Preliminary Design Program

Fox Hill Elementary School

Burlington, MA

14 July 2023

DINISCO DESIGN
architects + planners

July 14, 2023

Christina Forde
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, MA 02109

Dear Christina,

Please find enclosed the Module 3 Preliminary Design Program (PDP) submission for the Burlington Fox Hill Elementary School Project to the Massachusetts School Building Authority (MSBA). The consultant team, along with the Owner, has followed the current PDP guidelines to develop this submission over the last several months.

As Owner's Project Manager, we have reviewed the submittal and certify that it has been reviewed and approved by the city for submission to the MSBA.

We look forward to your team's feedback and working with you to proceed with the final evaluation of the proposed alternatives in the Preferred Schematic Report.

Sincerely,
DORE + WHITTIER

Christina Dell Angelo

TABLE OF CONTENTS

1 INTRODUCTION

Introduction
Facility Deficiencies
Program Deficiencies
MSBA Invitation
Design Enrollment
Capital Budget Statement Narrative
Local Process
Project Directory
Project Schedule

2 EDUCATIONAL PROGRAM

Grade & School Configuration Policies
Class Size Policies
School Scheduling Method
Teaching Methodology & Structure
Teacher Planning
Pre-Kindergarten Program
Kindergarten Program
Lunch Programs
Technology Instruction Poilicies & Program Requirements
Visual Art Programs
Music / Performing Arts Programs
Physical Education Programs
Special Education Programs
Vocations & Technology Programs
Core Academic Space Narrative
Transportation Policies
Functional & Spatial Relationships & Key Programmatic Adjacencies
Security & Visual Access Requirements
Day in the Life of Student
Week in the Life of Student

TABLE OF CONTENTS

3 INITIAL SPACE SUMMARY

Narrative
Initial Space Summaries
Existing Facilities Floor Plans

4 EVALUATION OF EXISTING CONDITIONS

Fox Hill Elementary School & Site Existing Conditions Report
Pine Glen Elementary School & Site Existing Conditions Report
Facilities Audit (Electronic Copy Only)
Legal Deeds to Sites (Electronic Copy Only)
Traffic Study Report (Electronic Copy Only)
Wetland Resource Area Delineation Report (Electronic Copy Only)
Phase I ESA Report (Electronic Copy Only)
HazMat Report (Electronic Copy Only)
AHERA Report (Electronic Copy Only)
Geothechnical Report (Electronic Copy Only)

5 SITE DEVELOPMENT REQUIREMENTS

Site Development Narrative
Structures & Fences
Site Access & Circulation
Parking & Paving
Code Requirements
Zoning Setbacks & Limitations
Accessibility Requirements
Easements
Wetlands and/or Flood Restrictions
Emergency Vehicle Access
Safety & Security Requirements
Utilities
Athletic Fields / Outdoor Educational Spaces
Site Orientation / Location Considerations

TABLE OF CONTENTS

6 PRELIMINARY EVALUATION OF ALTERNATIVES

School Assignment Practices
Tuition Agreements
Rental or Acquisition of Existing Buildings
Code Upgrade Option
Renovation and/or Addition Options
New Building Options & Potential Locations
Cost Summary of Options

7 LOCAL ACTIONS & APPROVALS

Local Actions & Approvals Certification
Certified Copy of SBC Minutes for PDP Submission
Meeting Agendas & Minutes (See Appendix)

8 APPENDIX

Burlington Fox Hill Elementary School Statement of Interest
MSBA Feasibility Study Invitation
Design Enrollment Certification
Capital Budget Statement
Project Directory
Project Schedule
SBC Agendas & Meeting Minutes
Visioning & Community Forum Presentations

1 INTRODUCTION

Introduction

Facility Deficiencies

Program Deficiencies

MSBA Invitation

Design Enrollment

Capital Budget Statement Narrative

Local Process

Project Directory

Project Schedule

INTRODUCTION

The purpose of the Preliminary Design Program is to define the programmatic, functional, spatial, and environmental requirements of the educational facility necessary to meet the District's educational program, and perform the review and investigation required to clearly define the existing building deficiencies.

The Study Enrollment Certification is to evaluate design alternatives for two enrollments:

- Enrollment for Grade K-5 at the Fox Hill Elementary School of 325 students
- Enrollment for Grade K-5 at a consolidated Fox Hill Elementary School and Pine Glen Elementary School of 640 students

The Town of Burlington continues to evaluate both enrollment options for this project. There are significant impacts to both options and therefore, the Town would like to continue to explore both through the duration of the study to arrive at a preferred solution at the conclusion of the Preferred Schematic Report.

Facility Deficiencies

Fox Hill Elementary School

The Fox Hill Elementary School is one of four elementary schools in the Burlington Public Schools system. It is located on a 37.9-acre site. The site is defined by the school building in the middle of the parcel. The school parcel is bounded by wetlands to the north and to the west. A vernal pool is located to the east of the existing school. Residential neighborhoods are to the south and west. Extensive conservation lands abut the property to the east and north. The parcel has a town border to the north with Wilmington. While the topography of the site is relatively flat, grades generally fall from its southeast to northwest corners.

The Fox Hill Elementary School is located on Fox Hill Road in Burlington, Massachusetts. The original school (1967), is a 64,400 gross square foot single-story building. A small modular addition with three classrooms was added in 2010.

The school currently serves kindergarten through 5th grade. It is composed of a ten-sided central wing and four eight-sided classroom wings, each with seven classrooms and ancillary spaces. The core of the building includes the cafetorium, gym and library. The special education spaces are somewhat integrated with the general classrooms; however, they are extremely undersized. The three-classroom addition houses the LABBB Collaborative program and has been modified to accommodate the program.

Although the building is on one floor, it is not fully accessible.

Despite some maintenance repairs the Fox Hill School remains largely original. All components, with exception of boilers and pumps, are the original 1967 vintage (56 years old) which are well past its useful life. Mostly hot water heating and ventilation system. Air conditioning is limited to a few split DX, window AC, and through-wall AC units in offices. Classrooms are served by heating and ventilating unit ventilators with wall intake louvers and designed to have individual exhaust module with adjacent louver. For some reason, the exhaust modules and its louvers have been blocked off, thereby severely compromising the ventilation effectiveness. Unit ventilators are considered inappropriate for teaching environment due to its high noise level.

The electric service equipment is rated at 1200-amperes, 120/208-volts, three-phase and consists of a main circuit breaker section, CT cabinet, and distribution section. All three items are separate equipment and original to the building.

All the systems in the building are past their useful life, affecting comfort and safety as well as teaching and learning. During utility retrofit programs, fluorescents lamps have been replaced with LED tube lamps or the fixture has been replaced with a LED fixture.

Overall quality of the lighting is fair to poor condition and the lighting creates glare, as glare was observed on whiteboards and computer screens.

All lighting appears to be controlled by local switches including corridors. There are occupancy sensors in most rooms in the building. Sensors were installed during a utility retrofit program.

Heat is uneven, with some rooms too hot and others too cold. Ventilation is below standard and is altogether lacking in some spaces.

The low slope roofs on the original building were replaced in 2015 with EPDM single ply adhered membrane. The aluminum flashings, facias, and caps were also replaced at this time. The roof of the modular classrooms was replaced when moved to this location in 2010.

The 1967 building was constructed prior to the current Massachusetts State Building Code; accordingly, the structure was not designed for wind and seismic loads. The construction does not meet current code requirements.

Pine Glen Elementary School

The Pine Glen Elementary School is one of four elementary schools in the Burlington Public Schools system. It is located on an 11.8-acre site. The northwest of the site contains two parking lots and the bus loop to the front entry. The school sits to the southeast of this paving. The site is completely surrounded by residential neighborhoods and conservation land. The site's topography is relatively flat, generally sloping from woodlands in the southeast corner of the property, flattening out across the developed area, and sloping down again towards the wet areas within the northeastern woodlands. A small slope runs across the open lawn area east of the school building, separating the playground above from an informal baseball field below.

The Pine Glen Elementary School is located at 1 Pine Glen Road in Burlington, Massachusetts. The original school (1961-62), is a 58,000 gross square foot split level building with a two-story classroom wing and a one story entry, office, cafeteria, kitchen and gymnasium. The one-story portion of the building is at an elevation half way between the two academic floors. A small addition with an elevator was added in 2004 with a teacher's dining room.

The school currently serves kindergarten through 5th grade. The building is I-shaped in plan with a two-story classroom wing at the north end, running east-west, a central one-story office wing running north-south, and a one-story community wing at the south end, running east-west. Programmed spaces in the community wing include a cafeteria, gymnasium, and a kitchen.

The existing building is not fully accessible.

Most of the system was installed in 1962 and are 61 years old, well past its useful life. It is mostly hot water heating and ventilation system. Air conditioning is limited to split DX units, window AC units, and two packaged rooftop units for offices. Classrooms are served by heating and ventilating unit ventilators with wall intake louvers. Exhaust is through central roof exhaust fans. All components, with exception of boilers and pumps, are the original vintage which are well past its useful life.

The electric service equipment is rated at 1200-amperes, 120/208-volts, three-phase and consists of a main circuit breaker section and CT cubicle section, and one distribution section. The main distribution equipment was installed in 2002.

All the systems in the building are past their useful life, affecting comfort and safety as well as teaching and learning. During utility retrofit programs, fluorescents lamps have been replaced with LED tube lamps or the fixture has been replaced with a LED fixture.

Overall quality of the lighting is fair to poor condition but the lighting creates glare, as glare was observed on whiteboards and computer screens.

All lighting appears to be controlled by local switches including corridors. There are occupancy sensors in most rooms in the building. Sensors were installed during a utility retrofit program.

Heat is uneven, with some rooms too hot and others too cold. Ventilation is below standard and is altogether lacking in some spaces.

The roof on the original building was replaced in 2016 and is an adhered single-ply membrane (EPDM), with aluminum flashings, transite facias, and soffits.

The 1961-62 building was constructed prior to the current Massachusetts State Building Code; accordingly, the structure was not designed for wind and seismic loads. The construction does not meet current code requirements.

Program Deficiencies

Fox Hill Elementary School

The Fox Hill School offers a comprehensive educational program for students in kindergarten through grade five. Fox Hill School has a growing population of English language learners, and has a strong sense of community and support, celebrating its uniqueness through curriculum, arts and ongoing community service involving students and families.

The school currently has 26 classrooms used for individual grades and a total enrollment of 428 students. The general classrooms are mostly in line with MSBA space guidelines. However, most of the other educational spaces are significantly undersized. In general, the shortcomings at the Fox Hill Elementary School include:

- ELL – Significantly undersized
- Literacy specialists, math specialists and Tutors - Significantly undersized
- Special Education – Limited instructional and support spaces which are significantly undersized
- The LABBB Collaborative located in the modular classrooms are inadequately sized. In addition, due to the space constraints one classroom for the ED/BD program is currently located at the Memorial School.
- Music – Two smaller spaces in different areas of the building
- Gymnasium – Significantly undersized
- Library – Significantly undersized
- Medical / Nurse Suite – Undersized
- Administration – Significantly undersized

Pine Glen Elementary School

The Pine Glen School offers a comprehensive educational program for students in kindergarten through grade five. Pine Glen School has a growing population of English language learners, and has a strong sense of community and support, celebrating its uniqueness through curriculum, arts and ongoing community service involving students and families.

The school currently has 18 classrooms used for individual grades and a total enrollment of 308 students. The general classrooms are mostly in line with MSBA space guidelines. However, most of the other educational spaces are significantly undersized. In general, the shortcomings at the Pine Glen Elementary School include:

- ELL – Undersized
- Literacy specialists, math specialists and Tutors - Significantly undersized
- Special Education – Limited instructional and support spaces which are significantly undersized
- Gymnasium – Significantly undersized
- Library – Significantly undersized
- Medical / Nurse Suite - Undersized
- Administration – Significantly undersized

MSBA Invitation

The MSBA invited Burlington Public Schools into the eligibility period April 14, 2021 and extended an invitation to the Feasibility Study phase on April 27, 2022. Refer to the Appendix for the MSBA Invitation into the eligibility period and Feasibility Study.

Design Enrollment

The Study Enrollment Certification is to evaluate design alternatives for two enrollments:

- Enrollment for Grade K-5 at the Fox Hill Elementary School of 325 students
- Enrollment for Grade K-5 at a consolidated Fox Hill Elementary School and Pine Glen Elementary School of 640 students

A copy of the Enrollment Certification is included in the Appendix of this report.

Capital Budget Statement

This Capital Budget Statement has been developed to demonstrate the Town of Burlington's capacity to financially support the Fox Hill Elementary School MSBA Project by summarizing available funding capacity.

The Town of Burlington has a demonstrated history of funding capital and infrastructure improvement problems; just within the last five years the Town has completed a fire station and a DPW facility building projects of $40M and invested another $30M in water and sewer improvements.

The Town has a comprehensive 10-year capital plan in place that is updated on an annual basis; as well as a pay-as-you-go plan for equipment and facility maintenance and improvements. Future plans over the next 10 years include a new police station facility, a high school building project, as well as this elementary school building project.

Currently the Town has $81M in authorized debt and a $450M debt limit; as well as $12M in excess levy capacity. Affirmed as of April 2023, the Town has an AAA bond rating from S&P.

Local Process

The local process began in 2020 when the School District submitted a Statement of Interest to the MSBA for the Fox Hill Elementary School. The MSBA invited the City of Burlington to participate in a Feasibility Study for this project at the Authority's April 27, 2022 Board Meeting.

Following the April 22, 2022 MSBA Board meeting that invited the Town into the Feasibility Study Phase, the search for an Owner's Project Manager (OPM) began. The Town selected Dore & Whitter Project Managers on October 18, 2022.

The OPM then worked with the Fox Hill Elementary School Building Committee and MSBA to select a designer. The RFS for designer services was issued on November 23, 2022 and proposals were received on December 21, 2022. The MSBA Designer Selection Panel selected DiNisco Design at the January 31, 2023 meeting of the MSBA Design Selection Panel.

Several working groups have established and comprised of representatives from SBC, School Department and Town. These groups meet with the project team regularly to ensure information is flowing appropriately and in a timely manner as well as ensure community engagement and other meetings occur as required.

The project team has met with Burlington Public Schools including the Director of Special Education, had visioning sessions with BPS's leadership team as well as with both the Fox Hill and Pine Glen staff, and conferred with BPS's facilities department. In addition, the project team and District visited a couple of new elementary school projects to evaluate educational and design precedents and gather design ideas. There has been one community visioning meeting as well as two community meetings.

The Fox Hill School Building Committee has met nine times since the full team has been in place:

- 2/7/2023 School Building Committee Meeting
- 3/7/2023 School Building Committee Meeting
- 4/13/2023 School Building Committee Meeting
- 5/2/2023 School Building Committee Meeting
- 5/16/2023 School Building Committee Meeting
- 5/30/2023 School Building Committee Meeting
- 6/20/2023 School Building Committee Meeting
- 6/28/2023 School Building Committee Meeting
- 7/13/2023 School Building Committee Meeting

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available electronically at https://www.foxhillbuildingproject.com/

Project Directory

A project directory with contact information for representatives of all District stake-holders, Designer and OPM is included in the Appendix of this report.

Project Schedule

The current project schedule is as follows:

Fox Hill School Building Committee vote for Preferred Schematic:
December 19, 2023 (estimated depending on MSBA 2024 Schedule)

Submission of Preferred Schematic Report: **December 28, 2023 (estimated depending on MSBA 2024 Schedule)**

MSBA Facilities Assessment Subcommittee Presentation:
January 17 or January 31, 2024 (estimated depending on MSBA 2024 Schedule)

MSBA Board of Directors meeting for approval to proceed into Schematic Design:
Estimated March 2024

Projected MSBA Board of Directors meeting for approval of Project Scope and Budget Agreement:
Estimated / Anticipated to be August 2024

Projected Town vote for Project Scope and Budget Agreement: **September 2024**

A project schedule with key meetings and approval dates is included in the Appendix of this report. The current project schedule is to have the new school completed 2028-29.

2 EDUCATIONAL PROGRAM

Grade & School Configuration Policies

Class Size Policies

School Scheduling Method

Teaching Methodology & Structure

Teacher Planning

Pre-Kindergarten Program

Kindergarten Program

Lunch Programs

Technology Instruction Policies & Program Requirements

Visual Art Programs

Music / Performing Arts Programs

Physical Education Programs

Special Education Programs

Vocations & Technology Programs

Core Academic Space Narrative

Transportation Policies

Functional & Spatial Relationships & Key Programmatic Adjacencies

Security & Visual Access Requirements

Day in the Life of Student

Week in the Life of Student

Fox Hill Elementary School Educational Program

BURLINGTON PUBLIC SCHOOLS

Burlington Public Schools
June 13, 2023

Table of Contents

Introduction	3
Grade & School Configuration Policies	5
Class Size Policies	5
School Scheduling Method	6
Teaching Methodology and Structure	8
Teacher Planning	16
Pre-Kindergarten Program	17
Kindergarten Program	18
Lunch Programs	18
Technology Instruction Policies & Program Requirements	19
Visual Art Programs	21
Music/Performing Arts Programs	19
Physical Education Programs	24
Special Education Programs	25
Vocations and Technology Programs	32
Core Academic Space Narrative	32
Transportation Policies	32
Functional & Spatial Relationships and Key Programmatic Adjacencies	33
Security & Visual Access Requirements	34
Day in the Life of Student	35
Week in the Life of Student	38

Introduction

The Burlington Public Schools (BPS) provides educational programs for students in grades preschool through grade 12, as well as post-secondary programs.

Mission of the Burlington Public Schools

The Mission of the Burlington Public Schools is to help all students acquire organized knowledge, master creative and intellectual skills, and understand ideas in ways that foster a positive self-image and sense of belonging needed for lifelong learning, self-sufficiency, and responsible, equitable citizenship.

The Vision

The Vision of the Burlington Public Schools is "striving for excellence" and will be accomplished by:

- Helping students achieve their highest potential by providing a rigorous, balanced curriculum.
- Employing highly qualified, diverse teachers, administrators, and support staff who are committed to the BPS mission and vision.
- Encouraging parents to take an active role in their children's education through involvement with the schools to enhance student academic success.
- Providing opportunities for community members to participate in school activities to reinforce the goals and advantages of providing quality educational programs for every student.

Equity Statement

Educational equity means that every child belongs and receives whatever support he/she/they needs to develop his/her/their full academic, emotional, and social potential to learn and thrive every day. This begins with kindness and valuing the humanity of every child/individual.

Core Values

The Burlington Public School District is committed to:

- Developing all students' potential for excellence.
- Creating a learning environment that values human differences, fosters a sense of belonging and promotes cultural proficiency among all students and staff through a culture of diversity, equity, and inclusion.
- Providing a program of study that has the same academic objectives for all students.
- Cultivating an educational environment that reflects sensitivity to students' differing styles and intellectual development.

Theory of Action

If Burlington Public Schools…

- Focuses on academic outcomes and social/emotional wellness and belonging of each student, providing targeted support, and building personal relationships,
- Establishes empowering conditions for students and educators, providing a welcoming environment, resources, programs, and community support,
- Provides human and financial resources to support high quality, engaged learning,

THEN students will make effective progress and be appropriately challenged, graduating from high school ready for college, career, and life as contributing citizens in an increasingly diverse global society.

Burlington Public Schools System Wide Goals

The attached BPS Planning for Success document identifies the priorities of the Burlington Public Schools for the 2022-25 school years. Our system-wide goals focus upon academic excellence, educational equity, and social and emotional wellbeing. The goal areas and related actions build upon prior work and reflect the ongoing commitment to system growth and improvement to meet the needs of all learners. While goals are situated within separate categories, it is important to note that the areas of focus are interrelated and inextricably linked. Ensuring positive, productive, and fulfilling learning experiences for all students requires attention to a myriad of factors that create welcoming, inclusive, equitable, challenging, and engaging learning environments necessary for students to thrive.

Grade & School Configuration Policies

The Burlington Public Schools currently educate over 3,400 students in grades PK through grade 12. All elementary students will move up to the Marshall Simonds Middle School and Burlington High School.

The Burlington Early Childhood Center (BECC) is located at the Burlington High School which is an integrated public preschool for children ages 3-5. District students in grades kindergarten through grade 5 are educated in four elementary schools: Francis Wyman, Fox Hill, Memorial, and Pine Glen. The Marshall Simonds Middle School houses grades 6-8 and the Burlington High School houses grades 9-12 as well as the BECC.

There is no plan to modify the grade configurations as a result of the Fox Hill Elementary School project.

Class Size Policies

The Burlington School Committee and the Burlington Teachers Association recognize the relationship between class size, effective teaching, and student achievement. Class sizes that rise above acceptable levels affect both educational quality and the School District's ability to attract and retain the best possible teachers. Attempts are made to keep class sizes close to the guidelines listed below, recognizing that in certain cases, some classes may have higher enrollment:

Kindergarten through Fifth Grade: 1 - 18 students

No changes are proposed to the class size guidelines for the Fox Hill Elementary School as a result of this project.

Average class sizes for the Fox Hill Elementary School and all Burlington Elementary Schools for as of October 1, 2022 are shown below.

Grade	Fox Hill ES Average Class Size	All BPS Elementary Schools Average Class Size
Kindergarten	14.75 students	14.71 students
Grade 1	15.40 students	16.35 students
Grade 2	15.60 students	16.63 students
Grade 3	18.25 students	15.76 students
Grade 4	19.00 students	17.19 students
Grade 5	16.25 students	19.07 students
Average for K-5	16.46 students	16.56 students

CLASS SIZE – 325 Student Enrollment

To maintain the student-to-teacher ratio it is strongly recommended that there be three classrooms per grade. In addition, it is important to maintain the same number of classrooms per grade. The proposed breakdown per grade based upon an enrollment of 325 students is shown in the chart below.

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	54	54	54	54	54	54	325
Average # students/class	18	18	18	18	18	18	
# of classrooms	3.01	3.01	3.01	3.01	3.01	3.01	18.06
Round for Total Classrooms / Grade	3	3	3	3	3	3	18

School Scheduling Method

The Burlington Public Schools has articulated specific instructional time allotments for elementary core subjects, which include language arts, mathematics, science, social studies and social curriculum. Specialist programs both enhance the core program and provide contractual preparation time for classroom teachers. These time allotments per week for the current enrollment or the reduced enrollment of 325 students are as follows and no changes are proposed:

- Language Arts - 450 minutes
- Mathematics - 300 minutes
- Science/Tech Engineering - 90-120 minutes
- Social Studies - 45-120 minutes
- Social Curriculum - 30 minutes
- SEL Curriculum - 45 minutes
- Art – 45 minutes – 1 time per week
- Music – 45 minutes – 2 times per week
- Physical Education, Health and Wellness – 45 minutes – 2 times per week
- Library – 30 minutes (K, 3-5); 45 minutes (1, 2)

The Burlington School Committee recognizes the importance of providing adequate numbers of specialist teachers in both elementary and secondary schools. Elementary specialist teachers are defined as Art, Music, Physical Education, and Library-Media. These programs are a vital component of the complete educational program that are both a value and expectation of the Burlington Public Schools to offer all students.

Article 43: "Elementary Preparation Time" of the collective bargaining agreement states that elementary teachers are entitled to a 30-minute duty-free and meeting-free lunch period. In addition, elementary classroom teachers are scheduled for a minimum of 240 minutes of preparation time per week.

The current specialist sections at Fox Hill Elementary are as follows:

- Art - Twenty-six 45 minute blocks are taught by one Art teacher each week.
- Music – Nineteen 45 minute blocks of general music for grades K-5. Additionally, three sections of recorder for grade 3 and two 45-minutes sessions for 4th and 5th grade chorus, by one Music teacher. Fourth grade band lessons are taught by the music teacher and a part time educator comes to teach strings.
- Band or String - In addition to general classroom music and 4th and 5th grade chorus, students in 4th grade may elect to take an introductory band or string instrument. Instrumental lessons are small group, pullout lessons during the school day. Students in 5th grade or other grades who are already proficient on an instrument may elect to participate in band or orchestra. The ensemble groups each meet once per week for 45 minutes. Chorus is compulsory for 4th and 5th grade students and is scheduled within the school day. The 4th grade chorus runs for 45 minutes, once per week and the 5th grade chorus runs for 60 minutes, once per week. General music class meets once per week for grades K-2 and 4-5. The 3rd grade meets for 45 minutes and includes compulsory instruction on the recorder.
- Physical Education, Health, and Wellness - Thirty 45-minute blocks are taught per week for grades K-5 by two Physical Education teachers.
- Library/Media - The Fox Hill School Library is currently staffed full time. The Library Teacher instructs each class in grades K, 3, 4, and 5 for a 30-minute block every school week. Each class in grades 1 and 2 have a library class every week for a 45-minute block of time. Unscheduled times for Library Teachers are designated as flextime. Library flextime is designed to provide unscheduled blocks of time during the school day for collaboration between the library teacher and the classroom teacher, as well as time to manage the library collection. Library Teacher focuses on district led curriculum featuring literacy skills, research, and Digital Citizenship while fostering a love of reading for all.
- Digital Literacy and Computer Science – BPS DLCS curriculum leads to active, infused, collaborative, and authentic learning experiences using technology as a tool. Our program focuses on critical thinking and problem solving in order to help students ask the right questions and develop solutions to problems. Student choice and

leadership is emphasized via various grade level applications. Students use applications that provide opportunities to grow academically and engage with the global community. We encourage students to seek opportunities to create, invent, or support concepts or creations using personal initiative. Students use technology to explore and investigate personal interests and we work to foster curiosity and imagination. Finally, our CSforALL Computer Science program engages students with digital tools and resources to investigate real-world issues, answer questions, or solve complex problems leading to the potential participation in the Burlington High School Innovation Career Pathways.

Teaching Methodology and Structure

Burlington Public Schools (BPS) is committed to providing a rigorous educational program characterized by challenging academic content and engaging, relevant, and culturally responsive instruction. In alignment with our system-wide goals, every school is focused upon academic excellence, educational equity, and social and emotional wellbeing.

Fox Hill Elementary School is one of four elementary schools in the Burlington Public Schools, currently serving approximately 430 students in grades K through five in 26 classrooms. Fostering a safe, caring, and welcoming learning environment in which every child experiences a sense of belonging, challenge, joy, and engagement are key priorities at Fox Hill School.

A variety of programs and structures support the diverse learning needs of students. Teachers provide rigorous instruction aligned with grade level learning standards and work in collaboration with specialists and support staff to ensure student progress. Grade level teams routinely meet with math and literacy specialists to plan instruction, review student progress, and design interventions and enrichment opportunities for students.

Multi-Tiered System of Support (MTSS) or Response to Intervention (RtI), provides a framework that focuses on a system level approach across the classrooms, schools, and district to meet the academic and non-academic needs of all students. It guides both the provision of high-quality core educational experiences in a safe and supportive learning environment for all students and academic and/or non-academic targeted interventions/supports for students who experience difficulties and for students who have already demonstrated mastery of the concept and skills being taught. The flexible tiers represent a robust and responsive educational environment that provides students with a continuum of multiple supports to meet their needs. The tiers represent increasing intensity of academic and non-academic support and interventions.

There is flexibility of the system and the programming to allow movement between the tiers (to both a more or less intensive type of support/intervention). All students receive “Core Instruction” with appropriate accommodations and differentiation. This is considered Tier 1. It is expected that 80% of all students fall into this Tier 1. Some students receive additional small group instruction to support their growth called “Tier 2 Intervention” which is about 15% of all students. A small percentage of all students require intensive instruction

with additional supports and interventions. This is considered "Tier 3 Intervention" and encompasses about 5% of all students.

The academic and non-academic core components of MTSS are:

- ***High-quality core curriculum and instruction implemented with fidelity***
- ***Research-based academic interventions and assessment practices***
- ***Research-based behavioral interventions and supports***
- ***Universal screening and progress-monitoring***
- ***Collaboration and communication between educators and parents***

BPS believes in providing the necessary staff to support RtI. In addition to literacy and math specialists, tutors are provided at each school. At the Fox Hill School, there are 5-6 tutors. This would continue with the new school. Tutors provide support in the classroom as well as in small groups outside the classroom and therefore require dedicated spaces in the vicinity of the classrooms.

Every year, Fox Hill students include 30-40 English Language Learners of varied English proficiency and home languages, who learn alongside their grade level peers. Small groups of students meet with the ELL teacher several times a week both in and outside the classroom for direct English instruction.

BPS delivers special education services in a variety of settings and modalities. We offer Inclusion services with focus on co-teaching, partial inclusion services that combine both co-taught and pull out methods, and fully sub separate programming for students with intensive needs. We currently have multiple special educators, school psychologists, speech & language pathologists in every building. We also have district wide, three social workers, two OTs, and one PT. We collaborate with McLean's Hospital for our social emotional students, NECC for our specialized programming for our high needs population, and Landmark School for our students with language based disabilities. We also contract with a variety of other providers to meet the needs of our students, including but not limited to, Perkins School for the Blind and Kindle Associates.

In addition, BPS is a member of the LABBB (Lexington, Arlington, Burlington, Bedford, Belmont, Watertown) Collaborative. The Collaborative was formed in response to the need for more specialized programs. The Massachusetts Department of Education approved the Collaborative to begin in 1974. Currently, LABBB provides educational programming and support services for over 350 special needs students from over 65 districts. LABBB serves students with a variety of special needs including students on the autism spectrum, students with multi-handicaps, pervasive developmental disorders, developmental delays, language deficits and social/emotional challenges. The LABBB Collaborative Programs are all located in public school buildings.

BPS offers 3 district wide programs plus 3 LABBB programs at the elementary school level to provide learning cohorts and highly specialized instruction for elementary students with specific disability profiles.

Fox Hill hosts one LABBB program, known as the EDBD Program (Emotionally Disturbed/ Behaviorally Disturbed Program). There is one classroom currently located at the Memorial Elementary School due to insufficient space at the existing Fox Hill School. In the new school, the entire program would be located at the Fox Hill School. The EDBD Program supports students who are experiencing significant social/emotional and behavioral challenges. This program provides a setting with therapeutic support for students who are performing at or close to grade level academically. These students require significant structure and adult support to obtain the skills necessary to transition into a general education classroom. The curriculum is aligned with the general education classroom and modifications and accommodations are assessed and implemented on an individual basis. Opportunities for inclusion are available and implemented as the students are ready to meaningfully participate. A team of specialists include a counselor, BCBA, speech and language pathologist, occupational therapist, and physical therapist. Services are provided according to each student's IEP. Staff teams work closely together to help students find the tools and strategies that help them self-regulate, learn to use their language to communicate effectively with others, and engage in academic curriculum.

Flexible Grouping

General education teachers engage in flexible grouping methods to meet the instructional needs of their students and as determined by the professional learning communities. Grouping and regrouping methods take place weekly within classrooms and among grade level classrooms. General education, special education and ELL teachers collaborate seamlessly to provide tier one (general curriculum), tier two (strategic intervention) and tier three (intensive intervention) in the inclusive environment. Pullout instruction is provided for students who require it, based on their personalized instructional needs within tier two and tier three programming. There is shared responsibility among the faculty for all students' success. Grade level classrooms are organized within common hallways and adjacent locations. Close proximity is critical in order to achieve the requisite communication and collaboration for flexible grouping methods in a grade level PLC team.

Below is an overview of the general elementary curriculum, methods and practices used by teachers. The curriculum remains the same for an enrollment of 325 students.

English Language Arts / Literacy

Based on the Massachusetts Curriculum Frameworks, the English Language Arts Program serves to help all children develop communication skills in writing and reading to develop a lifelong interest in literacy. Using a blended model including Science of Reading approved programs, teachers integrate direct and systematic instruction with reading and writing experiences so students learn how to use word reading skills along with language comprehension skills to comprehend texts they are reading. Students have opportunities to apply what they are learning in small groups and independently. Teachers follow a specific Scope and Sequence based on the Common Core Standards to meet all students' needs. Writing is embedded throughout Science and Social Studies, as well as taught during ELA. Students receive at least 90 minutes of daily instruction in ELA. The curriculum and delivery method will not change with the "new" facility.

Phonological Awareness and Phonics are explicitly taught in the younger grades using structured programs. These skills are reinforced in small groups with decodables. Word Study and Comprehension are taught in a variety of ways in all grades and are reinforced with authentic texts in small groups. This helps to grow:

- Phonemic and phonological awareness and letter-sound knowledge
- Alphabetic Principle-knowledge, blending, sound/symbol correspondence, structural analysis, contextual clues, and high frequency words
- Comprehension strategies in order to evaluate, synthesize, analyze, connect, infer and inquire
- Vocabulary
- Process writing, spelling, and grammar

In addition, students read both orally and silently and are read to from a variety of high quality increasingly complex fiction and nonfiction texts. Students participate in small group instruction and read a variety of reading materials including authentic texts, articles, and decodable books. Students write daily to support and extend their knowledge of the structure of language and construct meaning. Technology is incorporated into the ELA classroom to support the reading and writing process, including iPads for younger students working on phonemic awareness.

Although most of the reading and writing instruction takes place within the classroom environment, smaller work areas are necessary to facilitate individualized instruction, both in 1:1 and small group settings. Areas inside and outside the classroom are preferred.

In support of literacy, a new or renovated building will house a Literacy Center which would serve many purposes. The space would be used for professional learning for teachers and assistants, and will provide an alternative location for specialized instruction for small groups or 1:1 intervention. The specialized materials used for literacy intervention would be stored in a centralized location to facilitate access by teachers providing RTI (Response to Intervention) services to students in classrooms and small group spaces. The collection used for literacy instruction would also be housed in the shared literacy center space to facilitate sharing the texts and materials across classes and grade levels.

Each floor would include instructional spaces (small group rooms) adjacent to clusters of classrooms for small group lessons. Literacy specialists, math specialists, ELL teachers and special education staff would utilize the small group rooms.

Mathematics

Students learn mathematics in whole class, small group, and partner configurations. The curriculum includes a variety of hands-on activities and many materials that require storage space in each classroom. Often students are working with manipulatives at their desks or in common spaces such as on the rug or at larger tables. Several times per week students need access to an online program. For this they use their assigned iPads or Chromebooks.

Teachers often project the curriculum and student work using an interactive whiteboard or an ELMO system. This allows all students to be able to see the content, either from their desks or a common space in the classroom. The teachers need to be able to access the technology easily while circulating around the room to check in with students who are engaging with the curriculum. The objective of each lesson is to present students with a variety of experiences in math class where tasks consistently encourage high-level student thinking, synthesis and application. Some of these tasks require a lot of space and materials, such as building cubic meters with meter sticks and tape. Students need to be able to work in small groups with enough space to meet the demands of the task.

BPS uses the enVisionMath Common Core 2020. Teachers help students to lead math congresses and to share mathematical ideas and thinking. The curriculum and delivery method will not change with the "new" facility however there will be appropriate spaces to deliver the curriculum. For students who have been identified with intervention needs, a math enhancement block is available. Students with IEPs have their needs met with a combination of co-teaching and pullout services to support their learning.

Math specialists are responsible for supporting classroom educators with instructional practice. Most of the time coaches are working with students and teachers in the classrooms. They also require a separate office to store materials, meet with other educators such as English Language and Special Education teachers, and occasionally work with one or two students.

Math interventionists work with small groups of three to four students outside of the classroom. They need table space for the group that can also accommodate manipulatives that support the mathematical concepts. They also use whiteboards to model the mathematics and the students use the boards to explain their thinking through annotation or drawing.

The curriculum and delivery method will not change with the "new" facility however there will be appropriate spaces to support delivery of the curriculum.

Science

The Science Center supports the K-12 Science Curriculum in Burlington Public Schools by providing numerous resources. Our main objectives are to:

- Provide science curriculum and materials enriched with using science practices.
- Expose students to a variety of sciences: physical, earth, life, and technology & engineering.
- Spark students' curiosity and foster excitement about the world around them.
- Provide experiences difficult for a classroom teacher and lessons on current scientific events.

We have developed a Science Curriculum that is aligned with the Massachusetts State Frameworks Standards and focusing on using science practices. We use UBD design

curriculum units that provides teachers with essential information (State standards, Vocabulary, Assessments, Lessons) they need to support their classrooms.

We provide unit based Science Kits to support the K-5 curriculum. Each kit comes with the necessary tools and materials to teach their unit. They also contain grade leveled science reading books, core content books and anything else to support their unit. Kits are delivered through the school mail to the classroom.

Focusing on grades K – 5 science, the Science Center's goals are to develop and maintain an active science curriculum, while supporting teachers and students in their science learning. We hope to inspire a passion for science and nature.

Classroom Programs

The Science Center staff teaches Grade Level Programs at all of our Elementary schools. Burlington Science Center's Grade Level Classroom Programs include:

Kindergarten:	Hedgehog, Magnetism, Chick Hatching, Protect the Popsicle Engineering, Push and Pull Forces Fair
1st Grade:	Tide Pool Field Trip, Starlab, Birds/Penguins/Mammals, Sound Show
2nd Grade:	Reptiles & Amphibians, Maple Sugaring, Habitat Investigation Field Trip, Augmented Reality Sandbox,
3rd Grade:	MagLev Train Engineering Challenge, Weather & Climate, Cockroach Traits Investigation
4th Grade:	Earthquake Shake Engineering, Pollinators Engineering, Stream Table Investigation
5th Grade	StarLab, Investigating Matter Models, Designing Water Filters, Ecosystems

The STE learning experiences we offer could be greatly enhanced by several building features. These include:

1. Access to sinks/water
   Science instruction at all levels requires access to water (as both a scientific "supply" and for the purposes of clean up and health/safety), making convenient access to sinks along the perimeter of the classroom essential.
2. Appropriate flooring materials
   Due to the use of liquids in activities and demonstrations, waterproof (non-carpeted), non-slip floor surfaces are important, especially in areas of the room where science activities will take place.
3. Ample work space
   Effective STE learning spaces have a variety of horizontal and vertical workspaces to support teaching and learning. These allow for flexible arrangement to support individual and small group work, whole-classroom discussions, demonstrations, presentations, and investigations. In STE learning spaces, large, seamless

desktops/workspaces are strongly preferred. Whiteboards and bulletin boards support communication and sharing of student work.

A designated STE Classroom and/or flexible makerspace (separate from an STE-optimized general classroom) would provide additional instructional room to support students' development of engineering/design and other 21st century skills that are applicable across subjects, particularly in project-based learning: e.g., creative thinking, problem solving, prototyping, testing and revising. Spaces like cubbies and countertops are recommended so that student work can be set up for extended periods of time. Low shelving provides students with easy access to the materials they need. An open floor space permits rearrangement of furniture for different purposes.

4. Ample storage space
   Many units of study require a substantial volume of supplies which are typically stored in large bins. These need to be stored out of the way of the instructional area. This storage space should be securable to prevent unauthorized access to expensive equipment and items that require adult supervision for safe handling. This applies for any designated STE/makerspace rooms as well.
5. Access to outlets
   STE learning requires access to outlets to support Chromebooks, clamp/desk lamps, and other electrical tools, primarily at the upper elementary level. Electrical ceiling drops, especially in any dedicated STE classroom or makerspace, help provide access while minimizing safety hazards.
6. Access to the outdoors
   Outdoor learning and environmental literacy are important components of our curriculum. These can be supported through visual and physical access to the outdoors which allows people to observe natural phenomena like weather, migration, and plant growth. Large windows overlooking the grounds and doors that connect classrooms directly with the schoolyard support these aims. Garden beds and other growing spaces like pollinator gardens require southern exposure and/or full sun. Site considerations such as stormwater detention / retention ponds as well as lessons on native and drought resistant plantings and other natural resources can be incorporated into the curriculum as well. Universal design principles applied to garden sites and other outdoor areas support equitable access to these important spaces.

The curriculum and delivery method are not proposed to change.

Social Studies

Students engage in a history/social sciences curriculum that, wherever possible, integrates with the informational skills components of the new Mass Frameworks for English Language Arts (incorporating the Common Core Standards). It is important that there be wall space available for maps and student designed educational posters/displays as well as ample

storage capacity for books and other content materials. Classroom space to provide enough room for small group projects and whole class presentations is needed. The curriculum and delivery method will not change with the "new" facility.

World Language

Burlington Public Schools does not offer world language instruction at the elementary level and this is not proposed to change.

Academic Support Programs

English Learner Education

There are currently 30-40 English Learners enrolled at Fox Hill Elementary School who are supported by two ESL teachers. The model is "push in" and "pull out" depending on a student's English proficiency and grade level. Two designated ESL classrooms are necessary for small group instruction (roughly 8-10 students). In addition, ESL instruction will occur in smaller work areas outside of the grade level classrooms, as needed to provide targeted instruction when using the "push-in" model. The curriculum and delivery method for the growing number of students requiring small group "pull out" will be better supported within the "new" facility.

Literacy and Math Support

Although most of the reading and writing instruction takes place within the classroom environment, smaller work areas are necessary to facilitate individualized instruction, both in 1:1 and small group settings. Areas inside and outside the classroom are preferred.

In support of literacy, a new building will house a Literacy Center which would serve many purposes. The space would be the location of professional learning for teachers, assistants, and parents. In addition, the Literacy Center will provide an alternative location where teachers may utilize the space for specialized instruction for small groups or 1:1 intervention. The specialized materials used for literacy intervention would also be stored in a centralized location to facilitate access by teachers providing RTI (Response to Intervention) services to students in classrooms and small group spaces. The collection used for literacy instruction would also be housed in the shared literacy center space to facilitate sharing the texts and materials across classes and grade levels. In addition, BPS is committed to supporting literacy for all students. The Fox Hill School will have 2 literacy specialists dedicated to this school. A shared space with two instructional areas is necessary to facilitate individualized instruction.

To support effective math instruction, math specialists work with classroom educators on instructional practice. Most of the time coaches are working with students and teachers in the classrooms. They also require a separate office to store materials, meet with other educators such as English Language and Special Education teachers, and occasionally work with one or two students.

Math interventionists work with small groups of three to four students outside of the classroom. They need table space for the group that can also accommodate

manipulatives that support the mathematical concepts. They also use whiteboards to model the mathematics and the students use the boards to explain their thinking through annotation or drawing.

Ideally, each floor would include instructional spaces (small group rooms) adjacent to clusters of classrooms for small group lessons. Literacy specialists, math specialists, tutors, ESL teachers and special education staff would utilize the small group rooms.

Student Guidance and Support Programs

Social/Emotional Learning

All students have access to non-academic supports that focus on the optimization of positive and productive functioning. These supports include access to a school counselor, school psychologist and/or a school adjustment counselor. Proactive and predictable classroom routines and a positive school climate are essential to the successful implementation of the tiered system of support. Classroom and school- wide expectations for all students must be clearly defined, communicated, and visually displayed in classrooms and throughout the school. The school climate should support positive relationships with adults/teachers/mentors to provide additional support and encouragement.

Positive Behavior Interventions & Supports (PBIS) is a set of ideas and tools that schools use to improve the behavior of students throughout the school. PBIS is a proactive approach to addressing student needs and supporting pro-social skills. Behavioral expectations are clearly established and articulated. The expectations are clearly established and routinely reinforced. Prosocial skills are directly and systematically taught, and interventions employed just as we do for academic skills. PBIS uses evidence and data-based programs, practices and strategies to frame behavioral improvement in terms of student growth in academic performance, safety, behavior, and establishing and maintaining positive school culture. PBIS addresses the needs of at-risk students as well as the multi-leveled needs of all students in regards to behavior, which creates an environment for both teaching and learning to occur in schools.

Our approach to social and emotional learning will not change in the “new” facility. Students will engage in explicit social and emotional learning, as well as implicit learning, throughout the school day.

Extended Day Program

The extended day program currently offered at the Fox Hill School will remain as part of the community with the new school. It serves more than 100 students each year and ideally will grow with the available community / core space in the new school.

Teacher Planning

Article 43: "Elementary Preparation Time" of the collective bargaining agreement states:

> Each elementary classroom teacher will be scheduled for a minimum of 240 minutes of preparation time per week (during the regular school day), which is to be scheduled in meaningful units, pro-rated by FTE. Given the minimum scheduled preparation time of 240 minutes per week, elementary teachers will receive a minimum of 30 minutes of duty-free preparation time (excluding their duty-free lunch time) for three (3) days per week, and the Committee will make reasonable efforts to continue providing, subject to economic factors, a minimum of 30 minutes of duty-free preparation time (excluding their duty-free lunch time) on two (2) additional days per week for a total of five (5) days per week."

Teachers provide rigorous instruction aligned with grade level learning standards and work in collaboration with specialists and support staff to ensure student progress. Grade level teams routinely meet with math and literacy specialists to plan instruction, review student progress, and design interventions and enrichment opportunities for students.

Existing support and teacher planning spaces are either non-existent, or undersized, throughout the school. Offices for support staff either don't exist, are shared by multiple specialists, or are in sub-optimal locations. General education teachers often remain in their classroom during their planning / preparation time.

Although there will be no changes to the teacher planning time in a new facility, there will be multiple spaces within close proximity to classroom neighborhoods for teacher planning, collaboration, and to support small, flexible group work spaces. The spaces will be designed to accommodate project-based learning, with optimal acoustics to allow for privacy, and flexible furniture to support all students. This would support and promote collaboration, communication, and flexible groupings. Having small group rooms in the neighborhood would also promote our sense of inclusion. The classroom spaces in each neighborhood would offer flexibility for project-based learning.

Classrooms across grades provide inclusion for students with special needs so it is critical to provide small quiet working areas within these classrooms to meet the educational needs of the inclusion and integrated students.

In a new facility, there should be enough special education spaces which would be large enough for teacher planning, testing, consultation, and small group instruction. The special education teaching spaces should be centrally located on each academic floor for easy access. A school for 325 students will require four Learning Centers to meet the needs of the students.

Pre-Kindergarten

The Burlington Early Childhood Center (BECC), located at Burlington High School, is an integrated public preschool for children ages 3-5. We support children of all abilities in both general education and special education settings. We also provide support in the areas of speech-language, fine motor, and gross motor development.

OUR MISSION:
The Burlington Early Childhood Center (BECC) is committed to providing a developmentally appropriate curriculum for every child. Our curriculum promotes our students' cognitive, language, social-emotional, and fine and gross motor skills. Our students are provided with a range of enriching experiences to promote a lifelong love of learning to reach their full potential. We are committed to providing a safe, nurturing, and supportive environment for all students, families, and staff.

CORE VALUES:
The Burlington Public School District is committed to:
- Developing all students' potential for excellence.
- Providing a program of study that has the same academic objectives for all students.
- An educational environment reflecting sensitivity to students' differing styles and intellectual development.
- Creating a learning environment that values human differences, fosters a sense of belonging, & promotes cultural proficiency.

Kindergarten

Burlington Public Schools offers full-day Kindergarten at each of the four elementary schools. The curriculum is the same as grades 1 through 5 and is addressed within the curriculum as stated above in the Teaching Methodology and Structure section. The curriculum follows the Massachusetts Common Core Standards. There are no proposed changes to the Kindergarten curriculum for an enrollment of 325 students.

Lunch Programs

Whitsons Culinary Group currently provides food service. Lunch runs from 10:45 A.M. - 12:15 P.M. and serves students across three waves of eating times. There are two serving lines that lead to a single register.

In the new facility, the size of the cafetorium should accommodate a minimum of two grades eating at a time, for two to three seatings per day. To fully support the food service program, the kitchen should be adequately sized to accommodate a full-service kitchen as well as serving lines for approximately 110-160 students with an enrollment of 325 at each seating. It is anticipated that a stage will be included in the cafeteria for school performances, assemblies, and other programs.

Technology Instruction Policies & Program Requirements

Burlington Public Schools is committed to provide outstanding access to educational technology devices, applications, and the internet via our 1:1 iPad Learning Program and Digital Literacy and Computer Science (DLCS) curriculum.

The BPS Digital Literacy and Computer Science curriculum leads to active, infused, collaborative, and authentic learning experiences using technology as a tool. Our program focuses on critical thinking and problem solving in order to help students ask the right questions and develop solutions to problems.

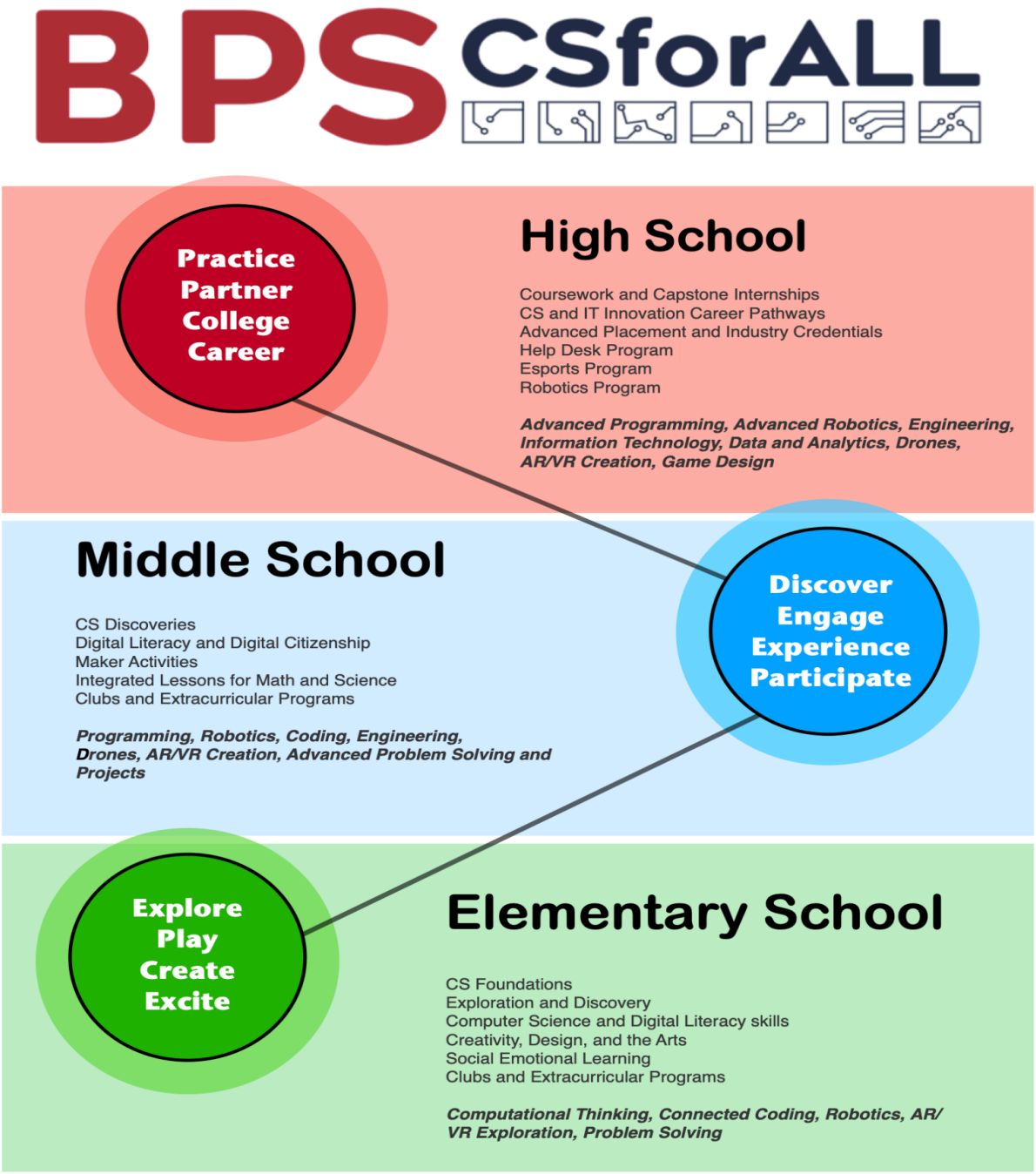
Student choice and leadership is emphasized via various grade level applications. Students use applications that provide opportunities to grow academically and engage with the global community. We encourage students to seek opportunities to create, invent, or support concepts or creations using personal initiative. Students use technology to explore and investigate personal interests and we work to foster curiosity and imagination.

A critical component of our DLCS Curriculum is helping students understand and practice appropriate and safe uses of information and technology. This is necessary to demonstrate personal responsibility for lifelong learning and communication using technology. These skills are critical for the success of our students in school and beyond.

Students explore how to use and access technology hardware and applications by working to create a positive attitude toward using technology that supports collaboration, learning, and productivity.

We also help students use technology to engage in the information literacy process in order to access, evaluate, organize, and communicate information and ideas.

Finally, our CSforALL Computer Science program engages students with digital tools and resources to investigate real-world issues, answer questions, or solve complex problems leading to the potential participation in the Burlington High School Innovation Career Pathways.



Fox Hill Elementary School currently offers the following instructional technology:

- Every classroom is equipped with:
  - LCD Projector
  - Audio Amplification System (Lightspeed Systems)
  - Media Streaming Device (AppleTV)
  - Charging Cart with (1:1) iPad devices for all students

- All Students are provided iPads for use during the school day. They are returned to the charging cart in each classroom at the end of each day.
- All Staff are provided a laptop and/or iPad for instruction and classroom management.
- Additionally, printers are positioned throughout the building to provide access to printing for both teachers and students. There is approximately one printer in each hallway/wing of the building for shared use.

Given the reliance on technology for instruction, it is imperative the network infrastructure in the school is reliable and robust to support 100s of simultaneous connections without interruption. Wireless access is also critical to all common areas and some outdoor learning spaces.

There is a *Responsible Use Policy* for students and staff in the district. All staff members participate in an annual, mandatory training regarding the district policy. All students receive instruction in the *Responsible Use Policy* during the first two months of the school year.

Library / Media Center

Students meet in library class once every week:

- Grades K, 3, 4, and 5 for a 30-minute block
- Grades 1 and 2 for a 45-minute block of time.

The library serves as an information hub for research and learning about both print and digital resources. During library class students learn research skills and digital literacy skills following a district led curriculum. Students also participate in active lessons focused on Digital Citizenship using a district curriculum. The Library Teacher efforts the development of literacy skills and fosters a love of reading for all students.

The Fox Hill Library has about 8,000 books in its collection that are made available to students, staff and families. A portion of class library time is devoted to students selecting and checking out books on a weekly basis to promote interest in reading.

Visual Arts Program

The Burlington Art & Design Program supports the BPS district vision of Striving for Excellence by helping students achieve their highest potential with a challenging curriculum, guided by the state and national frameworks, that includes the concepts of Creating, Presenting, Responding, & Connecting.

The Art & Design program helps students develop their visual literacy (an understanding and appreciation of guiding art concepts), their creative problem solving, and "design thinking" (a focus on *process*). Students develop their Studio Habits of Mind (which stem from a framework of Studio Thinking designed by practitioners at Project Zero at Harvard's School of Education.). They develop their craft, becoming more and more technically skillful in using a wide range of tools, materials, and artistic processes. They learn to care for the

tools, materials, and space they use. They begin to see and embrace problems as opportunities, develop focus, and they learn to persist and persevere at tasks. Art students learn to envision and imagine. They learn to plan. They express themselves, making art that conveys ideas, feelings, or personal meanings. They observe, looking closely and carefully at things, attending to nuance, noticing the small things that the casual observer might not. They become more and more sensitive to the natural environment as they work from observation, memory, and imagination. They reflect on what they and their fellow artists have done. They spend time learning how to look at and talk about art. They are encouraged to stretch and explore, to reach beyond what they originally thought they could accomplish. They learn to embrace opportunities, discover through play, and learn from their mistakes. They work and interact with one another in the community that is the art class, and they share their work with their school, family, and community. They make connections, learning about cultures, history, and current practices. They develop a sense of community through collaborative projects, sharing and discussions, and participation in exhibitions. We believe that students' art classes can help to balance with and connect to content from their core subject classes, and that art-making is an essential, enriching experience that helps to more fully develop a well-rounded person. The art room is a safe, stimulating environment where they can share ideas, build confidence, and feel independent enough to explore, take creative risks, problem-solve, and meet new challenges; where they are excited to share their understanding of the world; and where they'll learn to analyze, interpret, evaluate, and respond to works of art.

We believe…

- Art is a vital part of every child's development.
- Art is a way of understanding one's self, one's society and other cultures.
- Art provides a means to express and communicate thoughts, feelings, and experiences.
- Art education provides the gifts of vision, appreciation, and joy for the student to take into the world.
- Art promotes the brain development of children and improves their ability to innovate and problem-solve.

All students at Fox Hill currently take one 45 minute visual art class each week. It is requested by the visual arts director that there be more art time each week (such as a full hour of art class each week, or two 45 minute sessions, or a rotation of specials to create equal time between art, music, and physical education.).

The curriculum and delivery method will not change with the "new" facility, including the use of a kiln. The new art room must be equipped to provide all students with a rigorous, varied, and exciting art education in a variety of high-quality media and with many possibilities for interdisciplinary connection. Ample storage spaces must be provided for flat works on paper or canvas as well as three-dimensional mixed-media sculpture. A clay storage area and well-ventilated kiln and glazing area are required, separate from the areas

storing paper or flammable liquids. BPS is well versed with the use of kilns at the elementary school level. The new school will have the proper safety measures to accommodate the art curriculum including the kiln and materials. The kiln will have its own designated room.

The art room must have ample natural light as well as wall space for a projector, whiteboard, and bulletin board surfaces for displaying exemplary student work and additional relevant works of art. Sinks of varying height (suited to a variety of age ranges, including one adult height sink) must be provided – three to four sinks would be ideal. Cabinets, countertops, drying racks, and storage cubbies must be provided to store the work of hundreds of students as well as all of the supplies to serve the whole school. This includes space/shelves for drying clay artwork before firing.

There should be designated spaces for displaying student artwork in the hallways of the school, including built-in glass cabinets for displaying three-dimensional artwork.

Music / Performing Arts Programs

OUR MISSION

The Department prepares students for a lifelong appreciation and understanding of the performing arts by offering a challenging and diverse curriculum as guided by the state and national frameworks.

STUDENT LEARNING EXPECTATIONS

Burlington Performing Arts Students will:

Present quality performances

Achieve music literacy

Explore a diverse repertoire

Form community connections

We provide students with the opportunity to develop positive relationships and long lasting memories.

Students in Kindergarten are given one 45 minute class one time per week. Students in grades 1-5 have two 45-minute general music classes per week. In addition, we offer students in grades 3-5 the option to sign up for a string orchestra instrument. In grades 4 and 5, students are offered the choice of taking a band instrument. The band and orchestra students meet in small group lessons for one 30 minutes time and one ensemble rehearsal for one 30 minutes time. The pull-out lessons are done on a rotating schedule to reduce the impact of missing class time.

The schedule requires two full time classroom music teachers and two part time instrumental teachers.

One large music classroom accompanied by two smaller instrument storage rooms/small

group lesson space is desired to support the music program. The large classrooms should provide ample open floor space for dance and movement activities as well as risers for organized seating/standing for singing activities.

The classroom will require music stands, music chairs for appropriate posture, and classroom instruments with storage cabinets.

Fox Hill hosts a variety of music concerts (choral and instrumental) throughout the school year. The students perform in an annual variety show or musical theater production. A cafetorium with an ample stage is preferred to support music and performing arts programs. Steps or risers between the floor and the stage are desirable for preventing the need to move risers from the music classroom. A cafetorium also allows for the stage to be used for music/performance rehearsals before and after lunch as well as for school wide performances and presentations held for students and parents throughout the year.

The curriculum and delivery method will not change with the “new” facility.

Physical Education Program

All students in grades K-5, participate in instructional, quality physical education programs twice a week, for 45 minutes each class. The curriculum is presented in accordance with the Massachusetts Frameworks and the National Standards for Quality Physical Education, however, still falls short of the recommended time for physical education in elementary schools, which is 225 minutes per week. The current curriculum works to provide students with developmentally appropriate activities that focus on skill development, social emotional literacy, and developing a better understanding of healthy choices and lifelong fitness. The current gym is significantly undersized; a full size gymnasium is needed to fully support the health and physical education program. The gymnasium is also a significant community asset. Therefore, the District would like to add approximately 1,000 square feet to the MSBA guidelines to accommodate additional space for the safety and use of the gymnasium for full court basketball games with the appropriate runoff space beyond the court.

In support of the importance of physical activity as a major necessity for student learning, the district requires that all elementary students participate in recess in its state enforced Wellness Policy. The gym should be located to connect directly to outdoor play and recreation space.

The curriculum and delivery method will not change with the “new” facility.

Special Education Programs

Philosophy and Approach: An inclusive education helps prepare students with and without disabilities for life and good citizenship.

The role of the Burlington Public Schools has evolved over the years from one of essentially developing and implementing specific support programs and services for students to one of collaboration with Principals, classroom teachers, and curriculum coordinators and department heads. This collaboration in planning and implementation enables the District to provide specifically defined programs and services to continue to meet the needs of the students.

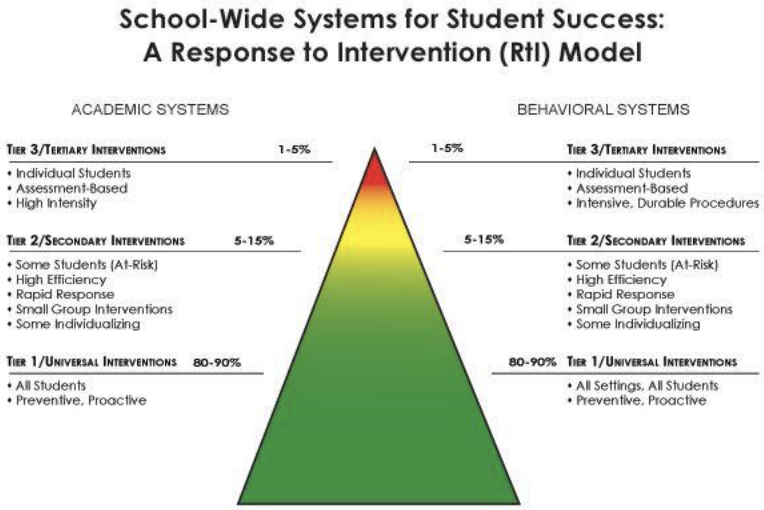
The formulation of new programs and service initiatives are a result of the broader representation of opinions through District Leadership Teams and individual School Based Teams. The Burlington Public Schools in consultation with these Teams has facilitated the establishment of programs and services to more effectively and efficiently meet the needs of the students.

The Burlington Public Schools is dedicated to working collaboratively with educators, parents, support professionals and the community to ensure that all students receive their appropriate services and supports in the least restrictive environment/setting, conducive to facilitating their maximum emotional, social and academic growth. The focus of this collaborative approach is to prepare students for productive lives as full members of our society. The Burlington Public Schools District Curriculum Accommodations Plan (DCAP) was developed and refined through several meetings with district administrators and was shared with each School Leadership Team. The Burlington Public Schools DCAP addresses various strategies that will help to achieve this objective. The link is below and the DCAP is appended to this document.

https://docs.google.com/document/d/1ZP0jIJLpd7A-tn6yTxKV2_IzSAOMFe2qGFmV2CcUNPk/edit

BPS delivers special education services in a variety of settings and modalities. We offer Inclusion services with focus on co-teaching, partial inclusion services that combine both co-taught and pull out methods, and fully sub separate programming for students with intensive needs. We collaborate with McLean's Hospital for our social emotional students, NECC for our specialized programming for our high needs population, and Landmark School for our students with language based disabilities. We also contract with a variety of other providers to meet the needs of our students, including but not limited to, Perkins School for the Blind and Kindle Associates. We are a member district of LABBB Collaborative.

BPS utilizes Response to Intervention (RtI) which is a process within the framework called Multi-Tiered System of Supports (MTSS). Both embrace an approach to education that focuses on high quality instruction for all students that includes a multi-tiered or layered system of differentiated intervention supports in academic and behavioral areas with a goal of educating students with disabilities within the least restrictive environment. Please refer to the attached MTSS/RtI Handbook.



This educational model challenges schools to meet the needs of all students by educating learners with disabilities alongside students who do not have identified educational disabilities. The environment necessary to nurture and foster inclusion is built upon a shared belief system between general and special education, and a willingness to merge the talents and resources of teachers.

The mission of all of the schools is to maximize the potential and independence of each student. An inclusive education helps prepare students with disabilities for an integrated adult life and builds understanding and acceptance within the broader community.

Curriculum, instruction, and assessments are aligned vertically (between grades) and horizontally (across classrooms at the same grade level and across sections of the same course). A method is established and implemented for assessing the effectiveness of the core curriculum on a routine basis. District and school leaders address instruction needs and strengths identified through active monitoring of instruction and ongoing use of formative and summative student assessment data. Qualified personnel are skilled in providing large and small-group research-based differentiated instruction aligned with individual students' developmental levels and learning needs, and a system for formative feedback and decision-making is in place. All students receive academic instruction and non-academic supports that include differentiation and extension activities.

The staff that provides special education services includes special education teachers, inclusion facilitators, aides, behavior therapists and related service providers such as school psychologists, social workers, speech/language pathologists, occupational therapists and physical therapists.

Related Services

Related services encompass specialized services from licensed professionals in particular domains. These related services are designed to support skill building necessary for effective access to educational experiences within the life of the school and are provided to students who require this specialized intervention to access their curriculum. Providers

effort to provide services within the classroom as much as possible and will pull children out of class only when necessary to provide the needed interventions.

A full list of related service domains is listed below:

Speech and Language Pathologist
SLP's perform evaluations and screenings, provide consultation to classrooms, and provide direct services to children both in the classroom and in the therapy room to address communication skills including the following: receptive and expressive language, social communication, articulation, fluency, voice, and hearing.

Occupational Therapy (OT)
OT's perform evaluations and screenings, provide consultation to classrooms and provide direct services to children both in the classroom and in the therapy room to address fine motor and perceptual motor skills as well as address sensory integration skills.

Physical Therapy (PT)
PT's perform evaluations and screenings, provide consultation to classrooms and provide direct services to children both in the general education setting and in the therapy room to address gross motor skills.

Behaviorist:
The behaviorist provides consultation and support to classroom throughout the district as well as direct services to students in district programs. The behaviorist conducts systematic behavioral assessments, provides interpretations of the results, and develops and supervises behavior intervention plans.

Vision Specialist
The vision specialist conducts assessments and provides consultative services to classroom teachers as well as direct instruction to students with visual impairments.

Assistive Technology
Products, devices, or equipment (whether acquired commercially, modified or customized) that are used to maintain, increase, or improve the functional capabilities of individuals with disabilities.

Counseling Services
Counseling services are for students who have identified or emerging social-emotional or mental health needs that interfere with the student's ability to access their education. Services may include individual or group counseling, consultation with teachers, parents and outside providers. Services are provided by social workers, school psychologists, school counselors and counseling interns.

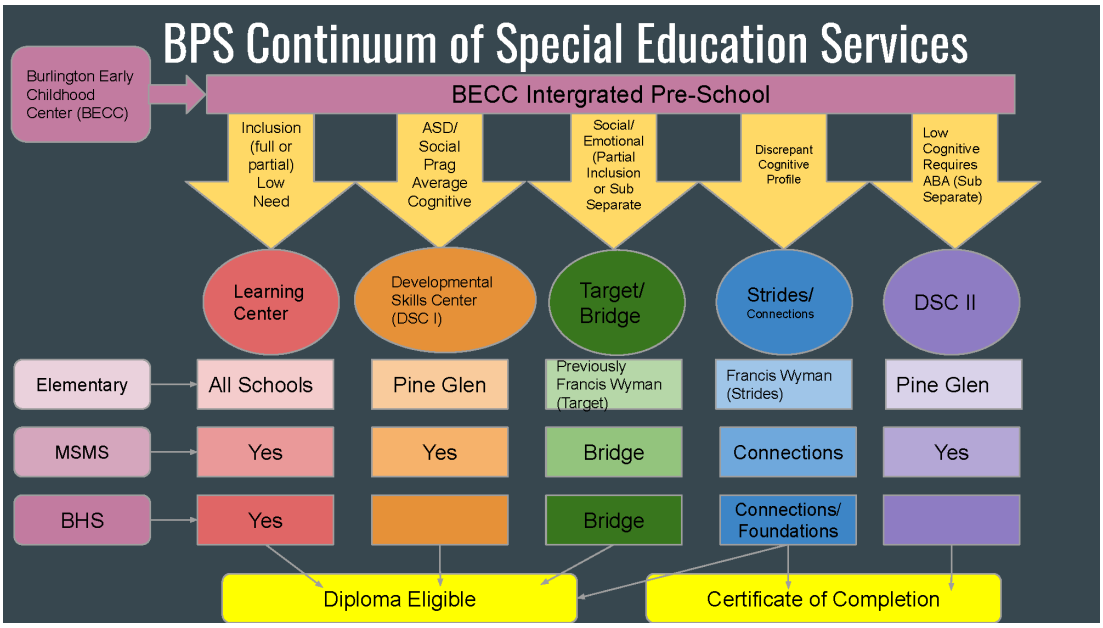
Orientation and Mobility (O&M)

O&M conducts assessments and provides consultative services to classroom teachers as well as direct instruction to students with visual impairments.

Continuum of Services

Within the continuum of services, we identify the level of special education services needed and customize based on individual needs. Among these designators are full inclusion services, partial inclusion services, and substantially separate services. Although BPS supports the Least Restrictive Environment (LRE), services and support can be provided both within and outside the general education classroom. The nature of this support varies and is specific to a student's needs.

While BPS is deeply committed to supporting students within the least restrictive environment, the district also recognizes that a small percentage of students may need more intensive support during part of their school day. Adding more intensive supports or more restrictive supports may cause the students IEP services to be delivered outside of the general education classroom for part of the day (called partial inclusion on the IEP) or sometimes most of the day (called substantially separate on the IEP). This type of service delivery can be supported through the assigned neighborhood school or supported by a citywide program. The location of the services is proposed by the IEP team.



The full list and descriptions of the town-wide special programs is described below.

Francis Wyman - Target (Therapeutic Acquisition & Regulation to Gain Educational Targets), Strides (students with marked global disabilities, who require a high level of support and specialized programming.), LABBB program supports students experiencing global developmental delays, neurological impairments, and/or significant medical challenges.

Pine Glen - Developmental Skills (The Developmental Skills Center (DSC) provides a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders).

Memorial - LABBB Collaborative PDD Program supports students with autism spectrum disorder, or other developmental needs, who benefit from visual supports and a highly structured academic environment.

Fox Hill - LABBB Emotionally Disturbed/Behaviorally Disturbed Program

The following description responds to the specific special programs at the Fox Hill Elementary School.

The percentage of students in the district with an IEP is 17% and the percentage of students at Fox Hill School with an IEP is 14%.

Aligned with BPS' approach to special education, students at the Fox Hill School are supported through a variety of teaching models - co-teaching, team teaching, flexible grouping, small group instruction, and individualized instruction. Teachers believe that all learners should be provided differentiated forms of instruction and recognize that all students learn in different ways, rates, and timeframes. To that end, the Fox Hill School continually adapts its staffing support, instructional methodologies, and assessment practices to meet student needs.

Tiered levels of instruction provide the regular education foundation of Fox Hill School's continuum of service model. Fox Hill Staff provide tiered levels of instruction to all students (Tier One - the general classroom curriculum; Tier Two - strategic levels of instruction; Tier Three - intensive levels of instruction usually at an individualized level.) If a student demonstrates academic and/or social/emotional/behavioral concerns despite thorough RTI procedures, the teacher refers the student to the building Student Support Team. This Team supports teachers in implementing additional strategies.

Special education services at Fox Hill School range from the least restrictive (for example, in class support services) to more restrictive (significant amount of multiple services out of the regular education classroom). Fox Hill School offers rooms available for pullout small group and individual instruction provided by special education teachers and related service providers who support inclusion for students with significant disabilities. Related service providers include speech/language pathologists, an occupational therapist, a physical therapist, a psychologist, and a social worker. Teachers of deaf/hearing impaired students and vision-impaired students also support students with these disabilities in accessing the curriculum.

The Fox Hill School utilizes the co-teaching model, taught by a special education teacher and a regular education teacher, to support students with special needs. These classrooms include regular education students and students with special needs enrolled at Fox Hill. Students with special needs are supported academically and socially through small group and individual teaching, modifications of the curriculum, and classroom accommodations. The goal of the program is to address students' multiple needs by providing a comprehensive range of services and a consistent, structured, and nurturing environment throughout the school day.

Special education learning spaces should be situated among regular education classrooms. The location of the classrooms should allow staff to communicate and collaborate fluidly throughout the day on student needs and programming. The number of students in these classrooms is monitored to ensure that a lower class size is maintained in order to allow the flexible learning requirements of the students.

In support of the special education services Fox Hill currently has several very small Special Education teaching spaces. The students with a moderate level of special needs who require this service account for over approximately 15% of the total student body. Four Special Education teaching spaces (Learning Centers / Dedicated SPED Teacher spaces) will be required to accommodate the student population of 325 students.

Two Speech & Language Pathologists (SLP) currently work at the Fox Hill School. Looking ahead to a new school, there will be a need for two dedicated spaces for Speech and Language.

One Team Chair works at the Fox Hill School. The Team Chair leads special education team meetings, supervises special education staff and organizes all mandated documentation associated with special education services. Looking ahead to a new school, there will be a need for one (1) Team Chair which will require a dedicated office space as well as require conference space for Team Meetings of staff and parents in a confidential location near the SPED Leadership Team.

One Psychologist works at the Fox Hill School. The school psychologist at the new school would require a private office for testing and meeting with families and should be adjacent to the administration and team meeting conference space. To ensure confidentiality and privacy, related service providers require individual spaces in the new school.

Fox Hill elementary school currently does not employ a BCBA, however bringing the DSC II (high needs students) will require a BCBA who provides services and consultation to students and the student's IEP Team and direct service delivery is provided by a behavior therapist, a special education aide with specialized experience and training who implements ABA methods under the direction of a BCBA. A dedicated office located near the Team Chair is required.

The Fox Hill School hosts one LABBB program, known as the EDBD Program (Emotionally Disturbed/Behaviorally Disturbed Program). Due to space constraints at the Fox Hill School, one of the classrooms is currently located at the Memorial Elementary School.

Ages/Grades Served	K-5
Student Profile	The EDBD Program supports students who are experiencing significant social/emotional and behavioral challenges. This program provides a setting with therapeutic support for students who are performing at or close to grade level academically. These students require significant structure and adult support to obtain the skills necessary to transition into a general education classroom.
Program Offerings	The curriculum is aligned with the general education classroom and modifications and accommodations are assessed and implemented on an individual basis. Opportunities for inclusion are available and implemented as the students are ready to meaningfully participate. A team of specialists include a counselor, BCBA, speech and language pathologist, occupational therapist, and physical therapist. Services are provided according to each student's IEP. Staff teams work closely together to help students find the tools and strategies that help them self-regulate, learn to use their language to communicate effectively with others, and engage in academic curriculum.

Looking forward to a new school, the district-wide Developmental Skills Center (DSC II) program (Low Cognitive requires ABA / Sub-Separate program) currently located at the Pine Glen School would move to the new Fox Hill School so as to achieve the appropriate spaces required for the students of the DSC program. The district is sensitive to ensuring the district-wide special education programs are equally dispersed between the elementary schools. The DSC program is growing and will require three classrooms for the DSC I and three classrooms for DSC II plus support spaces in the near future. The increased population of this program (currently 31 including incoming kindergarteners) requires significant space to support the growing needs of the students. The program has been supported at the Pine Glen School however there is no longer sufficient space to adequately support the program looking to the future. Given the opportunity of a new school, the District believes it is in the best interest of the DSC students to relocate the DSC II program to the new Fox Hill Elementary School which will provide for the appropriate spaces to support the program.

Ages/Grades Served	K-5
Student Profile	The Developmental Skills Center (DSC) provides a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders: ● Verbal and Nonverbal Communication ● Social Interaction Skills ● Unusual responses to sensory experiences

- Resistance to environmental or changes in routines
- Engagement in repetitive activities or stereotyped movements
- Maladaptive behaviors stemming from ASD
- Progress in the General education curriculum including social/emotional learning

Program Offerings — The specialized Curriculum (e.g., ACE or other with modified content with ongoing progress monitoring/mastery criteria) is designed to include ABA discrete trial, ABA task analysis, ABA Naturalistic/ Incidental teaching with a modified Grade Level Curriculum and Specialized Reading Program.

The last Tiered Focused Monitoring (TFM) (formerly Coordinated Program Review) was May 2022. There were no issues or problems identified at that review.

The programs and services identified above will continue at the "new" Fox Hill School. As referenced above, the district-wide DSC II program will move from the Pine Glen School to the Fox Hill School as a result of this project.

Vocations and Technology programs

There are no vocation or technology programs being offered at the Elementary School level.

Core Academic Space Narrative

Please see the "Teaching Methodology and Structure" section above and the attached "Day in the Life of Student" and "Week in the life of Student" charts for detailed descriptions of core academic educational activities that take place both inside general education classrooms as well as activities that are intended to take place outside of the general classrooms.

Transportation Policies

The Burlington Public Schools transportation department is committed to ensuring students are transported safely to and from school. Students typically arrive at school in one of three ways – walk, bike, or bus. In addition, some families choose to drive students to school.

BPS provides bus transportation free of charge for all K-5 elementary school students. Special education transportation services are separate from regular bus transportation.

Fox Hill Elementary School currently has seven district buses as well as four district vans. Students who are bussed are dropped off in a live, bus drop-off lane between 7:30 a.m. and 8:10 a.m. daily. School dismissal is at 2:10 p.m. daily. The school staff provides safety and supervision on the school property during arrival and dismissal times.

Functional & Spatial Relationships and Key Programmatic Adjacencies

The foundation of our educational program is built on the collaboration of the professionals in the building. The snowflake design and limited space erodes collaboration. Grade level teams are divided. There are no appropriate, large gathering spots for student performances or exhibitions. Offices have been built in hallways to accommodate the need for privacy and special services, like counseling and English Language Learner support.

The open classroom model does not work. The oddly shaped classrooms do not allow for redesign or repurposing. The four pods prevent grade level teams from working collaboratively - which is a priority in Burlington. Several grade level classrooms need to be located across the building isolating these students and teachers from their grade level peers and colleagues. Specifically, we have instituted a multi-tiered reading program in line with the DESE model. The multiple tiers require students to switch classrooms to narrow the teachable range of students within the classroom or so that a teacher can focus on a particular reading skill. Having some grade level classrooms in different pods because of a lack of space limits the ability to fully implement this multi-tiered system of instruction.

Functional and spatial relationships and adjacencies are key to the successful design of the new facility. These relationships between classrooms and programs in the school define the programmatic, functional, spatial, and environmental requirements of the educational facility and become the basis for the design at the next phase. Fox Hill School depends on adjacencies for communication, collaboration, flexible grouping, and teaming. Providing learning areas both in and outside classrooms for small group work, individual tutorial spaces, and additional instructional break out rooms are critical in a school with a focus on universally designed classrooms, requiring specialized instruction and an emphasis on inclusive practices.

Community is a core value among students, staff and parents. The PTO and parent volunteers are actively involved in before, during and after school programs. Fox Hill requires a welcoming main office and community arrival space that accommodates the high morning influx of families who walk or get dropped off by parents at school arrival, as well as the active dismissal procedures. The students, faculty and parent community value and require a space for the entire school to gather, both as a common space to gather and celebrate learning and as an area to spotlight the arts through assemblies and performances. A functional dining facility with a reasonable capacity is a need of the school. After school, we provide space for a K-5 extended day program that operates until 6:00 p.m. Up to 100 students participate in this program on a regular basis Monday through Friday.

The Fox Hill School is a relationship-oriented community that practices and values inclusive partnerships and mutual support in all aspects of the school community. This is the overall spirit of the school that will drive the design of the facility.

Security & Visual Access Requirements

The Fox Hill School, as all schools in Burlington, requires a safe environment for the Staff, Students and Public.

- A facility that is locked at all times. An access control system for staff members that allow their staff identification badge to grant access to the building
- A receptionist monitoring main access point(s)
- Visual Security of the main entrance utilizing a video monitoring system that will be monitored at the school secretary's desk.
- Visitors to the building should be granted access via door release after communicating with the secretary via video and audio intercom
- Video surveillance and recording of all appropriate areas on the interior and exterior of the building
- Safe, well-lit parking for staff
- Safe, well-lit parking for visitors in close proximity to the building
- Safe vehicular student drop-off and pick-up areas (without crossing traffic)
- Safe pathways for pedestrians and bicyclists coming from varied directions to the school
- Safe bus access systems that do not interfere with drop-off and pick-up traffic
- Safe recess grounds and play fields that can be properly supervised by staff and protected from vehicle traffic
- Safe access for kitchen, facility and shipping / receiving separate from school traffic to the main entrance
- Safe and appropriate access to the perimeter of the building and play fields
- High ratio of staff to students while on outside activities
- All staff trained in a district safety procedures and protocols

Day in the life of Student

SAMPLE DAILY STUDENT SCHEDULE	
Activity or Subject	Program Details and Educational Benefit
8:10 Arrival	School starts at 8:10 AM
8:10-8:30 AM Morning Meeting	Morning meeting welcomes all students, builds connection and community, and prepares students for the day ahead.
8:30-9:05 Specials	All students in grades K-5 attend Specials classes in the following areas: Library, Art, Music, and Physical Education (PE). **Library**: Develops students' information literacy and skills to access and utilize information in all formats including current and emerging technologies. **Art:** Provides experiences in a variety of visual art media and techniques while developing artistic skills. Students increase their knowledge of art history and develop art appreciation. **Music:** Students learn fundamentals of music through a sequential curriculum, which develops skills and knowledge in music performance, appreciation and history. **PE:** Encourages an active, healthy lifestyle, and positive choices that aims to grow developmentally appropriate skills, social connections, and promote the mind-body connection.
9:10–10:20 Math	70 Minute Math Block using enVision Math which is aligned with the Massachusetts Curriculum Frameworks. This curriculum incorporates teacher-guided exploration of mathematical ideas, individual practice, class discussion, reasoning about mathematical concepts and solving non-routine problems.
10:20–11:50 Reading	90 minutes of Literacy Instruction aligned with the Massachusetts Curriculum Frameworks Specific instructional components at each grade level include: • Primary: interactive read aloud, shared reading, guided reading (including skills based and strategy lessons), independent reading, phonemic awareness, and phonics / word study. • Intermediate: interactive read aloud, shared reading, guided reading (including strategy lessons, book clubs and literature circles), independent reading, and word study.

	Also included is explicit writing instruction occurs using Writing Units of Study, common writing prompts and scoring methods that include focused experiences in narrative, opinion, and informational, and both written and oral feedback from teachers: • All grades: authorship experiences that emphasize conferring, revising, editing, publishing and celebrating creative efforts • Intermediate: focus lessons on a variety of rhetorical and stylistic issues including specific narrative and expository techniques, planning and organizing, rich language, elaboration; serious examination of sentence structure and sentence boundaries; emphasis on writing as a tool to enhance learning and thinking in all subject areas
11:50–12:15 Lunch	There are three lunch blocks. Each lunch block is 50 minutes, 25 minutes to eat lunch and 25 minutes for recess. 10:45-11:10 (grades K and 1) 11:20-11:45 (grades 2 and 3) 11:50-12:15 (grades 4 and 5)
11:10–12:40 Recess	Students go outside for recess or play indoors in instances of inclement weather. Recess provides students with the opportunity to engage in structured and unstructured play activities and physical exercise, socialize with peers, and take a break from academic tasks.
12:40–1:10 Academic Intervention and Enrichment Block	Students are flexibly grouped to receive targeted additional support to master grade level standards. Enrichment groups help students who have already mastered grade level standards to deepen and extend their learning. Lessons designed to foster social emotional competencies are provided during this time, as well.
1:10-1:55 Science and Social Studies	**History/Social Science:** Students engage in a history/social sciences curriculum that, wherever possible, integrates with the informational skills components of the Mass Frameworks for English Language Arts. The curriculum provides age-appropriate experiences for students to view and come to understand themselves; their family and cultural heritage; the United States and the world; and the relationship between and among them. Throughout the history program, students are asked to explore the contributions and experiences of different peoples, past and present, appreciate the diverse sources of these contributions, and apply this knowledge as citizens of the United States.

	Science: Teachers implement a hands-on science and engineering curriculum. There are typically three units at each grade level from K-grade 2 and four units at grades 3 through 5. These units address standards for the following domains: life science, physical science, earth and space science, and engineering. Instructional components include: • Investigation - Pairs and groups of students work with a variety of materials to make sense of science phenomena. • Demonstration - Teachers model science phenomena for the whole class. • Observation - Students observe scientific models, and living materials, including crabs, butterflies, and wood frogs. • Reading - Information texts are used to deepen understanding, through teacher read-alouds and paired reading. • Recording scientific ideas - Students explain their understanding of scientific phenomena through writing, using drawn models to enhance their descriptions.
1:55-2:15 Closing Activities	Students wrap their day with a closing circle which focuses on activities that continue to build the classroom community and a review of the day. Students also pack up and prepare what they may need for the following day.
2:15 Dismissal	Students are dismissed at 2:15

Week in the life of Student

SAMPLE WEEKLY STUDENT SCHEDULE	
Weekly Activity or Subject	Program Details and Educational Benefit
Specials	Library, Art, Music, and Physical Education classes are included in all students' schedules to provide a well-rounded curriculum that supports skill development as summarized in the daily schedule above. **Library** Grades 1, 2, 3, 4, & 5 have one 30-minute library class each week Grade K has one 45-minute library class each week **Music** Grades 1-5 have two 45-minute general music class each week Grade K has one 45-minute music class each week Students in Grades 3-5 also have the choice of signing up for instrumental lessons. **Visual Art** K-5 have one 45-minute art class each week. **Physical Education, Health and Wellness** Kindergarten have one 45-minute class each week Grades 1-5 have two 45-minute classes each week
Math	5x per week, 70 Minute Math Block / 30 Minutes of Intervention This allows students to work towards meeting grade level benchmarks as detailed above (See Sample Daily Schedule).
Literacy	5x per week for 90 minutes of Literacy Instruction per day which includes reading and writing instruction. This allows students to work towards meeting grade level benchmarks as detailed above (See Sample Daily Schedule).
Academic Intervention and Enrichment	5x per week for 30 minutes. The content will vary.
Recess	Students have recess 5x per week for 25 minutes daily. This provides down time for students and a time to play.
Science and Social Studies	Three hours per week Science and Social Studies instruction. This allows students to work towards meeting grade level benchmarks as detailed above (See Sample Daily Schedule).

Fox Hill and Pine Glen Elementary School Educational Program

BURLINGTON PUBLIC SCHOOLS

Burlington Public Schools
June 13, 2023

Table of Contents

Introduction	3
Grade & School Configuration Policies	6
Class Size Policies	6
School Scheduling Method	7
Teaching Methodology and Structure	9
Teacher Planning	18
Pre-Kindergarten Program	19
Kindergarten Program	19
Lunch Programs	19
Technology Instruction Policies & Program Requirements	20
Visual Art Programs	22
Music/Performing Arts Programs	24
Physical Education Programs	25
Special Education Programs	26
Vocations and Technology Programs	34
Core Academic Space Narrative	34
Transportation Policies	34
Functional & Spatial Relationships and Key Programmatic Adjacencies	34
Security & Visual Access Requirements	36
Day in the Life of Student	37
Week in the Life of Student	40

Introduction

This Educational Program closely resembles the Fox Hill Elementary School Educational Program. The mission, overall educational program and goals and objectives of the Burlington Public Schools (BPS) remains the same. The slight nuances occur as BPS looks at combining the Fox Hill and Pine Glen Elementary Schools for a combined enrollment of 640 students as part of the Massachusetts School Building Authority's Enrollment Agreement.

The BPS School Committee is committed to maintaining small schools. In 2019, it voted to maintain the four elementary schools that currently exist. Therefore, when looking at a combined school, the ideal relationship with the consolidation is to maintain two smaller schools within the larger school with approximately 320 students in each school. The District strongly believes there is a direct correlation to school size and school performance. However, there is a benefit to consolidation in some areas of the program as follows:

- Remains intimate, is operationally and cost effective with core programs and functions such as the cafeteria & kitchen, library and gymnasium that can be shared
- Provides for staff collaboration and team teaching (PLCs)
- Maximizes staffing ratios

As part of the MSBA process, the District will study the following school configurations to determine the most educationally appropriate and cost-effective solution for the Fox Hill Elementary School project:

Grades K-5 enrollment based upon an enrollment of 325 students at the Fox Hill Elementary School

Grades K-5 based upon an enrollment of 640 students for consolidation of the Fox Hill Elementary School and the Pine Glen Elementary School

The Burlington Public Schools (BPS) provides educational programs for students in grades preschool through grade 12, as well as post-secondary programs.

Mission of the Burlington Public Schools

The Mission of the Burlington Public Schools is to help all students acquire organized knowledge, master creative and intellectual skills, and understand ideas in ways that foster a positive self-image and sense of belonging needed for lifelong learning, self-sufficiency, and responsible, equitable citizenship.

The Vision

The Vision of the Burlington Public Schools is "striving for excellence" and will be accomplished by:

- Helping students achieve their highest potential by providing a rigorous, balanced curriculum.
- Employing highly qualified, diverse teachers, administrators, and support staff who are committed to the BPS mission and vision.
- Encouraging parents to take an active role in their children's education through involvement with the schools to enhance student academic success.
- Providing opportunities for community members to participate in school activities to reinforce the goals and advantages of providing quality educational programs for every student.

Equity Statement

Educational equity means that every child belongs and receives whatever support he/she/they needs to develop his/her/their full academic, emotional, and social potential to learn and thrive every day. This begins with kindness and valuing the humanity of every child/individual.

Core Values

The Burlington Public School District is committed to:

- Developing all students' potential for excellence.
- Creating a learning environment that values human differences, fosters a sense of belonging and promotes cultural proficiency among all students and staff through a culture of diversity, equity, and inclusion.
- Providing a program of study that has the same academic objectives for all students.
- Cultivating an educational environment that reflects sensitivity to students' differing styles and intellectual development.

Theory of Action

If Burlington Public Schools…

- Focuses on academic outcomes and social/emotional wellness and belonging of each student, providing targeted support, and building personal relationships,
- Establishes empowering conditions for students and educators, providing a welcoming environment, resources, programs, and community support,
- Provides human and financial resources to support high quality, engaged learning,

THEN students will make effective progress and be appropriately challenged, graduating from high school ready for college, career, and life as contributing citizens in an increasingly diverse global society.

Burlington Public Schools System Wide Goals

The attached BPS Planning for Success document identifies the priorities of the Burlington Public Schools for the 2022-25 school years. Our system-wide goals focus upon academic excellence, educational equity, and social and emotional wellbeing. The goal areas and related actions build upon prior work and reflect the ongoing commitment to system growth and improvement to meet the needs of all learners. While goals are situated within separate categories, it is important to note that the areas of focus are interrelated and inextricably linked. Ensuring positive, productive, and fulfilling learning experiences for all students requires attention to a myriad of factors that create welcoming, inclusive, equitable, challenging, and engaging learning environments necessary for students to thrive.

Grade & School Configuration Policies

The Burlington Public Schools currently educate over 3,400 students in grades PK through grade 12. All elementary students will move up to the Marshall Simonds Middle School and Burlington High School.

The Burlington Early Childhood Center (BECC) is located at the Burlington High School which is an integrated public preschool for children ages 3-5. District students in grades kindergarten through grade 5 are educated in four elementary schools: Francis Wyman, Fox Hill, Memorial, and Pine Glen. The Marshall Simonds Middle School houses grades 6-8 and the Burlington High School houses grades 9-12 as well as the BECC.

There is no plan to modify the grade configurations as a result of combining the Fox Hill and Pine Glen Elementary Schools.

Class Size Policies

The Burlington School Committee and the Burlington Teachers Association recognize the relationship between class size, effective teaching, and student achievement. Class sizes that rise above acceptable levels affect both educational quality and the School District's ability to attract and retain the best possible teachers. Attempts are made to keep class sizes close to the guidelines listed below, recognizing that in certain cases, some classes may have higher enrollment:

Kindergarten through Fifth Grade: 1 - 18 students

No changes are proposed to the class size guidelines for the combined Fox Hill / Pine Glen Elementary School as a result of this project.

Average class sizes for the Fox Hill and Pine Glen Elementary Schools and all Burlington Elementary Schools for as of October 1, 2022 are shown below.

Grade	Fox Hill ES Average Class Size	Pine Glen ES Average Class Size	All BPS Elementary Schools Average Class Size
Kindergarten	14.75 students	17.33 students	14.71 students
Grade 1	15.40 students	15.67 students	16.35 students
Grade 2	15.60 students	14.33 students	16.63 students
Grade 3	18.25 students	14.67 students	15.76 students
Grade 4	19.00 students	20.00 students	17.19 students
Grade 5	16.25 students	20.67 students	19.07 students
Average for K-5	16.46 students	17.11 students	16.56 students

CLASS SIZE – 640 Student Enrollment

To maintain the student-to-teacher ratio it is strongly recommended that there be six classrooms per grade or three classrooms per "school" per grade. In addition, it is important to maintain the same number of classrooms per grade. The proposed breakdown per grade based upon an enrollment of 640 students is shown in the chart below.

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	107	107	107	107	107	107	640
Average # students/class	18	18	18	18	18	18	
# of classrooms	5.93	5.93	5.93	5.93	5.93	5.93	35.56
Round for Total Classrooms / Grade	6	6	6	6	6	6	36

To break it down by school, the overall classroom requirement remain the same as above but separates them by school.

GOAL Class Size	K	1	2	3	4	5	Total
Fox Hill School							
# Students (Average)	53	53	53	53	54	54	320
Average # students/class	18	18	18	18	18	18	
# of classrooms	2.94	2.94	2.94	2.94	3.0	3.0	17.76
Round for Total Classrooms / Grade	3	3	3	3	3	3	18

GOAL Class Size	K	1	2	3	4	5	Total
Pine Glen School							
# Students (Average)	53	53	53	53	54	54	320
Average # students/class	18	18	18	18	18	18	
# of classrooms	2.94	2.94	2.94	2.94	3.0	3.0	17.76
Round for Total Classrooms / Grade	3	3	3	3	3	3	18

School Scheduling Method

The Burlington Public Schools has articulated specific instructional time allotments for elementary core subjects, which include language arts, mathematics, science, social studies and social curriculum. Specialist programs both enhance the core program and provide contractual preparation time for classroom teachers. These time allotments per week for the current enrollment or the combined two-school solution with an enrollment of 640 students are as follows and no changes are proposed:

- Language Arts - 450 minutes
- Mathematics - 300 minutes
- Science/Tech Engineering - 90-120 minutes
- Social Studies - 45-120 minutes
- Social Curriculum - 30 minutes
- Art – 45 minutes – 1 time per week
- Music – 45 minutes – 2 times per week
- Physical Education, Health and Wellness – 45 minutes – 2 times per week
- Library – 30 minutes (K, 3-5); 45 minutes (1, 2)

The Burlington School Committee recognizes the importance of providing adequate numbers of specialist teachers in both elementary and secondary schools. Elementary specialist teachers are defined as Art, Music, Physical Education, and Library-Media. These programs are a vital component of the complete educational program that are both a value and expectation of the Burlington Public Schools to offer all students.

Article 43: “Elementary Preparation Time” of the collective bargaining agreement states that elementary teachers are entitled to a 30-minute duty-free and meeting-free lunch period. In addition, elementary classroom teachers are scheduled for a minimum of 240 minutes of preparation time per week.

The current specialist sections at Fox Hill Elementary are as follows:

- Art - Twenty-six 45 minute blocks are taught by one Art teacher each week.
- Music – Nineteen 45 minute blocks of general music for grades K-5. Additionally, three sections of recorder for grade 3 and two 45-minutes sessions for 4th and 5th grade chorus, by one Music teacher. Fourth grade band lessons are taught by the music teacher and a part time educator comes to teach strings.
- Band or String - In addition to general classroom music and 4th and 5th grade chorus, students in 4th grade may elect to take an introductory band or string instrument. Instrumental lessons are small group, pullout lessons during the school day. Students in 5th grade or other grades who are already proficient on an instrument may elect to participate in band or orchestra. The ensemble groups each meet once per week for 45 minutes. Chorus is compulsory for 4th and 5th grade students and is scheduled within the school day. The 4th grade chorus runs for 45 minutes, once per week and the 5th grade chorus runs for 60 minutes, once per week. General music class meets once per week for grades K-2 and 4-5. The 3rd grade meets for 45 minutes and includes compulsory instruction on the recorder.
- Physical Education, Health, and Wellness - Thirty 45-minute blocks are taught per week for grades K-5 by two Physical Education teachers.
- Library/Media - The Fox Hill School Library is currently staffed full time. The Library Teacher instructs each class in grades K, 3, 4, and 5 for a 30-minute block every school week. Each class in grades 1 and 2 have a library class every week for a 45-minute block of time. Unscheduled times for Library Teachers are designated as flextime. Library flextime is designed to provide unscheduled blocks of time during the school day for collaboration between the library teacher and the classroom teacher, as well as time to manage the library collection. Library Teacher focuses on district led curriculum featuring literacy skills, research, and Digital Citizenship while fostering a love of reading for all.
- Digital Literacy and Computer Science – BPS DLCS curriculum leads to active, infused, collaborative, and authentic learning experiences using technology as a tool. Our program focuses on critical thinking and problem solving in order to help students ask the right questions and develop solutions to problems. Student choice and leadership is emphasized via various grade level applications. Students use applications that provide opportunities to grow academically and engage with the global community. We encourage students to seek opportunities to create, invent, or support concepts or creations using personal initiative. Students use technology to explore and investigate personal interests and we work to foster curiosity and imagination. Finally, our CSforALL Computer Science program engages students with digital tools and resources to investigate real-world issues, answer questions, or solve complex problems leading to the potential participation in the Burlington High School Innovation Career Pathways.

Teaching Methodology and Structure

Burlington Public Schools (BPS) is committed to providing a rigorous educational program characterized by challenging academic content and engaging, relevant, and culturally responsive instruction. In alignment with our system-wide goals, every school is focused upon academic excellence, educational equity, and social and emotional wellbeing.

Fox Hill Elementary School is one of four elementary schools in the Burlington Public Schools, currently serving approximately 430 students in grades K through five in 26 classrooms. The Pine Glen Elementary School is also one of the four elementary schools in Burlington Public Schools, currently serving approximately 310 students in grades K through five in 26 classrooms. All elementary schools foster a safe, caring, and welcoming learning environment in which every child experiences a sense of belonging, challenge, joy, and engagement.

A variety of programs and structures support the diverse learning needs of students. Teachers provide rigorous instruction aligned with grade level learning standards and work in collaboration with specialists and support staff to ensure student progress. Grade level teams routinely meet with math and literacy specialists to plan instruction, review student progress, and design interventions and enrichment opportunities for students.

Multi-Tiered System of Support (MTSS) or Response to Intervention (RtI), provides a framework that focuses on a system level approach across the classrooms, schools, and district to meet the academic and non-academic needs of all students. It guides both the provision of high-quality core educational experiences in a safe and supportive learning environment for all students and academic and/or non-academic targeted interventions/supports for students who experience difficulties and for students who have already demonstrated mastery of the concept and skills being taught. The flexible tiers represent a robust and responsive educational environment that provides students with a continuum of multiple supports to meet their needs. The tiers represent increasing intensity of academic and non-academic support and interventions.

There is flexibility of the system and the programming to allow movement between the tiers (to both a more or less intensive type of support/intervention). All students receive “Core Instruction” with appropriate accommodations and differentiation. This is considered Tier 1. It is expected that 80% of all students fall into this Tier 1. Some students receive additional small group instruction to support their growth called “Tier 2 Intervention” which is about 15% of all students. A small percentage of all students require intensive instruction with additional supports and interventions. This is considered “Tier 3 Intervention” and encompasses about 5% of all students.

The academic and non-academic core components of MTSS are:

- ***High-quality core curriculum and instruction implemented with fidelity***
- ***Research-based academic interventions and assessment practices***
- ***Research-based behavioral interventions and supports***
- ***Universal screening and progress-monitoring***
- ***Collaboration and communication between educators and parents***

BPS believes in providing the necessary staff to support RtI. In addition to literacy and math specialists, tutors are provided at each school. At the Fox Hill School, there are 5-6 tutors. At the Pine Glen School there are currently 4 tutors with the intent to add 1 more for a total of 5. This would continue with the combined new school. Tutors provide support in the classroom as well as in small groups outside the classroom and therefore require dedicated spaces in the vicinity of the classrooms.

Every year, Fox Hill students include 40-50 English Language Learners, and Pine Glen students include 40-50 English Language Learners, of varied English proficiency and home languages, who learn alongside their grade level peers. Small groups of students meet with the ELL teacher several times a week both in and outside the classroom for direct English instruction.

BPS delivers special education services in a variety of settings and modalities. We offer Inclusion services with focus on co-teaching, partial inclusion services that combine both co-taught and pull out methods, and fully sub separate programming for students with intensive needs. We currently have multiple special educators, school psychologists, speech & language pathologists in every building. We also have district wide, three social workers, two OTs, and one PT. We collaborate with McLean's Hospital for our social emotional students, NECC for our specialized programming for our high needs population, and Landmark School for our students with language based disabilities. We also contract with a variety of other providers to meet the needs of our students, including but not limited to, Perkins School for the Blind and Kindle Associates.

In addition, BPS is a member of the LABBB (Lexington, Arlington, Burlington, Bedford, Belmont, Watertown) Collaborative. The Collaborative was formed in response to the need for more specialized programs. The Massachusetts Department of Education approved the Collaborative to begin in 1974. Currently, LABBB provides educational programming and support services for over 350 special needs students from over 65 districts. LABBB serves students with a variety of special needs including students on the autism spectrum, students with multi-handicaps, pervasive development disorders, developmental delays, language deficits and social/emotional challenges. The LABBB Collaborative Programs are all located in public school buildings.

BPS offers 3 district wide programs plus 3 LABBB programs at the elementary school level to provide learning cohorts and highly specialized instruction for elementary students with specific disability profiles.

Fox Hill hosts one LABBB program, known as the EDBD Program (Emotionally Disturbed/Behaviorally Disturbed Program). There is one classroom currently located at the

Memorial Elementary School due to insufficient space at the existing Fox Hill School. In the new school, the entire program would be located at the Fox Hill School. The EDBD Program supports students who are experiencing significant social/emotional and behavioral challenges. This program provides a setting with therapeutic support for students who are performing at or close to grade level academically. These students require significant structure and adult support to obtain the skills necessary to transition into a general education classroom. The curriculum is aligned with the general education classroom and modifications and accommodations are assessed and implemented on an individual basis. Opportunities for inclusion are available and implemented as the students are ready to meaningfully participate. A team of specialists include a counselor, BCBA, speech and language pathologist, occupational therapist, and physical therapist. Services are provided according to each student's IEP. Staff teams work closely together to help students find the tools and strategies that help them self-regulate, learn to use their language to communicate effectively with others, and engage in academic curriculum.

Flexible Grouping

General education teachers engage in flexible grouping methods to meet the instructional needs of their students and as determined by the professional learning communities. Grouping and regrouping methods take place weekly within classrooms and among grade level classrooms. General education, special education and ELL teachers collaborate seamlessly to provide tier one (general curriculum), tier two (strategic intervention) and tier three (intensive intervention) in the inclusive environment. Pullout instruction is provided for students who require it, based on their personalized instructional needs within tier two and tier three programming. There is shared responsibility among the faculty for all students' success. Grade level classrooms are organized within common hallways and adjacent locations. Close proximity is critical in order to achieve the requisite communication and collaboration for flexible grouping methods in a grade level PLC team.

Below is an overview of the general elementary curriculum, methods and practices used by teachers. The curriculum remains the same for a combined school with an overall enrollment of 640 students, or 320 students per "school". Each "school" would require equal number of spaces to accommodate the program.

English Language Arts / Literacy

Based on the Massachusetts Curriculum Frameworks, the English Language Arts Program serves to help all children develop communication skills in writing and reading to develop a lifelong interest in literacy. Using a blended model including Science of Reading approved programs, teachers integrate direct and systematic instruction with reading and writing experiences so students learn how to use word reading skills along with language comprehension skills to comprehend texts they are reading. Students have opportunities to apply what they are learning in small groups and independently . Teachers follow a specific Scope and Sequence based on the Common Core Standards to meet all students' needs. Writing is embedded throughout Science and Social Studies, as well as taught during ELA. Students receive at least 90 minutes of daily instruction in ELA. The curriculum and delivery method will not change with the "new" facility.

Phonological Awareness and Phonics are explicitly taught in the younger grades using structured programs. These skills are reinforced in small groups with decodables. Word Study and Comprehension are taught in a variety of ways in all grades and are reinforced with authentic texts in small groups. This helps to grow:

- Phonemic and phonological awareness and letter-sound knowledge
- Alphabetic Principle-knowledge, blending, sound/symbol correspondence, structural analysis, contextual clues, and high frequency words
- Comprehension strategies in order to evaluate, synthesize, analyze, connect, infer and inquire
- Vocabulary
- Process writing, spelling, and grammar

In addition, students read both orally and silently and are read to from a variety of high quality increasingly complex fiction and nonfiction texts. Students participate in small group instruction and read a variety of reading materials including authentic texts, articles, and decodable books. Students write daily to support and extend their knowledge of the structure of language and construct meaning. Technology is incorporated into the ELA classroom to support the reading and writing process, including iPads for younger students working on phonemic awareness.

Although most of the reading and writing instruction takes place within the classroom environment, smaller work areas are necessary to facilitate individualized instruction, both in 1:1 and small group settings. Areas inside and outside the classroom are preferred.

In support of literacy, a new or renovated building will house a Literacy Center which would serve many purposes. The space would be used for professional learning for teachers and assistants, and will provide an alternative location for specialized instruction for small groups or 1:1 intervention. The specialized materials used for literacy intervention would be stored in a centralized location to facilitate access by teachers providing RTI (Response to Intervention) services to students in classrooms and small group spaces. The collection used for literacy instruction would also be housed in the shared literacy center space to facilitate sharing the texts and materials across classes and grade levels.

Each floor would include instructional spaces (small group rooms) adjacent to clusters of classrooms for small group lessons. Literacy specialists, math specialists, ELL teachers and special education staff would utilize the small group rooms.

Mathematics

Students learn mathematics in whole class, small group, and partner configurations. The curriculum includes a variety of hands-on activities and many materials that require storage space in each classroom. Often students are working with manipulatives at their desks or in common spaces such as on the rug or at larger tables. Several times per week students need access to an online program. For this they use their assigned iPads or Chromebooks.

Teachers often project the curriculum and student work using an interactive whiteboard or an ELMO system. This allows all students to be able to see the content, either from their desks or a common space in the classroom. The teachers need to be able to access the technology easily while circulating around the room to check in with students who are engaging with the curriculum. The objective of each lesson is to present students with a variety of experiences in math class where tasks consistently encourage high-level student thinking, synthesis and application. Some of these tasks require a lot of space and materials, such as building cubic meters with meter sticks and tape. Students need to be able to work in small groups with enough space to meet the demands of the task.

BPS uses the enVisionMath Common Core 2020. Teachers help students to lead math congresses and to share mathematical ideas and thinking. The curriculum and delivery method will not change with the "new" facility however there will be appropriate spaces to deliver the curriculum. For students who have been identified with intervention needs, a math enhancement block is available. Students with IEPs have their needs met with a combination of co-teaching and pullout services to support their learning.

Math specialists are responsible for supporting classroom educators with instructional practice. Most of the time coaches are working with students and teachers in the classrooms. They also require a separate office to store materials, meet with other educators such as English Language and Special Education teachers, and occasionally work with one or two students.

Math interventionists work with small groups of three to four students outside of the classroom. They need table space for the group that can also accommodate manipulatives that support the mathematical concepts. They also use whiteboards to model the mathematics and the students use the boards to explain their thinking through annotation or drawing.

The curriculum and delivery method will not change with the "new" facility however there will be appropriate spaces to support delivery of the curriculum.

Science

The Science Center supports the K-12 Science Curriculum in Burlington Public Schools by providing numerous resources. Our main objectives are to:

- Provide science curriculum and materials enriched with using science practices.
- Expose students to a variety of sciences: physical, earth, life, and technology & engineering.
- Spark students' curiosity and foster excitement about the world around them.
- Provide experiences difficult for a classroom teacher and lessons on current scientific events.

We have developed a Science Curriculum that is aligned with the Massachusetts State Frameworks Standards and focusing on using science practices. We use UBD design

curriculum units that provides teachers with essential information (State standards, Vocabulary, Assessments, Lessons) they need to support their classrooms.

We provide unit based Science Kits to support the K-5 curriculum. Each kit comes with the necessary tools and materials to teach their unit. They also contain grade leveled science reading books, core content books and anything else to support their unit. Kits are delivered through the school mail to the classroom.

Focusing on grades K – 5 science, the Science Center's goals are to develop and maintain an active science curriculum, while supporting teachers and students in their science learning. We hope to inspire a passion for science and nature.

Classroom Programs

The Science Center staff teaches Grade Level Programs at all of our Elementary schools. Burlington Science Center's Grade Level Classroom Programs include:

Kindergarten:	Hedgehog, Magnetism, Chick Hatching, Protect the Popsicle Engineering, Push and Pull Forces Fair
1st Grade:	Tide Pool Field Trip, Starlab, Birds/Penguins/Mammals, Sound Show
2nd Grade:	Reptiles & Amphibians, Maple Sugaring, Habitat Investigation Field Trip, Augmented Reality Sandbox,
3rd Grade:	MagLev Train Engineering Challenge, Weather & Climate, Cockroach Traits Investigation
4th Grade:	Earthquake Shake Engineering, Pollinators Engineering, Stream Table Investigation
5th Grade	StarLab, Investigating Matter Models, Designing Water Filters, Ecosystems

The STE learning experiences we offer could be greatly enhanced by several building features. These include:

1. Access to sinks/water
   Science instruction at all levels requires access to water (as both a scientific "supply" and for the purposes of clean up and health/safety), making convenient access to sinks along the perimeter of the classroom essential.
2. Appropriate flooring materials
   Due to the use of liquids in activities and demonstrations, waterproof (non-carpeted), non-slip floor surfaces are important, especially in areas of the room where science activities will take place.
3. Ample work space
   Effective STE learning spaces have a variety of horizontal and vertical workspaces to support teaching and learning. These allow for flexible arrangement to support individual and small group work, whole-classroom discussions, demonstrations, presentations, and investigations. In STE learning spaces, large, seamless

desktops/workspaces are strongly preferred. Whiteboards and bulletin boards support communication and sharing of student work.

A designated STE Classroom and/or flexible makerspace (separate from an STE-optimized general classroom) would provide additional instructional room to support students' development of engineering/design and other 21st century skills that are applicable across subjects, particularly in project-based learning: e.g., creative thinking, problem solving, prototyping, testing and revising. Spaces like cubbies and countertops are recommended so that student work can be set up for extended periods of time. Low shelving provides students with easy access to the materials they need. An open floor space permits rearrangement of furniture for different purposes.

4. Ample storage space
   Many units of study require a substantial volume of supplies which are typically stored in large bins. These need to be stored out of the way of the instructional area. This storage space should be securable to prevent unauthorized access to expensive equipment and items that require adult supervision for safe handling. This applies for any designated STE/makerspace rooms as well.

5. Access to outlets
   STE learning requires access to outlets to support Chromebooks, clamp/desk lamps, and other electrical tools, primarily at the upper elementary level. Electrical ceiling drops, especially in any dedicated STE classroom or makerspace, help provide access while minimizing safety hazards.

6. Access to the outdoors
   Outdoor learning and environmental literacy are important components of our curriculum. These can be supported through visual and physical access to the outdoors which allows people to observe natural phenomena like weather, migration, and plant growth. Large windows overlooking the grounds and doors that connect classrooms directly with the schoolyard support these aims. Garden beds and other growing spaces like pollinator gardens require southern exposure and/or full sun. Site considerations such as stormwater detention / retention ponds as well as lessons on native and drought resistant plantings and other natural resources can be incorporated into the curriculum as well. Universal design principles applied to garden sites and other outdoor areas support equitable access to these important spaces.

The curriculum and delivery method are not proposed to change.

Social Studies

Students engage in a history/social sciences curriculum that, wherever possible, integrates with the informational skills components of the new Mass Frameworks for English Language Arts (incorporating the Common Core Standards). It is important that there be wall space available for maps and student designed educational posters/displays as well as ample

storage capacity for books and other content materials. Classroom space to provide enough room for small group projects and whole class presentations is needed. The curriculum and delivery method will not change with the "new" facility.

World Language

Burlington Public Schools does not offer world language instruction at the elementary level and this is not proposed to change.

Academic Support Programs

English Learner Education

There are currently 30-40 English Learners enrolled at Fox Hill Elementary School and there are 30-40 English Learners enrolled at Pine Glen Elementary School. Each school is supported by two ESL teachers. The model is "push in" and "pull out" depending on a student's English proficiency and grade level. Two designated ESL classrooms for each "school" are necessary for small group instruction (roughly 8-10 students). In addition, ESL instruction will occur in smaller work areas outside of the grade level classrooms, as needed to provide targeted instruction when using the "push-in" model. The curriculum and delivery method for the growing number of students requiring small group "pull out" will be better supported within the "new" facility.

Literacy and Math Support

Although most of the reading and writing instruction takes place within the classroom environment, smaller work areas are necessary to facilitate individualized instruction, both in 1:1 and small group settings. Areas inside and outside the classroom are preferred.

In support of literacy, a new building will house a Literacy Center which would serve many purposes. The space would be the location of professional learning for teachers, assistants, and parents. In addition, the Literacy Center will provide an alternative location where teachers may utilize the space for specialized instruction for small groups or 1:1 intervention. The specialized materials used for literacy intervention would also be stored in a centralized location to facilitate access by teachers providing RTI (Response to Intervention) services to students in classrooms and small group spaces. The collection used for literacy instruction would also be housed in the shared literacy center space to facilitate sharing the texts and materials across classes and grade levels. In addition, BPS is committed to supporting literacy for all students. The Fox Hill School and Pine Glen will each have 2 literacy specialists dedicated to this school. A shared space with two instructional areas is necessary to facilitate individualized instruction.

To support effective math instruction, math specialists work with classroom educators on instructional practice. Most of the time coaches are working with students and teachers in the classrooms. They also require a separate office to store materials, meet with other educators such as English Language and Special Education teachers, and occasionally work with one or two students.

Math interventionists work with small groups of three to four students outside of the classroom. They need table space for the group that can also accommodate manipulatives that support the mathematical concepts. They also use whiteboards to model the mathematics and the students use the boards to explain their thinking through annotation or drawing.

Ideally, each floor would include instructional spaces (small group rooms) adjacent to clusters of classrooms for small group lessons. Literacy specialists, math specialists, tutors, ESL teachers and special education staff would utilize the small group rooms.

Student Guidance and Support Programs

Social/Emotional Learning

All students have access to non-academic supports that focus on the optimization of positive and productive functioning. These supports include access to a school counselor, school psychologist and/or a school adjustment counselor. Proactive and predictable classroom routines and a positive school climate are essential to the successful implementation of the tiered system of support. Classroom and school- wide expectations for all students must be clearly defined, communicated, and visually displayed in classrooms and throughout the school. The school climate should support positive relationships with adults/teachers/mentors to provide additional support and encouragement.

Positive Behavior Interventions & Supports (PBIS) is a set of ideas and tools that schools use to improve the behavior of students throughout the school. PBIS is a proactive approach to addressing student needs and supporting pro-social skills. Behavioral expectations are clearly established and articulated. The expectations are clearly established and routinely reinforced. Prosocial skills are directly and systematically taught, and interventions employed just as we do for academic skills. PBIS uses evidence and data-based programs, practices and strategies to frame behavioral improvement in terms of student growth in academic performance, safety, behavior, and establishing and maintaining positive school culture. PBIS addresses the needs of at-risk students as well as the multi-leveled needs of all students in regards to behavior, which creates an environment for both teaching and learning to occur in schools.

Our approach to social and emotional learning will not change in the “new” facility. Students will engage in explicit social and emotional learning, as well as implicit learning, throughout the school day.

Extended Day Program

The extended day programs currently offered at the Fox Hill and Pine Glen Schools will remain as part of the community with the new school. Each school serves more than 100 students each year and ideally will grow with the available community / core space in the new school.

Teacher Planning

Article 43: "Elementary Preparation Time" of the collective bargaining agreement states:

> Each elementary classroom teacher will be scheduled for a minimum of 240 minutes of preparation time per week (during the regular school day), which is to be scheduled in meaningful units, pro-rated by FTE. Given the minimum scheduled preparation time of 240 minutes per week, elementary teachers will receive a minimum of 30 minutes of duty-free preparation time (excluding their duty-free lunch time) for three (3) days per week, and the Committee will make reasonable efforts to continue providing, subject to economic factors, a minimum of 30 minutes of duty-free preparation time (excluding their duty-free lunch time) on two (2) additional days per week for a total of five (5) days per week."

Teachers provide rigorous instruction aligned with grade level learning standards and work in collaboration with specialists and support staff to ensure student progress. Grade level teams routinely meet with math and literacy specialists to plan instruction, review student progress, and design interventions and enrichment opportunities for students.

Existing support and teacher planning spaces are either non-existent, or undersized, throughout the school. Offices for support staff either don't exist, are shared by multiple specialists, or are in sub-optimal locations. General education teachers often remain in their classroom during their planning / preparation time.

Although there will be no changes to the teacher planning time in a new facility, there will be multiple spaces within close proximity to classroom neighborhoods for teacher planning, collaboration, and to support small, flexible group work spaces. The spaces will be designed to accommodate project-based learning, with optimal acoustics to allow for privacy, and flexible furniture to support all students. This would support and promote collaboration, communication and flexible groupings. Having small group rooms in the neighborhood would also promote our sense of inclusion. The classroom spaces in each neighborhood would offer flexibility for project-based learning.

Classrooms across grades provide inclusion for students with special needs so it is critical to provide small quiet working areas within these classrooms to meet the educational needs of the inclusion and integrated students.

In a new facility, there should be enough special education spaces which would be large enough for teacher planning, testing, consultation, and small group instruction. The special education teaching spaces should be centrally located on each academic floor for easy access. A school for 640 students or 320 students per "school" will require four learning centers / Special Education teacher spaces to meet the needs of the students for each school.

Pre-Kindergarten

The Burlington Early Childhood Center (BECC), located at Burlington High School, is an integrated public preschool for children ages 3-5. We support children of all abilities in both general education and special education settings. We also provide support in the areas of speech-language, fine motor, and gross motor development.

OUR MISSION:
The Burlington Early Childhood Center (BECC) is committed to providing a developmentally appropriate curriculum for every child. Our curriculum promotes our students' cognitive, language, social-emotional, and fine and gross motor skills. Our students are provided with a range of enriching experiences to promote a lifelong love of learning to reach their full potential. We are committed to providing a safe, nurturing, and supportive environment for all students, families, and staff.

CORE VALUES:
The Burlington Public School District is committed to:
- Developing all students' potential for excellence.
- Providing a program of study that has the same academic objectives for all students.
- An educational environment reflecting sensitivity to students' differing styles and intellectual development.
- Creating a learning environment that values human differences, fosters a sense of belonging, & promotes cultural proficiency.

Kindergarten

Burlington Public Schools offers full-day Kindergarten at each of the four elementary schools. The curriculum is the same as grades 1 through 5 and is addressed within the curriculum as stated above in the Teaching Methodology and Structure section. The curriculum follows the Massachusetts Common Core Standards. There are no proposed changes to the Kindergarten curriculum for combined school with an enrollment of 640 students.

Lunch Programs

Whitsons Culinary Group currently provides food service. Lunch runs from 10:45 A.M. - 12:15 P.M. and serves students across three waves of eating times. There are two serving lines that lead to a single register.

In the new facility, the size of the cafetorium should accommodate a minimum of two grades eating at a time, for two to three seatings per day. All students will eat on their specific side of the cafetorium. An acoustic partition would separate the two schools during lunches. Lunches will be made in the shared kitchen and served to students from one service area that is split for the two different schools. To fully support the food service program, the kitchen should be adequately sized to accommodate a full-service kitchen as well as serving lines for approximately 215-320 students with an enrollment of 640 at each seating. It is anticipated that a stage will be included in the cafeteria for school performances, assemblies, and other programs. Both schools would share the stage and coordinate schedules for use of the stage and assembly space.

Technology Instruction Policies & Program Requirements

Burlington Public Schools is committed to provide outstanding access to educational technology devices, applications, and the internet via our 1:1 iPad Learning Program and Digital Literacy and Computer Science (DLCS) curriculum.

The BPS Digital Literacy and Computer Science curriculum leads to active, infused, collaborative, and authentic learning experiences using technology as a tool. Our program focuses on critical thinking and problem solving in order to help students ask the right questions and develop solutions to problems.

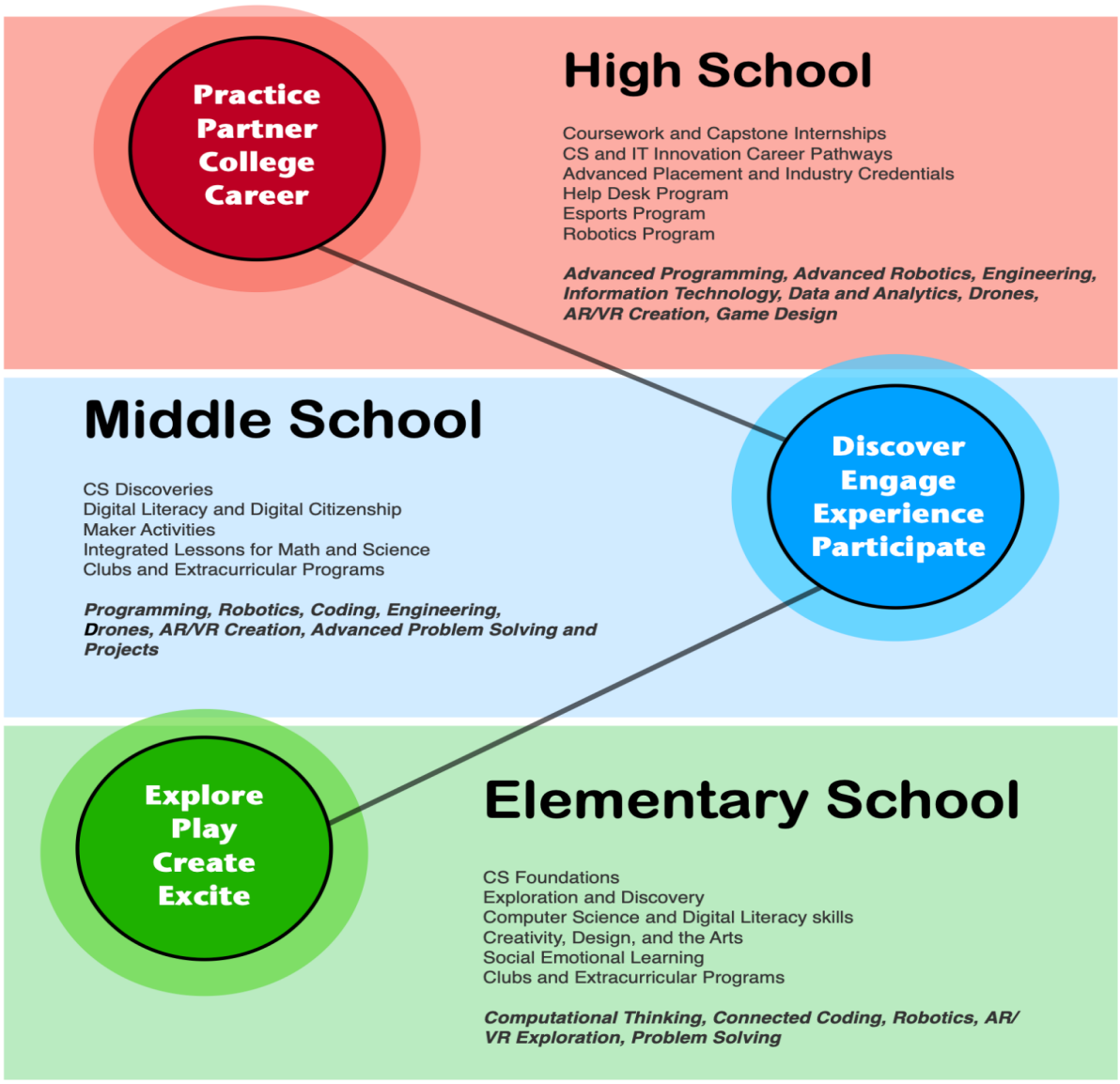
Student choice and leadership is emphasized via various grade level applications. Students use applications that provide opportunities to grow academically and engage with the global community. We encourage students to seek opportunities to create, invent, or support concepts or creations using personal initiative. Students use technology to explore and investigate personal interests and we work to foster curiosity and imagination.

A critical component of our DLCS Curriculum is helping students understand and practice appropriate and safe uses of information and technology. This is necessary to demonstrate personal responsibility for lifelong learning and communication using technology. These skills are critical for the success of our students in school and beyond.

Students explore how to use and access technology hardware and applications by working to create a positive attitude toward using technology that supports collaboration, learning, and productivity.

We also help students use technology to engage in the information literacy process in order to access, evaluate, organize, and communicate information and ideas.

Finally, our CSforALL Computer Science program engages students with digital tools and resources to investigate real-world issues, answer questions, or solve complex problems leading to the potential participation in the Burlington High School Innovation Career Pathways.



Fox Hill and Pine Glen Elementary Schools currently offer the following instructional technology:

- Every classroom is equipped with:
  - LCD Projector
  - Audio Amplification System (Lightspeed Systems)
  - Media Streaming Device (AppleTV)
  - Charging Cart with (1:1) iPad devices for all students

- All Students are provided iPads for use during the school day. They are returned to the charging cart in each classroom at the end of each day.
- All Staff are provided a laptop and/or iPad for instruction and classroom management.
- Additionally, printers are positioned throughout the building to provide access to printing for both teachers and students. There is approximately one printer in each hallway/wing of the building for shared use.

Given the reliance on technology for instruction, it is imperative the network infrastructure in the school is reliable and robust to support 100s of simultaneous connections without interruption. Wireless access is also critical to all common areas and some outdoor learning spaces.

There is a *Responsible Use Policy* for students and staff in the district. All staff members participate in an annual, mandatory training regarding the district policy. All students receive instruction in the *Responsible Use Policy* during the first two months of the school year.

Library / Media Center

Students meet in library class once every week:

- Grades K, 3, 4, and 5 for a 30-minute block
- Grades 1 and 2 for a 45-minute block of time.

The library serves as an information hub for research and learning about both print and digital resources. During library class students learn research skills and digital literacy skills following a district led curriculum. Students also participate in active lessons focused on Digital Citizenship using a district curriculum. The Library Teacher efforts the development of literacy skills and fosters a love of reading for all students.

The Fox Hill Library has about 8,000 books in its collection that are made available to students, staff and families. The Pine Glen Library has about 12,000 books in its collection that are made available to students, staff and families. A portion of class library time is devoted to students selecting and checking out books on a weekly basis to promote interest in reading.

Visual Arts Program

The Burlington Art & Design Program supports the BPS district vision of Striving for Excellence by helping students achieve their highest potential with a challenging curriculum, guided by the state and national frameworks, that includes the concepts of Creating, Presenting, Responding, & Connecting.

The Art & Design program helps students develop their visual literacy (an understanding and appreciation of guiding art concepts), their creative problem solving, and "design

thinking" (a focus on *process*). Students develop their Studio Habits of Mind (which stem from a framework of Studio Thinking designed by practitioners at Project Zero at Harvard's School of Education.). They develop their craft, becoming more and more technically skillful in using a wide range of tools, materials, and artistic processes. They learn to care for the tools, materials, and space they use. They begin to see and embrace problems as opportunities, develop focus, and they learn to persist and persevere at tasks. Art students learn to envision and imagine. They learn to plan. They express themselves, making art that conveys ideas, feelings, or personal meanings. They observe, looking closely and carefully at things, attending to nuance, noticing the small things that the casual observer might not. They become more and more sensitive to the natural environment as they work from observation, memory, and imagination. They reflect on what they and their fellow artists have done. They spend time learning how to look at and talk about art. They are encouraged to stretch and explore, to reach beyond what they originally thought they could accomplish. They learn to embrace opportunities, discover through play, and learn from their mistakes. They work and interact with one another in the community that is the art class, and they share their work with their school, family, and community. They make connections, learning about cultures, history, and current practices. They develop a sense of community through collaborative projects, sharing and discussions, and participation in exhibitions. We believe that students' art classes can help to balance with and connect to content from their core subject classes, and that art-making is an essential, enriching experience that helps to more fully develop a well-rounded person. The art room is a safe, stimulating environment where they can share ideas, build confidence, and feel independent enough to explore, take creative risks, problem-solve, and meet new challenges; where they are excited to share their understanding of the world; and where they'll learn to analyze, interpret, evaluate, and respond to works of art.

We believe…

- Art is a vital part of every child's development.
- Art is a way of understanding one's self, one's society and other cultures.
- Art provides a means to express and communicate thoughts, feelings, and experiences.
- Art education provides the gifts of vision, appreciation, and joy for the student to take into the world.
- Art promotes the brain development of children and improves their ability to innovate and problem-solve.

All students at both Fox Hill and Pine Glen currently take one 45 minute visual art class each week. It is requested by the visual arts director that there be more art time each week (such as a full hour of art class each week, or two 45 minute sessions, or a rotation of specials to create equal time between art, music, and physical education.).

The curriculum and delivery method will not change with the "new" facility, including the use of a kiln. The new art room at each "school" must be equipped to provide all students

with a rigorous, varied, and exciting art education in a variety of high-quality media and with many possibilities for interdisciplinary connection. Ample storage spaces must be provided for flat works on paper or canvas as well as three-dimensional mixed-media sculpture. A clay storage area and well-ventilated kiln and glazing area are required, separate from the areas storing paper or flammable liquids. BPS is well versed with the use of kilns at the elementary school level. The new school will have the proper safety measures to accommodate the art curriculum including the kiln and materials. The kiln will have its own designated room.

The art room at each "school" must have ample natural light as well as wall space for a projector, whiteboard, and bulletin board surfaces for displaying exemplary student work and additional relevant works of art. Sinks of varying height (suited to a variety of age ranges, including one adult height sink) must be provided – three to four sinks would be ideal. Cabinets, countertops, drying racks, and storage cubbies must be provided to store the work of hundreds of students as well as all of the supplies to serve the whole school. This includes space/shelves for drying clay artwork before firing.

There should be designated spaces for displaying student artwork in the hallways of the school, including built-in glass cabinets for displaying three-dimensional artwork.

Music / Performing Arts Programs

OUR MISSION

The Department prepares students for a lifelong appreciation and understanding of the performing arts by offering a challenging and diverse curriculum as guided by the state and national frameworks.

STUDENT LEARNING EXPECTATIONS

Burlington Performing Arts Students will:

Present quality performances

Achieve music literacy

Explore a diverse repertoire

Form community connections

We provide students with the opportunity to develop positive relationships and long lasting memories.

Students in Kindergarten are given one 45 minute class one time per week. Students in grades 1-5 have two 45-minute general music classes per week. In addition, we offer students in grades 3-5 the option to sign up for a string orchestra instrument. In grades 4 and 5, students are offered the choice of taking a band instrument. The band and orchestra students meet in small group lessons for one 30 minutes time and one ensemble rehearsal for one 30 minutes time. The pull-out lessons are done on a rotating schedule to reduce the impact of missing class time.

The schedule requires two full time classroom music teachers and two part time instrumental teachers.

One large music classroom accompanied by two smaller instrument storage rooms/small group lesson space is desired at each “school” to support the music program. The large classrooms should provide ample open floor space for dance and movement activities as well as risers for organized seating/standing for singing activities.

The classrooms will require music stands, music chairs for appropriate posture, and classroom instruments with storage cabinets.

Fox Hill and Pine Glen host a variety of music concerts (choral and instrumental) throughout the school year. The students perform in an annual variety show or musical theater production. A cafetorium with an ample stage is preferred to support music and performing arts programs. Steps or risers between the floor and the stage are desirable for preventing the need to move risers from the music classroom. A cafetorium also allows for the stage to be used for music/performance rehearsals before and after lunch as well as for school wide performances and presentations held for students and parents throughout the year.

The curriculum and delivery method will not change with the “new” facility.

Physical Education Program

All students in grades K-5, participate in instructional, quality physical education programs twice a week, for 45 minutes each class. The curriculum is presented in accordance with the Massachusetts Frameworks and the National Standards for Quality Physical Education, however, still falls short of the recommended time for physical education in elementary schools, which is 225 minutes per week. The current curriculum works to provide students with developmentally appropriate activities that focus on skill development, social emotional literacy, and developing a better understanding of healthy choices and lifelong fitness. The current gym is significantly undersized; a full size gymnasium is needed to fully support the health and physical education program. The gymnasium is also a significant community asset. Therefore, the District intends to add approximately 1,000 square feet to the MSBA guidelines to accommodate additional space for the safety and use of the gymnasium for full court basketball games with the appropriate runoff space beyond the court.

In support of the importance of physical activity as a major necessity for student learning, the district requires that all elementary students participate in recess in its state enforced Wellness Policy. The gym should be located to connect directly to outdoor play and recreation space.

The curriculum and delivery method will not change with the “new” facility. A full size gym will support two classes to have PE simultaneously.

Special Education Programs

Philosophy and Approach: An inclusive education helps prepare students with and without disabilities for life and good citizenship.

The role of the Burlington Public Schools has evolved over the years from one of essentially developing and implementing specific support programs and services for students to one of collaboration with Principals, classroom teachers, and curriculum coordinators and department heads. This collaboration in planning and implementation enables the District to provide specifically defined programs and services to continue to meet the needs of the students.

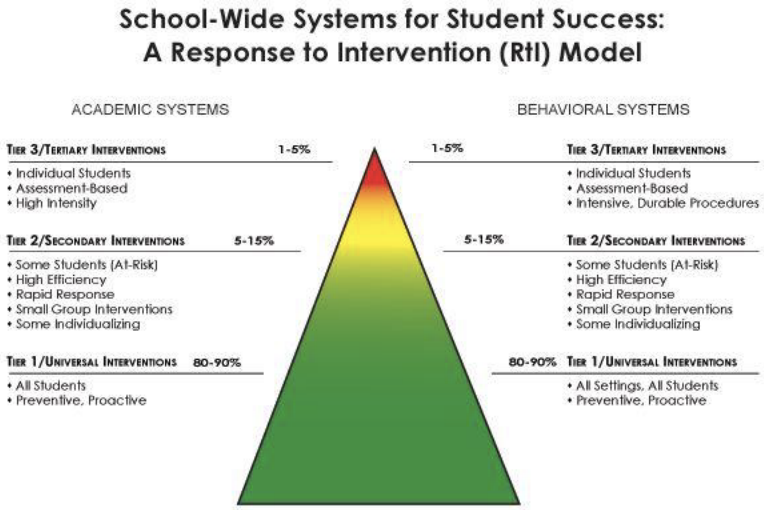
The formulation of new programs and service initiatives are a result of the broader representation of opinions through District Leadership Teams and individual School Based Teams. The Burlington Public Schools in consultation with these Teams has facilitated the establishment of programs and services to more effectively and efficiently meet the needs of the students.

The Burlington Public Schools is dedicated to working collaboratively with educators, parents, support professionals and the community to ensure that all students receive their appropriate services and supports in the least restrictive environment/setting, conducive to facilitating their maximum emotional, social and academic growth. The focus of this collaborative approach is to prepare students for productive lives as full members of our society. The Burlington Public Schools District Curriculum Accommodations Plan (DCAP) was developed and refined through several meetings with district administrators and was shared with each School Leadership Team. The Burlington Public Schools DCAP addresses various strategies that will help to achieve this objective. The link is below and the DCAP is appended to this document.

https://docs.google.com/document/d/1ZP0jIJLpd7A-tn6yTxKV2_IzSAOMFe2qGFmV2CcUNPk/edit

BPS delivers special education services in a variety of settings and modalities. We offer Inclusion services with focus on co-teaching, partial inclusion services that combine both co-taught and pull out methods, and fully sub separate programming for students with intensive needs. We collaborate with McLean's Hospital for our social emotional students, NECC for our specialized programming for our high needs population, and Landmark School for our students with language based disabilities. We also contract with a variety of other providers to meet the needs of our students, including but not limited to, Perkins School for the Blind and Kindle Associates. We are a member district of LABBB Collaborative.

BPS utilizes Response to Intervention (RtI) which is a process within the framework called Multi-Tiered System of Supports (MTSS). Both embrace an approach to education that focuses on high quality instruction for all students that includes a multi-tiered or layered system of differentiated intervention supports in academic and behavioral areas with a goal of educating students with disabilities within the least restrictive environment. Please refer to the attached MTSS/RtI Handbook.



This educational model challenges schools to meet the needs of all students by educating learners with disabilities alongside students who do not have identified educational disabilities. The environment necessary to nurture and foster inclusion is built upon a shared belief system between general and special education, and a willingness to merge the talents and resources of teachers.

The mission of all of the schools is to maximize the potential and independence of each student. An inclusive education helps prepare students with disabilities for an integrated adult life and builds understanding and acceptance within the broader community.

Curriculum, instruction, and assessments are aligned vertically (between grades) and horizontally (across classrooms at the same grade level and across sections of the same course). A method is established and implemented for assessing the effectiveness of the core curriculum on a routine basis. District and school leaders address instruction needs and strengths identified through active monitoring of instruction and ongoing use of formative and summative student assessment data. Qualified personnel are skilled in providing large and small-group research-based differentiated instruction aligned with individual students' developmental levels and learning needs, and a system for formative feedback and decision-making is in place. All students receive academic instruction and non-academic supports that include differentiation and extension activities.

The staff that provides special education services includes special education teachers, inclusion facilitators, aides, behavior therapists and related service providers such as school psychologists, social workers, speech/language pathologists, occupational therapists and physical therapists.

Related Services

Related services encompass specialized services from licensed professionals in particular domains. These related services are designed to support skill building necessary for effective access to educational experiences within the life of the school and are provided to students who require this specialized intervention to access their curriculum. Providers

effort to provide services within the classroom as much as possible and will pull children out of class only when necessary to provide the needed interventions.

Related Services

Related services encompass specialized services from licensed professionals in particular domains. These related services are designed to support skill building necessary for effective access to educational experiences within the life of the school and are provided to students who require this specialized intervention to access their curriculum. Providers effort to provide services within the classroom as much as possible and will pull children out of class only when necessary to provide the needed interventions.

A full list of related service domains is listed below:

Speech and Language Pathologist
SLP's perform evaluations and screenings, provide consultation to classrooms, and provide direct services to children both in the classroom and in the therapy room to address communication skills including the following: receptive and expressive language, social communication, articulation, fluency, voice, and hearing.

Occupational Therapy (OT)
OT's perform evaluations and screenings, provide consultation to classrooms and provide direct services to children both in the classroom and in the therapy room to address fine motor and perceptual motor skills as well as address sensory integration skills.

Physical Therapy (PT)
PT's perform evaluations and screenings, provide consultation to classrooms and provide direct services to children both in the general education setting and in the therapy room to address gross motor skills.

Behaviorist:
The behaviorist provides consultation and support to classroom throughout the district as well as direct services to students in district programs. The behaviorist conducts systematic behavioral assessments, provides interpretations of the results, and develops and supervises behavior intervention plans.

Vision Specialist
The vision specialist conducts assessments and provides consultative services to classroom teachers as well as direct instruction to students with visual impairments.

Assistive Technology
Products, devices, or equipment (whether acquired commercially, modified or customized) that are used to maintain, increase, or improve the functional capabilities of individuals with disabilities.

Counseling Services
Counseling services are for students who have identified or emerging social-emotional or mental health needs that interfere with the student's ability to access their education. Services may include individual or group counseling, consultation with

teachers, parents and outside providers. Services are provided by social workers, school psychologists, school counselors and counseling interns.

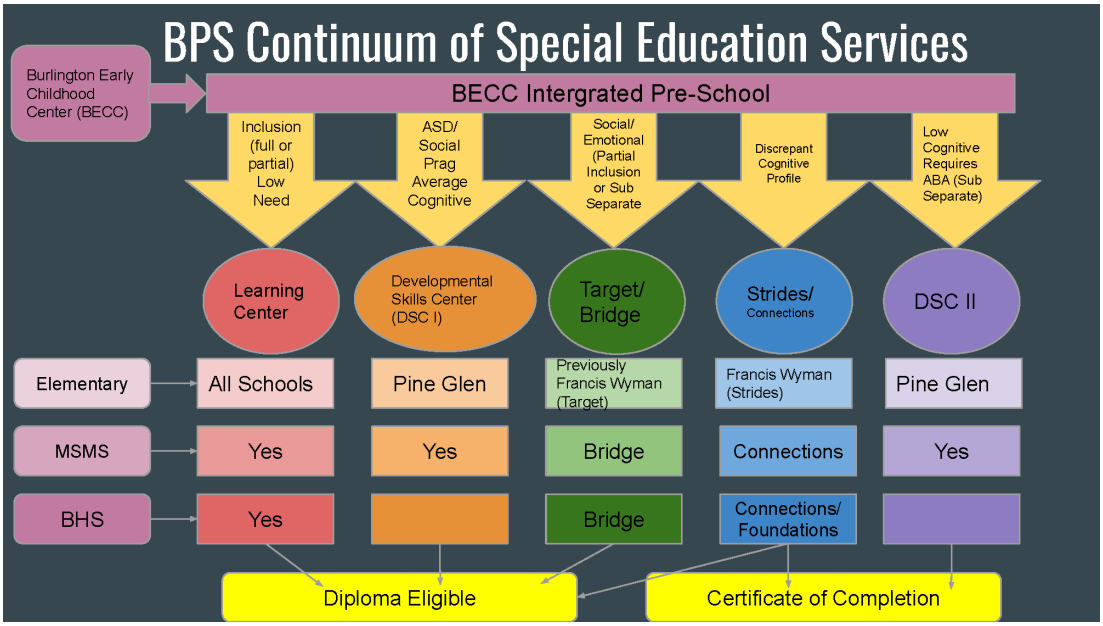
Orientation and Mobility (O&M)

O&M conducts assessments and provides consultative services to classroom teachers as well as direct instruction to students with visual impairments.

Continuum of Services

Within the continuum of services, we identify the level of special education services needed and customize based on individual needs. Among these designators are full inclusion services, partial inclusion services, and substantially separate services. Although BPS supports the Least Restrictive Environment (LRE), services and support can be provided both within and outside the general education classroom. The nature of this support varies and is specific to a student's needs.

While BPS is deeply committed to supporting students within the least restrictive environment, the district also recognizes that a small percentage of students may need more intensive support during part of their school day. Adding more intensive supports or more restrictive supports may cause the students IEP services to be delivered outside of the general education classroom for part of the day (called partial inclusion on the IEP) or sometimes most of the day (called substantially separate on the IEP). This type of service delivery can be supported through the assigned neighborhood school or supported by a citywide program. The location of the services is proposed by the IEP team.



The full list and descriptions of the town-wide special programs is described below.

Francis Wyman - Target (Therapeutic Acquisition & Regulation to Gain Educational Targets), Strides (students with marked global disabilities, who require a high level of support and

specialized programming.), LABBB program supports students experiencing global developmental delays, neurological impairments, and/or significant medical challenges.

Pine Glen - Developmental Skills (The Developmental Skills Center (DSC) provides a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders).

Memorial - LABBB Collaborative PDD Program supports students with autism spectrum disorder, or other developmental needs, who benefit from visual supports and a highly structured academic environment.

Fox Hill - LABBB Emotionally Disturbed/Behaviorally Disturbed Program

The following description responds to the specific special programs at the Fox Hill Elementary School.

The percentage of students in the district with an IEP is 17% and the percentage of students at Fox Hill School with an IEP is 14%.

Aligned with BPS' approach to special education, students at the Fox Hill and Pine Glen Schools are supported through a variety of teaching models - co-teaching, team teaching, flexible grouping, small group instruction, and individualized instruction. Teachers believe that all learners should be provided differentiated forms of instruction and recognize that all students learn in different ways, rates, and timeframes. To that end, the Fox Hill and Pine Glen Schools continually adapt their staffing support, instructional methodologies, and assessment practices to meet student needs.

Tiered levels of instruction provide the regular education foundation of BPS' continuum of service model. Staff provide tiered levels of instruction to all students (Tier One - the general classroom curriculum; Tier Two - strategic levels of instruction; Tier Three - intensive levels of instruction usually at an individualized level.) If a student demonstrates academic and/or social/emotional/behavioral concerns despite thorough RTI procedures, the teacher refers the student to the building Student Support Team. This Team supports teachers in implementing additional strategies.

Special education services at both the Fox Hill and Pine Glen Schools range from the least restrictive (for example, in class support services) to more restrictive (significant amount of multiple services out of the regular education classroom). Both schools offer rooms available for pullout small group and individual instruction provided by special education teachers and related service providers who support inclusion for students with significant disabilities. Related service providers include speech/language pathologists, an occupational therapist, a physical therapist, a psychologist, and a social worker. Teachers of deaf/hearing impaired students and vision-impaired students also support students with these disabilities in accessing the curriculum.

The Fox Hill and Pine Glen Schools utilize the co-teaching model, taught by a special education teacher and a regular education teacher, to support students with special needs. These classrooms include regular education students and students with special needs. Students with special needs are supported academically and socially through small group

and individual teaching, modifications of the curriculum, and classroom accommodations. The goal of the program is to address students' multiple needs by providing a comprehensive range of services and a consistent, structured, and nurturing environment throughout the school day.

Special education learning spaces should be situated among regular education classrooms. The location of the classrooms should allow staff to communicate and collaborate fluidly throughout the day on student needs and programming. The number of students in these classrooms is monitored to ensure that a lower class size is maintained in order to allow the flexible learning requirements of the students.

In support of the special education services both the Fox Hill and Pine Glen Schools currently have several very small Special Education teaching spaces. The students with a moderate level of special needs who require this service account for over approximately 15% of the total student body at the Fox Hill School. The Pine Glen School has students with a moderate level of special needs who require this service account for over approximately 17% of the total student body. Four Special Education teaching spaces (Learning Centers / Dedicated SPED Teacher spaces) will be required to accommodate the student population of 320 students for each of the schools within the larger facility.

Two Speech & Language Pathologists (SLP) currently work at the Fox Hill School and two SLP currently work at the Pine Glen School. Looking ahead to a new school, there will be a need for two dedicated spaces for Speech and Language for each of the "schools".

One Team Chair works at the Fox Hill School and one team chair works at the Pine Glen School. The Team Chair leads special education team meetings, supervises special education staff and organizes all mandated documentation associated with special education services. Looking ahead to a new school, there will be a need for one (1) Team Chair at each of the "schools" which will require a dedicated office space as well as require conference space for Team Meetings of staff and parents in a confidential location near the SPED Leadership Team.

One Psychologist works at the Fox Hill School and one Psychologist works at the Pine Glen School. The school psychologist at the new school would require a private office for testing and meeting with families and should be adjacent to the administration and team meeting conference space. To ensure confidentiality and privacy, related service providers require individual spaces for each school within the larger facility.

Fox Hill elementary school currently does not employ a BCBA, however bringing the DSC II (high needs students) will require a BCBA who provides services and consultation to students and the student's IEP Team and direct service delivery is provided by a behavior therapist, a special education aide with specialized experience and training who implements ABA methods under the direction of a BCBA. A dedicated office located near the Team Chair is required.

The Pine Glen School will continue to support the DSC I program (low needs students) and will also require the support spaces to accompany the program which includes a BCBA.

The Fox Hill School hosts one LABBB program, known as the EDBD Program (Emotionally Disturbed/Behaviorally Disturbed Program) and will continue to do so in the new facility.

Ages/Grades Served	K-5
Student Profile	The EDBD Program supports students who are experiencing significant social/emotional and behavioral challenges. This program provides a setting with therapeutic support for students who are performing at or close to grade level academically. These students require significant structure and adult support to obtain the skills necessary to transition into a general education classroom.
Program Offerings	The curriculum is aligned with the general education classroom and modifications and accommodations are assessed and implemented on an individual basis. Opportunities for inclusion are available and implemented as the students are ready to meaningfully participate. A team of specialists include a counselor, BCBA, speech and language pathologist, occupational therapist, and physical therapist. Services are provided according to each student's IEP. Staff teams work closely together to help students find the tools and strategies that help them self-regulate, learn to use their language to communicate effectively with others, and engage in academic curriculum.

Looking forward to a new school, the district-wide Developmental Skills Center (DSC II) program (Low Cognitive requires ABA / Sub-Separate program) currently located at the Pine Glen School would move to the new Fox Hill School so as to achieve the appropriate spaces required for the students of the DSC program. The district is sensitive to ensuring the district-wide special education programs are equally dispersed between the elementary schools. The DSC program is growing and will require three classrooms for the DSC I and three classrooms for DSC II plus support spaces in the near future. The increased population of this program requires significant space to support the growing needs of the students. The program has been supported at the Pine Glen School however there is no longer sufficient space to adequately support the program looking to the future. Given the opportunity of a new school, the District believes it is in the best interest of the DSC students to relocate the DSC II program to the new Fox Hill Elementary School which will provide for the appropriate spaces to support the program. The Developmental Skills Center (DSC I) program (ASD/Social Prag Average Cognitive) would remain at the Pine Glen School side of the new school.

DSC II Program relocated to the Fox Hill School

Ages/Grades Served	K-5
Student Profile	The Developmental Skills Center (DSC) provides a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders:

- Verbal and Nonverbal Communication
- Social Interaction Skills
- Unusual responses to sensory experiences
- Resistance to environmental or changes in routines
- Engagement in repetitive activities or stereotyped movements
- Maladaptive behaviors stemming from ASD
- Progress in the General education curriculum including social/emotional learning

Program Offerings: This is a specialized curriculum (e.g., ACE or other with modified content with ongoing progress monitoring/mastery criteria). It includes ABA discrete trials, ABA task analysis, ABA Naturalistic/Incidental teaching, a modified grade level curriculum as well as a specialized reading program.

DSC I Program to remain at the Pine Glen School

The DSC Program started as a single classroom and has grown based on student need. Our projections are that 6 classrooms will be required to support the student needs in the coming year. Prior Comprehensive Program Reviews by DESE supported distributing significantly separate programs throughout our elementary schools. To this end, we would look to split the DSC program into a higher functioning and lower functioning group to better serve student needs and to maximize the inclusionary opportunities across two buildings.

Ages/Grades Served: K-5

Student Profile: The Developmental Skills Center (DSC) provides a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders:

- Verbal and Nonverbal Communication
- Social Interaction Skills
- Unusual responses to sensory experiences
- Resistance to environmental or changes in routines
- Engagement in repetitive activities or stereotyped movements
- Maladaptive behaviors stemming from ASD
- Progress in the General education curriculum including social/emotional learning

Program Offerings	This is a specialized curriculum (e.g., ACE or other with modified content with ongoing progress monitoring/mastery criteria). It includes ABA discrete trials, ABA task analysis, ABA Naturalistic/Incidental teaching, a modified grade level curriculum as well as a specialized reading program.

The last Tiered Focused Monitoring (TFM) (formerly Coordinated Program Review) was May 2022. There were no issues or problems identified at that review.

The programs and services identified above will continue at the new combined School. As referenced above, the district-wide DSC II program will move from the Pine Glen School to the Fox Hill School as a result of this project.

Vocations and Technology programs

There are no vocation or technology programs being offered at the Elementary School level.

Core Academic Space Narrative

Please see the "Teaching Methodology and Structure" section above and the attached "Day in the Life of Student" and "Week in the life of Student" charts for detailed descriptions of core academic educational activities that take place both inside general education classrooms as well as activities that are intended to take place outside of the general classrooms at both schools.

Transportation Policies

The Burlington Public Schools transportation department is committed to ensuring students are transported safely to and from school. Students typically arrive at school in one of three ways – walk, bike, or bus. In addition, some families choose to drive students to school.

BPS provides bus transportation free of charge for all K-5 elementary school students. Special education transportation services are separate from regular bus transportation.

Fox Hill Elementary School currently has seven district buses as well as four district vans. Students who are bussed are dropped off in a live, bus drop-off lane between 7:30 a.m. and 8:10 a.m. daily. School dismissal is at 2:10 p.m. daily. The school staff provides safety and supervision on the school property during arrival and dismissal times.

Pine Glen Elementary School currently has five district buses as well as two mini vans and two district vans. Students who are bussed are dropped off in a live, bus drop-off lane between 7:30 a.m. and 8:10 a.m. daily. School dismissal is at 2:10 p.m. daily. The school staff provides safety and supervision on the school property during arrival and dismissal times.

Functional & Spatial Relationships and Key Programmatic Adjacencies

The foundation of our educational program is built on the collaboration of the professionals in the building.

The Fox Hill School snowflake design and limited space erodes collaboration. Grade level teams are divided. There are no appropriate, large gathering spots for student performances or exhibitions. Offices have been built in hallways to accommodate the need for privacy and special services, like counseling and English Language Learner support.

The open classroom model does not work. The oddly shaped classrooms do not allow for redesign or repurposing. The four pods prevent grade level teams from working collaboratively - which is a priority in Burlington. Several grade level classrooms need to be located across the building isolating these students and teachers from their grade level peers and colleagues. Specifically, we have instituted a multi-tiered reading program in line with the DESE model. The multiple tiers require students to switch classrooms to narrow the teachable range of students within the classroom or so that a teacher can focus on a particular reading skill. Having some grade level classrooms in different pods because of a lack of space limits the ability to fully implement this multi-tiered system of instruction.

The Pine Glen School has a better layout and organization, with the classrooms organized on two floors of a double loaded corridor. However, there are no smaller spaces for support programs. Multiple service providers must share one larger space which makes instruction difficult due to the lack of privacy, acoustics, and distractions within the larger space. Some providers must share a smaller space which creates additional complications in providing their lessons. Other instructional spaces are converted storage closets and spaces originally designed to be unoccupied spaces for the school.

Functional and spatial relationships and adjacencies are key to the successful design of the new facility. These relationships between classrooms and programs in the school define the programmatic, functional, spatial, and environmental requirements of the educational facility and become the basis for the design at the next phase. Both the Fox Hill and Pine Glen Schools depend on adjacencies for communication, collaboration, flexible grouping, and teaming. Providing learning areas both in and outside classrooms for small group work, individual tutorial spaces, and additional instructional break out rooms are critical in a school with a focus on universally designed classrooms, requiring specialized instruction and an emphasis on inclusive practices.

Community is a core value among students, staff and parents. The PTO and parent volunteers are actively involved in before, during and after school programs. Both the Fox Hill and Pine Glen Schools require a welcoming main office and community arrival space that accommodates the high morning influx of families who walk or get dropped off by parents at school arrival, as well as the active dismissal procedures. The students, faculty and parent community value and require a space for the entire school to gather, both as a common space to gather and celebrate learning and as an area to spotlight the arts through assemblies and performances. A functional dining facility with a reasonable capacity is a need of the school. After school, we provide space for a K-5 extended day program that operates until 6:00 p.m. Up to 100 students participate in this program on a regular basis Monday through Friday for both schools.

Combining the Fox Hill and Pine Glen Schools into one facility is possible but it will be

extremely important that each school maintain its own identity and spirit. Locating the core facilities (cafetorium, gymnasium, library and service) that can be shared between the two schools while each school functions independently will be important for this project to be successful.

The Fox Hill and Pine Glen Schools are relationship-oriented community that practices and values inclusive partnerships and mutual support in all aspects of the school community. This is the overall spirit of the school that will drive the design of the facility.

Security & Visual Access Requirements

The new school, as all schools in Burlington, requires a safe environment for the Staff, Students and Public.

- A facility that is locked at all times. An access control system for staff members that allow their staff identification badge to grant access to the building
- A receptionist monitoring main access point(s)
- Visual Security of the main entrance utilizing a video monitoring system that will be monitored at the school secretary's desk.
- Visitors to the building should be granted access via door release after communicating with the secretary via video and audio intercom
- Video surveillance and recording of all appropriate areas on the interior and exterior of the building
- Safe, well-lit parking for staff
- Safe, well-lit parking for visitors in close proximity to the building
- Safe vehicular student drop-off and pick-up areas (without crossing traffic)
- Safe pathways for pedestrians and bicyclists coming from varied directions to the school
- Safe bus access systems that do not interfere with drop-off and pick-up traffic
- Safe recess grounds and play fields that can be properly supervised by staff and protected from vehicle traffic
- Safe access for kitchen, facility and shipping / receiving separate from school traffic to the main entrance
- Safe and appropriate access to the perimeter of the building and play fields
- High ratio of staff to students while on outside activities
- All staff trained in a district safety procedures and protocols

The sample Daily Student Schedule applies to both the Fox Hill and Pine Glen Schools.

Day in the life of Student

SAMPLE DAILY STUDENT SCHEDULE	
Activity or Subject	Program Details and Educational Benefit
8:10 Arrival	School starts at 8:10 AM
8:10-8:30 AM Morning Meeting	Morning meeting welcomes all students, builds connection and community, and prepares students for the day ahead.
8:30-9:10 Specials	All students in grades K-5 attend Specials classes in the following areas: Library, Art, Music, and Physical Education (PE). **Library**: Develops students' information literacy and skills to access and utilize information in all formats including current and emerging technologies. **Art:** Provides experiences in a variety of visual art media and techniques while developing artistic skills. Students increase their knowledge of art history and develop art appreciation. **Music:** Students learn fundamentals of music through a sequential curriculum, which develops skills and knowledge in music performance, appreciation and history. **PE:** Encourages an active, healthy lifestyle, and positive choices that aims to grow developmentally appropriate skills, social connections, and promote the mind-body connection.
9:10–10:20 Math	70 Minute Math Block using the Investigations 3 Curriculum which is aligned with the Massachusetts Curriculum Frameworks incorporating the Common Core Standards. This curriculum incorporates teacher-guided exploration of mathematical ideas, individual practice, class discussion, reasoning about mathematical concepts and solving non-routine problems.
10:20–11:50 Reading	90 minutes of Literacy Instruction aligned with the Massachusetts Curriculum Frameworks Specific instructional components at each grade level include: • Primary: interactive read aloud, shared reading, guided reading (including skills based and strategy lessons), independent reading, phonemic awareness, and phonics / word study. • Intermediate: interactive read aloud, shared reading, guided reading (including strategy lessons, book clubs and literature circles), independent reading, and word study.

11:50–12:10 Lunch	There are three lunch blocks. Each lunch block is 40 minutes, 20 minutes to eat lunch and 20 minutes for recess. 11:30-12:10 (grades K and 5). While one grade eats, the other has recess. They swap at 11:50. 12:15-12:55 (grades 1 and 2) 1:00-1:40 (grades 3 and 4)
12:10–12:30 Recess	Students go outside for recess or play indoors in instances of inclement weather. Recess provides students with the opportunity to engage in structured and unstructured play activities and physical exercise, socialize with peers, and take a break from academic tasks.
12:30–1:45 Writing	Explicit writing instruction occurs using Writing Units of Study, Teachers' College Reading and Writing Project; common writing prompts and scoring methods that include focused experiences in narrative, opinion, and informational, and both written and oral feedback from teachers: • All grades: authorship experiences that emphasize conferring, revising, editing, publishing and celebrating creative efforts • Intermediate: focus lessons on a variety of rhetorical and stylistic issues including specific narrative and expository techniques, planning and organizing, rich language, elaboration; serious examination of sentence structure and sentence boundaries; emphasis on writing as a tool to enhance learning and thinking in all subject areas
1:45-2:15 Academic Intervention and Enrichment Block	Students are flexibly grouped to receive targeted additional support to master grade level standards. Enrichment groups help students who have already mastered grade level standards to deepen and extend their learning. Lessons designed to foster social emotional competencies are provided during this time, as well.
2:15–2:50 Science and Social Studies	**History/Social Science:** Students engage in a history/social sciences curriculum that, wherever possible, integrates with the informational skills components of the Mass Frameworks for English Language Arts. The curriculum provides age-appropriate experiences for students to view and come to understand themselves; their family and cultural heritage; the United States and the world; and the relationship between and among them. Throughout the history program, students are asked to explore the contributions and experiences of different peoples, past and present, appreciate the

	diverse sources of these contributions, and apply this knowledge as citizens of the United States. **Science:** Teachers implement a hands-on science and engineering curriculum. There are typically three units at each grade level from K-grade 2 and four units at grades 3 through 5. These units address standards for the following domains: life science, physical science, earth and space science, and engineering. Instructional components include: • Investigation - Pairs and groups of students work with a variety of materials to make sense of science phenomena. • Demonstration - Teachers model science phenomena for the whole class. • Observation - Students observe scientific models, and living materials, including crabs, butterflies, and wood frogs. • Reading - Information texts are used to deepen understanding, through teacher read-alouds and paired reading. • Recording scientific ideas - Students explain their understanding of scientific phenomena through writing, using drawn models to enhance their descriptions.
2:50 Dismissal	Students are dismissed at 2:50

The sample Weekly Student Schedule applies to both the Fox Hill and Pine Glen Schools.

Week in the life of Student

SAMPLE WEEKLY STUDENT SCHEDULE	
Weekly Activity or Subject	Program Details and Educational Benefit
Specials	Library, Art, Music, and Physical Education classes are included in all students' schedules to provide a well-rounded curriculum that supports skill development as summarized in the daily schedule above. **Library** Grades K, 3, 4, & 5 have one 30-minute library class each week Grades 1 & 2 have one 45-minute library class each week **Music** K-5 have one 30 minute general music class each week Grade 3 has one 30-minute recorder class each week Grades 4 & 5 have one 45 minute chorus class each week **Visual Art** K-5 have one 45-minute art class each week. **Physical Education, Health and Wellness** Kindergarten have two 30-minute classes each week Grades 1-5 have two 45-minute classes each week
Math	5x per week, 70 Minute Math Block / 30 Minutes of Intervention This allows students to work towards meeting grade level benchmarks as detailed above (See Sample Daily Schedule).
Literacy	5x per week for 100 minutes of Reading Instruction per day. 4x45 minutes per week for 180 minutes of Writing Instruction. This allows students to work towards meeting grade level benchmarks as detailed above (See Sample Daily Schedule).
Recess	Students have recess 5x per week for 35 minutes daily (15 minute morning recess and 20 minutes at lunch). This provides down time for students and a time to play.
Science and Social Studies	Science and Social Studies 2.5 hours per week for each subject. This allows students to work towards meeting grade level benchmarks as detailed above (See Sample Daily Schedule).

BURLINGTON PUBLIC SCHOOLS

123 Cambridge Street
Burlington, MA 01803
(781) 781 270-1801
FAX (781) 781 270-1773

Planning for Success: District Plan | 2022 – 2025

Eric M. Conti, Ph.D.
Superintendent of Schools

Draft: September 13, 2022

Table of Contents

Executive Summary **2**

Approach and Scope *2*

Planning for Success Process & BPS *3*

Cohesion – Links between Plans *3*

BPS District Plan for Success | 2022-2025 **4**

Mission, Vision, Core Values, Equity Statement, Theory of Action, Strategic Objectives *4*

Strategic Objectives, Initiatives, Outcomes *5*

Superintendent's Goals **14**

Student Learning *14*

Professional Practice *14*

Appendices **15**

A *English Learner Education | Plan for Success | 2022-2025* *16*
- *Kerri Lamprey, Director of English Language Learning*

B *Finance | Plan for Success |2022-2025* *23*
- *Nichole Coscia, District Business Manager*

C *Mental Health & Social Emotional Health | Plan for Success | 2022-2025* *25*
- *Christine Robinson-Conceison, Director of Mental Health*

D *Special Education | Plan for Success | 2022-2025* *29*
- *Christina Cicolini, Director of Special Education*

E *BPS Plan for Success (PfS) | Glossary of Acronyms and Terms* *34*

BPS District Leadership Team | 2022 - 2025 **38**

Executive Summary

In March 2016, Burlington Public Schools was invited to partner with the Massachusetts Department of Elementary and Secondary Education (DESE) to pilot its *Planning for Success* (*PfS*) school improvement process. The *Planning for Success* model includes a multi-year improvement plan that supports implementation through the development of action plans which are updated annually. *Planning for Success* incorporates effective planning practices in its design, educator evaluation expectations, and legislative requirements.

The purpose of this work is two-fold: (1) to support the Burlington Public Schools DESE's *Planning for Success* Model, and (2) to improve collaboration and communication. The *Planning for Success* process provides the District Leadership Team (DLT) guidance and support in developing action plans aligned to Burlington's goals as well as opportunities for collaboration between the levels and central office.

The proposed *Planning for Success* document reflects the third iteration of this process and spans from 2022 through 2025. This is our first post-pandemic *Plan for Success*. We look forward to implementing it without the significant impact of the pandemic and with a renewed commitment to equity and justice for all students.

The focus of the *2022-2025 Plan for Success* is centered on students' learning and well-being. The Plan has three primary strategic objectives - Learning, Equity, and Thriving – which are centered on the District's commitment to engaged, inclusive teaching and the opportunity for all students to learn and develop regardless of their ability, disability, age, gender identity, or cultural and linguistic background. Progress towards these goals will be measured with targeted metrics designed to ensure our students are engaged in classroom instruction and have access to the educational resources needed to support their education.

Approach and Scope

Predicated upon his belief and commitment to inclusive, collaborative decision making and two-way communication, Superintendent Conti, at the onset of developing the 2022-2025 *Plan for Success* process, met with the District leadership team and building principals. These conversations were based upon the Portrait of a Graduate process, the BPS Equity Statement, and how to ensure our students can flourish and thrive in our schools.

As a result of these conversations, the Strategic Objectives and Initiatives have been refined to focus on the needs of our student's post-pandemic and the recently adopted BPS equity statement regarding diversity, equity, and inclusion. The plan continues to include two major components: initiative/action and projected outcomes. These elements provide the means to monitor the plan and report both the progress and impact of the initiatives to the staff and public. Burlington District Directors of English Learner Education, Mental Health, Special Education, and the District Business Manager have developed specific *Plans for Success* which are included in the Appendix of this document. Burlington principals and the director of the Burlington Early Childhood Center are in the process of developing /refining their 2022-2025 *School Improvement Plans for Success* to align with the updated District Plan. The principals will present their plans to the School Committee in early winter and then implement them once approved.

Planning for Success Process & BPS

Our adoption of the Planning for Success process for developing district and school improvement plans achieves three key BPS objectives:

1| Creating a District Improvement Plan

- Connects Burlington's current initiatives with initiatives identified as central to realizing our mission, vision, equity statement, and core values
- Improves two-way communication and transparency with staff, parents, the community, and town officials

2| Developing the Capacity of the District Leadership Team

- Supports a culture of shared responsibility for student learning
- Increases and improves communication and collaboration amongst all levels and central office

3| Creating Coherence

- By linking the District Improvement Plan, School Improvement Plans, and Educator Evaluation Plans
- Through a system-wide focus on BPS goals

Cohesion – Links between Plans

District Improvement Plan

- 4 Goals
- Superintendent's Educator Goals - Student Learning and Professional Practice
- District Plan +
- Plans for: English Learner Education, Finance, Mental Health, Special Education

School Improvement Plan

- 4 Plans: BECC, Elementary, Middle, and High School
- Principals'/Directors' Educator Goals - Student Learning and Professional Practice

Teacher Educator Plan

- Student Learning Goal linked to District Objectives
- Profesional Practice Goal linked to District Objectives

Mission

The Mission of the Burlington Public Schools is to help all students acquire organized knowledge, master creative and intellectual skills, and understand ideas in ways that foster a positive self-image and sense of belonging needed for lifelong learning, self-sufficiency, and responsible, equitable citizenship.

Vision

The Vision of the Burlington Public Schools is "striving for excellence" and will be accomplished by

- Helping students achieve their highest potential by providing a rigorous, balanced curriculum
- Employing highly qualified, diverse teachers, administrators, and support staff who are committed to the BPS mission and vision
- Encouraging parents to take an active role in their children's education through involvement with the schools to enhance student academic success
- Providing opportunities for community members to participate in school activities to reinforce the goals and advantages of providing quality educational programs for every student

Equity Statement

In the Burlington Public School District

Educational equity means that every child belongs and receives whatever support he/she/they needs to develop his/her/their full academic, emotional, and social potential to learn and thrive every day. This begins with kindness and valuing the humanity of every child/individual.

Core Values

The Burlington Public School District is committed to

- Developing all students' potential for excellence.
- Creating a learning environment that values human differences, fosters a sense of belonging and promotes cultural proficiency among all students and staff through a culture of diversity, equity, and inclusion.
- Providing a program of study that has the same academic objectives for all students.
- Cultivating an educational environment that reflects sensitivity to students' differing styles and intellectual development.

Theory of Action

IF Burlington Public Schools…

- Focuses on academic outcomes and social/emotional wellness and belonging of each student, providing targeted support, and building personal relationships
- Establishes empowering conditions for students and educators, providing a welcoming environment, resources, programs, and community support
- Provides human and financial resources to support high quality, engaged learning

THEN students will make effective progress and be appropriately challenged, graduating from high school ready for college, career, and life as contributing citizens in an increasingly diverse global society

District Strategic Objectives

Learning
Empower all students through a rigorous, dynamic, and relevant curriculum designed to include the academic, social, emotional, and psychological supports to ensure student growth and achievement

Equity
Educate and allow all learners to be their authentic selves so they attain high academic standards and outcomes by creating challenging learning environments where they feel they truly belong because they see representations of themselves in their curricula and in their teachers and support staff

Thriving
Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults

Facilities + Finance
Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success and growth of all learners and adults

Burlington Public Schools – Plan for Success – 2022-2025		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Learning *Empower all students through a rigorous, dynamic, and relevant curriculum designed to include the academic, social, emotional, and psychological supports to ensure student growth and achievement.*	1. Growth – BPS will ensure students have equitable access to and engagement with programs and supports that reduce barriers to learning. 2. Post Grad – BPS will enable students to explore ad succeed in their post-secondary pathway. 3. Tiered Frameworks in ELA, Math, SEL – BPS will implement MA DESE and SC adopted curriculum and resources with fidelity. 4. Digital Literacy/Computer Science Program (DLCS) - BPS will provide grade level appropriate technology experiences aligned with the MA Digital Literacy and Computer Science Standards. 5. District-wide Data Meeting (attendance, discipline, involvement) – BPS will continue its comprehensive school improvement support teams with representatives from all relevant departments (i.e., instruction, equity, SEL, etc.) 6. Warm Demander (Kleinfeld, 1975) – BPS will provide support for educators/support staff to embed the "warm demander" tenant of culturally responsive teaching into their repertoire to ensure that each student is supported to achieve their best. 7. Systemic Alignment – BPS will focus on a culture of continuous improvement and equitable systems for school and instructional improvement through the creation of a viable Curriculum Review/Pilot/Adoption Process with an embedded common feedback process.	1. A viable curriculum is delivered to all students and includes the use of identified best practices in educating students with disabilities and English Language Learners that are differentiated to meet student needs. 2. Programming is supported. 3. (a) Multi-tiered Systems of Support are reestablished and strengthened with an intentional emphasis on Social Emotional and Academic Learning Instruction to address learning loss. (b) Consistent expectations for high-leverage instructional delivery for all learners across Tiers, 1, 2, 3 with appropriate monitoring tools to determine supports needed for fidelity of implementation. 4. Digital Literacy/Computer Science (DLCS) - (a) Align the DLCS curriculum with MA DCLS Standards by Spring 2023 for SY 2023-2024 implementation; (b) implement an embedded digital curriculum by grade level to promote the balanced and healthy use of technology for student success; (c) measure, and report on technology competencies for learning based on the MA DCLS Standards. 5. District-wide Data Meetings are scheduled to implement data-to-action informed, efficient, and effective decision-making processes for ongoing learning and growth. Use diagnostic, formative, and summative data to inform interventions or strategies. 6. Warm Demander – (a) Faculty/staff are actively engaged and students and families are knowledgeable of the practices and active participants in the process. (b) Evidence of implementation is visible in student/staff/family interactions, (c) adoption of "warm demander" practices are evidenced through data collection on student achievement, implementation fidelity and satisfaction 7. Systemic Alignment – Attention, energy, and resources are focused on the understanding of how identified instructional improvements lead to better outcomes for students via: a. Curriculum Review/Pilot/Adoption/Process is restructured whereby any new focus area is piloted before implementing it District-wide.

Burlington Public Schools – Plan for Success – 2022-2025		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Learning - continued *Empower all students through a rigorous, dynamic, and relevant curriculum designed to include the academic, social, emotional, and psychological supports to ensure student growth and achievement.*		b. A common-feedback process is implemented to identify what is working in school and program implementations defines the processes, and uses the information to scale and adapt the processes in other settings.

October	January	June
Once the metrics are decided upon, they will be added to the appropriate target month for reports	*Once the metrics are decided upon, they will be added to the appropriate target month for reports*	*Once the metrics are decided upon, they will be added to the appropriate target month for reports*

Learning - Possible Metrics to Consider:

1 – AP Test Performance; results better than national averages; enrollment matches demographics.
Course Grades – Reduction in course failures year over year, proportional rates for all groups.
1, 3, 5, 6 – Achievement gaps closed and results better than state averages
3 & 5– Proportion of students mastering(achieving?) math, ELA, and SEL skills as articulated in the curriculum displayed in equity table format for each school
6 – School climate data; implementation data (e.g. type and frequency of practices); implementation satisfaction; implementation fidelity; attendance, academic, discipline and disproportionality trends.
4 – Do you ever use the annual SPEAK UP Survey with students to check on their understanding of their digital citizenship? It could be used here to report the percentage of students who report having such as understanding.
Strategies 1, 2, 3, 5 - Growth, Post Grad, and Multi-Tiered Support – ELA, Math , SEL. District-wide Data Meetings
Student growth and proficiency in reading
Student growth and proficiency in mathematics
Disproportionality rate of chronically absent students by school and school group
Disproportionality rate of students identified with a disability
Percentage of 9th grade students on target to graduate high school in four years
Disproportionality rate of students in advanced coursework at the secondary level by student group
Disproportionality rate of students with one or more school suspensions (out of school and in school) by school and student group
Disproportionality rate of students referred to special education by school and race/ethnicity

Burlington Public Schools – Plan for Success – 2022-2025		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Equity *Educate and allow all learners to be their authentic selves so they attain high academic standards and outcomes by creating challenging learning environments where they feel they truly belong because they see representations of themselves in their curricula and in their teachers and support staff.*	***1. District Equity Audit*** – BPS, through the Equity Audit will identify the root causes of historic systemic inequities and racism. ***2. Equity Initiatives*** – BPS Leadership and School Committee will identify 3-5 focus initiative from the Equity Audit Findings. Each initiative will have specific, measurable outcomes identified and added to this Plan for Success by December 2022. ***3. PreK-12 Shared Vision of Quality Instruction*** - BPS will develop and advance the concept of Quality Instruction for All by completing the BPS Portrait of a Graduate. ***4. MSMS "Enrichment"*** – BPS will evaluate the BEAM Program to determine its purpose and student accessibility. ***5. Professional Development Plan*** – BPS will provide strong professional development on cultural competence, equity, and restorative practices so teachers and staff can improve classroom instruction and provide equitable school management strategies that will improve achievement for all students. ***6. School Committee Policy Review*** – The BPS School Committee, in collaboration with MA Association of School Committees, will review and update its policy manual. ***7. Systemic Alignment*** – BPS will focus on a culture of continuous improvement and equitable systems for school and instructional improvement through the creation of a viable Curriculum Review/Pilot/Adoption Process with an embedded common feedback process.	***1. District Equity Audit -*** Analyze the findings and make recommendations for action to the School Committee, BPS staff, parents, and community. ***2. Equity Initiatives*** – The top 5 initiatives are identified through the Equity Audit and include (1) Hiring practices, (2) Restorative Practices Introductory Training, and (3) Align the BPS Evaluation System with the Culturally Responsive Instruction Observation Protocol (CRIOP). **3. PreK-12 Shared Vision Quality Instruction** - BPS is an inclusive, equitable, and multi-identity community in which each student can build intellectual and moral capacity, not only for school but, for life. ***4. MSMS "Enrichment"*** – The BEAM Program is evaluated for purpose and accessibility with recommendations for program development and/or restructuring. ***5. Professional Development Plan*** - The BPS Professional Development Plan is aligned to support its educators in the areas of cultural competence, equity, and restorative practices so they can apply the practices to the instructional framework and develop high-leverage instructional strategies designed to improve student achievement as evidenced by teacher/administrator self-assessment and evaluation data, student learning/achievement data, and equity audit data. ***6. SC Policy Review*** - BPS School Committee Policy Review results in a web-based policy manual with updated or new policies, systems, and practices that reflect the District's commitment to equity, access, diversity, and inclusion. ***7. Systemic Alignment –*** Attention, energy, and resources are focused on the understanding of how identified instructional improvements lead to better outcomes for students via: a. Curriculum Review/Pilot/Adoption/Process is restructured whereby any new focus area is piloted before implementing it District-wide. b. A common-feedback process is implemented to identify what is working in school and program implementations define the processes, and uses the information to scale and adapt the processes in other settings.

Burlington Public Schools – Plan for Success – 2022-2025		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
October	***January***	***June***
Once the metrics are decided upon, they will be added to the appropriate target month for reports.	*Once the metrics are decided upon, they will be added to the appropriate target month for reports.*	*Once the metrics are decided upon, they will be added to the appropriate target month for reports.*

Equity - Potential Metrics to Consider:

1. We Are Burlington document
2. Equity Audit – Percentage of students agreeing that they feel supported socially, emotionally, and academically.
3. Professional Development Plan & Systemic Alignment –
   - Input and support for both the District's Professional Development Plan and its approach to systemic alignment and identified strategic areas of focus from BPS staff (survey).
   - Percentage of classrooms in each school demonstrating use of high-impact (engaging, rigorous, culturally relevant) strategies (observation; rubric)
4. Professional Development – Percentage of teachers agreeing that they feel well supported with high quality instructional training and support (survey)
5. Curriculum Adoption/Pilot Process – Level of implementation of strategic areas of focus by each school and central office departments (rubric)
6. Common Feedback – School staff report collaboration, monitoring, and support from principals, directors/coordinators, and Central Office (survey)
7. SC Policy Book – Number of "hits" on website for policies related to equity, access, diversity, and inclusion.

Burlington Public Schools – Plan for Success – 2022-2025		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Thriving *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	***1. Establish Thriving Metrics*** - BPS will develop metrics to define "thriving" such as belonging, kindness, leadership, and bystander. ***2. Mental and Physical Health*** - Develop and strengthen programming focused on the health (mental and physical) and safety of students. ***3. Portrait of a BPS Graduate*** – BPS will complete the development of the "Portrait" with identified stakeholder groups to define the vision for student success. ***4. Systemic Alignment*** – BPS will focus on a culture of continuous improvement and equitable systems for school and instructional improvement through the creation of a viable Curriculum Review/Pilot/Adoption Process with an embedded common feedback process. ***5. Educator Evaluation Focus Areas*** a. BPS will contract with Ribas Associates to provide coaching to BPS educators as they focus on the indicators and elements that develop teaching and leading practices that result in culturally responsive schools and classrooms for all. b. BPS will ensure Culturally Responsive Teaching practices, using the CRIOP tool, are implemented in all classes and learning environments by adapting observational tools for formal and informal observations that are aligned with culturally responsive practices.	***1. Metrics*** defining "thriving" are established for concepts such as *belonging, kindness, leadership, and bystander* and are used in classroom curriculum and practices. ***2. Mental and Physical Health*** - Comprehensive services and support are integrated throughout every grade level. Partnerships are established with community and private agencies to expand student access to mental and physical health supports. Access is provided to behavioral, mental health, and physical health services and programs. Responsive Classroom, PBIS, and the Advisory Curriculum audits of implementation show fidelity of implementation. ***3. The Portrait of a BPS Graduate*** is completed and approved by the School Committee by Spring 2023. The Portrait embodies the shared vision of all BPS stakeholders regarding the educational experience BPS will provide its learners to ensure they are ready for college, career, and life as contributing citizens in a pluralistic global society. The Portrait will be utilized to bring clarity to decision making about learning in the BPS. ***4. Systemic Alignment*** – Attention, energy, and resources are focused on the understanding of how identified instructional improvements lead to better outcomes for students via: (a) Curriculum Review & Adoption/Pilot Process is restructured so any new focus area is piloted before District-wide implementation and (b) A common-feedback process is implemented to identify what is working in school and program implementations, define the processes, and uses the information to scale and adapt the processes in other settings. **5.a. Educator Evaluation** – BPS refocuses its efforts to support educators as it resumes the Education Evaluation Process during the 2022-2023 school year by centered on identified areas of focus, indicators, and elements with educators receiving high-quality feedback and recognition for their efforts in the identified areas of focus. 5. b. Education Evaluation – Establish a crossover between the CIROP tool and the BPS Evaluation Focus Areas (The Great Eight). 5.c. Educator Evaluation – Create balanced evaluator assignments with a focus on non-professional status teachers by distributing the evaluator responsibilities more equitably.

Burlington Public Schools – Plan for Success – 2022-2025		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Thriving - *continued* *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	***6. Food Service*** – BPS will (a) evaluate the food service program to ensure that its staff and services represent BPS goals and values and enables students to thrive through healthy nutrition that supports them throughout their school day, (b) develop strategies and outcomes to address specific program deficits, and (c) ensure all non-licensed staff are provided professional development to increase cultural awareness competencies. ***7. Communications/Website*** – (a) BPS will have reliable, scalable technology infrastructure facilitates communications with staff and the community and the operations of the school district to support greater access and equity. (b) Identify a staff member to manage and update the district website to keep it current. ***8. Community Connections*** – BPS will (a) strengthen school/community partnerships with groups which include, but are not limited to: English Learner PAC, CPAC, MA Advisory, and DEI Student Advisory; (b) partner with all families, with a particular focus on immigrants and families of color, in their children's education and in school/district decision making and (c) empower all stakeholders, including those without child in our schools, to engage in our school community through effective communications and community engagement strategies. ***9. Evening Academy*** – BPS will expand the Evening Academy to increase access to the number of students who want to participate in career/work-based learning programs.	**6. Food Service Program** – The program reviews evidence that (1) students are nutritionally supported; (2) staff create and present fresh, quality food selections that support and appeal to the diverse student population; (3) food service staff demonstrate cultural sensitivity in their interactions with students; (4) food service programs are fully-compliant with nutritional and food safety standards/guidelines, and (5) food service budgets are balanced annually. **7. Communications/Website** – (a) Reliable, scalable technology infrastructure facilitates communications with staff and the community and the operations of the school district to support greater access and equity. (b) Staff member is assigned to maintain an updated website. **8. a. Community Connections** – Collaborative relationships are built between the school and students' families and communities. BPS continues to partner with Town, community and corporate partners to address the health, social service, and academic needs of students and their families. 8. b. Community Connections – (1) Implement a multi-lingual communications platform to increase community engagement, (2) create systems to expand the number and diversity of school volunteers, (3) increased use of media outlets of which English is not the primary language. 8.c. Community Connections – The percentage of community members accessing messaging and web pages show steady increases. ***9. Evening Academy*** – An increased number of students have access to career/work-based programs as a pathway to graduation.

Burlington Public Schools – Plan for Success – 2022-2025

Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
October	***January***	***June***
Once the metrics are decided upon, they will be added to the appropriate target month for reports.	*Once the metrics are decided upon, they will be added to the appropriate target month for reports.*	*Once the metrics are decided upon, they will be added to the appropriate target month for reports.*

Thriving - Possible Metrics to Consider:

1, 3, 5 – See also: Mental Health Social Emotional Learning Plan for Success and English Language Learner Success Plan for metrics.

- Increase the percentage of students feeling welcomed, valued, empowered, and connected to adults and school programs as evidenced by (a) using survey with a cohort of students to understand their needs, and (b) using questionnaires with individual students to understand their specific needs, (c) informal classroom teacher determined data collection of student responses expressing positive emotions (joy, gratitude, interest, hope, pride, amusement, inspiration, awe) about school relationships and experiences through verbal or written declarations or exclamations ("best day ever") and application of PBIS support interventions and support strategies.

2, 6, Increase the percentage of students and families that feel connected to a coordinated system of services (mental health, physical health, safety; evening academy, food services) (survey, service logs)

7, 8. Increase the percentage of families feeling welcomed, valued, and empowered as partner in their children's success (survey)

Percentage of families who feel their voices are included and valued in BPS decision-making processes (survey)

Demographic response rate to surveys increases to match school/community demographics

Placements of news releases, messages, interviews, advertisements in media outlets of which English is not the primary language increases each year.

Stakeholders, with and without children in the schools, report having an authentic voice in the schools through participation in focus groups, advisory groups, etc.

9. Dashboard data reveal an increase in the number of students participating in work-based learning programs

Equity table for students selecting and completing Evening Academy courses of study reflects school demographics.

Burlington Public Schools – Plan for Success – 2022-2025		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Finance *Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success of all learners and adults.*	*Overarching Goal: Continuation of clean financial audits to ensure the fiscal health of BPS.* ***1. MUNIS*** - The Business Office will continue to implement sound business practices and refine processes to guarantee transparency in financial reporting using the MUNIS system. ***2. Financial Reporting*** – Continue to prepare and present the monthly financial reports to the School Committee at scheduled, open school committee meetings. ***3. 10-Year Capital Plan*** – Update the 10-year capital plan to articulate the needs of the district. Work with the Town to align and overlap strategies to fund the 10-Year Capital Plan. ***4. Grants Management*** - Provide funding and hire a 1.0 FTE grants management position to monitor and ensure compliance with all financial reportin requirements, deadlines, disbursements, and submissions set by state and federal regulatory agencies as well as preparing and submitting state and federal program grant applications, expenditure tracking ledgers, and financial reimbursements to all authorizers and governmental agencies. ***5. Business Systems*** - Improve operational efficiencies through a focus on improved systems by strengthening processes to reduce manual data entry and by conducting a needs assessment (where needed) of existing central office data systems, including finance and human resources information systems beginning with systems for the management of employee time and attendance by: a. Identifying and implementing an online payment system for student activity accounts, BECC tuition, etc. b. Identifying and implementing an online system for time sheets and leave (time-off) requests for support staff, teachers, and administrators. c. Activating and implementing substitute teacher management module designed to permit teachers to create an absence request, allow substitutes to accept open jobs, provide administrators the ability to view requests in progress, and provide information to HR and the Business Office to run payroll reports to pay substitutes and track substitutes expenses.	***1. MUNIS*** - BPS utilizes a stream-lined software/applications to support its education and business operations. ***2. Financial Reporting*** – (a) Monthly financial reports are prepared and presented to the School Committee monthly for their review. ***3. 10-Year Capital Plan*** – The Capital Plan is updated annually to articulate the needs of the district. ***4. Grants Management*** - The 1.0 FTE Grants Management position is funded and hired for the SY 2022-2023 to help ensure all financial reporting requirements, deadlines, disbursements, and submissions set by state and federal regulatory agencies are monitored and meet compliance. ***5. Business Systems –*** Operation efficiencies are implemented and reduce in-person time dedicated to tasks that can be conducted online through specialized software applications. a. An online payment system for student activity account, BECC tuition, etc. is implemented by the end of 2025. b. An online management system for recording time sheets and leave forms (personal, sick, vacation, compensatory) is implemented by the end of 2025. c. The substitute teacher management module is implemented and fully operatable by the end of 2023-2024 school year.

Burlington Public Schools – Plan for Success – 2022-2025

Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Finance *- continued* *Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success of all learners and adults*	***6. Personnel Rules and Regs***- Develop and implement a written Personnel Rules & Regulations which will include the rules and regulations regarding, but not limited to, general personnel policies, vacation language, accrual caps, etc. ***7. School Committee Policy Review*** – Assist the BPS School Committee, in its collaboration with the MA Association of School Committees (MASC) with its review and update of its policy manual. ***8. Meritorious Budget Award (MBA) Application Submission*** *- (Source: Association of School Business Officials International, Ashton, VA)* Using the criteria set forth to each the Meritorious Budget Award (MBA), incorporate elements from the MBA checklist into the BPS budget document to continue to incrementally work towards an MBS-worthy budget document.	***6. Personnel Rules & Regs***– The handbook is completed and distributed to employees for implementation during the SY 2023-2024. ***7. School Committee Policy Review*** – The policy review results in a web-based policy manual with updated or new policies, systems, and practices which reflect the district's commitment to equity, access, diversity, and inclusion. ***8. Meritorious Budget Award (MBA) Application Submission*** **-** Elements of the Association of School Business Officials International Meritorious Budget Award are worked into the BPS annual budget document.
Facilities *Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success of all learners and adults.*	***1. Building Projects*** **-** Partner with MSBA and the Town of Burlington on the Fox Hill School and Burlington High School renovation projects. ***2. Transportation*** – a. conduct an audit/evaluation of school transportation with a focus on equity, timeliness, and safety of buses to inform decision making regarding student transportation to support student learning. b. Negotiate a new transportation contract. ***3. Sustainable Practices*** – BPS facilities management will increase its implementation of "green" (environmentally healthy) practices and policies throughout the district including, but not limited to, composting lunch waste. ***4. Healthy Workspaces*** – Ensure healthy workspaces for staff and students through regular air quality testing.	***1. Building Projects*** **-** BPS provides safe, modern, environmentally sustainable school facilities at the elementary, middle and high school levels. ***2. Transportation*** – a. BPS develops a plan of action based upon the findings of the audit/evaluation to support student learning in the areas of equity, timeliness, and safety of buses to inform decision making regarding student transportation. b. BPS successfully negotiates a successor transportation contract that supports student learning needs (timeliness, breakfast program access, afterschool transportation, etc.). ***3. Sustainable Practices***– BPS buildings reduce carbon emissions and embed identified "green" practices throughout the district. ***4. Health Workplaces –*** Regular air quality testing measures are conducted each school year.

Finance - Possible Metrics to Consider:	*Facilities - Possible Metrics to Consider:*
1. BPS meets audit standards as evidenced by "clean" audit reports from the external auditors. 2. Business office personnel develop, implement, and refine financial reporting processes and procedures that continue to drive confidence in the school district's transparency and clarity. 3. Operational efficiencies are implemented and reduce in-person time dedicated to operations that can be conducted online through specialized software applications	1. Timeliness and safety of busses to support student learning needs 2. Quality of Central Office facility and maintenance support for schools (principal survey)

SUPERINTENDENT'S GOALS |
STUDENT LEARNING & PROFESSIONAL PRACTICE

Student Learning – *To be added on September 27, 2022*

Professional Practice - *To be added on September 27, 2022*

A English Learner Education | Plan for Success | 2022-2025

- Kerri Lamprey, Director of English Language Learning

B Finance | Plan for Success |2022-2025

- Nichole Coscia, District Business Manager

C Mental Health & Social Emotional Health | Plan for Success | 2022-2025

- Christine Robinson-Conceison, Director of Mental Health

D Special Education | Plan for Success | 2022-2025

- Christina Cicolini, Director of Special Education

E BPS Plan for Success (PfS) | Glossary of Acronyms and Terms

Appendix A - Burlington Public Schools – Plan for Success 2022-2025 – English Learner Education		
Overarching Objective: *Build shared responsibility among all educators for equitably educating English learners to ensure students are supported to achieve their best.*		
Strategic Objective *What we will do to realize the BPS Mission + Vision + Theory of Action*	***Initiatives*** *How we will achieve the Strategic Objectives*	***Outcomes*** *How we will know we achieved the Strategic Objective Evidence/Product*
Learning *Empower all students through a rigorous, dynamic, and relevant curriculum designed to include the academic, social, emotional, and psychological supports to ensure student growth and achievement.*	***1. Relevant Curriculum*** a. Implement models of structured and intentional collaboration among K-12 English learners educators, content and classroom teachers, and administrators by developing procedures and schedules that facilitate such collaboration. - BHS: The schedule incorporates a PLC for Levels 1 and 2 English learner teachers to collaborate monthly. - MSMS: Grades 6-8 ESL and Science teachers co-teach Level 1 and 2 students during Social Studies. - MSMS: Teachers have scheduled time during the day to co-plan with monthly support provided. - Elementary: ESL teachers are scheduled to attend meetings with at least one grade level per teacher to increase collaboration. b. Convene a team of English learner educators and parents to develop Success Plans (SP) for English learners using the template that is accessible in ASPEN. Upon completion of the SP, implement a process to monitor the SP to determine the English learners progress in meeting the stated goals to ensure student access to learning. Provide training for all teachers to learn how to access the reports and incorporate them into daily instruction. c. Implement and analyze the data from the new district-wide interim assessment for SY2022-2023 at data meetings (Elementary), team meetings (MSMS), and Student Support Teams (BHS) to ensure fidelity of student programming. d. Develop ESL schedules based on the specific instructional minutes for varying levels of English proficiency to ensure all English learner student receive the level of support necessary for their English language growth and academic success.	***1. Relevant Curriculum*** 1. a.b.c.d. – English language achievement and SEL data evidence that educators (a) created classrooms that are inclusive learning environments, (b) provided English Learners (English learners) with opportunities to participate in classroom activities and cooperative learning experiences alongside their non-English learner peers, and (c) developed schedules based upon instructional minutes embedded for minimal disruption to student learning. 1.a. K-12 teachers, including general education, special education and ESL teachers, understand and assume their respective responsibilities for the language development of English learners as follows: - *general education and special education* teachers scaffold language to support English learners with learning content. - *ESL teachers* provide systematic, explicit, and sustained language development instruction in the context of the content. 1.a. b. c. – K-12 teachers, general education, special education, and ESL teachers, communicate and collaborate regularly to provide effective instruction for English learners during designated co-planning times embedded into the teacher schedules. 1.b. – The English learner Team model is established and implemented to establish success plans for English learner students. The team design facilitates the identification of areas of improvement, available resources and services, and incorporates input from teachers and parents. English learner student success plans are developed, implemented, and monitored for identified students to track the progress of English learners in the identified areas of improvement. 1.c. – School level data teams regularly review the progress of English learners using data from the district assessment to inform programming decisions and to ensure student progress in learning and attaining English proficiency.

Appendix A - Burlington Public Schools – Plan for Success 2022-2025 – English Learner Education		
Overarching Objective: *Build shared responsibility among all educators for equitably educating English learners to ensure students are supported to achieve their best.*		
Strategic Objective *What we will do to realize the BPS Mission + Vision + Theory of Action*	***Initiatives*** *How we will achieve the Strategic Objectives*	***Outcomes*** *How we will know we achieved the Strategic Objective Evidence/Product*
Learning *- continued* *Empower all students through a rigorous, dynamic, and relevant curriculum designed to include the academic, social, emotional, and psychological supports to ensure student growth and achievement.*	***2. Emotional and Psychological Support*** In collaboration with the Director of Mental Health provide professional learning for currently practicing educators and leaders focused on culturally responsive SEL and EL-specific SEL strategies.	***2. Emotional and Psychological Support*** The EL Director collaborates with the Director of Mental Health and other school leaders to provide professional learning on developing students' social and emotional competencies and to provided tiered social and emotional learning supports for Els where they are needed. Educators recognize students' strengths and areas for growth based on their levels of English proficiency scores (ACCESS scores).
	3. Academic and Social Support – Students and Educators a. BPS educators engage in intentional and ongoing professional learning that provides them with the necessary tools and strategies to meet the academic and linguistic needs of ELs. b. Provide professional development training to expand/develop the repertoire of specialists to facilitate/expedite second language acquisition with ESL teachers, reading teachers, and classroom teachers.	***3. Academic and Social Support – Students and Educators*** a. EL students, including students on IEPs and newcomer/ SLIFE designated students receive explicit, language-focused appropriate to their levels of English language proficiency. b. Training is completed for (a) ESL teachers by 2023, (b) reading teachers by 2024, and (c) classroom teachers by 2025. As result of the training the expanded repertoire of the targeted educators is evidenced through teacher observation and the increase in student learning and English proficiency.
	4. Electives & Extracurricular Programs a. Evaluate programming and extracurricular offering and update selections to accommodate the interests of Els interests. b. Provide access to extracurricular programs for students who are working.	4. ***Electives & Extracurricular Programs*** a. & b. An extracurricular program which reflects the interests of students is accessible to those who are working. b. Student participation rates increase incrementally each year programs are offered.

Appendix A - Burlington Public Schools – Plan for Success 2022-2025 – English Learner Education

Overarching Objective: *Build shared responsibility for equitably educating English Learners to ensure students are supported to achieve their best.*

Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Equity *Educate and allow all learners to be their authentic selves so they attain high academic standards and outcomes by creating challenging learning environments where they feel they truly belong because they see representations of themselves in their curricula and in their teachers and support staff.*	***1. Student Accessibility and Support*** - Close opportunity gaps for Els (*for example, Dual Language Learners (DLLs), Newcomers, Long-Term English Learners (LTELs), Students with Limited Interrupted Formal Education (SLIFE), ELs with disabilities)* by ensuring that instruction for ELs is appropriately aligned with college- and career-ready standards and assessments. a. High School - Increase high school graduation rates of Els and SLIFE students. b. High School - Appropriately place high school Els and SLIFE students in the continuum of courses and services to ensure eligibility for a timely graduation. c. Provide Els at the HS level with access to Honors level courses using appropriate accommodations, designated supports, interventions, and scaffolding for ELs with appropriate support for their ongoing language development. d. Create protocols and resources to identify potential risk factors and early warning indicators (attendance, behavior, course performance) that may delay or prevent high school graduation for Els. e. Develop career pathways and mentor partnerships through exploratory experiences, making connections with former ELs with explaining postsecondary work/college experiences, hosting visitors from different career fields, and providing students to extended day opportunities. f. Collaborate with the Director of Special Education to access and provide bilingual evaluators to evaluate El students in their home language when concerns around a disability present.	***1. Student Accessibility and Support*** 1. a.b.c. - ELs at all English proficiency levels to participate in rigorous, grade-appropriate courses that build on their cultural and linguistic assets. 1. a.b.c – Els have equal opportunity to meaningfully participate in all programs and activities, including advanced courses and dual enrollment courses. 1. a.d. e. - Educators believe that all Els are candidates for graduation and motivate students by cultivating relationships with them, engaging, and collaborating with families, and responding to early warning signs for dropout. 1.d The district improvement plan includes actions to track and resolve problems that may be early warning signs for dropout, specifically for ELs. 1.e. - English Learner students "...use and develop language to interpret and present different perspectives, build awareness of relationships, and affirm their identities" (WIDA Guiding Principles, 2020 Standards, p. 12) 1.e. The district creates opportunities for ELs to participate in educational opportunities related to career development (e.g., awareness, exploration, and immersion activities, including but not limited to internships and capstones). 1.f. Bilingual evaluators are available for EL students who need an evaluation in their home language.
	2. Professional Development - (a) Plan professional learning to include cultural competency and a lens for cultural competency and a lens for bilingualism, biculturalism, and English learners. b. Provide professional development so staff can build cultural competence to address implicit bias and promote equitable practices for EL students.	***2. Professional Development*** 2. a.b.c. - BPS educators engage in international and ongoing professional learning that provides them with the necessary tools and strategies to meet the academic, SEL, and linguistic needs of EL students.

Appendix A - Burlington Public Schools – Plan for Success 2022-2025 – English Learner Education		
Overarching Objective: *Build shared responsibility for equitably educating English Learners to ensure students are supported to achieve their best.*		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Equity – *continued* *Educate and allow all learners to be their authentic selves so they attain high academic standards and outcomes by creating challenging learning environments where they feel they truly belong because they see representations of themselves in their curricula and in their teachers and support staff.*	*2. Professional Development – continued* b. Strengthen the knowledge base for currently practicing educators and leaders in building capacity to meet the unique needs of diverse ELs (DLLs, Newcomers, LTELs, SLIFE, ELs with disabilities by embedding professional development within the content areas. c. Provide educators of ELs with collaborative opportunities to review evidenced-based resources and evaluate the effectiveness of standards-aligned curriculum and assessments appropriate for Els.	
	3. Educator Evaluation a. Focus educator observations and evaluation on the culturally proficient criteria in the Classroom Teacher Rubric for Educator Evaluation.	***3. Educator Evaluation*** a. Educator goals, observations, and evaluations focus on the culturally proficient criteria in the Classroom Teacher Rubric for Educator Evaluation.

Appendix A - Burlington Public Schools – Plan for Success 2022-2025 – English Learner Education		
Overarching Objective: *Build shared responsibility for equitably educating English Learners to ensure students are supported to achieve their best.*		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Thriving *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	**1. *BPS Students*** *– Engage every English learner in high-quality instruction and assessment designed to meet their individual needs.* a. Conduct a systemic analysis to assess which students are accessing programs and set targets for EL inclusion in programming that mirror the demographic of the school, including addressing transportation needs to remove barriers to participation. b. Provide access to EL students to fully participate in all instructional and extracurricular activities offered through our schools and the Burlington community, so they can build relationships.	**1. *BPS Students*** 1.a.b. Educators nurture self-confidence and ensure that Els participate in classroom and school activities; educators help to coordinate available school resources. 1.b. EL students participation rates increase incrementally each year beyond the baseline data evidencing that Els are accessing the instructional and extracurricular activities offered through our schools and the Burlington community.
	2. BPS Staff *- Refine effective programming for English learners through intentional analysis of data and collaboration.* a. Establish an inquiry-based diverse data team (ESL and content area educators, school leaders, EL parents, etc.) to review EL high school attainment and post-secondary success. b. Implement a position for an English Language Assessor to ensure consistency and fidelity of programming given the number of increased student screenings and documentation requirements. c. BPS Staffing – Both core academic teachers and ESL teachers are fully credentialed with either the required SEI endorsement and/or hold ESL licensure. d. Develop a district-wide cadre of ESL teachers that are assigned to schools based upon student needs. The Director of English Learner Education and Principals work collaboratively to make the annual placements of ESL teachers.	***2. BPS Staff*** 2.b. District data teams regularly review students' attainment of goals as well as post-secondary outcomes for ELs. 2.b. The district budget includes the funds to hire an English Language Assessor for SY 22-23. The position is hired by August 2022 to ensure consistency and fidelity of programming given the number of increased student screenings and documentation requirements. 2.c. 100% of BPS educators assigned to provide sheltered English instruction to English learners hold the SEI Teacher Endorsement by 2025. 2.d. The ELL Director and Principals work collaboratively to determine the annual placements of ESL teachers at each school based upon student needs.
	3. *BPS EL Families* *- EL Families feel welcomed, respected, and valued.* a. Access to translation and interpretation services are provided free to EL parents so they feel welcomed, valued, and empowered as partners in their children's education. b. Provide training and resources for translation and interpretation services to BPS educators and support staff both in-person and online to ensure the needs of EL families are met.	3. ***BPS EL Families*** 3a. BPS families are provided translated materials or a language interpreter which is free and provided by appropriate and competent staff, or through appropriate and competent outside resources to ensure they are empowered partners in their children's education. 3b. BPS educators and support staff are knowledgeable about and can access translation and interpretation services so they can ensure that EL parents, regardless of home language, understand expectations for

Appendix A - Burlington Public Schools – Plan for Success 2022-2025 – English Learner Education		
Overarching Objective: *Build shared responsibility for equitably educating English Learners to ensure students are supported to achieve their best.*		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Thriving – *continued* *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	*BPS EL Families – continued* c. Promote effective family engagement and empowerment throughout the school year with regularly scheduled meetings of the English Learner Parent Advisory Council (ELPAC) so parents/caregivers take an active role in supporting their child's education, learn how to access services for their child, and to build relationships with school staff and the Burlington community. *Examples of programming include, but are not limited to:* - Align initiatives for EL family engagement across the district, connecting district, school, and classroom efforts. - Support and encourage EL Parents to volunteer in the classroom as well as school events. - Pair parents of similar backgrounds together at school information nights or back to school events. - Help El Parents to navigate school challenges through strong two-way communication and parental guidance to help increase positive support of school. - Educate parents more directly about the ways in which they can help their children with schoolwork by offering bilingual workshops on scheduling, materials, transportation, etc.	student learning, how to support their students' success, and where to go for assistance. 3.a.b. The multilingual communications strategies/platforms utilized by the district evidence increased family and community engagement. 3c. The percentage of family/caregiver attendance and participation in the scheduled ELPAC meeting increases from month to month. Parents/caregivers report being more active in their child's education, their understanding of available services (academic, physical and mental health, extracurricular), and increase their ability to develop relationships with the staff and community. The needs of parents, as documented from written feedback, are incorporated into ELPAC meetings and programming.
	4. Burlington Community *– Engage the community and public to support English learners.* a. Provide English Learners with equitable access to community-based agencies and organizations available to their non-EL peers. b. Continue established partnerships with community organizations and state agencies to respond to needs of EL students and families and seek to increase partnerships that would benefit our students and their families.	***4. Burlington Community*** a. & b. EL students have equitable access to community-based agencies and organizations have the support needed to meet their physical and mental health needs. Examples include: - Board of Heath (for vaccinations) - Burlington Youth & Family Services (transportation) - Burlington and Woburn Public Schools Partnership (medical clinics).
	5. BPS English Learner Staffing a. In collaboration with the Director of Mental Health, recruit and hire culturally responsive, multilingual counselors to meet the needs of identified students in special populations. b. The Director of Mental Health and the Director of English Learner Education collaborate to research and identify an agency with the capacity to provide clinical services (Tier 3) to identified student in special populations.	***5. BPS English Learner Staffing*** a. Culturally responsive, multilingual counselors are hired and available to students K-12 by 2025. b. An agency is identified and contracted to provide clinical services to identified students in special populations beginning in the SY 2023-24.

Appendix A - Burlington Public Schools – Plan for Success 2022-2025 – English Learner Education		
Overarching Objective: *Build shared responsibility for equitably educating English Learners to ensure students are supported to achieve their best.*		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Facilities/Finance *Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success of all learners and adults.*	1.a. The Superintendent and School Committee align and coordinate fiscal and human resources to ensure Els (including SLIFE, Els with disabilities, and newcomers) receive ESL, native language instructional supports, and services tailored to their unique academic and linguistic needs (*Source: MA Vision and Blueprint for EL Success).* 2. Work with Director of Operations Management to determine how to provide transportation to students for summer programming, extended day programs, clinics, and evening academic programs.	1.a. BPS Els are provided with ESL, native language instructional supports, and services tailored to their unique academic and linguistic needs (Source: MA Vision and Blueprint for EL Success) as evidenced by student learning/achievement data. 2. Vans are purchased and/or existing vans are shared among departments to transport students to summer programming, extended day programs, clinics, and evening academic programs.

Appendix B - Burlington Public Schools – Plan for Success – 2022-2025 – Business Office		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Finance *Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success of all learners and adults.*	*Overarching Goal: Continuation of clean financial audits to ensure the fiscal health of BPS.* ***1. MUNIS*** - The Business Office will continue to implement sound business practices and refine processes to guarantee transparency in financial reporting using the MUNIS system. ***2. Financial Reporting*** – Continue to prepare and present the monthly financial reports to the School Committee at scheduled, open school committee meetings. ***3. 10-Year Capital Plan*** – Update the 10-year capital plan to articulate the needs of the district. Work with the Town to align and overlap strategies to fund the 10-Year Capital Plan. ***4. Grants Management*** - Provide funding and hire a 1.0 FTE grants management position to monitor and ensure compliance with all financial reporting requirements, deadlines, disbursements, and submissions set by state and federal regulatory agencies as well as preparing and submitting state and federal program grant applications, expenditure tracking ledgers, and financial reimbursements to all authorizers and governmental agencies. ***5. Business Systems*** - Improve operational efficiencies through a focus on improve systems by strengthening processes to reduce manual data entry and by conducting needs assessment (where needed) of existing central office data systems, including finance and human resources information systems beginning with systems for the management of employee time and attendance by: a. Identifying and implementing an online payment system for student activity accounts, BECC tuition, etc. b. Identifying and implementing an online system for time sheets and leave (time-off) requests for support staff, teachers, and administrators. c. Activating and implementing substitute teacher management module designed to permit teachers to create an absence request, allow substitutes to accept open jobs, provide administrators the ability to view requests in progress, and provide information to HR and the Business Office to run payroll reports to pay substitutes and track substitutes expenses.	***1. MUNIS*** - BPS utilizes a stream-lined software/applications to support its education and business operations. ***2. Financial Reporting*** – (a) Monthly financial reports are prepared and presented to the School Committee monthly for their review. ***3. 10-Year Capital Plan*** – The Capital Plan is updated annually to articulate the needs of the district. ***4. Grants Management*** - The 1.0 FTE Grants Management position is funded and hired for the SY 2022-2023 to help ensure all financial reporting requirements, deadlines, disbursements, and submissions set by state and federal regulatory agencies are monitored and meet compliance. ***5. Business Systems –*** Operation efficiencies are implemented and reduce in-person time dedicated to tasks that can be conducted online through specialized software applications. a. An online payment system for student activity account, BECC tuition, etc. is implemented by the end of 2025. b. An online management system for recording time sheets and leave forms (personal, sick, vacation, compensatory) is implemented by the end of 2025. c. The substitute teacher management module is implemented and fully operatable by the end of 2023-2024 school year.

Appendix B - Burlington Public Schools – Plan for Success – 2022-2025 – Business Office		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives & Strategies** *How will we achieve the Strategic Objectives?*	**Outcome** *How will we know we achieved the Strategic Objective Evidence/Product?*
Finance – *continued* *Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success of all learners and adults.*	***6. Personnel Rules and Regs-*** Develop and implement a written Personnel Rules & Regulations which will include the rules and regulations regarding, but not limited to, general personnel policies, vacation language, accrual caps, etc. ***7. School Committee Policy Review*** – Assist the BPS School Committee, in its collaboration with the MA Association of School Committees (MASC) with its review and update of its policy manual. ***8. Meritorious Budget Award (MBA) Application Submission*** *- (Source: Association of School Business Officials International, Ashton, VA)* Using the criteria set forth to each the Meritorious Budget Award (MBA), incorporate elements from the MBA checklist into the BPS budget document to continue to incrementally work towards an MBS-worthy budget document.	***6. Personnel Rules & Regs***– The handbook is completed and distributed to employees for implementation during the SY 2023-2024. ***7. School Committee Policy Review*** – The policy review results in a web-based policy manual with updated or new policies, systems, and practices which reflect the district's commitment to equity, access, diversity, and inclusion. ***8. Meritorious Budget Award (MBA) Application Submission -*** Elements of the Association of School Business Officials International Meritorious Budget Award are worked into the BPS annual budget document.
Finance - Possible Metrics to Consider: 1. BPS meets audit standards as evidenced by "clean" audit reports from the external auditors. 2. Business office personnel develop, implement, and refine financial reporting processes and procedures that continue to drive confidence in the school district's transparency and clarity. 3. Operational efficiencies are implemented and reduce in-person time dedicated to operations that can be conducted online through specialized software applications		

Appendix C - Burlington Public Schools – Plan for Success – 2022-2025 – Mental Health Social Emotional Learning

Overarching Objective: *BPS offers a comprehensive school mental health system that provides an array of supports and services which promote a positive school climate, social and emotional learning, and mental health and well-being while reducing the prevalence and severity of mental illness.*

Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Learning *Empower all students through a rigorous, dynamic, and relevant curriculum designed to include academic, social, emotional, and psychological supports to ensure student growth and achievement.*	***1. Mental Health Promotion Services and Supports (Tier 1)*** a. Implement evidence-based school-wide SEL practices to promote positive social emotional well-being and behaviors in grades K-12. i. Responsive Classroom *(K-5)* ii. PBIS *(K-5)* iii. Advisory Curriculum (6-8, 9-12) b. Counseling staff PreK through 12 will conduct consistent and equitable classroom-based or large group SEL/Mental Health lessons throughout the academic year. c. Universal SEL and Mental Health screening will be available to all students; grades K-12, within the next three years. i. YRBS (MSMS & BHS) ii. DESSA (K-6, 9-12) iii. SBIRT (6-8; 9-12) iv. Universal Mental Health Screening *(*varies by age/grade (Anxiety, Depression, School Climate, Life Satisfaction/Quality, Global Functioning, etc.*	***1. Mental Health Promotion Services and Supports (Tier 1)*** *- An integrated framework of educational, social, emotional, and behavioral health support for all BPS students (MTSS Framework) is established and implemented in the areas of:* - Evidence-based school-wide SEL practices to promote positive social emotional well-being and behaviors in grades K-12 are implemented in every school by the end of 2025. - PreK-12 counseling staff provide consistent and equitable classroom-based or large group SEL/Mental Health lessons throughout each academic year. - Universal SEL and Mental Health screening are available to all students; grades K-12 by the end of 2025. - Using the DESSA, students demonstrate incremental growth within the SEL competencies from pre-test to post-test.
	2. Early Intervention Services and Supports (Tier 2) a. Identified students in grades PreK through grade 12 will have access to small-group evidence-based interventions. Interventions will be conducted by counseling department staff. b. Identified PreK through grade 12 students will have access to brief individualized mental health interventions *(e.g., motivational interviewing, problem-solving, solution-focused, CBT, etc).*	***2. Early Intervention Services and Supports (Tier 2)****- An integrated framework of educational, social, emotional, and behavioral health support for all BPS students (MTSS Framework) is established and implemented.* a. Identified PreK-12 students have access to small group evidence-based interventions. b. Identified PreK-12 students have access to individualized mental health interventions.
	3. Treatment Services and Supports (Tier 3) a. Identified students in grades K-12 will have access to comprehensive SEL/mental health programming to ensure consistency of services and skills coaching. b. Programs will be staffed appropriately, including access to licensed school psychologists and/or licensed social workers/school adjustment counselors. c. Enhancement of summer programming for elementary and middle school students to include SEL/Mental Health support, including groups and individual therapeutic sessions.	***3. Treatment Services and Supports (Tier 3)*** *- An integrated framework of educational, social, emotional, and behavioral health support for all BPS students (MTSS Framework) is established and implemented.* a. Comprehensive SEL/mental health programming is implemented to ensure consistent services and skills coaching. b. Program staffing is hired to ensure there are an appropriate number of licensed psychologists, social workers, and or school adjustment counselors available to provide consistent services and coaching to students. c. Summer programming for identified elementary and middle school students includes SEL/Mental Health support with group and individual therapeutic sessions.

Appendix C - Burlington Public Schools – Plan for Success – 2022-2025 – Mental Health Social Emotional Learning

Overarching Objective: *BPS offers a comprehensive school mental health system that provides an array of supports and services which promote a positive school climate, social and emotional learning, and mental health and well-being while reducing the prevalence and severity of mental illness.*

Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Equity *Educate and allow all learners to be their authentic selves so they attain high academic standards and outcomes by creating challenging learning environments where they feel they truly belong because they see representations of themselves in their curricula and in their teachers and support staff.*	1.a. All K-8 students will participate in ongoing social emotional learning through structured curriculum by 2025. 1.b. Develop (2022-2023) and implement (2023-2024) a comprehensive SEL curriculum for grades 9-12. 2. Universal social emotional and mental health screening will be available to all BPS students to identify emerging needs and provide proactive programming/support. 3. Student voice for all students will be promoted using school climate surveys, targeted focus groups, and small group and individual counseling services. 4. The Social Emotional and Mental Health curriculum provide the means for students to feel connected to their school and community.	1-4. All BPS students have access to an equitable and consistent social emotional curriculum and mental health programming and services by the 2024-2025 school year. 4. The annual percentage of students who are able to articulate feeling connected to their schools and the Burlington Community as determined through targeted group discussions, individual interviews, and surveys increases incrementally from year to year from the baseline percentage established in SY 2022-2023.

Appendix C - Burlington Public Schools – Plan for Success – 2022-2025 – Mental Health Social Emotional Learning

***Overarching Objective**: BPS offers a comprehensive school mental health system that provides an array of supports and services which promote a positive school climate, social and emotional learning, and mental health and well-being while reducing the prevalence and severity of mental illness.*

Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Thriving *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	***1. Targeted SEL/Mental Health Professional Development is provided for all BPS Educators.*** a. MSMS and BHS staff will complete Mental Health Literacy Training (Mental Health First Aid) by 2025. b. BPS staff will participate in training through Aperture Education to grow and develop capacity in social emotional domains and programming by 2025. c. BPS staff will have the option to participate in evidence-based educator wellness groups which will be offered to all BPS staff through 2025. d. Continue to provide targeted and ongoing professional development for staff to build their capacity to address social emotional and mental health issues for all students, including identified special populations. e. MSMS and BHS counseling staff will participate in the McLean consultation programming which includes needs assessment meetings/10 consultations per year/2 professional development opportunities/3 administrative team meetings.	***1. Targeted SEL/Mental Health Professional Development is provided for all BPS Educators.*** 1.a. MSMS and BHS staff complete Mental Health Literacy Training by 2025 and apply their learning to their practice as evidenced by teacher observations and student outcomes. 1.b. BPS staff complete training through Aperture Education by 2025 with their learning evidenced in their practice. 1.c. Increase staff participation and the number of educator wellness groups for educators from 3 to 9 by 2025. 1.d. Targeted professional development is both a district priority and ongoing for all staff, so staff develops the capacity to address social emotional, and mental health issues of all students, including special populations. 1.e. MSMS and BHS counseling staff participate in consultation programming to improve their practice and work with students.
	2. Staffing Needs are assessed annually to meet the needs of students. a. 2022-2023 School Year - MSMS 1.0 FTE Adjustment/Social Worker b. 2023-2024 School Year - Elementary – 4.0 FTE Adjustment/Social Workers c. In collaboration with the Director of English Learner Education recruit and hire culturally responsive, multilingual counselors to meet the needs of identified students in special populations. d. 2023-2025 School Years - Assess staffing needs annually to strengthen tiered programming based upon student needs for mental health program development. Submit staffing requests to the Superintendent for review and inclusion in the final school budget for the fiscal year. e. The Director of Mental Health and the Director of English Learner Education collaborate to research and identify an agency with the capacity to provide clinical services (Tier 3) to identified student in special populations.	***2. Staffing Needs are assessed annually to meet the needs of students.*** a. 2022-2023 School Year – Positions Hired - MSMS - 1.0 FTE - Certified Adjustment/Social Worker hired b. 2023-2024 School Year - Elementary - 4.0 FTE - Certified Social Worker/Adjustment hired c. Culturally responsive, multilingual counselors are hired and available to students K-12 by 2025. d. 2023-2025 School Years - Staff are funded and hired based upon identified student needs. e. An agency is identified and contracted to provide clinical services to identified students in special populations beginning in the SY 2023-2024.

Appendix C - Burlington Public Schools – Plan for Success – 2022-2025 – Mental Health Social Emotional Learning

***Overarching Objective**: BPS offers a comprehensive school mental health system that provides an array of supports and services which promote a positive school climate, social and emotional learning, and mental health and well-being while reducing the prevalence and severity of mental illness.*

Strategic Objective *What will we do to realize the BPS Mission + Vision + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objectives?*	***Outcomes*** *How will we know we achieved the Strategic Objective Evidence/Product?*
***Thriving -** continued* *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	***3. Partnerships with the Community are promoted and deepened.*** a. BYFS (Burlington Youth and Family Services), INTERFACE referral line by Williams James College, Lahey Behavioral Health, and FCA (Family Counseling Associates) partnerships will continue to provide direct mental health services. b. Burlington Police and Fire Department partnerships will continue to provide consistency in response to emergencies and/or threats. c. A representative from the school will continue to participate in the town-wide Community Response Team to ensure consistency in response and services provided. d. A parent/guardian SEL/Mental Health Advisory Council will be established to ensure feedback and perspectives regarding the district's SEL/Mental Health programming.	***3. Partnerships with the Community are promoted and deepened***. 3.a-c. Community partnerships for mental health and social emotional learning supports are strengthened and play an integral role in the education of BPS students. 3-d. The SEL/Mental Health Advisory Council is established and meets quarterly to support the district's SEL/Mental Health programming.
	3. Data Systems are implemented to collect data relative to students and staff which will be utilized to promote growth and change opportunities. a. BPS counseling staff will complete data tracking on student outcomes including: 51A reports, student risk assessments, threat assessments, bullying incidents, NSSI (Non-Suicidal Self-Injury), and counseling sessions on an ongoing basis. b. School climate surveys will be conducted on an annual basis for MSMS and BHS staff and students. c. Universal SEL and mental health screening will be available to all Burlington Public Schools students within the next 3yrs.	***3. Data Systems are implemented to collect data relative to students and staff which will be utilized to promote growth and change opportunities.*** 3. The system-wide data system is implemented with funds to maintain it. Additionally, a component to track counseling sessions is implemented/integrated as part of the district-wide data system by 2025. 3.a. As a result of BPS's comprehensive mental health programming, there will be an increased annual incremental decrease in students requiring risk and threat assessments, bullying incidents, and NSSI assessments by 2025. 3.b. Data relative to students are utilized to promote growth and change opportunities for both individuals and groups. 3.b. Individual students and groups evidence social emotional growth annually based on the data collection. 3.c. Program development evolves to continually meet the needs of the students. 3.c. The number of students able to access screening increases by 75% by 2025.

Appendix D – Burlington Public Schools - Plan for Success – 2022-2025 – Department of Special Education

Overarching Objective: *All BPS special educators can provide for the specialized learning needs of BPS students.*

Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objective?*	***Outcome*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Learning *Empower all students through a rigorous, dynamic, and relevant curriculum designed to include academic, social, emotional, and psychological supports to ensure student growth and achievement.*	***1. Programming – Life Skills and Vocational Training*** a. Flexible scheduling to allocate time to the instruction of life skills curriculum, pre-vocational and vocational training, and opportunities to learn and practice community access skills. b. Provide staffing to support individualized student schedules. c. Implement a formal life skills curriculum for middle school students and high school students. d. Reevaluate the spaces utilized for programs with consideration of the resources available. e. Planning for the development of a comprehensive substantially separate program to meet the needs of students with ASD transitioning to the middle and high school levels and the resources needed to support the students and classrooms. f. BHS - Increase consultation time from BHS and MSMS LABB Transition Counselor for the Connections classroom to support expanded life skills instruction. g. Middle School – Continuation of identified social/emotional SEL programs K-12. Extend support to middle school classrooms so students begin to build prerequisite skills needed to matriculate to high school. h. Structure and increase opportunities for collaboration and communication amongst teachers working with substantially separate groups of students across school levels to strengthen the continuity of services and common goals across classrooms. i. Implement a method for evaluating the age-appropriateness of curriculum and instructional materials, particularly for the middle school and high school levels in substantially separate classes.	1. a-f - A comprehensive life skills program for middle and high school students is implemented. 1.g-i. – A comprehensive substantially separate program (i.e., Foundation, Autism Spectrum Disorder) is implemented at MSMS and BHS. Spaces and materials lend themselves to students building and practicing life skills (e.g. kitchen space, laundry facilities, pre-vocational/vocational areas) as well as spaces to continue to build academic repertoires are recommended.)

Appendix D – Burlington Public Schools - Plan for Success – 2022-2025 – Department of Special Education

Overarching Objective: *All BPS special educators can provide for the specialized learning needs of BPS students.*

Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objective?*	***Outcome*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Learning - *continued* *Empower all students through a rigorous, dynamic, and relevant curriculum designed to include academic, social, emotional, and psychological supports to ensure student growth and achievement.*	***2. Educational Programming*** a. Elementary School: Implement a remedial math curriculum to support students who are not progressing with modified instruction within the general education curriculum. b. Middle School: Allocate resources to develop/implement a standard curriculum for middle school students in substantially separate math and ELA classes. c. Focused professional development programs targeted to both special education teachers and general education teachers at all three levels (elementary, middle, and high school). 1. PD for Special Education Teachers: - Orton-Gillingham, Lindamood Bell, and other reading programs 2. PD for All Teachers (special education and general education): - Reading instruction, accommodating, modifying curriculum - Project-based learning - Disability Awareness - Not to just grade but look at standard completion d. Beginning the 2022-2023 school year, implement the consulting model utilized at the middle school for identified language-based students at the high school. e. BHS: Continue utilizing consults for language-based programming through partnerships with outside agencies specializing in language-based pedagogy. f. Expand ASD programming to Middle School with the incoming 6th grade students and continue the program expansion through 8th grade.	2.a. Elementary students evidence academic growth as the result of participating in the remedial math curriculum. 2.b. Middle school students, in substantially separate math and ELA courses, have an established ELA and/or math curriculum which enables them to meet or exceed grade level learning objectives. 2.c. Focused professional development programs are provided for general education and special education teachers whose learnings are evidenced in their classroom practice, teaching methodology, and student growth. 2.d-e. The MSMS consulting model for identified language-based students is extended to BHS. 2 f. The ASD program is extended at MSMS through the 8th grade to accommodate students by 2025.
	3. Extended Year Services (EYS): a. Collect and analyze data (entry/exit criteria) for students being referred for summer services to answer the questions: Who is being referred for EYS and why? What is the best program design to meet the needs of those referred? b. Utilize the data gathered to develop programming to address the needs of those students who require extended year services.	3.a.b. The Extended Year Service Referral Process and program design reflect the needs of those students who require extended year services.

Appendix D - Burlington Public Schools – Plan for Success – 2022-2025 - Department of Special Education		
Overarching Objective: *All BPS special educators can provide for the specialized learning needs of BPS students.*		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objective?*	***Outcome*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Equity *Educate and allow all learners to be their authentic selves so they attain high academic standards and outcomes by creating challenging learning environments where they feel they truly belong because they see representations of themselves in their curricula and in their teachers and support staff.*	1. Provide collaboration time for special educators within and across schools. 2. Increase the number of co-taught programs at the elementary level. 3. Provide professional development programs to special educators and instructional assistants to build their capacity to meet the needs of students with more significant needs who have not been historically placed in special education program classrooms. 4. Restructure the Evening Academy (Simons Youth Academy) to include more flexibly timed classes to provide an option for access to all (special and ELL) students. 5. Collaborate with the Director of English Learner Education to access and provide bilingual evaluators to evaluate El students in their home language when concerns around a disability present.	1.-3. The needs of all learners are met through focused instruction. 4. The Evening Academy restructuring provides greater access and programming for all students. 5. Bilingual evaluators are available for ELL students who need an evaluation in their home language.

Appendix D - Burlington Public Schools – Plan for Success – 2022-2025 - Department of Special Education		
Overarching Objective: *All BPS special educators can provide for the specialized learning needs of BPS students.*		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objective?*	***Outcome*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Thriving *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	1. Develop written descriptions of all BPS special education programs which include the supports the program provides and clarifies the student placement criteria for each classroom/program for dissemination within and across district schools. 2. Include exit/discharge criteria, or "nonexamples" of student profiles to help program staff (a) determine when a student is ready to fade or transition out of special education program supports, and (b) determine when to refer a student to a program in special education program descriptions. 3. Provide focused professional development on disability awareness to every BPS educator to increase educator awareness and understanding of existing programs or programs being developed, sharing information about the target student population and program design would benefit both educators and students. 4. Provide focused professional development offerings and/or supports for the curriculum needs o special education program classroom teachers in the areas of: a. Supports for the curriculum needs of special education students: - Implementing special education curricula available in the district. - Identifying the special education curricula best matched to student needs. - Training surrounding general education curricula that is accessed by or modified for special education students. b. Understanding and supporting a range of student needs that may occur comorbidly with other diagnoses (anxiety, apraxia, sensory needs, etc.) c. Interventions for students who engage in challenging behavior and classroom management strategies and supports. d. Permit special educators to utilize building or district-level professional development time at their discretion when the topics offered are unrelated to the students they serve. e. Increase scheduled/structured opportunities for special education teacher collaboration for staff working with similar student populations or similar program models where there is only one classroom of its type at a school level *(e.g. MSMS and BHS Connections; Bridge programs at the MSMS and BHS).* 5. Elementary Schools: Research the feasibility of concentrating a specific program (i.e. autism, intellectual, social emotional) in each elementary school to optimize learning and resources for students.	1.-2. Program descriptions are disseminated to general education and special education staff and programs throughout the district for use in consultation when making student referrals or placement recommendations. 3. BPS staff have a greater understanding regarding disabilities, the needs of these students, the supports in place for them, and how the school community can support them will result in better student referral and student support. 4. a-c. education educators, including special education students regarding successful inclusion strategies and grading. 4.d &e. Professional development program scheduling provides opportunities for teachers/staff working within similar program models at the same school or from across school levels to collaborate for training and program development purposes. 5. A "Summary of Findings and Recommendations" is presented to the Superintendent for review and consideration regarding the feasibility of concentrating a specific program (i.e. autism, intellectual, social emotional) in each elementary school to optimize learning and resources for students.

Appendix D - Burlington Public Schools – Plan for Success – 2022-2025 - Department of Special Education		
Overarching Objective: *All BPS special educators can provide for the specialized learning needs of BPS students.*		
Strategic Objective *What will we do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	***Initiatives*** *How will we achieve the Strategic Objective?*	***Outcome*** *How will we know we achieved the Strategic Objective Evidence/Product?*
Thriving - *continued* *Strengthen BPS culture through relationships between and amongst students, staff, families, and the Burlington community to ensure the health, safety, security, and happiness of all learners and adults.*	6. Staffing – Specialized Elementary and MSMS Programming: Hire a 1.0 FTE "Director of Programming" to lead and manage program development and implementation as specialized programs expand from one level to another.	6. A 1.0 FTE Director of Programming is approved. funded, and hired.

Appendix D - Burlington Public Schools – Plan for Success – 2022-2025 - Department of Special Education		
Special Education - Overarching Objective: All BPS special educators can provide for the specialized learning needs of BPS students.		
Strategic Objective *What we will do to realize the BPS Mission + Vision + Equity Statement + Theory of Action?*	**Initiatives** *How we will achieve the Strategic Objectives?*	**Outcome** *How we will know we achieved the Strategic Objective Evidence/Product?*
Facilities/Finance *Ensure fiscal responsibility, transparency, and the long-term stability of the district by utilizing resources effectively and providing facilities that are safe and well maintained to support the success of all learners and adults.*	1. Build out new spaces to provide for expanded special educational programming as needed. - 2022 – Middle School - ADA Bathroom and OT/PT Room 2. Work with the Director of Operations Management to determine how to provide transportation to students who need to get to places of work as part of their transition skills programs.	1. Middle School – 2022 – ADA Bathroom and OT/PT Room constructed for the 2022-2023 school year. 2. Specialized vans are purchased to transport students in transitional skills programs to their places of work or their programs.

Appendix E | BPS Plan for Success *(PfS)* | Glossary of Acronyms & Terms

ACCESS for ELLs– Assessing Comprehension and Communication in English State-to-State for English Language Learners. This large-scale test addresses the academic English language proficiency (ELP) standards at the core of the WIDA Consortium's approach to instructing and evaluating the progress of English language learners. The ACCESS for ELLs test is the annual assessment required by NCLB.

Advanced Placement (AP) – A nationally recognized program run by The College Board consisting of college-level work that students can access while still in high school through AP exams; through this program, students can earn college credit.

Alternative pathways to course credit – Opportunities to earn credit for a class through nontraditional means: for example, through work or volunteering with an organization.

ASPEN – Student information management system - The Aspen platform provides students and families with convenient access to grades, attendance, and additional information about student progress.

ASD – Autism Spectrum Disorder

BECC - The Burlington Early Childhood Center is located at Burlington High School and is an integrated public preschool for children ages 3-5. BECC supports children of all abilities in both general education and special education setting.

BPS – Burlington Public Schools

BHS – Burlington High School

BYFS – Burlington Youth and Family Services

Capital Projects – Multi-year projects meant to expand, maintain, replace, or improve upon a significant piece of physical property; a capital project is distinct from other BOS projects as it is large in scale, high in cost, and requires considerable planning (example: new construction, renovations, and maintenance; school bus/van replacements; and technology replacement).

Core Values – The fundamental beliefs of BPS. These guiding principles dictate behavior and can help people make decisions for the district.

Culturally responsive teaching – Instruction that draws on cultural knowledge prior experiences, and frames of reference to teach to background and experiences of all students; instruction that understand diverse student learning styles.

CRIOP – Culturally Responsive Instruction Observation Protocol - A classroom observation tool to measure teachers' use of culturally responsive literacy practices. The *Culturally Responsive Instruction Observation Protocol* measures teachers' instruction along eight key pillars: assessment practices, teacher dispositions, classroom climate, planned curriculum activities, instructional discourse, family collaboration and involvement, instructional strategies/pedagogy, and sociocultural perspectives.

Digital citizenship – Having knowledge and skills to effectively use digital technologies in order to communicate with others, participate in society and create and consume digital content, leaving a positive digital footprint.

DEI - Diversity, Equity, and Inclusion

Dual enrollment – Course taught in high schools that earn a student college credit in conjunction with a local community college.

DLLs - Dual language learners. Children under the age of five who have at least one parent or guardian who speaks a language other than English at home and are mastering their native language proficiency while learning English simultaneously.

Devereaux Students Strength Assessment (DESSA) – Standardized, norm-referenced behavior rating scale that assesses social emotional competencies in students.

E or Elem – Elementary School(s)

ELA – English Language Arts

EL - English Learner. An EL is a student who uses another language in addition to or other than English.

ELL - English Language Learner. An ELL is a student who uses another language in addition to or other than English.

ELP - English Language Proficiency. ELP is the degree to which a student is able to use standard American English as the language of instruction.

ELPAC – English Learner Parent Advisory Council

ESL - English as a second language; a program model that delivers specialized instruction to students who are learning English as a new language.

Environmental Sustainability – Behaviors that ensure future generations have the natural resources available to live an equal, if not better, way of life as current generations.

Equity – The provision of personalized resources needed to all individuals to reach common goals.

EYS – Extended Year Services. An individualized instructional program for eligible students with and without disabilities that is provided beyond the regular school year.

Field Experiences – A learning experience that happens outside of the school (example: trip to a museum or a live theater experience).

FTE - Full-time equivalent. FTE is the unit of measurement that measures the ratio that represents the hours worked by an individual employee within a week, generally from Monday to Friday.

Infrastructure – The resources necessary to operate a school district (examples, buildings, transportation, technology software and hardware).

Growth Mindset –Dr. Carol Dweck (2007) invented the terms "fixed mindset" and "growth mindset" to explain the beliefs people have about their ability to learn and grow. Students and educators with a growth mindset believe that they can improve through hard work, thrive on challenge, and see failure as an opportunity to do better. Learners and educators with a growth mindset embrace curiosity to experience new ideas; to possess the desire to learn, unlearn, and relearn; to develop positive attitudes and attitudes and beliefs about learning; to believe that learning is growing, and doesn't always happen sequential, linearly, and/or predictably.

HS – High School

LABBB - LABBB (Lexington, Arlington, Burlington, Bedford, Belmont) is an educational collaborative that provides educational programming and support services for over 350 special needs students from over 65 districts. LABBB serves students with a variety of special needs including students on the autism spectrum, students with multi-handicaps, pervasive development disorders, developmental delays, language deficits and social/emotional challenges. The LABBB Collaborative Programs are all located in public school buildings.

LEP – Limited English Proficient. LEP is an acronym used at the federal level to describe English language learners who participate in ESL programs.

LTEL - Long-term English learner. A formal educational classification given to students who have been enrolled in American schools for more than six years, who are not progressing toward English proficiency, and who are struggling academically due to their limited English skills.

MA DESE – Massachusetts Department of Elementary and Secondary Education

MS - Middle School

Mission – A brief description of BPS' fundamental purpose both for those in the school district and for the public, It answers the question, "Why do we exist?"

MSMS – Marshall Simonds Middle School

Opportunity Gap – Closely related to achievement gap and learning gap, the term opportunity gap refers to the ways in which race, ethnicity, socioeconomic status, English proficiency, community wealth, familial situations, or other factors contribute to or perpetuate lower educational aspirations, achievement, and attainment for certain groups of students.

Outcomes **–** The expected results: what they will be, how they will be measured, when they will occur. (MA DESE)

Planning for Success **(**PfS**)** – The MA DESE strategic planning and continuous improvement process for school districts. PfS is an inclusive, hands-on planning process designed to build district and school capacity and coherence while also building community understanding and support. (MA DESE)

Portrait of a Learner – The competencies identified by the BPS community through a collaborative process to define a vision for student success**.** This requires input from district administrators, building administrators, teachers, students, families, community leaders, and business leaders.

Project-Based Learning (PBL) – Teaching method in which students gain knowledge and skills by working for an extended period to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.

Racial Equity – When race does not determine quality of life, opportunities, and outcomes.

Restorative Practices - Restorative practices encompass a variety of structures, activities, systems, and practices aimed at building community & belonging, supporting social & emotional development, and helping students understand their role as community members. Educators with a restorative mindset place students at the center of their practice.

PBIS - Positive Behavior Intervention and Support programs are a way to impact school learning environments by establishing and reinforcing clear behavioral expectations to support high student performance and to reduce behavioral problems.

PD - Professional Development. The term refers to skills and knowledge attained for both personal development and career advancement such as continuous courses, workshops, activities and learning objectives aimed at helping professional educators and staff members improve their skills in their fields.

Responsive Classroom **-** *Responsive Classroom* is a high-quality, evidence-based, well-designed classroom program that systematically promotes students' social and emotional competence, provides opportunities for practice, and offers multi-year programming.

SBIRT - Screening, Brief Intervention, and Referral to Treatment**.** SBIRT is an approach to the delivery of early intervention and treatment to people with substance use disorders and those at risk of developing these disorders. SBIRT Screening quickly assesses the severity of substance use and identifies the appropriate level of treatment.

SLIFE - Students with Limited or Interrupted Formal Education (SLIFE) "are English language learners who have experienced interrupted education due to war, civil unrest, migration, or other factors; who have never had the opportunity to participate in any type of schooling before entering school in the United States; or who have experienced limited education in their home countries due to lack of resources or trained teachers, the type of schooling they participated in, or other circumstances." (DeCapua & Marshall, 2010)

Social-Emotional Learning (SEL) – Social and emotional learning (SEL) is an integral part of education and human development. SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions. (CASEL, 2020)

SSP **–** Student Success Plans. A personalized student driven plan that will be created to address every learner's needs and interests to help then stay engaged in school and to achieve post-secondary educational and career goals. (MA DESE)

SPED – Special Education

Strategic Initiatives - The projects and programs that support and will achieve the strategic objectives (the "how").
(MA DESE)

Strategic Objectives - The coherent group of overarching goals and key levers for improvement that will achieve the vision (the "what" and "why"). (MA DESE)

Theory of Action –The fundamental belief about what will lead to the great improvement of student outcomes and eliminate opportunity and achievement gaps. The theory of action ensures the district achieves it vision, executes its mission, and upholds its core values. Framed as an "if…then" statement. (City, 2009; MA DESE)

Warm Demander – The phrase "warm demander" is as an equity approach, built on the belief that educators will be far more successful when showing their students that they matter to them and that you refuse to give up on them. (Judith Kleinfeld, 1975)

WIDA - The WIDA Consortium is an educational consortium of state departments of education that supports academic language development for students who are English Learners. The WIDA suite of assessments are what Massachusetts uses to assess and monitor English language proficiency.

Work-based learning –coordinated with local employers that give students exposure to the world of work.

YRBS - The Youth Risk Behavior Survey focuses on the major risk behaviors that threaten the health and safety of young people. This anonymous survey includes questions about tobacco use, alcohol and other drug use, sexual behaviors that might lead to unintended pregnancy or sexually transmitted disease, dietary behaviors, physical activity, and behaviors associated with intentional or unintentional injuries.

The YRBS was developed by the Centers for Disease Control and Prevention to monitor priority health risk behaviors that contribute to the leading causes of death, disease, injury, and social problems among youth. The Massachusetts Department of Elementary and Secondary Education, in collaboration with the Centers for Disease Control and Prevention (CDC) and the Massachusetts Department of Public Health (DPH), conducts the Youth Risk Behavior Survey (YRBS) in randomly selected public high schools in every odd-numbered years. Since 2007, the MYRBS has been conducted jointly with the Massachusetts Youth Health Survey (MYHS) developed by DPH.

Vision – A clear statement that describes what BPS is trying to achieve in the future.

District Leadership Team | 2022-2023

Central Office

Eric Conti	Superintendent of Schools
Nichole Coscia	Business Manager
Raymond Porch	Director of Diversity, Equity, and Inclusion
Christina Cicolini	Director of Special Education
Robert Cuhna	Director of Operations
Barbara Conley	Nurse Leader
Joanne Faust	Human Resources Director

High School

Mark Sullivan	Principal, Burlington High School
Heather Northrop	Associate Principal, Burlington High School
Rick Sheehan	Associate Principal, Burlington High School
Shaun Hart	Associate Principal, Burlington High School
Joseph Attubato	Director of Guidance, Burlington High School
Shannon Janovitz	English Department Head, Burlington High School
Kathleen Whitcomb	Mathematics Department Head, Burlington High School
Holly Potters	Science Department Head, Burlington High School
Todd Whitten	Social Studies Department Head, Burlington High School
George Ratkevich	Visual Arts Department Head, Burlington High School
John Middleton	Performing Arts Department Head, Burlington High School
Bonnie Nichols	Team Chair/Special Education Department Head

Middle School

Cari Perchase	Principal, Marshall Simonds Middle School
Cheryl Mantia	Assistant Principal, Marshall Simonds Middle School
Panagiota Athinelis	Assistant Principal, Marshall Simonds Middle School

Elementary Schools

Patricia English-Sand	Principal, Memorial Elementary School
John Lyons	Principal, Pine Glen Elementary School
Nicole McDonald	Principal, Francis Wyman Elementary School
David Rosenblatt	Principal, Fox Hill Elementary School

Burlington Early Childhood Center

Deborah Clark	Director, Early Childhood Center

Afterschool Program

Donna Sullivan	Director, Child Care

Special Education

Alice Bhukhmohan	Team Chair, Special Education
Andrea Hayes	Team Chair, Special Education
Nicole Mattos	Team Chair, Special Education
Jaclyn Vigneau	Team Chair, Special Education
Steven Eastridge	Team Chair, Special Education
Marissa Bellio	Team Chair, Special Education
Deanna Goggin	Team Chair, Special Education
Kristen DeMarco	Team Chair, Special Education
Bonnie Nichols	Team Chair/Special Education Department Head

District Leadership Team | 2022-2023 - continued

District Curriculum Team

Robyn Miliano	Director of Student Information
Renee Sacco	Director of Literacy
Carrie Fortunato	Mathematics Coach
Sean Musselman	Social Studies/Science Coach
Christine Conceison	Director of Mental Health
Wendy Pavlicek	Director of the Science Center
George Ratkevich	Visual Arts Department Head, Burlington High School
John Middleton	Performing Arts Department Head, Burlington High School
Matt Jackling	Health/Physical Education Coordinator
Dennis Villano	Director of Instructional Technology
Kerri Lamprey	Director of English Language Learners
Jennifer Knight	Director of Family and Community Engagement

Burlington Educator Association

Sean Musselman	Union President

BURLINGTON PUBLIC SCHOOLS
District Curriculum Accommodations Plan
(DCAP)

A Resource Guide for Teachers, Principals, Student Support Services Personnel, and Parents to Meet the Needs of All Learners of the Burlington School District

Massachusetts General Laws require the adoption and implementation of a District Curriculum Accommodation Plan (DCAP). This plan is intended to guide principals and teachers in ensuring that all possible efforts are made to meet student needs in general education classrooms and to support teachers in analyzing and accommodating the wide range of student learning styles and needs that exist in any school. By describing in a document the accommodations, instructional supports and strategies that are available in general education, and the process for determining effective interventions for struggling learners, it is hoped that this DCAP will help support diverse learners in our schools and avoid unnecessary referrals to special education.

Massachusetts General Laws, Chapter 71, Section 38Q1/2 "A school district shall adopt and implement a curriculum accommodation plan to assist principals in ensuring that all efforts have been made to meet the students' needs in regular education. The plan shall be designed to assist the regular classroom teacher in analyzing and accommodating diverse learning styles of all children in the regular classroom and in providing appropriate services and support within the regular education programming, including, but not limited to, direct and systematic instruction in reading and provision of services to address the needs of children whose behavior may interfere with learning, or who do not qualify for special education services under chapter 71B. The curriculum accommodation plan shall include provisions encouraging teacher mentoring and collaboration and parental involvement."

DCAP Overview:

The role of the Burlington Public Schools has evolved over the years from one of essentially developing and implementing specific support programs and services for students to one of collaboration with Principals, classroom teachers, and curriculum coordinators and department heads. This collaboration in planning and implementation enables the District to provide specifically defined programs and services to continue to meet the needs of the students.

The formulation of new programs and service initiatives are a result of the broader representation of opinions through District Leadership Teams and individual School Based Teams. The Burlington Public Schools in consultation with these Teams has facilitated the establishment of programs and services to more effectively and efficiently meet the needs of the students.

The Burlington Public Schools is dedicated to working collaboratively with educators, parents, support professionals and the community to ensure that all students receive their appropriate services and supports in the least restrictive environment/setting, conducive to facilitating their maximum emotional, social and academic growth. The focus of this collaborative approach is to prepare students for productive lives as full members of our society. The Burlington Public Schools DCAP was developed and refined through several meetings with district administrators

and was shared with each School Leadership Team. Additionally, the DCAP was be disseminated and explained to all staff at the elementary, middle and high school grade levels. The Burlington Public Schools DCAP addresses various strategies that will help to achieve this objective, including:

Systems of Tiered Instruction (RTI) - A system used to screen, assess, identify, plan for, and provide interventions to any student at- risk of school failure due to academic or behavior needs. This approach referred to as Response to Intervention (RTI), is a process that provides immediate intervention to struggling students at the first indication of a failure to learn.

Special Education Services - These would include services that are available to students through the regular education program, including services to address the needs of students whose behavior may interfere with learning. A description of the District's Special Education programs and services is appended to this DCAP.

Title I - Memorial, Francis Wyman, Pine Glen

Reading Services - This means the direct and systematic instruction in reading for all students.

Mentoring and Collaboration - This set of strategies includes those that encourage teacher mentoring and collaboration.

Parental Involvement - This effort includes workshops/presentations and strategies that encourage parental involvement in their children's education.

While not required by the Department of Elementary and Secondary Education (DESE), this DCAP seeks to identify strategies in several other areas including:

School Organization - Included here are such things as changes to the school schedule (such as additional instructional time or block scheduling), review of school policies and discipline codes, RtI and pre-referral activities before students are evaluated to determine eligibility for special education, after-school options (such as homework assistance and peer coaching.) and behavioral interventions including Bullying Programs/Bullying Curriculum.

Curriculum Alignment- These strategies provide for a review of local curriculum in relation to state learning standards.

Additional Support Services - Services that provide additional staffing or consultation on behavioral issues and on literacy development are included in this category.

Psychologists: School Psychologists perform evaluations and screenings, provide consultation to classrooms, and provide direct services to children both in the classroom and individually to address academic, social/emotional, and/or behavioral needs.

Guidance Counselor: The guidance counselors at the secondary level support the academic, career and personal/social-emotional development of all students. They participate in disciplinary meetings as well as Special Education and 504 Team meetings. They assist students and parents with the college application process or other post secondary goals. At the elementary level, the guidance counselors support the social/emotional development of all students. They provide social skills instruction within the classroom and within small groups. The elementary guidance counselors coordinate and oversee students' 504 Accommodation Plans. The guidance counselors also provide support to teachers and parents.

Reading and Math Curriculum Coaches: Coaches facilitate curriculum work and alignment through Curriculum Councils and are the liaisons between the councils and the district leadership teams; they provide professional development to all staff in the district and also support teachers through modeling lessons and providing resources; coaches also manage student data and progress monitoring through the RtI model

Speech and Language Pathologist: SLP's perform evaluations and screenings, provide consultation to classrooms, and provide direct services to children both in the classroom and in the therapy room to address communication skills including the following: receptive and expressive language, social communication, articulation, fluency, voice, and hearing.

Occupational Therapist: OT's perform evaluations and screenings, provide consultation to classrooms and provide direct services to children both in the classroom and in the therapy room to address fine motor and perceptual motor skills as well as address sensory integration skills.

Physical Therapist: PT's perform evaluations and screenings, provide consultation to classrooms and provide direct services to children both in the general education setting and in the therapy room to address gross motor skills

Behaviorist: The behaviorist provides consultation and support to classroom throughout the district as well as direct services to students in district programs. The behaviorist conducts systematic behavioral assessments, provides interpretations of the results, and develops and supervises behavior intervention plans.

Vision Specialist: The vision specialist conducts assessments and provides consultative services to classroom teachers as well as direct instruction to students with visual impairments.

Assistive Technology: Products, devices, or equipment (whether acquired commercially, modified or customized) that are used to maintain, increase, or improve the functional capabilities of individuals with disabilities.

Strategies	Description
Assistance to general education classroom teachers to help them analyze and accommodate various students for learning needs and to manage students' behaviors.	● Weekly preschool therapist meetings to provide consultation to classroom teachers at the preschool ● New teacher meetings and new teacher mentor program. ● Grade level, department, and staff meetings. ● Curriculum Leaders, Department Heads, Literacy, Math, and Science Specialists from K-12 assist classroom teachers in problem-solving and analyzing instructional practice and student results. ● Building-based teacher support teams in each building convene regularly to provide instructional and behavioral intervention suggestions to teachers ● Middle School teams meet regularly to discuss student needs and behavioral and instructional strategies ● High School teams meet regularly to discuss at risk students needs and behavioral and instructional strategies ● Curriculum Leaders K-8 provide consultation for classroom teachers ● Library/Media Specialists and Technology Integration Specialists provide resources for curriculum and instructional and collaborate with classroom teachers around instruction ● Guidance counselors and school psychologists at elementary level provide whole class, small group, and individual counseling and social skill groups. ● Guidance staff, school psychologist, and school adjustment counselor at the high school provide individual and small group social skills and issue-specific groups (divorce, new to town, sibling issues, etc) ● Grade level, department, and faculty meetings ● Curriculum councils and Task Forces
Strategies	Description
Support services that are available to students through the general education, including services to address the needs of students whose behavior may interfere with learning.	Preschool: ● Social-Emotional Programs in the Classroom: ○ Preschool Life Skills Curriculum ○ Social Thinking Preschool Curriculum ● Behavior support through a behaviorist ● Summer program for students at risk for significant regression ● RTI groups for communication and motor skills Elementary: ● Social-Emotional Programs in the Classroom: ○ Social Thinking Curriculum ○ Responsive Classroom

	○ Classroom-wide system of behavior management ● Behavior support through BCBA ● Social skills and social pragmatics groups conducted by the school guidance counselor or school psychologist ● Reading Specialist and tutors work with individual/small groups of students for reading instruction ● Reading Specialists help teachers administer assessments, interpret results and design instruction to meet student needs ● Literacy and Math Coach provides teacher consultation for curriculum development, screening, data analysis, informal and formal assessments, demonstration teaching, and co-taught classes. ● iReady used as universal screening tool for reading and math ● Fundations phonics instruction in K-3. Frequent assessments lead to “double dose’ of instruction in the classroom as needed ● Kindergarten teachers administer DIBELS benchmark assessments and form RTI groups based on assessment data. Kindergarten teachers use the DIBELS to regularly progress monitor students in intervention groups. ● ESL staff provides language learning instruction and support for students in academic classes. ● Literacy tutors and Math tutors provide targeted reading and math support in eligible schools. ● Summer programs provide literacy and math instruction for grades K-5. ● Homework Club ● RTI group in the areas of academics, communication, fine/gross motor, and behavior ● Technology resources-iPads, ST Math, Symphony, Reflex, iReady, various reading and math programs Middle School ● Tutoring support services ● At risk meetings are held weekly at MSMS to exchange information on students who are in the court system in an attempt to help support them ● Pragmatic groups to support social learning and positive peer relations ● Executive functioning groups to support organization and planning across the curriculum ● Group and individual counseling to support emotional development ● After school teacher availability ● School Adjustment Counselor ● Reading Specialist ● CBJ meetings are held monthly to exchange information on students who are in the court system in an attempt to help support them High School Support Services: ● The Bridge Program

	● MCAS mastery tutoring offered in Math and Science ● Tutoring support services ● CBJ meetings are held monthly at BHS to exchange information on students who are in the court system in an attempt to help support them ● At Risk meetings are held bi-monthly at BHS to exchange information on students who are struggling academically and behaviorally in an attempt to help support them ● After-school teacher availability
Strategies	Description
Professional Development opportunities provided to increase instructional skills for all teachers	District Wide Professional Development: ● Training for all staff in implementing Preschool Life Skills Curriculum. ● Training for all teachers in classroom problem behavior and intervention ● Three day professional development conference for all Burlington staff prior to start of school ● Graduate level courses available in literacy and math ● SEI course available for all teachers ● Concepts in Standards Based Teaching available for all teachers ● “How Do I Do That?” series provides professional development in technology for all staff ● Three day professional development conference for all Burlington staff prior to start of school ● Targeted professional development opportunities in licensed content area ● Training for staff on executive functioning and transition skills
Direct Instruction	● Each elementary student has a daily, 90 minute literacy block where teachers provide direct instruction instruction in reading and writing. ● Each elementary student has 75 minutes of direct instruction in math ● Literacy specialists assist elementary school teachers with the implementation of literacy assessments and programming ● Elementary literacy, science, and math curriculum coaches provide model lessons for classroom teachers ● Integration of test-taking skills instruction in classes. ● Use of MCAS test format in classroom assessments. ● Use of MCAS vocabulary in classroom instruction and assessment in individual classrooms.

Teacher mentoring and collaboration	● The Burlington Public Schools follows all DESE regulations around non-professional status teachers and mentoring programs
Changes to the school schedule, such as additional instructional time or block scheduling	● The elementary schools have 90 minutes of direct literacy instruction and 75 minutes of direct math instruction daily ● The elementary schools have a designated a designated 30 minute extension/intervention block for individual/small group instruction in targeted areas of need ● The high school has a rotating schedule that includes one long block each day
Review of local curriculum in relation to state learning standards	● Each year's MCAS results are analyzed and compared to the previous year's results ● Curriculum is aligned to state standards; units are monitored and updated regularly
Strategies	Description
Additional staffing or consultation on academic and behavioral issues	● All schools have at least one nurse on staff. ● All schools have Speech-Language Pathologists, Occupational Therapists, and Physical Therapists that provide teacher consultation, perform classroom observations, provide direct services, and conduct screenings and evaluations. ● School Psychologists, guidance counselors and special education liaisons are specialists in behavior observation, consultation and program development and can provide support to classroom and specialist teachers as needed ● School Adjustment counselor at the middle school and high school can provide support for behavioral interventions and planning ● Each building has a trained team of teachers who can safely de-escalate student behavior and, if necessary, restrain a student ● Psychologists provide regular and ongoing consultation to staff at all levels, including completion of Functional Behavior Assessments, when needed to support a student ● The high school has one licensed social worker employed as a guidance counselor who can support students, parents and teachers

Communication with parents and opportunities for parent involvement in the schools	Preschool: ● Director, Classroom, and Therapist blogs. ● BECC website. ● Progress reports three times a year; report cards two times a year. ● Parent conferences two times a year. ● Open House for parents and students in September. ● In August, parents receive letters from their child's teacher. Elementary: ● School based websites ● Principal's blog and individual classroom blogs ● Opportunities for parent volunteers within the schools ● Back to School nights held at all elementary schools at the start of the school year ● Standards-based report cards sent home three times per year ● At least one parent-teacher conference per year ● Parent Teacher Organization (PTO) at all elementary schools Middle School ● Classroom and teacher blogs, websites, and other learning management systems. ● Progress reports are sent during the middle of each term ● Parent teacher conferences and opportunities to schedule team meetings with content area teachers ● Back to school night High School: ● Classroom and principal's blogs, websites, and twitter accounts ● Interim reports are sent during the middle of each term ● students receive course verifications in the Spring ● Any senior in danger of not graduating receives a letter in the Spring ● Parent teacher conferences are held in the fall and in the Spring ● Parent Portal-Parent access to student progress All Schools preK-high school hold Back-to-School nights.

WHAT ARE ACCOMMODATIONS?

Accommodations are practices and procedures in the areas of presentation, response, setting, and timing/scheduling that provide equitable access during instruction and assessments for students with disabilities.

Accommodations are intended to reduce or even eliminate the effects of a student's disability; they do not reduce learning expectations. The accommodations provided to a student must be the same for classroom instruction, classroom assessments, and district and state assessments. It is critical to note that although some accommodations may be appropriate for instructional use, they may not be appropriate for use on a standardized assessment. There may be consequences (e.g., lowering or not counting a student's test score) for the use of some accommodations during state assessments. It

is very important for educators to become familiar with state policies regarding accommodations during assessments.
Typically, accommodation use does not begin and end in school. Students who use accommodations will generally also need them at home, in the community, and as they get older, in postsecondary education and at work. Accommodations for instruction and assessment are integrally intertwined.

<u>Presentation Accommodations</u>: Allow students to access information in ways that do not require them to visually read standard print. These alternate modes of access are auditory, multi-sensory, tactile, and visual.

- Present content in multi-modal approaches
- Break down long term assignments
- Use transition cues
- Use technology assisted instruction
- Additional small group/1:1 instruction (even before or after school)
- Pair student with peer instructors/tutoring
- Paper to peer to provide notes (grades 6-12)
- Provide handouts
- Present demonstration model/exemplars
- Utilize manipulatives (across curriculum)
- Pre-teach vocabulary
- Make/use vocabulary files
- Repeat clarify directions
- Break-down directions/tasks into smaller steps
- Arrangement of materials on page/Reduced amount of visual information on the page
- Highlight test/study guides
- Use supplementary materials
- Marker to guide reading
- Large graph paper format
- Graphic organizers
- Assignment notebooks
- Use of manipulatives
- Use of 1:1 to technology to support instruction

<u>Setting Accommodations</u>:Change the location in which a test or assignment is given or the conditions of the assessment setting.

- Strategic seating
- Change student's location within the classroom

<u>Timing and Scheduling Accommodations</u>:Increase the allowable length of time to complete an assessment or assignment and perhaps change the way the time is organized.

- Extended time

- Allow breaks
- Provide after or before school help regularly
- Use of daily schedules

<u>Response Accommodations</u>:Allow students to complete activities, assignments, and assessments in different ways or to solve or organize problems using some type of assistive device or organizer.

- Reduce assignments requiring copying
- Use rubrics
- Provide homework logs and journals for homework follow-up
- **Accommodations for Testing Adaptations:**
- Alternate type of tests
- Preview language of test questions
- Administer in short periods
- Change format visually
- **Accommodations for Classroom Assignments:**
- Reduce paper and pencil tasks
- Use pictorial directions
- Give extra cues and prompts
- Allow student to record or type assignments
- Buddy system
- Daily checklists of tasks

- **Behavioral Strategies:**
- Develop self monitoring systems
- Change seating
- Increase student-teacher interaction
- Develop behavior plan with motivating incentives
- Adjust classroom management techniques
- Parent communication and shared incentives
- Define clear and consistent expectations-student-class
- Consult with school guidance or psychologist
- Use charts and graphs to monitor expectations
- Warnings for transitions
- Use of daily/individual schedule

Motivation and Reinforcement:

- Increase positive reinforcement
- Increase concrete reinforcement
- Offer choice
- Use student's strengths/interests
- Reinforce student’s initiative in their own learning
- Promote self-determination skills

3 INITIAL SPACE SUMMARY

Narrative

Initial Space Summaries

Existing Facilities Floor Plans

INTRODUCTION

The initial space summary has been completed for the two study enrollments per the Enrollment Certification as follows:

Enrollment for Grade K-5 at the Fox Hill Elementary School of 325 students

Enrollment for Grade K-5 at a consolidated Fox Hill Elementary School and Pine Glen Elementary School of 640 students

The District will continue to evaluate both enrollment options during the Preferred Schematic phase and will arrive at a preferred enrollment at the conclusion of the Preferred Schematic phase.

General Comment

The Space Summary Template for each of the enrollment options deviates from the MSBA Guidelines as follows. Please refer to PART 2 I EDUCATIONAL PROGRAM for detailed information on these programs.

GRADE K-5 AT THE FOX HILL ELEMENTARY SCHOOL OF 325 STUDENTS

Core Academic Spaces

Using the enrollment of 325 students and dividing it by the number of grades (6 grades, K-5) there will be approximately 54 students per grade. With the average number of 18 students per classroom, per the class size policy, three (3) additional classrooms in total will be required to provide for the same number of classrooms per grade.

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	54	54	54	54	54	55	325
Average # students / class	18	18	18	18	18	18	
# of classrooms	3	3	3	3	3	3	18

- Three (3) more general classrooms - grades 1-5 are required compared to MSBA's guideline of twelve (12) classrooms grades 1-5.
- English Learners (ESL) Program is a mandated state program. The Burlington Public Schools' student population is increasingly multilingual. Every year, Fox Hill students include 40-50 English Language Learners of varied English proficiency and home languages, who learn alongside their grade level peers. Small groups of students meet with the ESL teacher several times a week both in and outside the classroom for direct English instruction.

  The existing Fox Hill School has two ESL spaces to serve these students and is anticipating the same in a new facility with either enrollment. The ESL teaching model is push in and pull out depending on a student's English proficiency. Students at the entering and developing stage need a designated ESL learning classroom in which to meet with the ESL teacher. This program requires two (2) classrooms at 500 NFA.

- Literacy Specialists: Although most of the reading and writing instruction takes place within the classroom environment, BPS is committed to supporting literacy for all students. The Fox Hill School will have 2 literacy specialists dedicated to this school. A shared space with two instructional areas is necessary to facilitate individualized instruction, both in 1:1 and small group settings therefore one space for the literacy specialists is required at 950 NFA.
- Math Coaches: To support effective math instruction, math coaches work with classroom educators on instructional practice. Most of the time coaches are working with students and teachers in the classrooms. They also require a separate office to store materials, meet with other educators such as English Language and Special Education teachers. In addition, Math Coaches work with small groups of three to four students outside of the classroom. They need table space for the group that can also accommodate manipulatives that support the mathematical concepts, therefore one space for the math coaches is required at 250 NFA.
- BPS believes in providing the necessary staff to support RtI. In addition to literacy and math specialists, tutors are provided at each school. At the Fox Hill School, there are 5-6 tutors. This would continue with the new school. Tutors provide support in the classroom as well as in small groups outside the classroom and therefore require a dedicated space of 950 NFA.
- Literacy Center: In support of literacy, a new building will house a Literacy Center which would serve many purposes. The space would be the location of professional learning for teachers, assistants, and parents. In addition, the Literacy Center will provide an alternative location where teachers may utilize the space for specialized instruction for small groups or 1:1 intervention. The specialized materials used for literacy intervention would also be stored in a centralized location to facilitate access by teachers providing RTI (Response to Intervention) services to students in classrooms and small group spaces. The collection used for literacy instruction would also be housed in the shared literacy center space to facilitate sharing the texts and materials across classes and grade levels. The required space needs for the Literacy Professional Center at 950 NFA.

Special Education

The Burlington Public Schools (BPS) is dedicated to working collaboratively with educators, parents, support professionals and the community to ensure that all students receive their appropriate services and supports in the least restrictive environment/setting, conducive to facilitating their maximum emotional, social and academic growth. BPS delivers special education services in a variety of settings and modalities. We offer inclusion services with focus on co-teaching, partial inclusion services that combine both co-taught and pull out methods, and fully sub separate programming for students with intensive needs.

The staff that provides special education services includes special education teachers, inclusion facilitators, aides, behavior therapists and related service providers such as school psychologists, social workers, speech/language pathologists, occupational therapists and physical therapists.

District-wide Program

- Developmental Skills Center (DSC II) program - Looking forward to a new school, the district-wide Developmental Skills Center (DSC II) program (Low Cognitive requires ABA / Sub-Separate program) currently located at the Pine Glen School would move to the new Fox Hill School so as to achieve the appropriate spaces required for the students of the DSC program. The district is sensitive to ensuring the district-wide special education programs are equally dispersed between the elementary schools. The DSC program is growing and will require three classrooms for the DSC I and three classrooms for DSC II plus support spaces in the near future. The increased population of this program requires significant space to support the growing needs of the students. The program has been supported at the Pine Glen School however there is no longer sufficient space to adequately support the program looking to the future. Given the opportunity of a new school, the District believes it is in the best interest of the DSC students to relocate the DSC II program to the new Fox Hill Elementary School which will provide for the appropriate spaces to support the program.

  The Developmental Skills Center (DSC) provides a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders including:

  - Verbal and Nonverbal Communication
  - Social Interaction Skills
  - Unusual responses to sensory experiences
  - Resistance to environmental or changes in routines
  - Engagement in repetitive activities or stereotyped movements
  - Maladaptive behaviors stemming from ASD
  - Progress in the General education curriculum including social/emotional learning

  In addition, students' learning may not be at grade level, and their needs are best met in a separate classroom, or in a partial inclusion environment if possible. One full size classroom at 1,200 NFA for the K-1 population and two full size classrooms at 950 NFA each are required for this program.

  Additional support staff and spaces are also required for this program. This includes:

  - OT/PT services (the space will be shared with the school OT/PT space)
  - Motor Room at 600 NFA
  - Board Certified Behavior Analyst (BCBA) at 150 NFA
  - Dedicated Speech Language Pathologist (SLP) at 250 NFA
  - Dedicated office for collaboration and evaluation at 300 NFA

- Resource Rooms / Learning Centers: With an enrollment of 325 students two (2) Learning Centers are required at 500 NFA each.
- Dedicated Special Ed Teachers K-2; 3-5: With an enrollment of 325 students two (2) Special Education Teaching spaces are required at 500 NFA each.
- Small Group Rooms: The District's goal is to provide services in the vicinity of the grade level classrooms. Therefore, allowing for one (1) small group room per grade is preferred. Therefore this is an increase of 400 NFA.
- Other related professionals include speech/language pathologists, occupational therapists, physical therapist teachers, psychologist, adjustment counselor, and evaluation team leader (ETL), who chairs all IEP meetings all require appropriate spaces. For additional detailed information please refer to PART 2 I EDUCATIONAL PROGRAM.

LABBB Collaborative

BPS is a member of the LABBB (Lexington, Arlington, Burlington, Bedford, Belmont, Watertown) Collaborative. Currently, LABBB provides educational programming and support services for over 350 special needs students from over 65 districts. LABBB serves students with a variety of special needs including students on the autism spectrum, students with multi-handicaps, pervasive developmental disorders, developmental delays, language deficits and social/emotional challenges. The LABBB Collaborative Programs are all located in public school buildings.

- Fox Hill hosts one LABBB program, known as the EDBD Program (Emotionally Disturbed/ Behaviorally Disturbed Program). There is one classroom currently located at the Memorial Elementary School due to insufficient space at the existing Fox Hill School. In the new school, the entire program would be located at the Fox Hill School. The EDBD Program supports students who are experiencing significant social/emotional and behavioral challenges. This program provides a setting with therapeutic support for students who are performing at or close to grade level academically. These students require significant structure and adult support to obtain the skills necessary to transition into a general education classroom. The curriculum is aligned with the general education classroom and modifications and accommodations are assessed and implemented on an individual basis. Opportunities for inclusion are available and implemented as the students are ready to meaningfully participate. A team of specialists include a counselor, BCBA, speech and language pathologist, occupational therapist, and physical therapist. Services are provided according to each student's IEP. Staff teams work closely together to help students find the tools and strategies that help them self-regulate, learn to use their language to communicate effectively with others, and engage in academic curriculum. The total space requirements for this LABBB program is 5,025 NFA.

The overall NFA for Special Education is 15,325 NFA which is 10,795 NFA above MSBA guidelines.

Health & PE

The gymnasium is a significant community asset. Therefore, the District would like to add approximately 1,000 NFA to the MSBA guidelines to accommodate additional space for the safety and use of the gymnasium for full court basketball games with the appropriate runoff space beyond the court. This is an increase of 1,000 NFA to MSBA Space Guidelines.

Medical

The overall required NFA for Medical is 60 NFA above MSBA guidelines due to the larger medical suite toilet space to provide for a Hoyer lift as well as additional space in the suite to provide for a washer and dryer to aide with required changes of clothes during the day for some of the student population.

Administration & Guidance

The overall required NFA for Administration & Guidance is 216 NFA more than MSBA guidelines based upon the initial discussions and needs to support the school. The district will evaluate the overall space needs once a preferred solution and configuration is arrived at.

GRADE K-5 AT A CONSOLIDATED FOX HILL ELEMENTARY SCHOOL AND PINE GLEN ELEMENTARY SCHOOL OF 640 STUDENTS

The BPS School Committee is committed to maintaining small schools. In 2019, it voted to maintain the four elementary schools that currently exist. Therefore, when looking at a combined school, the ideal relationship with the consolidation is to maintain two smaller schools within the larger school with approximately 320 students in each school. The District strongly believes there is a direct correlation to school size and school performance. However, there is a potential benefit to consolidation in some areas of the program. Core programs and functions such as the cafeteria and kitchen, library and gymnasium can be shared creating an economy of scale and economical benefit from a building size. Therefore, when comparing the MSBA Space Summary to the individual needs of the Fox Hill and Pine Glen Schools there will not be a straight one to one correlation with MSBA Space Summary Guidelines. There will be small redundancies throughout the project to support the smaller school environments.

Core Academic Spaces

Using the enrollment of 640 students and dividing it by the number of grades (6 grades, K-5) there will be approximately 107 students per grade. With the average number of 18 students per classroom, per the class size policy, seven (7) additional classrooms in total will be required to provide for the same number of classrooms per grade. There will be three classrooms per grade for each of the schools – Fox Hill School and Pine Glen School.

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	107	107	107	107	107	107	640
Average # students / class	18	18	18	18	18	18	
# of classrooms	5.93	5.93	5.93	5.93	5.93	5.93	35.56
Round for total classrooms / grade	6	6	6	6	6	6	36

GOAL Class Size	K	1	2	3	4	5	Total
Fox Hill Elementary (320 Students)							
# Students (Average)	53	53	53	53	54	54	320
Average # students / class	18	18	18	18	18	18	
# of classrooms	2.94	2.94	2.94	2.94	3.0	3.0	17.76
Round for total classrooms / grade	3	3	3	3	3	3	18
Pine Glen Elementary (320 Students)							
# Students (Average)	53	53	53	53	54	54	320
Average # students / class	18	18	18	18	18	18	
# of classrooms	2.94	2.94	2.94	2.94	3.0	3.0	17.76
Round for total classrooms / grade	3	3	3	3	3	3	18
Total Classrooms/Grade	**6**	**6**	**6**	**6**	**6**	**6**	**36**

- Seven (7) additional general classrooms - grades 1-5 is required compared to MSBA's guideline of twenty-nine (29) classrooms grades 1-5. This will allow both schools to function independently with equal number of classrooms per grade.
- English Learners (ESL) Program is a mandated state program. The Burlington Public Schools' student population is increasingly multilingual. Every year, Fox Hill students and Pine Glen students each include 40-50 English Language Learners of varied English proficiency and home languages, who learn alongside their grade level peers. Small groups of students meet with the ESL teacher several times a week both in and outside the classroom for direct English instruction.

  The existing Fox Hill School has two ESL spaces to serve these students and is anticipating the same in a new facility with this enrollment. The existing Pine Glen School has only one ESL space to serve these students and is anticipating two spaces in a new facility with this enrollment. The ESL teaching model is push in and pull out depending on a student's English proficiency. Students at the entering and developing stage need a designated ESL learning classroom in which to meet with the ESL teacher. This program requires two (2) classrooms at 500 NFA per "School" or a total of four (4) classrooms at 500 NFA each.
- Literacy Specialists: Although most of the reading and writing instruction takes place within the classroom environment, BPS is committed to supporting literacy for all students. The Fox Hill School and the Pine Glen School will each have 2 literacy specialists dedicated to this school. A shared space with two instructional areas is necessary to facilitate individualized instruction, both in 1:1 and small group settings therefore one space for the literacy specialists is required at 950 NFA for each school or two spaces at 950 NFA total.
- Math Coaches: To support effective math instruction, math coaches work with classroom educators on instructional practice. Most of the time coaches are working with students and teachers in the classrooms. They also require a separate office to store materials, meet with other educators such as English Language and Special Education teachers. In addition, Math Coaches work with small groups of three to four students outside of the classroom. They need table space for the group that can also accommodate manipulatives that support the mathematical concepts, therefore one space for the math coaches in each school is required or two spaces at 250 NFA total.
- BPS believes in providing the necessary staff to support RtI. In addition to literacy and math specialists, tutors are provided at each school. At the Fox Hill School, there are 5-6 tutors. This would continue with the new school. Pine Glen currently has 4 tutors but requires 5 at the current population. Tutors provide support in the classroom as well as in small groups outside the classroom and therefore require a dedicated space of 950 NFA at each school or for a total of two spaces of 950 NFA total.
- Literacy Center: In support of literacy, a new building will house a Literacy Center which would serve many purposes. The space would be the location of professional learning for teachers, assistants, and parents. In addition, the Literacy Center will provide an alternative location where teachers may utilize the space for specialized instruction for small groups or 1:1 intervention. The specialized materials used for literacy intervention would also be stored in a centralized location to facilitate access by teachers providing RTI (Response to Intervention) services to students in classrooms and small group spaces. The collection used for literacy instruction would also be housed in the shared literacy center space to facilitate sharing the texts and materials across classes and grade levels. The required space needs for the Literacy Professional Center at 950 NFA at each school or for a total of two spaces of 950 NFA total.

Special Education

The Burlington Public Schools (BPS) is dedicated to working collaboratively with educators, parents, support professionals and the community to ensure that all students receive their appropriate services and supports in the least restrictive environment/setting, conducive to facilitating their maximum emotional, social and academic growth. BPS delivers special education services in a variety of settings and modalities. We offer inclusion services with focus on co-teaching, partial inclusion services that combine both co-taught and pull out methods, and fully sub separate programming for students with intensive needs.

The staff that provides special education services includes special education teachers, inclusion facilitators, aides, behavior therapists and related service providers such as school psychologists, social workers, speech/language pathologists, occupational therapists and physical therapists.

District-wide Program

- Developmental Skills Center (DSC) program - Looking forward to a new school, the district-wide Developmental Skills Center (DSC II) program (Low Cognitive requires ABA / Sub-Separate program) currently located at the Pine Glen School would move to the new Fox Hill School so as to achieve the appropriate spaces required for the students of the DSC program. The district is sensitive to ensuring the district-wide special education programs are equally dispersed between the elementary schools. The DSC program is growing and will require three classrooms for the DSC I and three classrooms for DSC II plus support spaces in the near future. In consideration of consolidating the Fox Hill and Pine Glen Schools, the District believes it is in the best interest of the DSC students to relocate the DSC II program to the new Fox Hill Elementary School and maintain DSC I in the new Pine Glen School which will create equity of the district-wide programs across all four elementary schools.

  The Developmental Skills Center (DSC II), which will be located at Fox Hill School, provides a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders including:

  - Verbal and Nonverbal Communication
  - Social Interaction Skills
  - Unusual responses to sensory experiences
  - Resistance to environmental or changes in routines
  - Engagement in repetitive activities or stereotyped movements
  - Maladaptive behaviors stemming from ASD
  - Progress in the General education curriculum including social/emotional learning

In addition, students' learning may not be at grade level, and their needs are best met in a separate classroom, or in a partial inclusion environment if possible. One full size classroom at 1,200 NFA for the K-1 population and two full size classrooms at 950 NFA each are required for this program.

Additional support staff and spaces are also required for this program. This includes:

- OT/PT services (the space will be shared with the school OT/PT space)
- Motor Room at 600 NFA
- Board Certified Behavior Analyst (BCBA) at 150 NFA
- Dedicated Speech Language Pathologist (SLP) at 250 NFA
- Dedicated office for collaboration and evaluation at 300 NFA

The Developmental Skills Center (DSC I) which will be located at Pine Glen, is a highly specialized ABA based program and modified curriculum for students with disabilities associated with Autism Spectrum Disorders including:

- Verbal and Nonverbal Communication
- Social Interaction Skills
- Unusual responses to sensory experiences
- Resistance to environmental or changes in routines
- Engagement in repetitive activities or stereotyped movements
- Maladaptive behaviors stemming from ASD
- Progress in the General education curriculum including social/emotional learning

In addition, students' learning may not be at grade level, and their needs are best met in a separate classroom, or in a partial inclusion environment if possible. One full size classroom at 1,200 NFA for the K-1 population and two full size classrooms at 950 NFA each are required for this program.

Additional support staff and spaces are also required for this program. This includes:

- OT/PT services (the space will be shared with the school OT/PT space)
- Motor Room at 600 NFA
- Board Certified Behavior Analyst (BCBA) at 150 NFA
- Dedicated office for collaboration and evaluation at 300 NFA

- Resource Rooms / Learning Centers: With an enrollment of 320 students at each school, two (2) Learning Centers are required at 500 NFA each at each school for a total of (4) Learning Centers at 500 NFA.
- Dedicated Special Ed Teachers K-2; 3-5: With an enrollment of 320 students at each school, two (2) Special Education Teaching spaces are required at 500 NFA each for a total of (4) Special Ed Teachers at 500 NFA.
- Small Group Rooms: : The District's goal is to provide services in the vicinity of the grade level classrooms. Therefore, allowing for one (1) small group room per grade is preferred at each school. Therefore this is a total increase of 800 NFA.
- Other related professionals include speech/language pathologists, occupational therapists, physical therapist teachers, psychologist, adjustment counselor, and evaluation team leader (ETL), who chairs all IEP meetings all require appropriate spaces. For additional detailed information please refer to PART 2 I EDUCATIONAL PROGRAM.

LABBB Collaborative

BPS is a member of the LABBB (Lexington, Arlington, Burlington, Bedford, Belmont, Watertown) Collaborative. Currently, LABBB provides educational programming and support services for over 350 special needs students from over 65 districts. LABBB serves students with a variety of special needs including students on the autism spectrum, students with multi-handicaps, pervasive developmental disorders, developmental delays, language deficits and social/emotional challenges. The LABBB Collaborative Programs are all located in public school buildings.

- Fox Hill hosts one LABBB program, known as the EDBD Program (Emotionally Disturbed/ Behaviorally Disturbed Program). There is one classroom currently located at the Memorial Elementary School due to insufficient space at the existing Fox Hill School. In the new school, the entire program would be located at the Fox Hill School. The EDBD Program supports students who are experiencing significant social/emotional and behavioral challenges. This program provides a setting with therapeutic support for students who are performing at or close to grade level academically. These students require significant structure and adult support to obtain the skills necessary to transition into a general education classroom. The curriculum is aligned with the general education classroom and modifications and accommodations are assessed and implemented on an individual basis. Opportunities for inclusion are available and implemented as the students are ready to meaningfully participate. A team of specialists include a counselor, BCBA, speech and language pathologist, occupational therapist, and physical therapist. Services are provided according to each student's IEP. Staff teams work closely together to help students find the tools and strategies that help them self-regulate, learn to use their language to communicate effectively with others, and engage in academic curriculum. The total space requirements for this LABBB program is 5,025 NFA.

The overall NFA for Special Education is 23,975 NFA which is 16,425 NFA above MSBA guidelines.

Health & PE

The gymnasium is a significant community asset. Therefore, the District would like to add approximately 1,000 NFA to the MSBA guidelines to accommodate additional space for the safety and use of the gymnasium for full court basketball games with the appropriate runoff space beyond the court. This is an increase of 1,000 NFA to MSBA Space Guidelines.

Medical

Both the Fox Hill and Pine Glen Schools will have a dedicated medical office and team to support the needs of each of the "schools". This is an additional request of 790 NFA above MSBA Guidelines. In addition to the dedicated medical office and team the medical suites require larger toilet space to provide for a Hoyer lift as well as additional space in the suite to provide for a washer and dryer to aide with required changes of clothes during the day for some of the student population.

Administration & Guidance

Similarly, to the Medical spaces, both the Fox Hill and Pine Glen Schools will have a dedicated administrative team to support the needs of each of the "schools". The itemized spaces are identified on the Space summary. This is an additional request of 2,125 NFA above MSBA Guidelines based upon the initial discussions and needs to support the school. The district will evaluate the overall space needs once a preferred solution and configuration is arrived at.

3 INITIAL SPACE SUMMARY

Initial Space Summaries

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL ELEMENTARY SCHOOL (325 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM EXISTING TO REMAIN / RENOVATED			PROPOSED PROGRAM NEW CONSTRUCTION			PROPOSED PROGRAM TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
CORE ACADEMIC			**24,815**			**0**			**23,150**			**23,150**			**8,150**			**15,000**	STE Guidelines Policy
(List rooms of different sizes separately)																			
Kindergarten Classroom with Toilet (Existing no toilet)	920	1	920			0	1,200	3	3,600	1,200	3	3,600	0	0	0	1,200	3	3,600	1,100 NSF (minimum size) - 1,300 NSF (maximum size); Minimum of (2) sinks required per Kindergarten Classroom
Kindergarten Classroom with Toilet (Existing no toilet)	930	3	2,790																
General Classroom (Grades 1-6)	710	1	710			0	950	15	14,250	950	15	14,250	0	3	2,850	950	12	11,400	900 NSF (minimum size) - 1,000 NSF (maximum size); Minimum of (2) sinks required per General Classroom
General Classroom (Grades 1-6)	920	3	2,760																
General Classroom (Grades 1-6)	930	17	15,810																
General Classroom (Grades 1-6)	1,015	1	1,015																
Science, Technology, Engineering (STE) Room (Grades 3-6) (if applicable)	0	0	0			0	1,080	1	1,080	1,080	1	1,080	0	1	1,080	1,080	0	-	1,080 NSF (minimum size); Refer to the 2018 STE Guidelines for additional information.
STE Storage Room (if applicable)	0	0	0			0	120	1	120	120	1	120	0	1	120	120	0	-	Minimum of (1) 120 NSF STE Storage Room required per STE Room; Refer to the 2018 STE Guidelines for additional information.
ESL	170	2	340				500	2	1,000	500	2	1,000	500	2	1,000				
Literacy Specialists (Shared Space for 2 Lit + stu)	220	1	220			0	950	1	950	950	1	950	950	1	950				
Math Specialists	Share with Lit Specialists					0	250	1	250	250	1	250	250	1	250				
Tutor Small Group Room (6 Tutors RTI)	250	1	250			0	950	1	950	950	1	950	950	1	950				
Literacy Library	0	0	0			0	950	1	950	950	1	950	950	1	950				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
SPECIAL EDUCATION			**4,465**			**0**			**15,325**			**15,325**			**10,795**			**4,530**	Special Education spaces require DESE review and approval.
(List rooms of different sizes separately)																			
Self-Contained Special Education Classroom DSC II Program (High Need Students)	Currently at Pine Glen					0	1,200	1	1,200	1,200	1	1,200	250	-2	-1,650	950	3	2,850	900 NSF (minimum size) - 1,300 NSF; equal to the size of the proposed General Classrooms that serve the same student population.
Self-Contained Special Education Classroom DSC II Program (High Need Students)	Currently at Pine Glen					0	950	2	1,900	950	2	1,900	950	2	1,900				
Self-Contained Special Education Toilet Room						0			0	0	0	0	-60	-3	-180	60	3	180	
Resource Room (Learning Centers)	85	1	85			0	500	2	1,000	500	2	1,000	0	0	0	500	2	1,000	1/2 size of a General Classroom
Resource Room (Learning Centers)	165	1	165																
Small Group Room	80	1	80			0	150	6	900	150	6	900	-350	5	400	500	1	500	1/2 size of a General Classroom
Small Group Room	145	1	145																
Small Group Room	165	1	165																
Small Group Room	210	1	210																
DSC II Program (High Need Students) OT/PT Space	Currently at Pine Glen					0	Share with School OT/PT			0	0	0	0	0	0				
DSC II Program (High Need Students) Motor Space	Currently at Pine Glen					0	600	1	600	600	1	600	600	1	600				
DSC II Program (High Need Students) BCBA	Currently at Pine Glen					0	150	1	150	150	1	150	150	1	150				
DSC II Program (High Need Students) SLP	Currently at Pine Glen						250	1	250	250	1	250	250	1	250				
DSC II Program (High Need Students) Office / Evaluation Space	Currently at Pine Glen						300	1	300	300	1	300	300	1	300				
Dedicated SPED Teachers K-2, 3-5	170	1	170			0	500	2	1,000	500	2	1,000	500	2	1,000				
Dedicated SPED Teachers K-2, 3-5	190	1	190			0			0			0			0				
Speech Language (SLP)	100	1	100				300	2	600	300	2	600	300	2	600				
Speech Language (SLP)	150	1	150																
OT/PT	275	1	275			0			0			0			0				
Separate OT							300	1	300	300	1	300	300	1	300				
Separate PT							600	1	600	600	1	600	600	1	600				
Team Chair Office	80	1	80			0	150	1	150	150	1	150	150	1	150				
Team Chair Conference Room							300	1	300	300	1	300	300	1	300				
Psychologist	85	1	85				175	1	175	175	1	175	175	1	175				
Adjustment Counselors	0	0	0				250	1	250	250	1	250	250	1	250				
BCBA	0	0	0				250	1	250	250	1	250	250	1	250				
Quiet Room (1 per floor)	0	0	0				125	3	375	125	3	375	125	3	375				
Public Day Education Spaces (List rooms separately below)																			
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Collaborative Program Spaces (List rooms separately below)																			
LABBB Collaborative - EDBD Program - Self-Contained Classroom	960	1	960			0	950	4	3,800	950	4	3,800	950	4	3,800				
LABBB Collaborative - EDBD Program - Self-Contained Classroom	960	1	960			0			0			0			0				
LABBB Collaborative - EDBD Program - Self-Contained Classroom	320	1	320			0			0			0			0				
LABBB Collaborative - EDBD Program - Self-Contained Classroom Toilet							Dedicated bathrooms outside of classrooms												
LABBB Collaborative - EDBD Program -Quiet Room	45	2	90			0	100	1	100	100	1	100	100	1	100				
LABBB Collaborative - EDBD Program -Quiet Room	30	1	30			0			0			0			0				
LABBB Collaborative - EDBD Program -Breakout Room	0	0	0				150	1	150	150	1	150	150	1	150				
LABBB Collaborative - EDBD Program -Therapy Room OT/PT	0	0	0			0	Share with School		0			0			0				
LABBB Collaborative - EDBD Program -Therapy Room SLP	0	0	0			0	200	1	200	200	1	200	200	1	200				
LABBB Collaborative - EDBD Program -Therapy Room BCBA	0	0	0			0	Share with LABBB SLP		0			0			0				
LABBB Collaborative - EDBD Program -Therapy Room Motor / Sensory Roo	0	0	0			0	Share with DSC		0			0			0				

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL ELEMENTARY SCHOOL (325 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM EXISTING TO REMAIN / RENOVATED			PROPOSED PROGRAM NEW CONSTRUCTION			PROPOSED PROGRAM TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
LABBB Collaborative - EDBD Program -Motor / Sensory Space - Share with DSC Program. Need space for bikes, etc.	0	0	0				100	1	100	100	1	100	100	1	100				
LABBB Collaborative - EDBD Program -Counseling	0	0	0				250	1	250	250	1	250	250	1	250				
LABBB Collaborative - EDBD Program -LABBB Office - Program Coordinator	75	1	75			0	125	1	125	125	1	125	125	1	125				
LABBB Collaborative - EDBD Program -LABBB Conference Room	130	1	130			0	300	1	300	300	1	300	300	1	300				
ART & MUSIC			**2,160**			**0**			**2,500**			**2,500**			**0**			**2,500**	
Art Classroom (25 seats)	930	1	930			0	1,000	1	1,000	1,000	1	1,000	0	0	0	1,000	1	1,000	Assumed schedule: 2 times per week per student
Art Workroom with Storage and Kiln	0	0	0			0	150	1	150	150	1	150	0	0	0	150	1	150	
Music Classroom / Large Group (25-50 seats)	670	1	670			0	1,200	1	1,200	1,200	1	1,200	0	0	0	1,200	1	1,200	Assumed schedule: 2 times per week per student
Music Practice / Ensemble	560	1	560			0	75	2	150	75	2	150	0	0	0	75	2	150	
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
HEALTH & PHYSICAL EDUCATION			**4,170**			**0**			**7,300**			**7,300**			**1,000**			**6,300**	Excess Physical Education Spaces Policy
Gymnasium	3,770	1	3,770			0	7,000	1	7,000	7,000	1	7,000	1,000	0	1,000	6,000	1	6,000	
Gym Storeroom	150	2	300			0	150	1	150	150	1	150	0	0	0	150	1	150	
Health Instructor's Office with Shower and Toilet	60	1	60			0	150	1	150	150	1	150	0	0	0	150	1	150	
Gym Storeroom	40	1	40			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
MEDIA CENTER			**1,365**			**0**			**2,130**			**2,130**			**20**			**2,110**	
Media Center / Reading Room	1,365	1	1,365			0	2,130	1	2,130	2,130	1	2,130	20	0	20	2,110	1	2,110	
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
DINING & FOOD SERVICE			**6,610**			**0**			**5,567**			**5,567**			**40**			**5,527**	
Cafeteria / Dining	3,400	1	3,400			0	2,434	1	2,434	2,434	1	2,434	34	0	34	2,400	1	2,400	Based on 2 lunch seatings - 15 NSF per seat
Stage	800	1	800			0	1,000	1	1,000	1,000	1	1,000	0	0	0	1,000	1	1,000	
Chair / Table / Equipment Storage	0	0	0			0	308	1	308	308	1	308	1	0	1	307	1	307	
Kitchen	2,130	1	2,130			0	1,625	1	1,625	1,625	1	1,625	5	0	5	1,620	1	1,620	1,600 NSF for first 300 students + 1 NSF per additional student
Staff Lunch Room	280	1	280			0	200	1	200	200	1	200	0	0	0	200	1	200	20 NSF per student
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
MEDICAL			**400**			**0**			**600**			**600**			**90**			**510**	
Medical Suite Toilet	40	1	40			0	100	1	100	100	1	100	40	0	40	60	1	60	
Nurses' Office / Waiting Room	0	0	0			0	300	1	300	300	1	300	50	0	50	250	1	250	
Examination Room / Resting	360	1	360			0	100	2	200	100	2	200	0	0	0	100	2	200	
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
ADMINISTRATION & GUIDANCE			**1,390**			**0**			**2,255**			**2,255**			**220**			**2,035**	
General Office / Waiting Room with Toilet	430	1	430			0	425	1	425	425	1	425	115	0	115	310	1	310	
Teachers' Mail and Time Room	Included Above					0	Included in Copy Room		0	0	0	0	-100	-1	-100	100	1	100	
Copy Room	Included Above					0	300	1	300	300	1	300	150	0	150	150	1	150	
Records Room	Included Above					0	Included in Copy Room		0	0	0	0	-110	-1	-110	110	1	110	
Principal's Office with Conference Area	315	1	315			0	350	1	350	350	1	350	25	0	25	375	1	375	
Principal's Secretary / Waiting	Included in General Office					0	Included in General Office		0	0	0	0	-125	-1	-125	125	1	125	
Assistant Principal's Office	0	0	0			0	0	0	0	0	0	0	-120	0	0	120	0	0	
Supervisory / Spare Office	0	0	0			0	120	1	120	120	1	120	0	0	0	120	1	120	
Conference Room	150	1	150			0	250	1	250	250	1	250	0	0	0	250	1	250	
Guidance Office / SEL	180	2	360			0	150	2	300	150	2	300	0	1	150	150	1	150	
Guidance Storeroom	0	0	0			0	35	1	35	35	1	35	0	0	0	35	1	35	
Teachers' Work Room	135	1	135			0	200	2	400	200	2	400	-110	1	90	310	1	310	
Staff Lactation Room	0	0	0			0	75	1	75	75	1	75	75	1	75				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL ELEMENTARY SCHOOL (325 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM: EXISTING TO REMAIN / RENOVATED			PROPOSED PROGRAM: NEW CONSTRUCTION			PROPOSED PROGRAM: TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
CUSTODIAL & MAINTENANCE			**860**			**0**			**1,925**			**1,925**			**5**			**1,920**	
Custodian's Office	0	0	0			0	150	1	150	150	1	150	0	0	0	150	1	150	
Custodian's Workshop	0	0	0			0	Included with receiving		0	0	0	0	-375	-1	-375	375	1	375	
Custodian's Storage	175	1	175			0	150	1	150	150	1	150	-225	0	-225	375	1	375	
Recycling Room / Trash	0	0	0			0	Included with receiving		0	0	0	0	-400	-1	-400	400	1	400	
Receiving and General Supply	0	0	0			0	685	1	685	685	1	685	478	0	478	207	1	207	
Storeroom	135	1	135			0	300	1	300	300	1	300	87	0	87	213	1	213	
Network / Telecom Room	0	0	0			0	200	1	200	200	1	200	0	0	0	200	1	200	
Custodian's Storage	90	3	270			0	200	1	200	200	1	200	200	1	200				
Custodian's Storage	60	2	120			0	100	1	100	100	1	100	100	1	100				
Custodian's Storage	40	4	160			0			0	0	0	0	0	0	0				
Outdoor Storage			0			0	140	1	140	140	1	140	140	1	140				
[insert room type here]			0			0			0	0	0	0	0	0	0				
OTHER			**0**			**0**			**0**			**0**			**0**			**0**	
(List rooms separately below)																			
Pre-Kindergarten Classroom with Toilet (if applicable)			0			0			0	0	0	0	-1,200	0	0	1,200	0	-	1,100 NSF (minimum size) - 1,300 NSF (maximum size)
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Total Building Net Floor Area (NFA)			**46,235**			**0**			**60,752**			**60,752**			**20,320**			**40,432**	**Total Building Net Floor Area (NFA)**
Proposed Student Capacity / Enrollment																# of Grades	6	**320**	**Total Enrollment (Enter Design Enrollment)**
																K	1	**53**	Kindergarten Enrollment
																Grade 1	1	**107**	Lower Elementary School Enrollment (Grades 1-2)
																Grade 2	1	**160**	Upper Elementary School Enrollment (Grades 3-6)
																Grade 3	1		
																Grade 4	1		
																Grade 5	1		
																Grade 6	0		
NON-PROGRAMMED SPACES					% of GFA	**0**		% of GFA	**30,226**		% of GFA	**30,226**							Complete this category with Schematic Design Submittal
Other Occupied Rooms (List rooms separately below)																			
[Enter room type here]				-	#DIV/0!		-	0.0%		-	0.0%	0							
[Enter room type here]					#DIV/0!			0.0%			0.0%	0							
[Enter room type here]					#DIV/0!			0.0%			0.0%	0							
[Enter room type here]					#DIV/0!			0.0%			0.0%	0							
[Enter room type here]				-	#DIV/0!			0.0%		-	0.0%	0							
Unoccupied MEP / FP Spaces				-	#DIV/0!		-	0.0%		-	0.0%	0							
Unoccupied Closets, Supply Rooms, and Storage Rooms				-	#DIV/0!		-	0.0%		-	0.0%	0							
Toilet Rooms				-	#DIV/0!		-	0.0%		-	0.0%	0							
Circulation (corridors, stairs, ramps and elevators)				-	#DIV/0!		-	0.0%		-	0.0%	0							
Remaining[3]					#DIV/0!	**0**		33.2%	**30,226**		33.2%	**30,226**							
Total Building Gross Floor Area (GFA)[2]			**64,400**			**0**			**90,978**			**90,978**			**34,125**			**56,853**	**Total Building Gross Floor Area (GFA)[2]**
Grossing Factor (GFA / NFA)			**1.39**			**#DIV/0!**			**1.50**			**1.50**			**0.09**			**1.41**	**Grossing Factor (GFA / NFA)**

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls.

[3] **Remaining** Includes exterior walls, interior partitions, chases, and other areas not listed above. Do not calculate this area, it is assumed to equal the difference between the Total Building Gross Floor Area and area not accounted for above.

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architecture Firm: DiNisco Design, Inc.

Name of Principal Architect: Vivian Low

Signature of Principal Architect: Vivian Low

Date: 6/29/23

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL AND PINE GLEN ELEMENTARY SCHOOL (640 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM: EXISTING TO REMAIN / RENOVATED			PROPOSED PROGRAM: NEW CONSTRUCTION			PROPOSED PROGRAM: TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
CORE ACADEMIC			42,615			0			46,300			46,300			17,250			29,050	STE Guidelines Policy
(List rooms of different sizes separately)																			
Fox Hill School																			
Kindergarten Classroom with Toilet (Existing no toilet)	920	1	920			0	1,200	3	3,600	1,200	3	3,600	0	-3	-3,600	1,200	6	7,200	1,100 NSF (minimum size) - 1,300 NSF (maximum size); Minimum of (2) sinks required per Kindergarten Classroom
Kindergarten Classroom with Toilet (Existing no toilet)	930	3	2,790																
General Classroom (Grades 1-6)	710	1	710			0	950	15	14,250	950	15	14,250	0	-8	-7,600	950	23	21,850	900 NSF (minimum size) - 1,000 NSF (maximum size); Minimum of (2) sinks required per General Classroom
General Classroom (Grades 1-6)	920	3	2,760																
General Classroom (Grades 1-6)	930	17	15,810																
General Classroom (Grades 1-6)	1,015	1	1,015																
Science, Technology, Engineering (STE) Room (Grades 3-6) (if applicable)	0	0	0			0	1,080	1	1,080	1,080	1	1,080	0	1	1,080	1,080	0	-	1,080 NSF (minimum size); Refer to the 2018 STE Guidelines for additional information.
STE Storage Room (if applicable)	0	0	0			0	120	1	120	120	1	120	0	1	120	120	0	-	Minimum of (1) 120 NSF STE Storage Room required per STE Room; Refer to the 2018 STE Guidelines for additional information.
ESL	170	2	340				500	2	1,000	500	2	1,000	500	2	1,000				
Literacy Specialists (Shared Space for 2 Lit + stu)	220	1	220			0	950	1	950	950	1	950	950	1	950				
Math Specialists	Share with Lit Specialists					0	250	1	250	250	1	250	250	1	250				
Tutor Small Group Room (6 Tutors RTI)	250	1	250			0	950	1	950	950	1	950	950	1	950				
Literacy Library	0	0	0			0	950	1	950	950	1	950	950	1	950				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
Kindergarten Classroom with Toilet (Existing no toilet)	915	3	2,745				1,200	3	3,600	1,200	3	3,600	1,200	3	3,600				
General Classroom (Grades 1-6)	915	15	13,725				950	15	14,250	950	15	14,250	950	15	14,250				
Science, Technology, Engineering (STE) Room (Grades 3-6) (if applicable)	0	0	0			0	1,080	1	1,080	1,080	1	1,080	0	1	1,080	1,080	0	-	
STE Storage Room (if applicable)	0	0	0			0	120	1	120	120	1	120	0	1	120	120	0		
ESL	415	2	415			0	500	2	1,000	500	2	1,000	500	2	1,000				
Literacy Specialists (Shared Space for 2 Lit + stu)	0	0	0			0	950	1	950	950	1	950	950	1	950				
Math Specialists	0	0	0			0	250	1	250	250	1	250	250	1	250				
Tutor Small Group Room (Current 4, need 5)	915	1	915			0	950	1	950	950	1	950	950	1	950				
Literacy Library	0	0	0			0	950	1	950	950	1	950	950	1	950				
SPECIAL EDUCATION			8,655			0			23,975			23,975			16,425			7,550	Special Education spaces require DESE review and approval.
Fox Hill School																			
(List rooms of different sizes separately)																			
Self-Contained Special Education Classroom DSC II Program (High Need Students)	Currently at Pine Glen					0	1,200	1	1,200	1,200	1	1,200	250	-4	-3,550	950	5	4,750	900 NSF (minimum size) - 1,300 NSF; equal to the size of the proposed General Classrooms that serve the same student population.
Self-Contained Special Education Classroom DSC II Program (High Need Students)	Currently at Pine Glen					0	950	2	1,900	950	2	1,900	950	2	1,900				
Self-Contained Special Education Toilet Room						0			0	0	0	0	-60	-5	-300	60	5	300	
Resource Room (Learning Centers)	85	1	85			0	500	2	1,000	500	2	1,000	0	-1	-500	500	3	1,500	1/2 size of a General Classroom
Resource Room (Learning Centers)	165	1	165																
Small Group Room	80	1	80			0	150	6	900	150	6	900	-350	4	-100	500	2	1,000	1/2 size of a General Classroom
Small Group Room	145	1	145																
Small Group Room	165	1	165																
Small Group Room	210	1	210																
DSC II Program (High Need Students) OT/PT Space	Currently at Pine Glen					0	Share with School OT/PT			0	0	0	0	0	0				
DSC II Program (High Need Students) Motor Space	Currently at Pine Glen					0	600	1	600	600	1	600	600	1	600				
DSC II Program (High Need Students) BCBA	Currently at Pine Glen						150	1	150	150	1	150	150	1	150				
DSC II Program (High Need Students) SLP	Currently at Pine Glen						250	1	250	250	1	250	250	1	250				
DSC II Program (High Need Students) Office / Evaluation Space	Currently at Pine Glen						300	1	300	300	1	300	300	1	300				
Dedicated SPED Teachers K-2; 3-5	170	1	170			0	500	2	1,000	500	2	1,000	500	2	1,000				
Dedicated SPED Teachers K-2; 3-5	190	1	190			0			0			0			0				
Speech Language (SLP)	100	1	100				300	2	600	300	2	600	300	2	600				
Speech Language (SLP)	150	1	150																
OT/PT	275	1	275			0			0			0			0				
Separate OT							300	1	300	300	1	300	300	1	300				
Separate PT							600	1	600	600	1	600	600	1	600				
Team Chair Office	80	1	80			0	150	1	150	150	1	150	150	1	150				
Team Chair Conference Room							300	1	300	300	1	300	300	1	300				
Psychologist	85	1	85				175	1	175	175	1	175	175	1	175				
Adjustment Counselors	0	0	0				250	1	250	250	1	250	250	1	250				
BCBA	0	0	0				Share with DSC Program			0	0	0	0	0	0				
Quiet Room (1 per floor)	0	0	0				125	3	375	125	3	375	125	3	375				
Pine Glen School																			
Self-Contained Special Education Classroom DSC Program (High Need Students)	915	3	2,745				1,200	1	1,200	1,200	1	1,200	1,200	1	1,200				
Self-Contained Special Education Classroom DSC Program (High Need Students)	0	0	0				950	2	1,900	950	2	1,900	950	2	1,900				

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL AND PINE GLEN ELEMENTARY SCHOOL (640 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM EXISTING TO REMAIN / RENOVATED			PROPOSED PROGRAM NEW CONSTRUCTION			PROPOSED PROGRAM TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
Self-Contained Special Education Toilet Room	0	0	0																
Resource Room (Learning Centers)	225	1	225				500	2	1,000	500	2	1,000	500	2	1,000				
Small Group Room	0	0	0				150	6	900	150	6	900	150	6	900				
DSC I Program (High Need Students) OT/PT Space	0	0	0			0	Share with School OT/PT			0	0	0	0	0	0				
DSC I Program (High Need Students) Motor Space	0	0	0				600	1	600	600	1	600	600	1	600				
DSC I Program (High Need Students) BCBA	0	0	0				150	1	150	150	1	150	150	1	150				
DSC II Program (High Need Students) Office / Evaluation Space							300	1	300	300	1	300	300	1	300				
Dedicated SPED Teachers K-2; 3-5	430	1	430			0	500	2	1,000	500	2	1,000	500	2	1,000				
Speech Language (SLP)	450	1	450				300	2	600	300	2	600	300	2	600				
OT/PT	205	1	205			0	Share with Fox Hill		0			0			0				
Quiet Room (1 per floor)	0	0	0				125	3	375	125	3	375	125	3	375				
Psychologist	135	1	135				175	1	175	175	1	175	175	1	175				
Adjustment Counselors	0	0	0				250	1	250	250	1	250	250	1	250				
Team Chair Office	Shared with Admin Conference		0				150	1	150	150	1	150	150	1	150				
Team Chair Conference Room	0	0	0				300	1	300	300	1	300	300	1	300				
Public Day Education Spaces (List rooms separately below)																			
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Fox Hill Collaborative Program Spaces (List rooms separately below)																			
LABBB Collaborative - EDBD Program - Self-Contained Classroom	960	1	960			0	950	4	3,800	950	4	3,800	950	4	3,800				
LABBB Collaborative - EDBD Program - Self-Contained Classroom	960	1	960						0			0			0				
LABBB Collaborative - EDBD Program - Self-Contained Classroom	320	1	320						0			0			0				
LABBB Collaborative - EDBD Program - Self-Contained Classroom Toilet							Dedicated bathrooms outside of classrooms												
LABBB Collaborative - EDBD Program -Quiet Room	45	2	90				100	1	100	100	1	100	100	1	100				
LABBB Collaborative - EDBD Program -Quiet Room	30	1	30			0			0			0			0				
LABBB Collaborative - EDBD Program -Breakout Room							150	1	150	150	1	150	150	1	150				
LABBB Collaborative - EDBD Program -Therapy Room OT/PT	0	0	0			0	Share with School		0			0			0				
LABBB Collaborative - EDBD Program -Therapy Room SLP	0	0	0			0	200	1	200	200	1	200	200	1	200				
LABBB Collaborative - EDBD Program -Therapy Room BCBA	0	0	0			0	Share with LABBB SLP		0			0			0				
LABBB Collaborative - EDBD Program -Therapy Room Motor / Sensory Roo	0	0	0			0	Share with DSC		0			0			0				
LABBB Collaborative - EDBD Program -Motor / Sensory Space - Share with DSC Program. Need space for bikes, etc.	0	0	0				100	1	100	100	1	100	100	1	100				
LABBB Collaborative - EDBD Program -Counseling	0	0	0				250	1	250	250	1	250	250	1	250				
LABBB Collaborative - EDBD Program -LABBB Office - Program Coordinator	75	1	75			0	125	1	125	125	1	125	125	1	125				
LABBB Collaborative - EDBD Program -LABBB Conference Room	130	1	130			0	300	1	300	300	1	300	300	1	300				
ART & MUSIC			**4,085**			**0**			**5,000**			**5,000**			**0**			**5,000**	
Fox Hill School																			
Art Classroom (25 seats)	930	1	930			0	1,000	1	1,000	1,000	1	1,000	0	-1	-1,000	1,000	2	2,000	Assumed schedule: 2 times per week per student
Art Workroom with Storage and Kiln	0	0	0				150	1	150	150	1	150	0	-1	-150	150	2	300	
Music Classroom / Large Group (25-50 seats)	670	1	670				1,200	1	1,200	1,200	1	1,200	0	-1	-1,200	1,200	2	2,400	Assumed schedule: 2 times per week per student
Music Practice / Ensemble	560	1	560			0	75	2	150	75	2	150	0	-2	-150	75	4	300	
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
Art Classroom (25 seats)	915	1	915				1,000	1	1,000	1,000	1	1,000	1,000	1	1,000				
Art Workroom with Storage and Kiln	0	0	0				150	1	150	150	1	150	150	1	150				
Music Classroom / Large Group (25-50 seats)	1,010	1	1,010				1,200	1	1,200	1,200	1	1,200	1,200	1	1,200				
Music Practice / Ensemble	0	0	0				75	2	150	75	2	150	75	2	150				
HEALTH & PHYSICAL EDUCATION			**7,645**			**0**			**7,300**			**7,300**			**1,000**			**6,300**	Excess Physical Education Spaces Policy
Fox Hill School																			
Gymnasium	3,770	1	3,770			0	7,000	1	7,000	7,000	1	7,000	1,000	0	1,000	6,000	1	6,000	
Gym Storeroom	150	2	300			0	150	1	150	150	1	150	0	0	0	150	1	150	
Health Instructor's Office with Shower and Toilet	60	1	60				150	1	150	150	1	150	0	0	0	150	1	150	
Gym Storeroom	40	1	40			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
Gymnasium	3,175	1	3,175				Share with Fox Hill												
Gym Storeroom	300	1	300				Share with Fox Hill												
Health Instructor's Office with Shower and Toilet	Included with Storage		0				Share with Fox Hill												

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL AND PINE GLEN ELEMENTARY SCHOOL (640 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM EXISTING TO REMAIN / RENOVATED			NEW CONSTRUCTION			TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
MEDIA CENTER			2,635			0			3,550			3,550			0			3,550	
Fox Hill School																			
Media Center / Reading Room	1,365	1	1,365			0	3,550	1	3,550	3,550	1	3,550	0	0	0	3,550	1	3,550	
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
Media Center / Reading Room	1,270	1	1,270				Share with Fox Hill												
DINING & FOOD SERVICE			12,870			0			8,413			8,413			0			8,413	
Fox Hill School																			
Cafeteria / Dining	3,400	1	3,400			0	4,800	1	4,800	4,800	1	4,800	0	0	0	4,800	1	4,800	Based on 2 lunch seatings - 15 NSF per seat
Stage	800	1	800			0	1,000	1	1,000	1,000	1	1,000	0	0	0	1,000	1	1,000	
Chair / Table / Equipment Storage	0	0	0			0	413	1	413	413	1	413	0	0	0	413	1	413	
Kitchen	2,130	1	2,130			0	1,940	1	1,940	1,940	1	1,940	0	0	0	1,940	1	1,940	1,600 NSF for first 300 students + 1 NSF per additional student
Staff Lunch Room	280	1	280			0	260	1	260	260	1	260	0	0	0	260	1	260	20 NSF per student
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
Cafeteria / Dining	3,110	1	3,110				Share with Fox Hill												
Stage	630	1	630																
Chair / Table / Equipment Storage	0	0	0																
Kitchen	1,685	1	1,685																
Kitchen	470	1	470																
Staff Lunch Room	365	1	365																
MEDICAL			935			0			1,400			1,400			790			610	
Fox Hill School																			
Medical Suite Toilet (oversized for Hoyer Lift)	40	1	40			0	100	1	100	100	1	100	40	0	40	60	1	60	
Nurses' Office / Waiting Room (requires W+D)	0	0	0			0	300	1	300	300	1	300	50	0	50	250	1	250	
Examination Room / Resting	360	1	360			0	100	3	300	100	3	300	0	0	0	100	3	300	
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
Medical Suite Toilet (oversized for Hoyer Lift)	75	1	75				100	1	100	100	1	100							
Nurses' Office / Waiting Room (requires W+D)	460	1	460				300	1	300	300	1	300							
Examination Room / Resting	0	0	0				100	3	300	100	3	300							
ADMINISTRATION & GUIDANCE			2,800			0			4,750			4,750			2,125			2,625	
Fox Hill School																			
General Office / Waiting Room with Toilet	430	1	430			0	425	1	425	425	1	425	-45	0	-45	470	1	470	
Teachers' Mail and Time Room	Included Above					0	Included in Copy Room		0	0	0	0	-100	-1	-100	100	1	100	
Copy Room	Included Above					0	320	1	320	320	1	320	170	0	170	150	1	150	
Records Room	Included Above					0	Included in Copy Room		0	0	0	0	-110	-1	-110	110	1	110	
Principal's Office with Conference Area	315	1	315			0	320	1	320	320	1	320	-55	0	-55	375	1	375	
Principal's Secretary / Waiting	Included in General Office					0	Included in General Office		0	0	0	0	-125	-1	-125	125	1	125	
Assistant Principal's Office	0	0	0			0	0	0	0	0	0	0	-120	-1	-120	120	1	120	
Supervisory / Spare Office	0	0	0			0	150	1	150	150	1	150	30	0	30	120	1	120	
Conference Room	150	1	150			0	250	1	250	250	1	250	0	0	0	250	1	250	
Guidance Office / SEL	180	2	360			0	150	2	300	150	2	300	0	0	0	150	2	300	
Guidance Storeroom	0	0	0			0	35	1	35	35	1	35	0	0	0	35	1	35	
Teachers' Work Room	135	1	135			0	250	2	500	250	2	500	-220	1	30	470	1	470	
Staff Lactation Room	0	0	0			0	75	1	75	75	1	75	75	1	75				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
General Office / Waiting Room with Toilet	310	1	310				425	1	425	425	1	425							
Teachers' Mail and Time Room	Included Above						Included in Copy Room		0	0	0	0							
Copy Room	Included Above						320	1	320	320	1	320							
Records Room	Included Above						Included in Copy Room		0	0	0	0							
Principal's Office with Conference Area	250	1	250				320	1	320	320	1	320							
Principal's Secretary / Waiting	Included in General Office						Included in General Office		0	0	0	0							
Assistant Principal's Office	0	0	0				0	0	0	0	0	0							
Supervisory / Spare Office	0	0	0				150	1	150	150	1	150							
Conference Room	360	1	360				250	1	250	250	1	250							
Guidance Office / SEL	135	2	270				150	2	300	150	2	300							
Guidance Storeroom	0	0	0				35	1	35	35	1	35							
Teachers' Work Room	220	1	220				250	2	500	250	2	500							

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL AND PINE GLEN ELEMENTARY SCHOOL (640 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM: EXISTING TO REMAIN / RENOVATED			PROPOSED PROGRAM: NEW CONSTRUCTION			PROPOSED PROGRAM: TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
Staff Lactation Room	0	0	0			0	75	1	75	75	1	75	75	1	75				
CUSTODIAL & MAINTENANCE			**2,955**			**0**			**2,240**			**2,240**			**0**			**2,240**	
Fox Hill School																			
Custodian's Office	0	0	0			0	150	1	150	150	1	150	0	0	0	150	1	150	
Custodian's Workshop	0	0	0			0	Included with receiving		0	0	0	0	-375	-1	-375	375	1	375	
Custodian's Storage	175	1	175			0	150	1	150	150	1	150	-225	0	-225	375	1	375	
Recycling Room / Trash	0	0	0			0	Included with receiving		0	0	0	0	-400	-1	-400	400	1	400	
Receiving and General Supply	0	0	0			0	1,000	1	1,000	1,000	1	1,000	687	0	687	313	1	313	
Storeroom	135	1	135			0	300	1	300	300	1	300	-127	0	-127	427	1	427	
Network / Telecom Room	0	0	0			0	200	1	200	200	1	200	0	0	0	200	1	200	
Custodian's Storage	90	3	270			0	200	1	200	200	1	200	200	1	200				
Custodian's Storage	60	2	120			0	100	1	100	100	1	100	100	1	100				
Custodian's Storage	40	4	160			0			0	0	0	0	0	0	0				
Outdoor Storage			0			0	140	1	140	140	1	140	140	1	140				
[insert room type here]			0			0			0	0	0	0	0	0	0				
Pine Glen School																			
Custodian's Office	360	1	360				Share with Fox Hill												
Custodian's Workshop	Included Above																		
Custodian's Storage	120	1	120																
Recycling Room / Trash	0	0	0																
Receiving and General Supply	240	1	240																
Storeroom	400	1	400																
Network / Telecom Room	0	0	0																
Custodian's Storage	375	1	375			0							0	0	0				
Custodian's Storage	135	1	135			0							0	0	0				
Custodian's Storage	75	1	75			0							0	0	0				
Custodian's Storage	60	1	60										0	0	0				
Custodian's Storage	35	1	35																
Outdoor Storage	175	1	175																
Outdoor Storage	120	1	120																
OTHER			**0**			**0**			**0**			**0**			**0**			**0**	
(List rooms separately below)																			
Pre-Kindergarten Classroom with Toilet (If applicable)			0			0			0	0	0	0	1,200	0	0	1,200	0	-	1,100 NSF (minimum size) - 1,300 NSF (maximum size)
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
[Enter room type here]			0			0			0	0	0	0	0	0	0				
Total Building Net Floor Area (NFA)			**85,195**			**0**			**102,928**			**102,928**			**37,590**			**65,338**	**Total Building Net Floor Area (NFA)**
Proposed Student Capacity / Enrollment																# of Grades	6	**640**	**Total Enrollment (Enter Design Enrollment)**
																K	1	**107**	Kindergarten Enrollment
																Grade 1	1	**213**	Lower Elementary School Enrollment (Grades 1-2)
																Grade 2	1	**320**	Upper Elementary School Enrollment (Grades 3-6)
																Grade 3	1		
																Grade 4	1		
																Grade 5	1		
																Grade 6	0		
NON-PROGRAMMED SPACES					% of GFA	**0**		% of GFA	**51,464**		% of GFA	**51,464**							Complete this category with Schematic Design Submittal
Other Occupied Rooms (List rooms separately below)																			
[Enter room type here]				-	#DIV/0!		-	0.0%		-	0.0%	0							
[Enter room type here]				-	#DIV/0!		-	0.0%		-	0.0%	0							
[Enter room type here]				-	#DIV/0!		-	0.0%		-	0.0%	0							
[Enter room type here]				-	#DIV/0!		-	0.0%		-	0.0%	0							
[Enter room type here]				-	#DIV/0!		-	0.0%		-	0.0%	0							
Unoccupied MEP / FP Spaces				-	#DIV/0!		-	0.0%		-	0.0%	0							
Unoccupied Closets, Supply Rooms, and Storage Rooms				-	#DIV/0!		-	0.0%		-	0.0%	0							
Toilet Rooms				-	#DIV/0!		-	0.0%		-	0.0%	0							
Circulation (corridors, stairs, ramps and elevators)				-	#DIV/0!		-	0.0%		-	0.0%	0							
Remaining[3]				-	#DIV/0!	**0**		33.3%	**51,464**	-	33.3%	**51,464**							
Total Building Gross Floor Area (GFA)[2]			**122,400**			**0**			**154,392**			**154,392**			**61,592**			**92,800**	**Total Building Gross Floor Area (GFA)[2]**
Fox Hill GFA		64,400																	
Pine Glen GFA		58,000																	
Grossing Factor (GFA / NFA)			**1.44**			**#DIV/0!**			**1.50**			**1.50**			**0.08**			**1.42**	**Grossing Factor (GFA / NFA)**

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls.

[3] **Remaining** Includes exterior walls, interior partitions, chases, and other areas not listed above. Do not calculate this area, it is assumed to equal the difference between the Total Building Gross Floor Area and area not accounted for above.

Architect Certification

Proposed Space Summary - Elementary School

Date: 6/9/23 Preliminary Design Program

BURLINGTON PUBLIC SCHOOLS FOX HILL AND PINE GLEN ELEMENTARY SCHOOL (640 STUDENTS)	EXISTING CONDITIONS			PROPOSED PROGRAM									VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
				EXISTING TO REMAIN / RENOVATED			NEW CONSTRUCTION			TOTAL									
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architecture Firm: DiNisco Design, Inc.

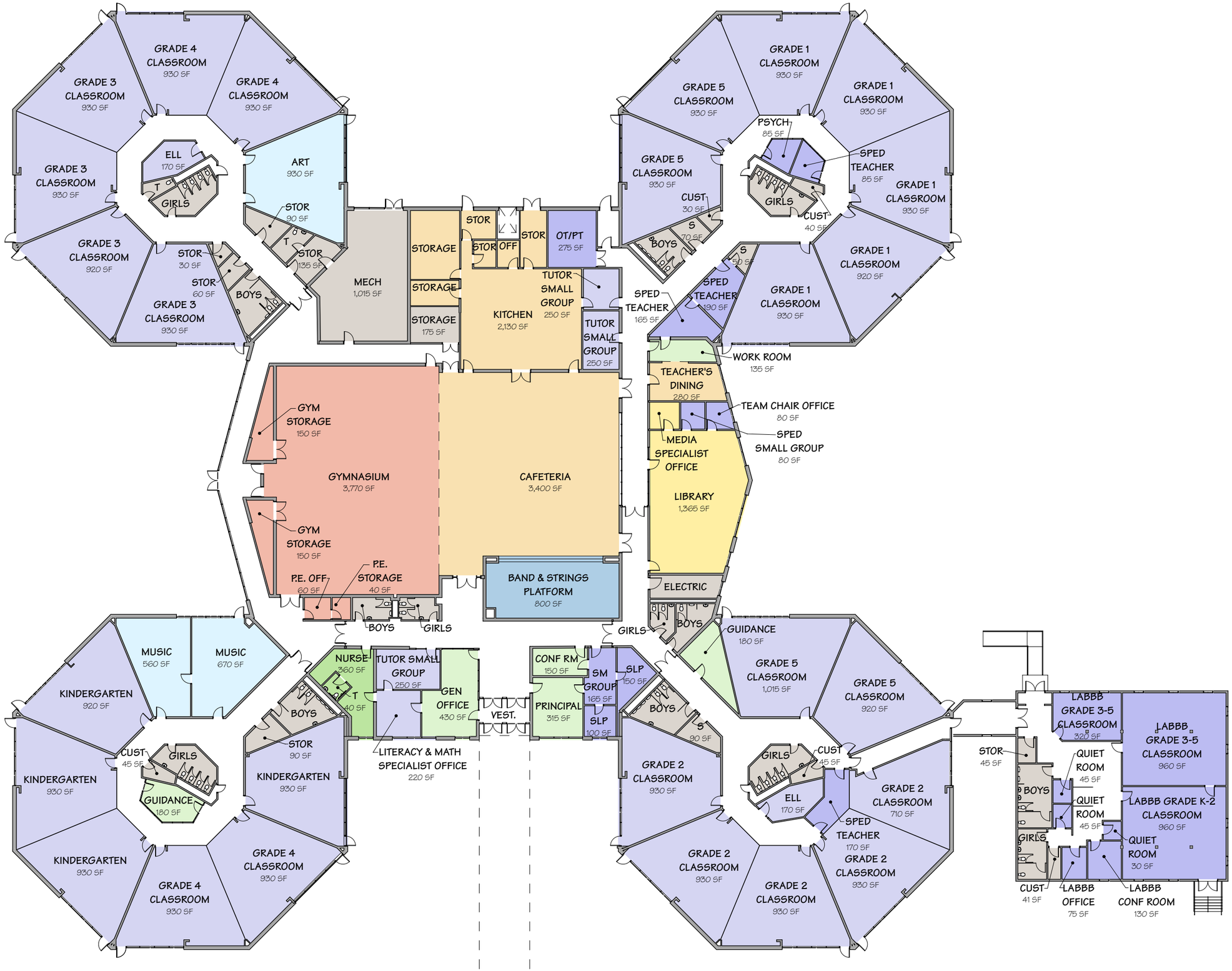
Name of Principal Architect: Vivian Low

Signature of Principal Architect:

Date: 6/29/23

3 INITIAL SPACE SUMMARY

Existing Facilities Floor Plans



FOX HILL ELEMENTARY SCHOOL

BURLINGTON, MA

PRELIMINARY DESIGN PROGRAM

EXISTING: GROUND LEVEL

LEGEND

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYS ED
- MEDIA CENTER
- AUDITORIUM / DRAMA
- DINING & FOOD SERVICE
- MEDICAL
- ADMIN & GUIDANCE
- CUST, MAINT, & TOILETS
- CIRCULATION

GROSS AREA CALCULATIONS

GROUND	**64,400 SF**

N

0 15 30

23 MARCH 2023

© 2023

DINISCO DESIGN
architects + planners

PINE GLEN ELEMENTARY SCHOOL

BURLINGTON, MA

PRELIMINARY DESIGN PROGRAM

EXISTING: UPPER AND GROUND LEVEL

LEGEND

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYS ED
- MEDIA CENTER
- AUDITORIUM / DRAMA
- DINING & FOOD SERVICE
- MEDICAL
- ADMIN & GUIDANCE
- CUST, MAINT, & TOILETS
- CIRCULATION

GROSS AREA CALCULATIONS

UPPER & GROUND	**37,500 SF**
LOWER FLOOR	20,500 SF
TOTAL	58,000 SF

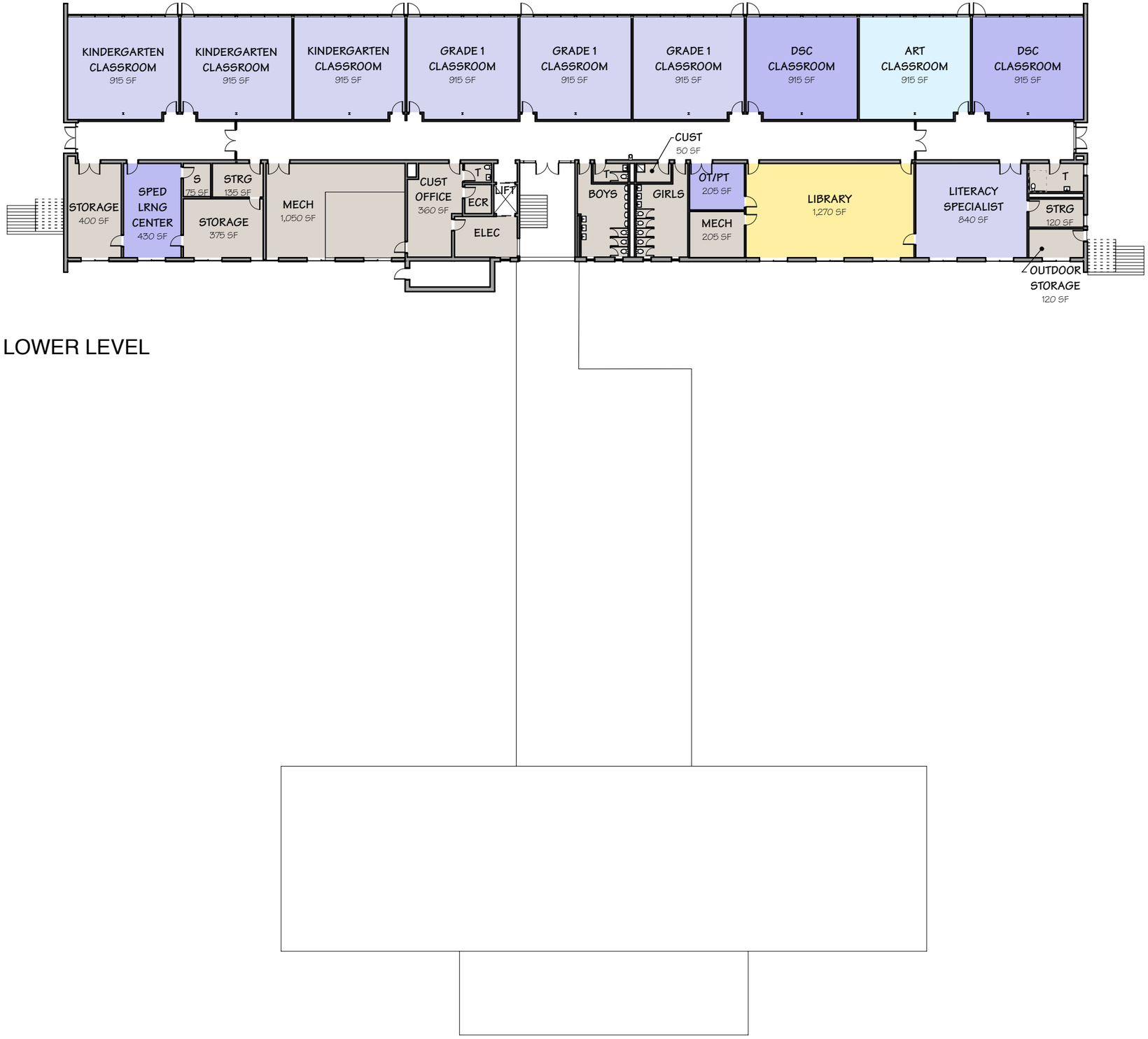
N

0 15 30

23 MARCH 2023

© 2023

DINISCO DESIGN
architects + planners



LOWER LEVEL

PINE GLEN ELEMENTARY SCHOOL

BURLINGTON, MA

PRELIMINARY DESIGN PROGRAM

EXISTING: LOWER LEVEL

LEGEND

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYS ED
- MEDIA CENTER
- AUDITORIUM / DRAMA
- DINING & FOOD SERVICE
- MEDICAL
- ADMIN & GUIDANCE
- CUST, MAINT, & TOILETS
- CIRCULATION

GROSS AREA CALCULATIONS

UPPER & GROUND	**37,500 SF**
LOWER FLOOR	20,500 SF
TOTAL	58,000 SF

N

0 15 30

23 MARCH 2023

© 2023

DINISCO DESIGN
architects + planners

4 EVALUATION OF EXISTING CONDITIONS

Fox Hill Elementary School & Site Existing Conditions Report

Pine Glen Elementary School & Site Existing Conditions Report

Facilities Audit (Electronic Copy Only)

Legal Deeds to Sites (Electronic Copy Only)

Traffic Study Report (Electronic Copy Only)

Wetland Resource Area Delineation Report (Electronic Copy Only)

Phase I ESA Report (Electronic Copy Only)

HazMat Report (Electronic Copy Only)

AHERA Report (Electronic Copy Only)

Geotechnical Report (Electronic Copy Only)

FOX HILL ELEMENTARY SCHOOL

Property Data

Address:	Fox Hill Road Burlington, MA
Use:	Elementary School (Grades K through 5)
Site Area:	37.90 acres
Date Built:	1967
Renovations:	1997 window replacement, 2015 roof replacement.
Additions & Reno:	2010 Modular addition
Occupancy Group:	E – Educational
Construction Class:	Type IIB (noncombustible, unprotected)
Zoning District:	Public Use (the site itself); Single Residence RO to the west,south, and east; Single Residence in Wilmington to the north.
Flood Zone:	No

Building Data

No. Floors:	1 (original building and modular addition are both 1 story).
Gross Area	64,400 GSF
Structure:	1967 - Steel columns and load bearing masory walls with open web steel joists and conventional spread concrete footings. No Basement. The first floor of the original building is soil-supported concrete slab on grade.
Exterior Walls:	1967 - Brick veneer masonry on unreinforced CMU backup with some areas of exposed concrete. Modular Addition – Wood framed with vinyl siding.
Roofing:	Original Building - Single-ply EPDM roofing ca. 2015
Window Systems:	Original Building – 1997 renovation with double-glazed aluminum frame system consisting of fixed transoms and operable units with Kallwall panels. Modular classrooms – double-glazed vinyl sliding windows
Exterior Doors:	Combination of original hollow metal doors in steel frames, aluminum full lite doors in aluminum frames, and fiberglass doors.
Interior Doors:	Wood and hollow metal doors in hollow metal frames.
Interior Walls:	Painted CMU and exposed brick masonry. Modular classrooms are vinyl clad gypsum wall board (GWB, painted GWB and some fiberglass resin panels (FRP)..
Floors:	Typically vinyl composition tile (VCT) throughout, hardwood flooring in the Gym, and carpet in office areas.
Ceilings:	Acoustic tile ceilings are typical throughout with 24”x48” tile. Exposed structure ceiling at gymnasium.
Sprinklers:	None

HVAC:	Spaces within the original building are mechanically heated and ventilated via unit ventilators with wall intake louvers. The wall intake louvers have been blocked off, compromising the ventilation's effectiveness. The cafetorium is served by two H&V units with Kitchen makeup air through a transfer duct. Gym is served by two 100% OA unit ventilators and two roof exhaust fans.
Sewerage:	6" connection to town's sewer system. 8" storm drain exits the building.
Water:	6" service from Fox Hill Road
Electric:	Service emanates from a pole on Fox Hill Road
	120/208 volts, 3-phase, 1200 amp in the original main building
	120/208 volts, 3-phase, 200 amp in the rear portable classrooms
Gas:	3" Gas service main from Fox Hill Road.

INTRODUCTION

The purpose of this section is to report the physical conditions of the existing building in order to identify the maintenance needs, capacity of existing systems, and the potential for expansion. Information has been obtained from historic drawings, previous reports and studies, on-site visual inspection, and interviews with school staff and maintenance personnel. No intrusive investigations or test opening have been performed to date.

General

The Fox Hill Elementary School is located on Fox Hill Road in Burlington, MA. It sits on a wooded 37.9 acre site.

The school parcel is bounded by wetlands to the north and to the west. A vernal pool is located to the east of the existing school. Residential neighborhoods are to the south and west. Extensive conservation lands abut the property to the east and north. The parcel has a town border to the north with Wilmington.

Fox Hill is one of four (4) elementary schools in the district with an enrollment of 450 students during the 2022-23 academic year.

Originally constructed in 1967 the building is a single story. A modular addition was added in 2010 with 3 classrooms.

The physical state of the building is good considering its age. However the age of many of its systems are at the end of their useful lives.

Legal Title

The Town of Burlington has legal title to the school property.

Historical Significance

The MACRIS database at the Massachusetts Historical Commission, does not contain an entry for the Fox Hill Elementary School.

A complete ENF and associated filings will be submitted if necessary.

SITE

The existing school is located directly off of Fox Hill road within a residential area. The site is defined by the school building in the center of the site's open space.. The school parcel is bounded by residential neighborhoods to the west and south. The northern boundary of the site is the town line with Wilmington. The property to the north and east of the site is conservation land. The overall site's topography is relatively flat where the existing school and playgrounds are located. However, it slopes down to the north, west and south of the school areas. East of the school also slopes down towards a delineated vernal pool at the treeline.

The Fox Hill Elementary School is located on a spacious property at the intersection of Fox Hill Road and Westwood Street in a residential area of Burlington, Massachusetts. The site and neighboring properties include notable natural and recreational features. Extensive woodland (mixed deciduous and coniferous) borders the developed area of the site along most edges, with more narrow woodland buffers between the property and nearby residential areas to the northeast, south, and southwest. The Sawmill Brook Conservation Area abuts the site's southeastern property line. Two trailheads at the edge between the open lawn area and woodland provide access to a trail that loops within the conservation area. The Fox Hill Nature Trail system winds through the site's northwestern woodland. Forested lots connect this wooded area to the Mill Brook Wetlands Conservation Area in the Town of Wilmington.

Major site development features include four building entry areas (three pedestrian-focused and one service-focused); a generous parking lot and drop-off drive aisle to the north of the school building; an access drive circling around the building; and a large open lawn area to the east of the school building containing two playgrounds, a multisport area, a gazebo, raised garden beds, and a baseball field.

Site – Landscape

While the topography of the site is relatively flat, grades generally fall from its southeast to northwest corners. A raised area in the southeast corner slopes downward across southeastern woodlands. Toward the bottom of this wooded slope lies the wetland categorized as "Wooded Swamp Deciduous" by MassDEP, containing an NHESP "Certified Vernal Pool." This slope continues into the property's large open lawn area. Pooled water and muddy spots were observed at its base. Moving northwest, the site flattens out across the remainder of the developed area. The terrain slopes downward significantly towards the residential lots just south of the school building. A slightly raised area occupies the site's northwest corner, which slopes gradually towards the residential lots to the west.

In addition to the dense surrounding woodlands, the developed area of the site contains several significant trees, mostly mature *Quercus* (Oak) specimens. Beginning at Fox Hill Road and moving clockwise, one encounters two Oak trees bordering the eastern edge of Fox Hill Road. One Oak tree stands at the corner of Westwood Street and the parking lot. Three Oak trees border the southern edge of Westwood Street, in front of the annex trailer. Three Oak trees and two mature ***Cornus*** (Dogwood) trees border the northern entrance walkway canopy. Two mature Oak trees occupy the eastern end of the parking lot island. Three young, flowering trees adorn the northeastern corner of the school building. Across the access drive, three deciduous trees border the northern playground. Two large Oak trees stand on either side of the walkway connecting the play area to the school building's eastern entrance. A young deciduous tree stands at the south side of the southern playground. The southern, service-focused building entry area features one Oak tree. While trees on site appeared to be in good condition, it is recommended that a licensed arborist be consulted to evaluate their health, expected lifespan, and safety.

Fox Hill Elementary School's landscape also contains several shrub and perennial garden beds, including shrubs planted at the base of the school sign adjacent to Westwood Street, Juniper foundation plantings around the annex trailer, Yew hedge rows in the northern entry area, and a variety of evergreen and deciduous shrubs adorning the corners of the walkway canopy and lining the façades of the original school building in the northern entry area. Planting areas generally lack edging, apart from several deteriorating wood planks bordering foundation plantings at the northern entry area. To the east of the multisport area are two raised, wooden garden beds surrounded by a wood picket and chicken wire fence. The beds and fence appear in fine condition, though they show early signs of aging.

The interstitial areas of the school grounds are blanketed in turf, with the largest open lawn areas stretching west of the parking lot and east of the developed site, wrapping around the play area. The turf appears to be in fine condition overall. Specific issues include pooled water and muddy spots towards the base of the slope of the eastern open lawn area; damage in this open lawn area due to recent vehicular travel and soil testing; worn areas at the base of play and athletic equipment; and worn areas at asphalt edges, likely due to vehicular travel and snow push. Turf damage along the asphalt edges was significant along the southern side of the parking lot island; along the looped access drive adjacent to the western entry area; and at the southern service entry area, where a large puddle was observed. It appears that the turf has struggled to survive at the southern service entry area, the lawn panel to the south of Westwood Street, and east of the access drive. Improved drainage of the eastern open lawn area and installation of curbs along all turf areas is recommended to protect the integrity of turf on site.

Landscape drainage infrastructure includes the gravel outfall at the northeastern corner of the parking lot, patches of drainage rocks along the northern façade of the annex trailer, gravel lining the western side of the access road, and three corrugated plastic pipes conveying water from the walkway canopy downspouts into a northern entry area turf panel. Installation of stone drip edge at all building façades is recommended, to protect the building foundation. It is further recommended that walkway canopy drainage solutions be explored that are less visually obstructive and physically hazardous than the corrugated plastic pipes.

Vehicular Circulation

Two asphalt roadways enter the western side of the property: Westwood Street, which travels southeast and terminates at the parking lot; and Fox Hill Road, which travels northeast and terminates at its intersection with Westwood Street. At the terminus of Westwood Street, a long parking lot island separates the parking area to the north from the drop-off loop to the south that passes in front of the school's main entrance (both are paved in asphalt). These surfaces appeared to be in fine condition. Some cracking was observed, especially at the edges of the parking lot island and along the crosswalk leading to the walkway canopy. The parking lot appears to contain five spaces marked as accessible, with three appearing to be van accessible. With a total number of parking spaces being approximately 163, this seems to fall just short of the ADA and MAAB requirements for six total accessible spaces for parking facilities of this size. Only one access aisle leads to a walkway across the parking lot island with accessible surfacing. Therefore, it appears that only two of the five accessible spaces accommodate safe and accessible egress to the school building.

The asphalt access drive branches off the eastern end of the drop-off loop, circling the original school building and trailer annex and terminating at its intersection with Westwood Street. It is showing signs of wear, with several areas of cracking and deterioration observed at its edges and more extensively to the south and west of the school building. One asphalt, vehicular drive leads to the southern, service entrance, providing access to a dumpster and raised loading dock. This drive is in poor condition, with significant cracking and deterioration observed adjacent to the damaged turf and puddled water.

Vehicular pavement on site is infrequently edged with curbing. Asphalt curb lines both sides of Fox Hill Road and both sides of Westwood Street, terminating on the northern edge at the Westwood Street crosswalk just west of the parking lot and continuing along the southern edge to border the drop-off loop north of the school building. Granite curbs are present wherever cast-in-place concrete sidewalk exists, including all curb cuts and the cast-in-place concrete portion of the sidewalk to the north of the school building. The asphalt curb appears to be damaged in many locations. The granite curb appears to be in good condition. It is recommended that all vehicular surfaces be lined with cast-in-place or granite curbs, to better preserve the integrity of asphalt surfacing and turf panels and improve pedestrian safety.

Pedestrian Circulation

The western side of Fox Hill Road is lined with an asphalt sidewalk, as is the northern side of Westwood Street. The southern side of Westwood Street contains an asphalt sidewalk beginning at the westernmost crosswalk. This sidewalk continues east along the southern side of the drop-off loop, changing to a cast-in-place concrete surfacing approximately where the original school building begins and continuing to the northeast corner of the building. A portion of this cast-in-place concrete sidewalk lies underneath the school building's T-shaped canopy. A cast-in-place walkway branches off this sidewalk, continuing underneath the canopy to the northern, main entrance of the school building. Asphalt sidewalks appear to be recently paved and in good condition. Significant erosion, cracking, and chipping were observed in the cast-in-place concrete sidewalk and walkway where canopy posts are embedded. Cracking was also observed at the main entrance landing.

Concrete landings exist at all doorways to the octagonal wings of the school building. Short, concrete ramps extend to connect these landings to grade. However, almost all these ramps terminate in turf, rendering them inaccessible. One exception is the concrete ramp at Door 26 and Door 27, which leads to an asphalt walkway branching off the access drive. This walkway appears to be in fine condition. Another asphalt walkway leads from the eastern entrance of the school building to the access drive. This walkway appears to be in poor condition; puddling and cracking were observed. Furthermore, the concrete landing at this entrance does not ramp down to the walkway, rendering this entrance inaccessible. There is also an asphalt pathway leading from an aluminum ramp at the southern entrance of the trailer annex to the access drive. This pathway appears to be cracking along one edge. The aluminum ramp appears to be in good condition. A second asphalt walkway, leading from the northern entrance of the annex trailer to the sidewalk along the south side of Westwood Street, appears to be in good condition. Finally, two walkways cut across the parking lot island. One is a cast-in-place walkway leading directly from a parking space access aisle to a crosswalk. Another is an asphalt pathway obstructed by the flagpole. It is recommended that sidewalks and walkways be repaired or replaced to remedy any damage that creates uneven surfaces and reduces safety and accessibility.

Five crosswalks exist on site: three crossing Westwood Street; one crossing Fox Hill Road at its intersection with Westwood Street; and one crossing the drop-off loop. It appears that all crosswalks are connected to sidewalks on either side via curb cuts. None of the curb cuts contained detectable warning panels. No crosswalk or curb cut was present connecting the parking lot to the asphalt walkway leading to the northern entrance of the annex trailer, potentially creating accessibility challenges for users moving between these locations.

Play and Athletics

The play area contains two playgrounds with a multisport area in between. Both playgrounds contain Engineered Wood Fiber Mulch (EWFM) safety surface that appears to be aged; worn areas were observed along paths of travel between the equipment and at the bases of slides and swings. These worn areas create uneven surfaces, likely reducing the accessibility of the playgrounds. Neither playground contains wear mats to prevent displacement of EWFM. Black plastic borders separate the playgrounds from the surrounding turf. These borders have begun to deteriorate and are sunken in spots, failing to prevent spillage of EWFM onto surrounding turf. The northern playground includes five pieces of traditional play equipment. The southern playground includes four pieces of traditional play equipment. Most play equipment appears outdated and worn; rubber components are cracked, paints and coatings are chipped, and the plastic pieces are faded in color. It is recommended that poured-in-place safety surfacing be installed in the playgrounds for greater accessibility and ease of maintenance, and that playground equipment be replaced.

The asphalt multisport area features four-square and basketball court line-striping. The basketball court contains two gooseneck basketball systems. Numerous puddles were observed in the multisport area and line-striping appeared faded. A Drop Shot play piece is installed in the turf area just east of the multisport area. Just south of the Drop Shot is a southeast-facing baseball field. It features an infield mix, bases, a chain link fence backstop, and two players' benches. Additional athletic equipment includes two small soccer goals.

Site Furnishings

A large metal gazebo on a concrete pad sits just north of the raised garden beds and east of the northern playground. The site contains one prominent flagpole centered within the parking lot island. Two bicycle racks are located just east of several granite memorial benches; one, a five-loop wave style, appears to be securely bolted to cast-in-place concrete. The other, a grid style, sits unsecured atop turf. Signage on site includes a school sign to the north of Westwood Street that appeared to be constructed of wood with granite supports. The school sign appears to be in excellent condition. An additional sign stands just inside the entrance gate to the playground, in recognition of supporters and benefactors of the school playground. This sign is in poor condition, with rust and chipping paint. Trail maps mark all trailheads on site. At the Fox Hill Nature Trail trailhead, this map is displayed within a wooden trailhead kiosk.

Several dedicated benches and memorials exist on site. Two granite benches to the north of the school building, dedicated to a teacher, sit atop a cobblestone paver pad edged with rubber. The Fox Hill Nature Trail trailhead contains one dedicated, plastic bench. Four plastic-backed benches dedicated to benefactors sit at the north and south ends of the play area. While all appear to be in good condition, significant erosion was observed around the concrete footings of the dedicated benches at the south end of the play area, presenting a safety hazard. In the multisport area are a multicolored "Friendship" picnic table and double Adirondack chair, both in good condition. The play area contains four additional picnic tables (two with integral chess boards) and two additional, backless benches, all appearing to be in good condition. Three litter receptacles are available in the play area. Two metal storage sheds sit behind the chain-link baseball backstop. The parking lot contains two clothing and shoe donation bins.

A chain link fence with green, vinyl-coated mesh runs south between the access drive and the western edge of the play area, following the access drive as it turns around the southeast corner of the building, and then making a 90-degree turn south near the school building's southern entry area to continue up the sloped lawn to the woodland's edge. While the individual components of this fence appear to be in fine condition, the assemblage is in disrepair; the mesh has become detached in several areas and several posts are leaning. What appears to have been a gate at the edge of the woodland has fallen apart. A second length of chain link fence runs along the site's south property line, within the woodland buffer. No visual screening exists around utility equipment in the eastern entry area. It is recommended that the chain link fence in the play area be repaired and that a screen be added to visually buffer utility equipment.

Site Lighting

Four line-voltage light poles were observed on site: two along the northern edge of Westwood Street and two within the parking lot island. The building canopy leading to the northern main entrance contains numerous overhead lights to illuminate the walkway below. No low-voltage landscape lighting was observed on site. It is recommended that the installation of walkway lighting be considered to improve the safety of pedestrians.

Site – Civil

The site is developed and located within a residential neighborhood, east/southeast of the intersection of Westwood Street and Fox Hill Road, north of Vincent Road, and south/southwest of the Burlington-Wilmington town line. On either side of Westwood Street, the site's parcel extends as far west as the easternmost residential properties on Westwood Street and as far south as the northernmost residential properties on Fox Hill Road. To the northwest, north, and southeast of the site are undeveloped, forested areas, including the Sawmill Brook Conservation area to the southeast. To the east of the school building is the Eleanor Drive and Murray Hill Circle residential neighborhood in neighboring Wilmington. A narrower wooded strip extends along the southern edge of the site.

The school's main access driveway is an extension of Westwood Street, heading east/southeast from its intersection with Fox Hill Road. The main access driveway continues east/southeast to the bus drop-off/pick-up location in front (i.e., north) of the school building and south of the school's parking lot. West of the parking lot, another access driveway splits off the main access driveway and runs south/southeast, east, and north, wrapping around the school building and connects to the school's parking lot on the northeast side of the building. The space between this access driveway, the main access driveway, and the school building is occupied by an annex trailer.

Immediately north and northwest of the parking lot is an unprogrammed grassy area, with forested areas to its north and northwest. East of the parking lot is another unprogrammed grassy area, with forested areas to its east in Wilmington. This grassy area continues to the south and southeast, with the school's two playgrounds, basketball court, and paved multi-purpose play areas (i.e., schoolyard) and baseball field located immediately east of the school building in this area. There is fencing around the playground areas. Other perimeter fencing onsite runs along the access drive to delineate the play area from the back loading dock area of the school. Immediately to the southeast are forested and wetland areas in the southeast corner of the site.

The school building occupies the central portion of the site and includes a central building, with octagonal buildings connected to each corner and the aforementioned annex trailer to the west connected to the northwest octagonal building. A walkway covered by a canopy serves as the main entrance to the school. On a site visit, the columns of this canopy were observed to be in various states of disrepair.

Two clothing and shoe donation bins are located on the edge of the northwest corner of the parking lot. The school's dumpster is located in a utility driveway, just south of the south side of the building in the middle of the building.

Northwest of the school parking lot is a trail system. The Fox Hill Nature Trail loops around the forested area off Westwood Street and includes two trail heads.

Soils

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, the central portion of the site around the school building and other developed areas is soil type Udorthents-Urban land complex. The forested area to its east and southeast is soil type Paxton fine sandy loam, 0 to 8 percent slopes, extremely stony; Scituate fine sandy loam, 3 to 8 percent slopes, extremely stony, and Rock outcrop-Hollis complex, 3 to 35 percent slopes. The forested area to its south is soil type Paxton-Urban land complex, 3 to 15 percent slopes. The forested area to its north and northwest is soil type Montauk fine sandy loam, 0 to 8 percent slopes, extremely stony and Montauk fine sandy loam, 8 to 15 percent slopes, extremely stony. The area to its west is Scituate fine sandy loam, 3 to 8 percent slopes, extremely stony. In residential areas to the west is soil type Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony, while in residential areas to the east is soil type Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes and Charlton-Hollis-Rock outcrop complex, 15 to 25 percent slopes.

- According to NRCS, soil type Udorthents-Urban land complex is "level to hilly complex [and] consists of Udorthents and areas of Urban land. Individual areas of this unit are rectangular or irregular in shape and range from 6 to 1,020 acres in size. This complex is about 40 percent Udorthents, 40 percent Urban land, and 20 percent minor soils."
- According to NRCS, soil type Paxton fine sandy loam, 0 to 8 percent slopes, extremely stony consists of "very deep, gently sloping, well drained soil [and] is on the smooth, convex side slopes and tops of glaciated hills. The areas are oval or irregular in shape and range from 6 to 140 acres in size. Stones cover 3 to 15 percent of the surface."
- According to NRCS, soil type Scituate fine sandy loam, 3 to 8 percent slopes, extremely stony consists of "very deep, gently sloping, moderately well drained soil [and] is on hill crests, on toeslopes, and in depressions of uplands. The areas of this soil are irregular in shape and range from 6 to 310 acres in size. Stones cover 3 to 15 percent of the surface."
- According to NRCS, soil type Rock outcrop-Hollis complex, 3 to 35 percent slopes "consists of rolling to steep, shallow, somewhat excessively drained Hollis soils and exposed bedrock. This complex is on ridge crests of upland hills. Areas are long and narrow or irregular in shape and range from 6 to 350 acres in size… This complex is about 50 percent rock outcrop, 45 percent Hollis soils, and 5 percent other soils."
- According to NRCS, soil type Paxton-Urban land complex, 3 to 15 percent slopes "consists of very deep, rolling, well drained Paxton and similar soils, and areas of Urban land on convex slopes of glaciated hills. The areas are oval or irregular in shape and range from 6 to 350 acres in size. These areas are 40 percent Paxton soils, 40 percent Urban land, and 20 percent other soils."
- According to NRCS, soil type, Montauk fine sandy loam, 0 to 8 percent slopes, extremely stony consists of "very deep, gently sloping, well drained soil [and] is on the tops and upper side slopes of glaciated hills. The areas are oval or irregular in shape, and range from 6 to 210 acres in size. Stones cover 3 to 15 percent of the surface."
- According to NRCS, soil type, Montauk fine sandy loam, 8 to 15 percent slopes, extremely stony consists of "very deep, strongly sloping, well drained soil [and] is on the side slopes of glaciated hills. The areas are oval or irregular in shape and range from 6 to 160 acres in size. Stones cover 3 to 15 percent of the surface."

- According to NRCS soil type Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony consists of "very deep, nearly level to gently sloping, very poorly drained soil [and] is along drainageways and in depressions on uplands. Water may be ponded on the surface... Areas are long and narrow or irregular in shape and range from 6 to 90 acres in size. Stones and boulders cover 3 to 15 percent of the surface."
- According to NRCS, soil type Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes "consists of gently sloping very deep and shallow soils on uplands where the relief is affected by the underlying bedrock. The well drained Charlton soils are on toeslopes and in low pockets. The somewhat excessively drained Hollis soils are on hilltops and ridges. Stones and boulders cover up to 15 percent of the surface. Areas of the map unit are irregular in shape and range from 6 to 180 acres in size. The soils and exposed bedrock are so intermingled that it was not practical to map them separately. This complex is about 50 percent Charlton soils, 25 percent Hollis soils, 15 percent rock outcrop, and 10 percent other soils."
- According to NRCS soil type Charlton-Hollis-Rock outcrop complex, 15 to 25 percent slopes "consists of moderately steep, shallow and very deep soils on uplands where the relief is affected by the underlying bedrock. The well drained Charlton soils are on toeslopes and in low pockets. The somewhat excessively drained Hollis soils are on hilltops and ridges. Stones and boulders cover up to 15 percent of the surface. Areas are irregular in shape and range from 6 to 110 acres in size…This complex is about 50 percent Charlton soils, 25 percent Hollis soils, 15 percent rock outcrop, and 10 percent other soils."

  (Source: USDA NRCS)

Wetlands and Floodplains

HW delineated the Fox Hill school site on February 22 and March 13, 2023. Four wetlands were identified during the field surveys including one at the southwest corner of Westwood Street and Fox Hill Road intersection, two north of the parking lot and playground areas (likely located in the Town of Wilmington), and a fourth in the southeast corner of the site. The wetland identified in the southeast corner of the site is the only wetland mapped by MassDEP. It is characterized as Wooded Swamp Deciduous. Within this wetland is a certified vernal pool, which was also delineated by HW.

The presence of these resource areas will likely trigger Burlington's 100-foot buffer zone for wetlands and vernal pools, requiring a permit from the Burlington Conservation Commission for any work in the vicinity of the resource areas. Given the proximity of the site to Wilmington, coordination with Wilmington's Conservation Commission will likely be necessary, per Burlington's Wetland Protection Bylaw. In addition, because at least a portion of the wetlands north of the school grounds are located within Wilmington, additional permitting (ANRAD) is anticipated with the Wilmington Conservation Commission.

The site is almost entirely characterized by the Federal Emergency Management Agency (FEMA) as an area of minimal flood hazard, although the mapped DEP wetland is characterized as an area of 0.2% Annual Chance of Flooding (500-year floodplain). (Source: FEMA FIRMs 25017C0289E, effective 6/4/10; 25017C0293E, effective 6/4/2010; 25017C0287F, effective 7/6/16).

Zone II Aquifers and Regulated Water Supplies

There are no water supply aquifers (Zone IIs) or other surface water supplies on the site or the in the immediate vicinity. (Source: MassMapper)

Wildlife Habitat

There is no Natural Heritage and Endangered Species Program (NHESP) Estimated Habitats of Rare Wildlife or Priority Habitats of Rare Species on the site or in the immediate vicinity. (Source: MassMapper)

Trees

The site is surrounded by forested areas on all sides, with wider forested areas particularly on the western, northwestern, northern, eastern, and southeastern sides. These forested areas provide a buffer between the school site and residential properties around it. There are several large trees around the school building and access driveway, especially in front (i.e., north) of the school building. A few smaller trees are also present around the northernmost playground.

Infrastructure

Stormwater Management

The site has minimal stormwater management onsite. The site topography generally drains to the northwest and outlets to the adjacent woods and wetland area. The parking lot onsite is sloped from west to east, draining the northeastern corner to a gravel outfall. The current condition of the outfall requires some routine maintenance including debris cleanup and erosion control stabilization. The site drainage eventually drains to this design point.

There are 3 main drainage features associated with the buildings onsite. The walkway canopy at the northern entrance to the school has downspouts that drain to grade with corrugated plastic pipe extensions to the surrounding area. The annex building also drains via downspouts to the surrounding area at grade. These downspouts appeared to be damaged but in fair condition. The main building drains through roof drains and is assumed to outlet at a culvert that has a headwall at the north end of the parking lot. The headwall is in fair condition.

There is one catch basin located onsite. It is located on the southern side of the school. It is unclear where the catch basin drains to or if it is a part of a larger system. There was standing water in the catch basin at the time of inspection.

The site appears to have additional drainage features including reinforced gravel shoulders around the access driveway on the west side of the building. There are signs of minor erosion on slopes around the school parking lot and access drive.

The specific drainage connections should be confirmed, and the capacity of the piping drainage system and outfall will need to be verified.

Water Supply System

The site appears to be connected to Burlington's water system via a service connection in Fox Hill Road, just south of its intersection with Westwood Street. One hydrant is present on Fox Hill Road in front of #251 Fox Hill Road, south of the intersection with Westwood Street. There are three hydrants located on site which include one hydrant located on the south side of the building adjacent to the access driveway. Two additional hydrants are located on the north side of the building near the parking lot and main entrance.

The adequacy of the water system with respect to pressure should be verified by a hydrant flow test.

Sanitary Sewer

The site appears to be connected to Burlington's sewer system via a manhole at the intersection of Westwood Street and Fox Hill Road. Another sewer manhole is present in Fox Hill Road, just south of its intersection with Westwood Street. Precise locations and capacities of sewer connections will need to be verified with the Burlington Department of Public Works.

Gas Utility

A gas line enters the property through Westwood Street and runs along the west side of the building and access roadway. The gas line enters the building from the south side near the loading area. Precise locations will need to be verified.

Electrical Utility

Overhead electrical lines run via utility poles along Fox Hill Road until just south of its intersection with Westwood Street and continue east/southeast through a wooded area between Fox Hill Road and the school site. These wires appear to connect to the building underground via a transformer located south of the school's northwest octagonal building. Precise locations will need to be verified.

Vehicular Circulation and Parking

It appears that buses pick-up and drop-off students in the main access driveway in front (i.e., north) of the school building and loop around the parking lot. It appears that parents and guardians drive around the school building via the access driveway to the west, south, and east of the building and pick-up and drop-off students.

The parking lot contains approximately 158 parking spaces and 5 accessible parking spaces. There is no evidence of vehicles driving or parking on adjacent grass areas.

TRAFFIC STUDY

An existing traffic conditions assessment for the Fox Hill Elementary School site dated 27 March 2023 by Pare Corporation is attached at the end of this section.

STRUCTURAL REVIEW

Introduction

Foley Buhl Roberts & Associates, Inc. (FBRA) is collaborating with *DiNisco Design, Inc. (DDI)* and their consultants in the review and evaluation of structural issues/conditions at the Fox Hill Elementary School in Burlington, Massachusetts. The purpose of this report is to identify and describe the structural systems of the building and to comment on the structural issues/conditions observed. General comments relating to potential renovations, alterations, and additions to the school (governed by the Existing Building Code of Massachusetts (EBCM - 9th Edition)) are presented as well.

Structural conditions at the Fox Hill Elementary School were reviewed at the site by FBRA on February 22, 2023.

The following documents were reviewed in the preparation of this Existing Conditions Structural Report:

Elementary School No. 5 Burlington, Massachusetts: Foundation Plans 4, Central Core Roof Framing S-1, C.R. Unit & Canopy Framing Plans S-2, and various Architectural Drawings, prepared by J. Williams Beal, Sons, Granger & Poskus Architects, Boston, Massachusetts; dated September 17, 1965.

No exploratory demolition or structural materials testing was conducted in conjunction with this study; accordingly, observations are based solely on the documents referenced above and on a limited visual survey of those areas of the building which were accessible and exposed to view.

General Description

The Fox Hill Elementary School is located at Fox Hill Road in Burlington, MA. The one-story building was constructed in 1965 on a relatively level site. It is composed of a ten-sided central wing and four eight-sided classroom wings at the northwest, northeast, southwest, and southeast corners. There is a small wood-framed addition to the west of the northwest classroom wing. The main entrance is on the north side of the central wing and leads to a corridor that circles the central cafeteria and gymnasium spaces. Additional programmed spaces in the central wing include a library, administrative offices, a kitchen, and mechanical and other support rooms. Classrooms and toilet rooms are contained within the eight-sided wings.

The total floor area is approximately 63,000 gross square feet. The roof of the main building is framed with open web steel joists and structural steel beams spanning to steel columns and masonry bearing walls with conventional, shallow concrete spread and strip footing foundations. The first floor is a soil-supported concrete slab on grade. Exterior walls are 4" brick veneer with 8" unreinforced CMU backup. Interior partitions are typically unreinforced CMU construction.

No major renovations, alterations, or additions to the building have been conducted since the original construction.

Structural Systems Description

Structural Materials: Per the available existing drawings, cast-in-place concrete is 2,500 psi strength at 28 days. Reinforcing steel bars are listed as ASTM A305 intermediate grade new billet steel. Structural steel is ASTM A36, with a 36 ksi yield strength. Per the drawings, open web steel joists were required to conform to the requirements of the Steel Joist Institute at the time. Metal deck has a minimum yield strength of 33,000 psi.

Subsurface Soils/Foundations: Per the existing drawings, the bottom of all footings was required to bear on undisturbed hard, fine sand with a minimum bearing capacity of 3 tons per square foot. A 6" well-compacted base course consisting of well-graded gravel was required below slabs on grade. There are no basement areas.

Structural Bays/Spans: The structural bay sizes and framing configurations vary throughout the building. Joist spans over the cafeteria space are approximately 60 feet. Joist spans over the gymnasium space are approximately 53 feet. A north-south spanning truss supports the west end of the gymnasium joists and spans approximately 66 feet. The remainder of the joist spans in the central wing range from about 20 feet to 30 feet. Each classroom wing consists of main framing lines extending out from a central point along 8 spokes. Each spoke consists of a 24" deep wide flange beam spanning approximately 33 feet from the exterior masonry wall to an interior column and a 14" deep wide flange beam spanning approximately 20 feet from the first interior column to a central ring-shaped plate assembly supported by a column.

Story Heights: Story heights are as follows:

First Floor to Top of Roof Deck:	+/-11 ft	(Admin Offices/Library)
First Floor to Top of Roof Deck:	+/-16 ft	(Cafeteria/Kitchen/Mech Rm)
First Floor to Top of Roof Deck:	+/-21 ft	(Gymnasium)
First Floor to Roof Eave:	+/-11 ft	(Classroom Wings)
First Floor to Roof Peak:	+/-17 ft	(Classroom Wings)

Design Live Loads: The Structural Drawings do not indicate design loads; however, schools designed and constructed in the 1960s (prior to the 1st Edition of the Massachusetts State Building Code in 1975) were likely required to comply with the requirements of *Building Regulations for Schoolhouses*, issued by the Commonwealth of Massachusetts Department of Public Safety. Accordingly, design live loads were likely as follows:

Roof (No provisions for snow drift):	30 psf
Classrooms:	50 psf
Corridors:	100 psf
Gymnasiums:	100 psf

It does not appear that snow drift loading was accounted for in the original design.

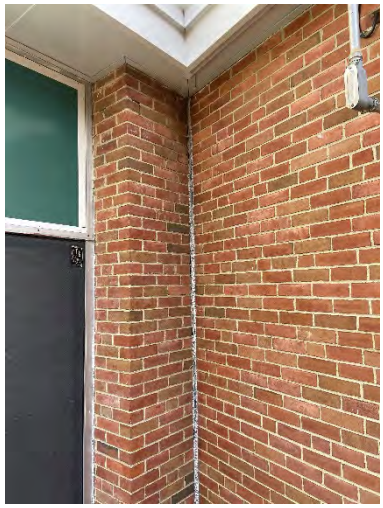
The building structure appears to have performed satisfactorily over time; there are no indications of structural overstress or failure. A comprehensive structural evaluation of the entire building is beyond the scope of this preliminary report.

Expansion Joints: There are expansion joints separating each of the classroom wings from the central wing. The joints do not appear to be properly detailed and do not extend through the finishes.

Roof Construction: Typical roof construction consists of 1½" deep x 20 gauge wide rib metal roof deck spanning 5 to 6 feet to open web steel joists of varying depths and spans. Steel joists are supported by steel beams or masonry bearing walls. Steel beams span to steel columns or masonry bearing walls. At the central wing, framing is flat at high, intermediate, and low roof areas. At each classroom wing, the roof slopes down from a central high point to the eaves at the perimeter. The main framing lines are configured like the spokes of a wheel with 8 main spokes composed of wide flange beams spanning from interior steel columns to the exterior masonry bearing wall. Steel beams and open web joists infill the space between the spokes.

First Floor Construction: Typical first floor construction is a 4" thick, soil-supported concrete slab on grade, reinforced with welded wire fabric. An 8" thick concrete slab on grade occurs under the boilers. The slab thickens to 12" below interior non-bearing CMU partitions and is reinforced with two continuous #6 bars.

Wall Construction: Typical exterior wall construction consists of 4" brick veneer with an 8" thick unreinforced masonry backup/bearing wall. Segments of curtainwall, which extend from foundation to roof framing, breakup the typical construction. The interior expansion joints between each of the classroom wings and the central wing extend through the exterior veneer. Additional control joints in the brick veneer were not apparent.



Interior wall construction consists of 8" or 12" unreinforced masonry bearing and non-bearing walls and flexible/moveable partitions.

Foundations: Foundations are conventional shallow concrete footings. Typical, reinforced concrete perimeter foundation walls are 12" thick, with a 24" wide by 12" deep continuous strip footing. Columns are supported on reinforced concrete piers and unreinforced concrete spread footings.

Fire Resistance: The building is classified as Type IIB construction; the unprotected steel roof framing has no fire resistance rating. There are no sprinklers in the building.

Lateral Load Resistance: As the building was designed and constructed prior to the introduction of the Massachusetts State Building Code (MBC), the structure does not meet current wind and seismic load requirements (strength and detailing). There is no clearly defined lateral force resisting system in either direction. The perimeter and interior masonry walls provide a level lateral force resistance (by default); however, the construction of these walls does not meet current code requirements. Lateral force resistance and unreinforced masonry wall issues would need to be addressed in conjunction with a future, major renovation of the building.

Structural Condition/Comments

Structural Conditions at the Fox Hill Elementary School were reviewed (where accessible and exposed) on February 22, 2023. Generally speaking, floor and roof construction appear to be performing satisfactorily; there is no evidence of structural distress that would indicate significantly overstressed, deteriorated, or failed structural members.

Foundations appear to be performing adequately; there are no apparent signs of significant, total or differential settlements.

Structural/structurally related conditions observed during the February 22, 2023 site visit and associated comments are noted below. All items would be addressed in conjunction with a future renovation of the building, unless noted otherwise.

1. Building Exterior:
    - Masonry veneer is generally in satisfactory condition, with limited cracking or deterioration of the face brick observed. Repointing of approximately 10% of exterior brick veneer is recommended.

- The brick masonry showed signs of efflorescence and deterioration in limited areas. Minor deterioration and cracking of bricks were observed at some building corners. Masonry repair and/or reconstruction is recommended.
- Caulking at expansion joints has cracked and deteriorated; re-caulking of joints is recommended.
- Deterioration and cracking at the top of foundation walls was observed at building corners. These conditions do not represent a structural concern (freeze-thaw action and thermal/ shrinkage movement related); however, they should be repaired in conjunction with a future renovation of the building.
- Exterior concrete elements (pavement, steps, curbing, etc.) have deteriorated in some locations (de-icing salts and freeze-thaw action). Repair/replacement of these elements should be undertaken, as these conditions may present a tripping hazard.

2. Roofing: Evidence of roof leaks (either past or present) was observed in some locations. The roof should be monitored for new leaks and investigated further if they should occur.

3. Snow Loads: The snow load capacity of the roof was not evaluated, and design loads were not listed in the original drawings. As the design of the building preceded the introduction of the Massachusetts State Building Code, it is unlikely that provisions were made in the structural design for snow drift loading. The current code requires a minimum, flat (or low slope) roof design snow load of 38.5 psf for a school building in Burlington. Drifting snow loads on lower roofs can be significantly higher. FBRA recommends that these conditions be evaluated in conjunction with a future renovation of the school (such an evaluation is beyond the scope of this report). In the interim, these conditions should be monitored during periods of heavy snow.
4. Lateral Force Resistance/Seismic Hazards: As previously noted in this report, there is no clearly defined lateral force resisting system (LFRS) in the building. Interior and exterior masonry walls provide a degree of lateral force resistance (by default). The building does not meet current seismic code requirements. Lateral force resistance issues and seismic hazards would need to be evaluated and addressed in conjunction with a future renovation of the school. Refer to additional comments in the next section of this report.
5. Ponding: There are no parapets so the potential for ponded water is minimal. Internal roof drains should be periodically inspected and maintained to ensure that they are clear and functioning properly.
6. Masonry Walls: Interior and perimeter CMU bearing walls are generally in satisfactory condition. The anchorage/bracing of all interior and exterior masonry walls as well as their height-to-thickness ratios will need to be evaluated (per code) if the building is renovated in the future.

Refer to the documents prepared by the Architect and the other disciplines for additional comments and recommendations relating to the building envelope and MEP/FP systems in the building.

Renovations and Additions – Code Requirements

General comments relating to potential renovations, alterations, and additions to the Fox Hill Elementary School are presented in this section. Renovations, alterations, repairs, and additions to existing buildings in Massachusetts are governed by the provisions of the Massachusetts State Building Code (MSBC; 780 CMR - 9th Edition) and the Existing Building Code of Massachusetts (EBCM; 780 CMR - 9th Edition, Chapter 34.00). These documents are based on amended versions of the 2015 *International Building Code (IBC)* and the 2015 *International Existing Building Code (IEBC),* respectively.

Code Compliance Methods

Section 104.2.2.1 of the EBCM requires that the existing building be investigated and evaluated in sufficient detail as to ascertain the effects of the proposed work on the structural systems (both gravity load carrying elements and lateral force (wind and seismic) resisting elements).

The EBCM defines three (3) compliance methods for the repair, alteration, change of occupancy, addition, or relocation of an existing building. The method of compliance is chosen by the Design Team (based on the project scope and cost considerations) and cannot be combined with other methods.

The *Prescriptive Compliance Method* (IEBC Chapter 4) prescribes specific minimum requirements for construction related to additions, alterations, repairs, fire escapes, glass replacement, change of occupancy, historic buildings, moved buildings and accessibility. If the impact of the proposed alterations and additions to structural elements carrying gravity loads and lateral loads is minimal (less than 5% and 10% respectively), structural/seismic reinforcing of an existing building are not required. Provided that not more than 50% of the spaces in the building are reconfigured, seismic hazards such as bracing the tops of interior masonry walls and partitions, anchorage of floor and roof diaphragms to the exterior walls, bracing of parapets and chimneys, etc. would not be required by code, but could be addressed on a voluntary basis. If the area of reconfigured spaces exceeds 50% of the gross floor area, these seismic hazards must be addressed by code. ***Note that, in determining the area of reconfigured spaces, the new floor layout would need to be compared to the original (not the current) floor layout (typical for all compliance methods).***

The *Work Area Compliance Method* (IEBC Chapters 5 through 13) is based on a proportional approach to compliance, where upgrades to an existing building are triggered by the type and extent of work. The Work Area Compliance Method includes requirements for three levels of alterations, in addition to requirements for repairs, changes in occupancy, additions, historic buildings or moved buildings. A complete seismic evaluation of the existing building is required under the following conditions: Level 2 alterations where the demand (mass/seismic force) to capacity (lateral force resistance) ratio of lateral load resisting elements has been increased by more than 10%, all Level 3 alterations, a change in occupancy to a higher category (not applicable to this project) and where structurally attached additions (vertical or horizontal) are planned (any major addition(s) to the building will be structurally separated, so this is not applicable). Provided that not more than 50% of the spaces in the building are reconfigured (since the original construction), renovations would be classified as ***Level 2***. Assuming that modifications to the existing masonry walls providing lateral force resistance and concrete frames will not be significant (i.e., less than 10%), seismic upgrades or seismic strengthening of the building would not be required by code. However, addressing certain seismic hazards by bracing the tops of interior masonry walls and partitions, anchoring floor and roof diaphragms to the exterior masonry walls, bracing of chimneys, etc. could be done on a voluntary basis. In a *Level 3* alteration (more than 50% of the building reconfigured), these seismic hazards must be addressed by code.

The less frequently chosen *Performance Compliance Method* (IEBC Chapter 14) provides for evaluating a building based on fire safety, means of egress and general safety (19 parameters total). This method allows for the evaluation of the existing building to demonstrate that proposed alterations, while not meeting new construction requirements, will maintain existing conditions to at their current levels (at a minimum) or improve conditions, as required. A structural investigation and analysis of the existing building is required to determine the adequacy of the structural systems for the proposed alteration, addition or change of occupancy. A report of the investigation and evaluation, along with proposed compliance alternatives must be submitted to the code official for approval.

Under all compliance methods, an evaluation of the roof diaphragm strength and anchorage of the diaphragm to the perimeter structure is required if the building is re-roofed, the building is in Risk Category IV, and the ultimate design wind speed at the site exceeds 150 mph. As the Fox Hill Elementary School is a Risk Category III building and the ultimate design wind speed is 136 mph, these requirements would not apply.

Additions – General Comments – EBCM

The design and construction of a new addition to the Fox Hill Elementary School would be conducted in accordance with the Code for new construction. Any planned, major additions should be structurally separated from the existing, adjacent construction by an expansion/seismic joint to avoid an increase in gravity loads or lateral loads to existing structural elements.

Renovations/Alterations – General Comments – EBCM

Where proposed alterations to existing structural elements carrying gravity loads result in a stress increase of over 5%, the affected element will need to be reinforced or replaced (if necessary) to comply with the Code for new construction.

Alterations to existing structural elements that are resisting lateral loads (i.e., full height, masonry walls/partitions), which result in an increase in the lateral force demand (seismic load) to capacity (seismic resistance) ratio of over 10% should be avoided, if possible. Essentially, this means that removal of masonry walls resisting lateral forces (or creating large openings in these walls) should be avoided; otherwise, seismic strengthening of the building as well as additional seismic upgrades may be triggered.

Repair/reinforcing of conditions that do not meet current code requirements must be evaluated to determine if any danger to the occupants exists. As the roof design snow load is unknown, and it does not appear that snow drift has been considered, a structural evaluation of the roof construction would be warranted.

ARCHITECTURAL SYSTEMS

Exterior Walls

The typical exterior wall assembly used throughout the original 1967 building is 4" brick veneer (no cavity) on 8" or 12" thick unreinforced concrete masonry block wall. The original facebrick has been maintained and repointed troughut the years. The exterior wall assemblies do not meet current energy code requirements for new construction.

While the condition of the exterior walls, appears generally in good condition from visual inspection, there are some signs of cracking at the exposed foundations.

Exterior walls of the modular classrooms have vinyl siding that is in fair condition.

Roofing

The low slope roofs on the original building were replaced in 2015 with EPDM single ply adhered membrane. The aluminum flashings, facias, and caps were also replaced at this time. The roof of the modular classrooms was replaced when moved to this location in 2010.

Windows

The windows in the original building were replaced in 1997 with aluminum casement and fixed window units. Kallwall (fiberglass translucent units) were also installed at this time in place of the original clerestory windows at the gymnasium and various other exterior transom locations. The windows in the modular classrooms are double pane vinyl replacement windows (sliders). All of the window systems within the entire school are beyond their useful life and are in poor condition.

Exterior Doors

Most of the exterior doors are hollow metal leaves, set in original steel frames. These doors are in poor fair to poor condition. The main entrance doors are aluminum full lite leafs in aluminum storefront frames. Likewise, the entry doors to the modular classrooms are also aluminum full lite frames in aluminum storefront frames. The aluminum doors are in fair condition. It must be noted that some of the doors, particularly in the modular wing, had little weather stripping and no door bottoms. Daylight was visible between the leafs and under the leafs.

Interior Walls

In the original building the interior partitions are typically painted concrete masonry units throughout. Interior walls are generally in good condition, with isolated areas of cracking and moisture damage. Between most of the classrooms are movable walls of vinyl material. Also many of the classrooms have a sliding wood partition separating the classroom from the corridor. These sliding partitions no longer function.

In the modular addition, the partitions are wood framed gypsum wall board with a variety of finishes-vinyl, paint, FRP. Their condition is fair.

Interior Doors

The original flush wood doors in hollow metal frames have remained in-place throughout the building. Some interior doors are equipped with vision panels. Knob hardware has been replaced with lever-type hardware at some doors, but many maintain the original knobs. In the kitchen and back of house spaces, some of the doors are hollow metal and in poor condition.

Flooring

Finish flooring throughout the building varies and appears original in many instances. The front entry and adjacent corridor are the original terrazzo. The classrooms have original vinyl composition tile (VCT. The corridors and cafeteria appear to have had the VCT replaced and are in good condition. The Stage and Gymnasium floor surfaces are hardwood flooring with game lines at the Gym. The kitchen is the original quarry tile. Toilet rooms are typically VCT. Mechanical and service spaces are exposed concrete, though some have been painted.

Ceilings

Ceilings throughout are 2'x4' acoustical ceiling tile. The grid appears to be mostly original. Many of the tiles have likely been replaced over the years. The modular Classrooms have a suspended 2'x4' acoustical ceiling tile and grid system and are in good condition. Ceiling heights are typically 9'-0" in the original building classroom and corridors, and higher in the cafetorium, kitchen and gymnasium.

The Gymnasium has exposed structure and decking. Likewise, the janitor's closets, mechanical spaces, and back of house spaces also have exposed structure and decking.

Lockers & Cubbies

Wooden cubbies line the corridor walls of the classroom pods. Considering their age, they are in fair condition.

FOODSERVICE

General Overview

Crabtree McGrath Associates, a consulting group specializing in foodservice facilities planning and design. Crabtree has been retained by Dinisco Design to visit the Fox Hill and Pine Glen Schools to inspect and report on the existing conditions of the kitchens.

The kitchens at both schools are in similar in condition. Both are in need of upgrades related to Plumbing and Health Code.

The following observations will reference codes and standards. For the purposes of this report when we reference the health code, we will be citing the Federal Food Code 2022 addition published by the FDA as well as the Merged Massachusetts Food Code.

Additionally, the National Sanitation Foundation (NSF) is an independent governing body and testing agency that develops standards for equipment design that is to be used in commercial foodservice applications. All equipment in a commercial kitchen must comply with NSF standards in order to be compliant for use with food preparation.

Fox Hill School

The Fox Hill School Kitchen is clean and well managed but the kitchen finishes and equipment are in poor condition. The original kitchen in mostly intact with only minor equipment replacements done throughout the years. Major infrastructure items such as the exhaust hood and sinks have not change since the original installation.

Image 1

What was once a dish room for reusable trays has been taken and repurposed for educational programs. This has removed the ability to wash trays and cooking utensils mechanically. What typically happens is as the equipment fails the replacement costs are high and the mechanical dishwashing becomes abandoned. As a result, the room was taken to make good use of it.

Many of the large pieces of equipment have failed and have been abandoned in place. For example, the original walk-in refrigerator and freezer have failed. The rooms are now being used for storage purposes but finishes and lighting levels within this space are not adequate for any purpose. Replacement walk-in rooms have been added to the dry storage room however this takes away from dry goods storge and the condensers within the dry storage room make the room very warm. The replacement walk-in storage is undersized resulting in overfilled storage space which is difficult to manage (image 1).

Image 2

The kitchen walls are a durable painted block and have held up well. The floor is had had some repairs but has held up well. The floors in adjoining spaces such as dry storage rooms are NSF or Health Code complaint. The floor in these spaces lack an integral cove and the floor finish is wearing and peeling away. The ceiling in the kitchen area is a lay in tile that is in fair condition (image 2). Lighting levels in this space is poor. The hood is original mesh style filter hood that was retrofitted and had baffle filters installed. This retrofit does not allow grease to collect into a grease collection cup to be disposed. This

caused any grease to accumulate over time. In some cases, the filter is missing all together. The lighting levels below the hood do not meet current Health Code standards. The hood is also not sealed to the surface above which is required by current code standards. These surfaces are impossible to clean and avoiding this condition is critical to a dust free food preparation environment (image 3).

Image 3

The serving line is in poor condition. It is original and lacks proper draining at the hot food wells. The cold food is not able to be held in a refrigerated setting resulting in temperature maintenance of cold food not being possible. In both cases the food is not adequately protected by the existing sneeze shields. The sneeze shield in the serving counter is not compliant with current sneeze guard standards.

Food preparation sink is a hazard in its current state. The health code requires that any sink used in the preparation of food be air gapped. The air gap prevents sewer gas and backup form contaminating the sink bowls. In this case the prep sink is directly connected to the sanitary drain system.

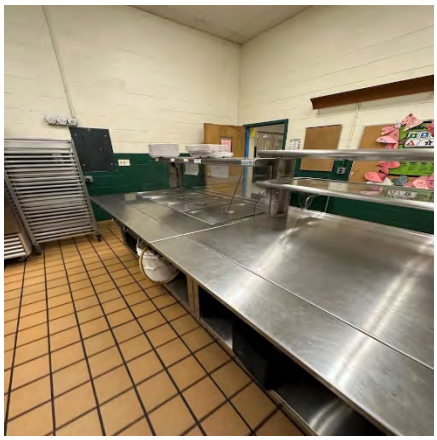


Image 4

Overall, this kitchen is in need of repair. An overhaul of the finished and infrastructure is long overdue. I refit of equipment is needed so that minimum health and safety concerns can be addressed. The staff do a wonderful job managing the protocols of the modern food code with an antiquated kitchen but it is with great difficulty and tremendous effort that they are able to make this kitchen function as it is.

Overall, the space is large enough to accommodate a reorganized kitchen. However, the extent of the renovation to infrastructure and equipment will require a complete overhaul of the space.

CODE

The existing Fox Hill Elementary School building was built as an educational facility in 1967. The building includes classrooms, a gymnasium, cafetorium, library, and administrative offices.

The following is a chart of codes applicable to the development of the project:

Code Type	Applicable Code (Model Code Basis)
Building	780 CMR: Massachusetts State Building Code, 9th Edition • Amended 2015 International Building Code (IBC) • Amended 2015 International Existing Building Code (IEBC)
Fire Prevention	527 CMR: Massachusetts Fire Prevention Regulations M.G.L. Chapter 148 Section 26G – Sprinkler Protection
Accessibility	521 CMR: Massachusetts Architectural Access Board Regulations 2010 ADA Standards
Electrical	527 CMR 12.00: Massachusetts Electrical Code • Amended 2023 National Electrical Code
Elevators	524 CMR: Massachusetts Elevator Code • Amended ASME A17.1-2013/CSA B44-13
Mechanical	2021 International Mechanical Code (IMC)
Plumbing	248 CMR: Massachusetts Plumbing Code
Energy Conservation	2021 International Energy Conservation Code (IECC) Updated Stretch Energy Code 225 CMR 23.00

Occupancy Classification

The existing building is considered Use Group E. Assembly spaces (i.e. cafetorium, gymnasium) that are associated with a Use Group E occupancy are also considered Use Group E (IBC 303.1.3). If these spaces are used for non-school events however they must be classified as a Use Group A occupancy.

Construction Type

From visual analysis and limited above-ceiling inspection, the original building appears to be Type IIB construction (non-combustible, unprotected). The modular addition appears to be unprotected wood construction Type VB.

Interior Finishes

The existing finishes generally consist of painted drywall or masonry that complies with the code requirements for new construction (IEBC 803.4). All wall finishes, ceiling finishes, and trim materials installed as part of a future project must comply with IBC Table 803.11.

Means of Egress

The means of egress including the number of exits and egress capacity must be sufficient for the number of occupants on all floors (780 CMR 102.6.4). The first floor has multiple exterior exit doors and provides capacity well in excess of the building's occupant load and therefore complies with this requirement.

All of the larger assembly spaces with greater than 50 occupants are provided with at least two egress doors as required. All of the existing primary egress doors swing in the direction of egress as required. The existing primary egress doors with latches appear to include panic hardware as required.

The building does contain a dead-end corridor that is greater than 20 feet.

Energy Code

New work is subject to the International Energy Conservation Code (IECC) or ANSI/ASHRAE/IESNA 90.1 with Massachusetts Amendments (Massachusetts Energy Code). Alterations to existing buildings are permitted without requiring the entire building to comply with the energy requirements of the International Energy Conservation Code (IECC). The alterations (new elements and additions) must conform to the energy requirements of the IECC as they relate to new construction only (IEBC 811.1).

The Massachusetts Stretch Code has been adopted by the town of Burlington.

Ventilation Requirements

All reconfigured spaces must provide mechanical or natural ventilation in accordance with the International Mechanical Code, except that existing ventilation systems are permitted to remain provided they achieve not less than 5cfm of outdoor air per person and not less than 15 cfm of ventilation air per person (IEBC Section 809).

Flood Hazard Requirements within Flood Hazard Areas

The project site in not within a FEMA Flood Hazard zone.

Architectual Access Board Regulations (MAAB)

The existing building does not fully comply with MAAB regulations.

The building includes several toilet rooms with multiple fixtures that are not accessible. The modular addition has two multi-fixture toilet rooms with one accessible stall each and accessible sinks and entries.

Signage does not meet current MAAB regulations and does not include raised characters or Braille.

While most doors along the main corridors of the original building have lever hardware, knob hardware remain in several locations. Also, door openings into many of the classrooms of the original building do not have the required clearance on the latch side of the door. All doors in modulars are equipped with lever hardware.

Classroom egress doors exit onto a ramp that is greater than 5% and does not have handrails. The ramp also does not connect to the sidewalk.

Future alterations to the building must comply with the requirements of the Massachusetts Architectural Access Board Regulations (521 CMR). For existing building alterations, the requirements of 521 CMR are based on the cost of the proposed work.

If the cost of the proposed work is greater than 30% of the full and fair cash value of the existing building, the entire building is required to comply with 521 CMR (521 CMR Section 3.3.2). All portions of the building open to the general public (students, visitors, etc) must be upgraded to comply in full with the current requirements of 521 CMR.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Environmental and Construction Management Services, Inc. prepared a Phase I Environmental Site Assessment for the Fox Hill Elementary School on **XXXXXX**. Please refer to the electronic copy of this report for the Phase I Environmental Site Assessment.

HAZARDOUS MATERIALS ASSESSMENT SURVEY

Universal Environmental Consultants prepared an Existing Conditions Evaluation and Hazardous Materials Identifcation Study Report for the Fox Hill Elementary School on January 30th, 2023. Please refer to the electronic copy of this report for the Hazardous Materials Identifcation Study.

MECHANICAL, FIRE PROTECTION & PLUMBING SYSTEMS

EXECUTIVE SUMMARY:

1. The HVAC System:
   a. All components, with exception of boilers and pumps, are the original 1967 vintage (56 years old) which are well past its useful life.
   b. Mostly hot water heating and ventilation system.
   c. Air conditioning is limited to a few split DX, window AC, and a through-wall AC units in offices.
   d. Classrooms are served by heating and ventilating unit ventilators with wall intake louvers and designed to have individual exhaust module with adjacent louver. For some reason, the exhaust modules and its louvers have been blocked off, thereby severely compromising the ventilation effectiveness. Unit ventilators are considered inappropriate for teaching environment due to its high noise level.
   e. Cafetorium is served by two H&V units, and Kitchen makeup air is through a transfer duct.
   f. Gym is served by two 100% OA unit ventilators and two roof exhaust fans.
   g. Due to high level of maintenance, components are still operable, but despite these heroic efforts, the system is far past its useful life.
   h. Some parts of pipe insulated appears to have encapsulated ACM (Asbestos Contaminated Material), and the encapsulation in some areas have been compromised.
   i. Original oil-fired hot water boilers were replaced with gas fired boilers in 1999 and underground fuel oil tank was removed.
   j. Entire mechanical system needs to replaced.

2. Plumbing System:
   a. System is original 1967 vintage and is 56 years old.
   b. Original oil-fired boilers were replaced with gas fired boilers and the underground fuel oil tank was removed. We assumed new gas service was installed with the new boilers.
   c. Potable water is connected to the municipal system.
   d. Sanitary drain system was originally to a septic system, but it is believed to be connected to the municipal system.
   e. Separated 8” storm and 6” sanitary lines leave the building.
   f. Fixtures have been repaired/ replaced as needed.
   g. Domestic hot water heater has been replaced.

3. Fire Protection System:
   a. This building does not have sprinkler system.
   b. Kitchen hood does not have Ansul system.
   c. Sprinkler and Ansul system must be added.

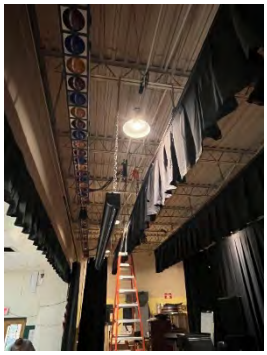
MECHANICAL:

1. Photo Essay:

L-Typical classroom
R-Typical Classroom unit ventilator (UV) provides heating and ventilation intake

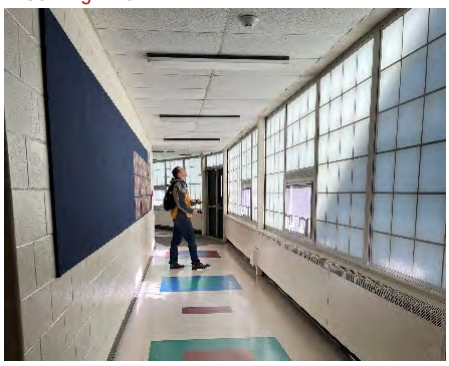
L-Left sdie louver is intake for UV, and right side was designed to serve exhaust module
R-Close up of louver shows it is being cleaned regularly

L-Inside view showing that exhaust module was blocked off
R-Original vintage day time and night setback pneumatic thermostats



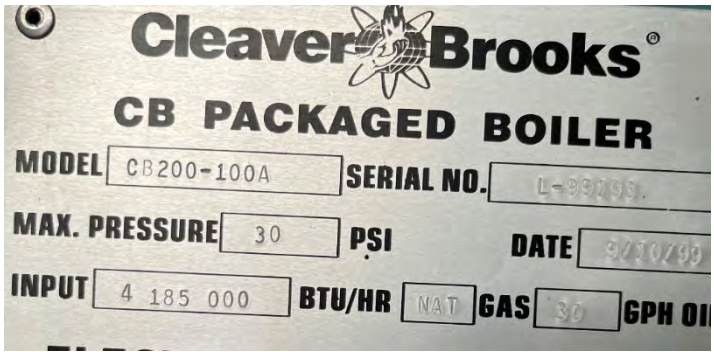
Cafetorium is served by two ducted H&V units with return air and partial outside air arrangement. Air from this space is transferred via a transfer duct to kitchen to serve as makeup air.

L-Kitchen cooking line; its makeup air is through transfer duct from the Cafetorium
C-Uninsulated kitchen duct does not have code required clearance to combustibles (ceiling tile)
R-Serving Line



L-Corridors have hot water fintube for heating and have operable windows for ventilation
C-One of the bathroom convectors showing damaged panel
R-Typical pneumatic thermostats

L-Packaged through wall AC (PTAC) units
R-Health Office heated by hot water fintube, ventilated by operable window, and with a window AC unit



Two boilers are Cleaver Brooks model CB200-100A, 1999, indicated to be gas/oil dual fuel, but piped up for 1, 185 MBH input natural gas

Original vintage expansion tanks, which are very difficult to maintain to keep them effective

L-Mostly original vintage pumps, some with new motors; original vintage gate valves which would have doubtful effectiveness
C&R-Possibly ACM insulation with its encapsulation compromised.

L&C-Roof view with roof exhaust fans and an air cooled condenser.
R-Masonry boiler chimney

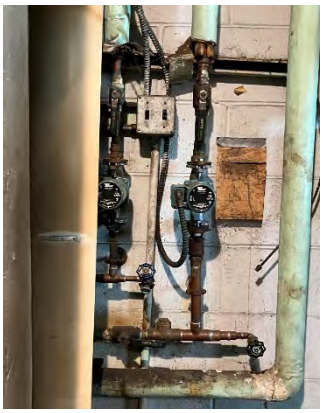
2. Remaining Useful Life:

	Components	BOMA Useful Years	Actual Years In	BOMA Remain. Life (Yrs.)	Comments
a.	Air handling units	25	56	-31	
b.	Boilers, water, Fire tube	30	24	+6	Nameplate
c.	Cabinet heaters	20	56	-36	
d.	Convectors, fintube	15	56	-41	
e.	Ductwork	30	56	-26	
f.	Fans	20	56	-36	
g.	Pumps	25	56	-31	
h.	Controls	20	56	-31	
i.	Piping	30	56	-31	
j.	Boiler metal flues	20	56	-31	

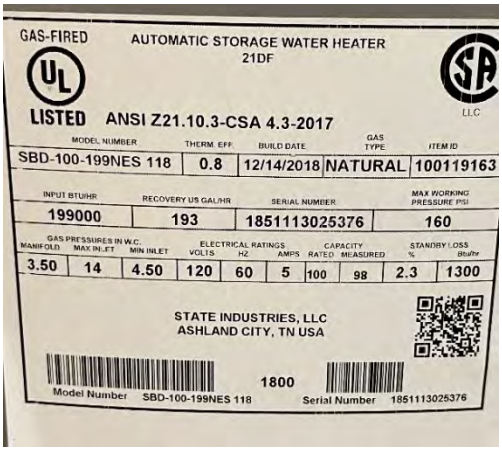
PLUMBING:

1. Photo Essay:

L-Typical roof drain
R-Some roof sections have downspouts



L-Janitor's sink
C-Gas service
R-Hot water recirculating pumps

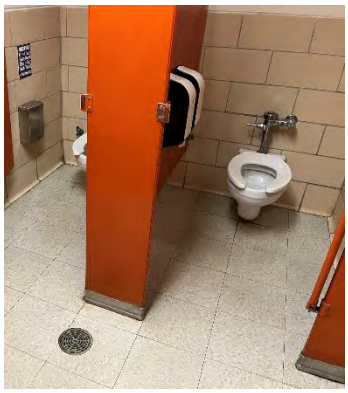
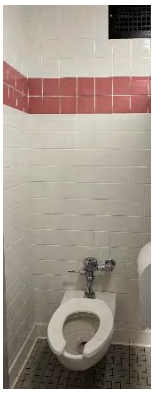


State gas fired atmospheric combustion domestic hot water heater model SBD-100-199NES 118; installed in 2018 (5 years ago), 199 MBH input, 193 GPH recovery

L-Typical water cooler / bottle filler
CL-Kitchen's cooking line
CR&R-Appliances are gas fired, but do not have code mandated solenoid shut off valve

L-Utility sink is piped to sanitary waste
R-Pot sink has an underslab grease interceptor

L-Hand Sink
C&R-Serving line with food warmer

Bathrooms are in fair shape with all functioning fixtures. WCs are wall-hung flush valves, and urinals are wall-hung flush valves.

2. Remaining Useful Life:

	Components	BOMA Useful Years	Actual Years In	BOMA Remain. Life (Yrs.)	Comments
a.	Water heaters, indirect	15	5	+10	Nameplate.
b.	Fixtures	30	56	-26	Faucets were replaced as needed.
c.	Potable water piping	30	56	-26	
d.	Waste water piping	30	56	-26	
e.	Storm water piping	30	56	-26	
f.	Gas piping, LP, threaded	30	24	+ 6	Estimated with boiler.

FIRE PROTECTION:

1. Overall Description:
   a. This building has no sprinkler system for the general area.
   b. Kitchen hood does not have Ansul system.
   c. Both of the above code requirements must be met.

ELECTRICAL

Existing Conditions Evaluations:

The building was constructed in 1967 and the electric service equipment, portions of the electrical panels, and generator are the original equipment. The building electrical equipment, some of the electrical panels and generator are over 55 years old and are well past their life expectancies. The electrical systems have been maintained by the owner over the years, however but most of the equipment does not properly support current educational needs including all-electric heating systems.

Electrical Service

The incoming underground primary underground electric service emanates from a pole on Fox Hill Road. There are two utility poles on school property, one serves the utility transformer, and the second services fire alarm and communication utilities. The electric utility serves a pad mounted transformer located on school property located adjacent to the switchboard which is located in the main electric room. Utility meter is located adjacent to the main switchboard. Pad mounted transformer and primary electric service cables were installed and maintained by Eversource.

Pad Mounted Transformer

Eversource Meter

Electrical Distribution

The electric service equipment is rated at 1200-amperes, 120/208-volts, 3-phase and consists of a main circuit breaker section, CT cabinet, and distribution section. All three items are separate equipment and original to the building. The equipment was manufactured by General Electric. The equipment is located in the first floor main electric room.

The existing electric service equipment shares the electric room with the emergency generator, communication equipment, fire alarm equipment, and public address (PA) equipment rack, and does not meet current electrical code requirements for equipment space, working space, egress, separation between normal and emergency equipment, and separation from non-trained staff.

Despite being maintained by the owner; the electric service equipment would be rated in poor condition, due to age.

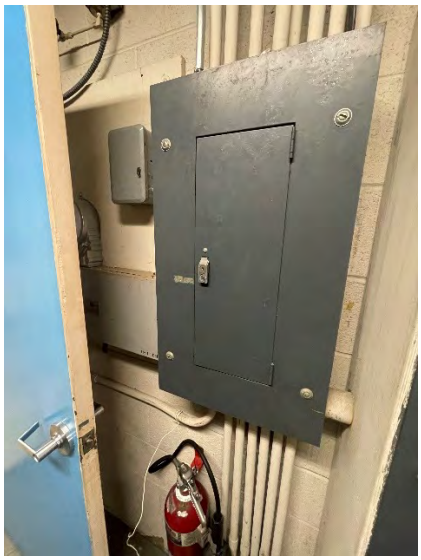
Main Breaker at CT Cabinet

MDP Panel

During our walk-through of the building, it appeared to us that the original General Electric panelboards and associated feeders have not been upgraded or replaced. We did notice that newer panelboards were installed to serve selected new loads.

Original receptacle and lighting panels are located in small electric rooms in each building wing. Panels are recessed mounted into the CMU or gyp walls. HVAC panels are located in storage rooms through the building. These panels are surface mounted. There does not appear to be any spare capacity or breakers in the original panels 208V panels for additional receptacles.

In 2002, new electrical panels were installed to the installation of receptacles and a data network upgrade. A 400A-3P distribution panel was installed on the stage which is across the hall from the main electric room. One 100A-3P panel was installed in each of the four wings, total of four panels. The new panels were manufactured by Eaton.



HVAC Panel

Panels

Kitchen Panel

Old Stage Panel and New Panel

2002 Classroom Wing Panel

Old HVAC Panels

2002 Classroom Wing Panel

Mod Classroom Panel

The modular classroom building is served by a separate electric service from the utility pole.

Emergency Light and Power System

The building is served by a 45 KW, 120/208V, 3-phase natural gas driven emergency generator manufactured by Superior. The generator, automatic transfer switch (ATS), distribution panel are located in the main electric room and all equipment is original. There are two emergency panels, one for lighting and one for power. A new ATS was installed in the past few years, and the original ATS is sitting on the floor adjacent to the new one.

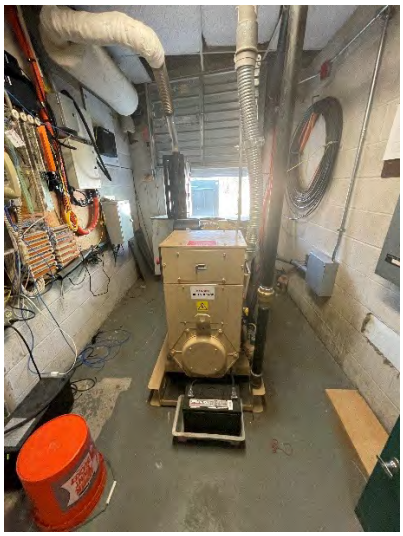
The generator and associated equipment being located in the same room as the normal electric service panels is a present day electrical code violation. MA Electrical Code Article 700 requires the normal and emergency electrical equipment to be separated from normal power equipment. Also, in a building with no sprinkler system, the separation between normal and emergency power needs to be two hour rated. In addition, the generator location does not allow for code required work space for the generator and wall mounted electrical panels.

TEC did not observe the emergency lighting levels. Based on past experience, it is doubtful that all areas are properly covered by emergency lighting as required by code.

The generator is not sized to support the systems that are typically connected to emergency power in a present day school – communications, security system, kitchen refrigeration, HVAC systems.

The modular classroom emergency lighting is provided by battery lights.

The emergency electric service including generator, and automatic transfer switch are in poor condition. The generator and associated panels are almost 50 years old and well past its life expectancy, do not meet current life safety codes, and need to be replaced.


Generator

Generator

New ATS, Old ATS (Green Box)

Lighting Systems

There are multiple types of lensed lighting fixtures in the building:

- Classrooms, kitchen, cafeteria: Linear 1’x4’ surface mounted fixtures with wrap around lens
- Modular classrooms: 2’x4’ lens troffers.
- Gym: 18”x48” pendants with wireguards in the gym
- Offices: 1’x4’ lensed surface fixtures and 2’x4’ parabolic
- Corridors: 1’x4’ surface linear fixtures.

During utility retrofit programs, fluorescents lamps have been replaced with LED tube lamps or the fixture has been replaced with a LED fixture.

Overall quality of the lighting is fair to poor condition but the lighting creates glare. Glare was observed on whiteboards and computer screens.

All lighting appears to be controlled by local switches including corridors. Corridors are controlled by local switches. There are occupancy sensors in most rooms in the building. Sensors were installed during a utility retrofit program. TEC did not test the occupancy sensors.

Site lighting: There is a lack of site lighting on the campus. There are pole mounted cobra head fixtures on the roadway to the campus. The parking lot is illuminated by two pole mounted flood lights. The bus drop area is illuminated by two additional flood lights on the same two poles. There are downlights under the entrance canopy. There is no lighting around the play area.

There are wall mounted fixtures along the exterior of the building, however in some areas the wall mounted lighting is at least 20'-0" from exterior doors. TEC did not test the wall mounted lighting, and therefore we cannot confirm if the lighting is connected to emergency power.

Based on the layout observed, it is assumed that the site lighting does not completely cover the parking lot and walkways. Site lighting is control by timeclock via a relay/contactor.

Typical Classroom

Cafeteria

Kitchen

Library

Mod Classroom

Gym

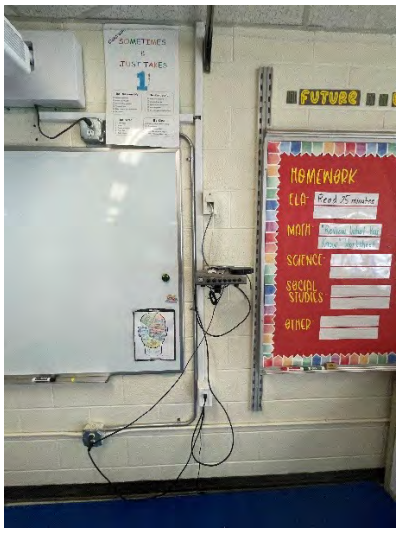
Corridor

Receptacle Systems

The original design provided two receptacles in each classroom.

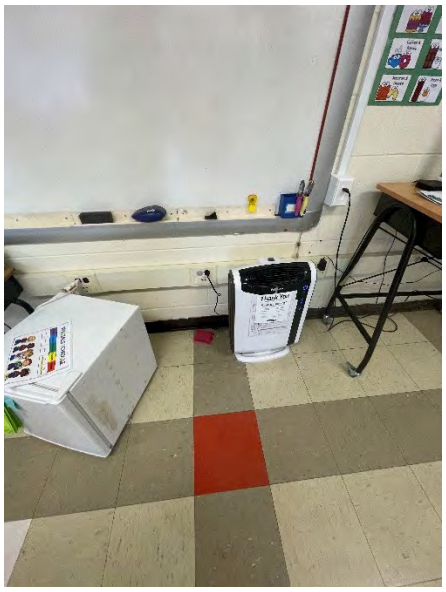
In 2002, surface mounted raceways with receptacles and data were added throughout the building including classrooms and other spaces to meet increased power needs for technology, wall mounted smartboards and projectors, however the overall quantity of receptacles is insufficient for current classroom and office requirements.

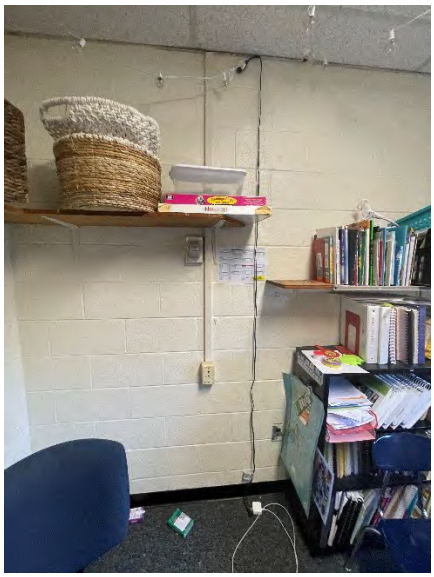
New and Old Receptacles



Raceways

Vertical Raceway





Raceway

Fire Alarm System

The building is not sprinkled. The fire alarm system was replaced in the last five to ten years and consists of a control panel, annunciator, manual pull stations, smoke detectors, heat detectors, and horn/strobe notification devices. The control panel (FACP) is a Firelite ES-200X and the panel is located adjacent to the original FACP in the main electric room.

The fire alarm system serves the original building and modular classrooms.

An annunciator is located in the main entrance. The original master box has been removed, and replaced with a radio mater box and antenna.

The original FACP is being used as a junction box, and the existing wiring is being re-used. The system uses horn evacuation alarms, by code, school buildings are required to have a voice evacuation system.

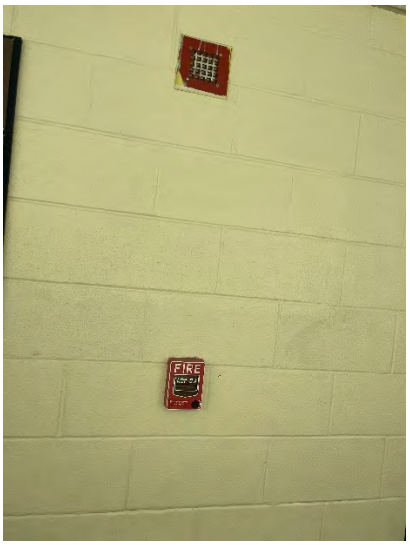
The building appears to have 100% smoke detector coverage. Pull stations at every egress door. Ceiling mounted horn/strobe units in all spaces including classrooms, office suites, and corridors.

TEC did not witness the fire alarm system operation, but it is assumed that the system is functioning properly. The last test was performed 1/19/2023.

Per NFPA 72 Fire Alarm System Code, AV notification devices shall be installed at a minimum mounting height of 6’-8” AFF to a maximum of 8’-0” AFF, and at least 6” from the ceiling, whichever is lower. There are many locations where the devices are closer than 6” from the ceiling, or above 8’-0” AFF.

The current system does not have a voice evacuation system, and it used 55 year old wiring in some places, therefore the system should be replaced if the building is renovated.

Control Panel



Pull Station with old horn above

Annunciator at Main Entrance

Horn/strobe unit within 6" of ceiling

Horn/strobe and old heat detector

Exit Signs

There appears to be exit signs in all paths of egress. There are several different generations of exit signs in the building. Not all exit signs are internally illuminated. Overall exit signs conditions are fair.

Exit Sign

Non-illuminated

Structured Cabling System

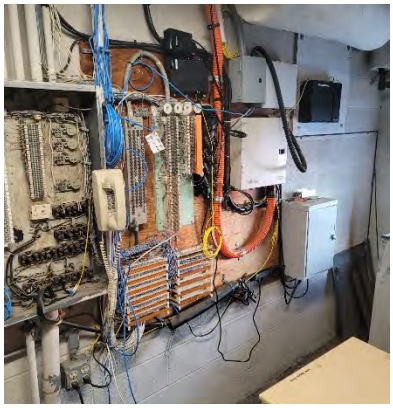


Figure 1

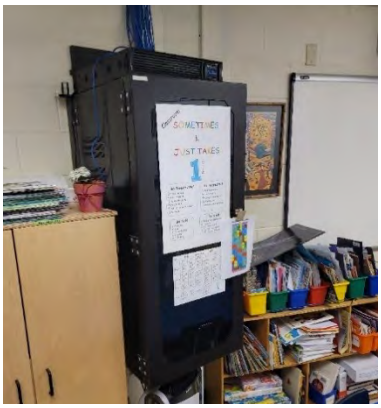


Figure 2

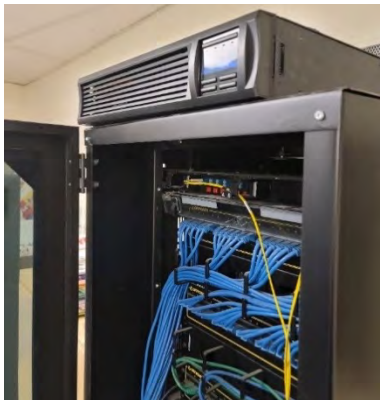


Figure 3

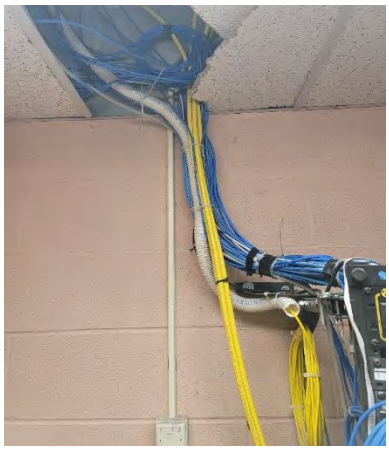


Figure 4

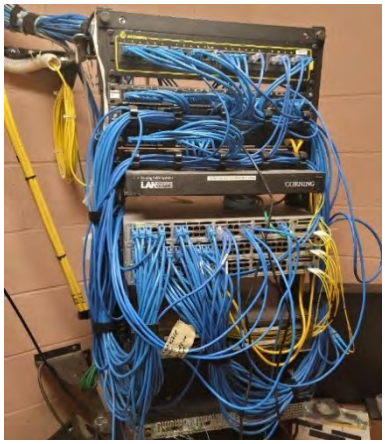


Figure 5

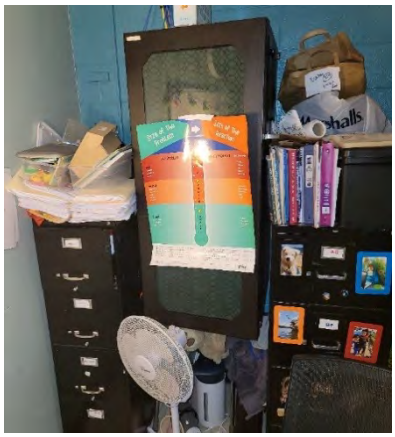


Figure 6

The School has Category 6 UTP cabling installed throughout the building and cabling is installed mostly above suspended ceilings to individual data outlets. All the voice and data cabling appears to be in good working order, even though it does not meet the most current standard for structured cabling. Building communication services come into a demarcation room (Figure 1) and are distributed to a MDF cabinet mounted in another room (Figures 2 and 3). Fiber optic communications cabling that ties the school to the wide area network is terminated in demarcation room. This includes dual 10Gb connections over dual 12 strand fiber to the Town Hall, which is the hub of the network. The MDF is connected via multimode fiber optic cabling running between the MDF cabinet and two other wiring racks or cabinets used as intermediate distribution frame closets (Figures 5 and 6). The Structured voice and data cabling is organized and terminated onto data patch panels, with patch cords running between network switches patch panel ports and network switches (Figures 5). However, in one of these areas, the cabling appears to not be well supported either above the ceiling or in the transition from the ceiling to the wiring rack mounted to the wall (Figure 4)

Structure voice and data network cabling appears to be installed to all rooms and spaces throughout the school providing connectivity for telephones, network peripherals, and wireless access devices.

The MDF cabinet and IDF rooms are in areas that share other purposes such as storage rooms, office space, and/or utility spaces. This is not a criticism, as the building was never designed to support the level of technology and cabling that is required, and finding space for wiring centers is a major challenge in older buildings. However, because these wiring centers are in shared spaces, they are not totally secure, and do not have dedicated power and environmental conditioning. Any major facilities project should include providing dedicated and secure spaces for wiring closets, which can also be properly equipped with power and environmental conditioning.

Distributed Communications System

Figure 7

Figure 8

Figure 9

Figure 10

Figure 11

Figure 12

The public address main system cabinet is located in the demarcation area. It is an analog Bogen Multicom 2000 System (Figure 7). There are wall mounted clocks (Figure 11) and flush mounted ceiling and wall speakers (Figure 8 and 11). There are older style horn speakers in the cafeteria (Figure 9). The secondary clock system appears to not be fully functional as battery operated secondary clocks appear throughout the school, and at all the locations where the original secondary clocks were located in the clock speaker panels (Figure 11). There are what appear to be older style public address handsets throughout the school (Figure 12.). There are what appear to be speakers in the Gym (Figure 10), which appear to be tied to the public address system and not a separate sound system in the Gym. The Public Address system operation was not observed; however, it was mentioned by office personnel that it is functioning.

Local Sound Systems

Figure 13

Figure 14

Figure 15

A Cafeteria sound system was observed to include program loudspeakers on either side of the proscenium (Figure 13), an electric screen on the stage, a high lumen projector mounted in the ceiling (Figure 14), and a state-of-the art sound system located in an equipment cabinet on the stage (Figure 15). cabinet including was assumed to be installed because of the program loudspeakers installed on either. The System was not turned on or tested and a comment was made that the system was recently installed within the last 5 years and that it did function. Some of the audio-visual system equipment could be resusable as part of any facility renovation projects.

Network and Wireless

Figure 16

Figure 17

Older Cisco Catalyst network switches were located in the MDF and IDF racks and cabinets, where structured network voice and data cabling originates and is terminated (Figure 16). Network switches support all hard-wired voice and data cabling and wireless access points throughout the school.

Cisco Wireless Access devices mounted to the underside of the suspended ceiling were observed throughout the school (Figure 17).

Security Systems

Figure 18

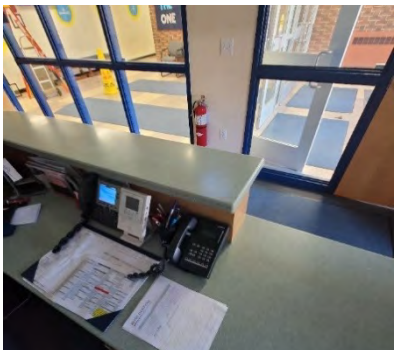


Figure 19

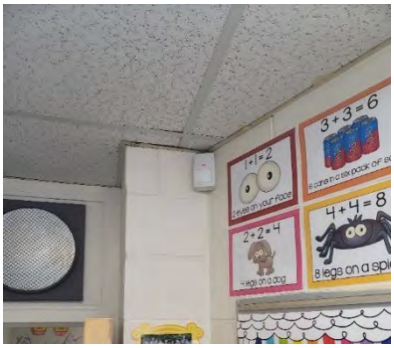


Figure 20

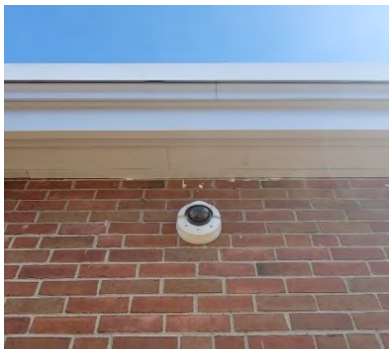


Figure 21

Figure 22

Figure 23

An Aiphone Video Intercom system was observed at the main entrance to the building (Figure 18). This system has a management console in the main office for remotely unlocking the main entrance door (Figure 19).

There is good visibility by the main office, some of the best that we have seen in a school for managing visitors (Figure 19). However, there is no separate transaction window for screening visitors before entering the school from the main vestibule (Figure 19).

The front entrance should be considered for modification to include a means of screening visitors prior to allowing them to enter the school from the main vestibule.

There is an intrusion alarm system with motion sensors (Figure 20) , which are ocated throughout the school.

Surveillance cameras were observed at various locations on the exterior perimeter of the school (Figure 21). A small number of cameras were also observed in strategic areas throughout the interior ceilings of the school (Figures 22). However, cameras were lacking at critical exterior perimeter locations and in many corridors and stairwells inside the school. The system could be enhanced with additional cameras.

There is also a wireless key access system observed at the main entrance and at various strategic entrance doors (Figure 23).

Operation of the installed system was not observed but we were informed that it is operational.

Classroom Technology

Figure 24

Figure 25

Figure 26

Figure 27

Figure 28

Figure 29

A VoIP telephone handset was observed in all classrooms and workspaces (Figure 24). A place for a wall phone was observed, however, telephones were more often located at teacher workstation areas in the classrooms.

Wireless Access Points were observed in classrooms and throughout the school.

Epson ultrashort projectors were observed in most classrooms (Figure 25).

Teaching stations in classrooms included a teacher's Chromebook or laptop devices and the necessary patch cords to connect to the projectors. Cabling between teacher locations and projectors appears to have been added later.

Most of the classrooms were equipped with older Lightspeed speech reinforcement systems that included an amplifier (Figure 26) that is used with a Lightspeed speaker mounted in the ceiling tile (Figure 27). The operation of this equipment was not observed, but verified it was working.

Chromebook charging carts were observed in classrooms of the school (Figure 28).

A large flat panel used for digital signage was observed at the main entrance (Figure 29).

PINE GLEN ELEMENTARY SCHOOL

Property Data

Address: 1 Pine Glen Way
Burlington, MA

Use: Elementary School
(Grades K through 5)

Site Area: 11.8 acres

Date Built: 1961-2

Renovations: 1997 window replacement, 2016 roof replacement, boiler replacement in the late 1990s.

Additions & Reno: New elevator and small addition 2004, new entry and vestibule 2014

Occupancy Group: E – Educational

Construction Class: Type IIB (noncombustible, unprotected)

Zoning District: Public Use (the site itself); Single Residence RO surrounds the site.

Flood Zone: No

Building Data

No. Floors: 2 (split level- Entry, Office, Gym and Cafeteria are between the levels of the academic floors)

Gross Area 58,000 GSF

Structure: Steel columns, concrete walls, concrete spread footings and bar joists comprise most of the structure. The floors of the mid level and the lower level are soil-supported concrete slab on grade. The cafeteria and gymnasium are framed with glue laminated wood arches with 4” tongue and groove wood decking.

Exterior Walls: Brick veneer masonry on unreinforced CMU backup with some areas of exposed concrete. Much of the exterior wall are aluminum curtain wall with precast spandrels.

Roofing: Single-ply EPDM roofing ca. 2015

Window Systems: 1997 renovation with double-glazed aluminum frame system consisting of fixed units and operable awning units.

Exterior Doors: Combination of original and 1997 hollow metal doors in steel frames and in aluminum curtain wall frames, and aluminum full lite doors in aluminum frames (2004 vestibule renovation).

Interior Doors: Wood and hollow metal doors in hollow metal frames.

Interior Walls: Painted CMU, tile and glazed block. New partitions are painted gypsum wall board on wood framing.

Floors: The typical floor covering is vinyl composition tile (VCT). Hardwood floors in the gym, carpeting in office areas and the media center. The main entry hall is stone. Toilet room floors are ceramic tile and the kitchen is ceramic quarry tile.

Ceilings: The gym and cafeteria are exposed wood structure and decking. Classrooms have textured plaster ceilings. Toilet rooms typically have smooth plaster celings. Acoustic tile ceilings 24”x48” tile are typical at corridors.

Sprinklers:	None
HVAC:	Spaces are heated and ventilated via unit ventilators with wall intake louvers. Exhaust is through central roof exhaust fans. Offices are air conditioned with DX systems and heated by hot water fin tube. Gym and Cafetorium are served by H&V units.
Sewerage:	6” connection to town’s sewer system. 8” storm drains exits the building and tie into a 12” line to the south west in the parking lot.
Water:	4” service from Pine Glen Way
Electric:	Service emanates from a pole on Pine Glen Way 120/208 volts, 3-phase, 1200 amp
Gas:	Gas service enters the building on the south-east side. It appears to be a 2” line.

INTRODUCTION

The purpose of this section is to report the physical conditions of the existing building in order to identify the maintenance needs, capacity of existing systems, and the potential for expansion. Information has been obtained from historic drawings, previous reports and studies, on-site visual inspection, and interviews with school staff and maintenance personnel. No intrusive investigations or test opening have been performed to date.

General

The Pine Glen Elementary School is located on 1 Pine Glen Road in Burlington, MA. It sits on a wooded 11.8 acre site.

The school parcel is bounded by residential neighborhoods in all directions. Conservation land abuts the property to the northeast.

Pine Glen is one of four (4) elementary schools in the district with an enrollment of 275 students during the 2022-23 academic year.

Originally constructed in 1961-2 the building is a split level with a two-story classroom wing and a one story entry, office, cafeteria, kitchen and gymnasium. The one story portion of the building is at an elevation half way between the two academic floors. A small addition with an elevator was added in 2004 with a teacher's dining room.

The physical state of the building is good considering its age. However, the age of many of its systems are at the end of their useful lives.

Legal Title

The Town of Burlington has legal title to the school property.

Historical Significance

The MACRIS database at the Massachusetts Historical Commission, does not contain an entry for the Pine Glen Elementary School.

A complete ENF and associated filings will be submitted if necessary.

SITE

The existing school is located directly off of Pine Glen Way within a residential area. The north west of the site contains two parking lots and the bus loop to the front entry. The school sits to the southeast of this paving. The site is completely surrounded by residential neighborhoods and conservation land. The overall site's topography is relatively flat however, it does slope down from the classroom wing towards the northeast. The site also slopes up to the south east, behind the building.

Site – Landscape

The site's topography is relatively flat, generally sloping from woodlands in the southeast corner of the property, flattening out across the developed area, and sloping down again towards the wet areas within the northeastern woodlands. A small slope runs across the open lawn area east of the school building, separating the playground above from an informal baseball field below.

Along with the surrounding woodlands, the site contains various significant trees. A stand of four towering *Pinus* (Pine) trees and one smaller deciduous tree occupies the green space just west of the south wing of the school building. Two large Pine trees and eight deciduous trees, many of them small in height, populate the western entry area. Two deciduous trees (one a large ***Quercus*** (Oak) tree) and one Pine tree stand along the eastern edge of the north parking lot. A very large oak tree creates a high canopy above the eastern school building entry area. Three ornamental trees adorn a special courtyard within the eastern entry area, nestled between the north and center wings of the school building. The ornamental trees include one mature ***Betula*** (Birch) tree within a raised wooden planter. While trees on site generally appeared to be in good condition, it is recommended that a licensed arborist be consulted to evaluate their health, expected lifespan, and safety.

The western and eastern entry areas and the courtyard space feature plantings of various types of shrubs. Few contain edging, apart from a wood-edged garden bed around the brick privacy wall of the courtyard. The eastern entry area also contains three raised, wooden garden beds surrounded by a wood fence and metal mesh, a gifted installation as indicated by signage. The wooden fence and beds appear to be in fine condition. Various panels of mesh are torn. Juniper shrubs line a fenced utility area in the western entry area, providing partial screening. Denser planting around the perimeter of this area is recommended to better screen the utility equipment. It is also recommended that the presence of potentially invasive, thorny shrubs at the edge of the northeastern woodlands be investigated.

In addition to the open lawn area around the north, east, and south sides of the school building, turf fills interstitial areas of the school grounds, in between paved vehicular areas and the school building. The turf generally appears to be in good condition on site, especially within the open lawn area. However, a patch of turf appears damaged adjacent to the school sign. Vehicular tracks and snow push appear to have damaged turf areas in the vicinity of the parking lots and along drives. In a few areas, repeated vehicular travel over turf has created informal dirt drives. Installation of curbs along all turf areas is recommended to protect the integrity of turf on site. Turf is generally absent underneath the Pine trees, likely due to the acidic soil and heavy blanket of needles they produce. Turf also appears to have struggled to establish in the eastern entry area. The soils here appeared very sandy. The property features numerous large boulders, including one in between a stand of Pine trees west of the school building, two clusters in the western entry area, and a cluster embedded in the slope of the open lawn area.

Landscape drainage infrastructure includes a stone drip edge along the southern façade of the north wing of the school building and a small length of the western façade of the center wing. Weedy vegetation and leaf litter was observed within this stone drip edge. Three additional stretches of stone drip edge line the southern façade of the north wing of the school building, the eastern façade of the center wing, and the north façade of the south wing. This stone drip edge appears to be in good condition. Clearing of weeds and leaf litter within the existing stone drip edge and installation of stone drip edge at all building façades where it is lacking is recommended, to protect the foundation of the building.

Corrugated plastic pipes extend off several roof drains. In one location, puddling has developed at a pipe outlet. It is recommended that alternatives to the corrugated plastic pipe be explored that are less visually obstructive and physically hazardous.

Vehicular Circulation

A looped access drive begins at the western side of the site, a continuation of Pine Glen Way. According to a sign on site, it appears that this drive is referred to as Preston Way. Preston Way runs east between two large parking lots to the north and south, turns south in front of the school building, turns west at the southern woodland edge, and finally turns north where it meets the western property line to return to its origin. A second access drive loops between the north parking lot and an asphalt pad at the northwestern corner of the school building. This pad seems to be used by service vehicles accessing the lower entrance of this façade. The vehicular asphalt paving along these drives appears to be in fine condition, with some cracking observed. A third asphalt drive begins at the asphalt pad at the northwestern corner of the school building and continues along the building's northern façade, wrapping around the building's northeastern corner to connect with the lower level of a cantilevered stair at the eastern façade. This drive appears mainly intended for pedestrian use, though it looks to receive vehicular travel as well. The asphalt in this area is in very poor condition, with significant cracking and puddling.

It appears that vehicles have frequently driven through an opening in the chain link fence at the northwestern corner of the property, creating an informal dirt drive leading to the north parking lot. It also appears that vehicles have driven between two short chain link fences south of the building, creating an informal dirt drive leading to a utility area and the open lawn area beyond.

The south parking lot sits within the Preston Way Loop, with three vehicular connections leading from Preston Way into the lot. Two vehicular connections branch off the north side of Preston Way to the north parking lot. The asphalt in these parking lots appears to be in fine condition, with occasional cracking and puddling observed. Parking space line striping appears to be very faded. A stretch of asphalt that seems to be used as an informal parking area abuts the building's western entry area. The asphalt here is in very poor condition. Extensive cracking was observed. Finally, a linear parking area extends from the southeast corner of Preston Way along the southern façade of the south wing of the school building. Together, the parking lots contain approximately 129 parking spaces. For parking facilities of this size, at least five accessible spaces are required. It does not appear that this requirement is met. Furthermore, it does not appear that all spaces marked accessible are adjacent to an access aisle, as required.

Vehicular pavement on site is infrequently edged with curbing. The interior of the south parking lot is lined with asphalt curb. This is in poor condition, cracked, and sunken in numerous locations. Granite curb exists only along the asphalt sidewalk on the outer edge of Preston Way. It is recommended that all vehicular surfaces be lined with granite curb, to better preserve the integrity of asphalt surfacing and turf panels and improve pedestrian safety.

Pedestrian Circulation

Two cantilevered, concrete stairs provide access to raised entrances at the eastern and western façades of the north wing of the school building. Both stairs appear to be in poor condition. Cracking and crumbling of the concrete steps was observed, especially around handrail posts. A number of these posts are rusting significantly at their bases. At the upper landing of the eastern stair, it appears that rust and concrete deterioration has spread from a post of the guardrail above to the underside of the landing. Furthermore, the handrails do not appear to meet ADA and MAAB requirements for extension lengths. It is recommended that damaged stairs be replaced and outfitted with ADA and MAAB-compliant handrails.

One sidewalk exists on site. It runs along the outer side of the Preston Way loop, beginning at the intersection of Pine Glen Way and Gardner Way, continuing along the south side of the north parking lot, merging with the informal parking area in front of the western entry area, and continuing south to terminate at the beginning of the small, linear parking lot. At the curb cut at the intersection of Pine Glen Way and Gardner Way, the sidewalk is paved in cast-in-place concrete. The curb cut does not contain a detectable warning panel. The remainder of the sidewalk is paved in asphalt. The asphalt is in very poor condition, with significant cracking and crumbling observed. A raised utility rim creates an additional tripping hazard. These conditions compromise the accessibility of the sidewalk.

A broad asphalt walkway leads from Preston Way to the main entrance to the school, at the western façade of its center wing. A building canopy provides shelter over this walkway. A secondary asphalt path branches off this canopy-covered walkway, leading to an entrance at the western façade of the south wing of the school building that appears to be the designated entrance for an afterschool program. Both walkways show signs of age, with cracking and uneven surfaces observed. A series of stepping stones lead from the canopy-covered walkway to the flagpole. These appear to have been partially overtaken by turf.

An asphalt walkway leads from the informal parking area to a concrete landing at another entrance to the center wing of the school building. This walkway appears to be in poor condition, with extensive cracks and bumps likely resulting from tree roots below. The concrete pad shows signs of water damage. A secondary path branches off this walkway, leading to what appears to be a maintenance entrance. This entrance features a raised concrete landing raised above the asphalt, compromising its accessibility. Two entrances at the eastern façade of the south wing of the building appear similarly inaccessible, with no ramps or accessible surfaces leading to the raised, concrete landings.

A short asphalt walkway leads from the south parking lot to Preston Way below. Due to the steepness of this walkway and chipped asphalt at its base, it does not appear accessible. Another asphalt walkway leads from the south side of Preston Way into the woods between the school property and the Pinewood Lutheran Church. Where the paving ends, a dirt path with wood edging begins and appears to continue to the church property.

The asphalt drive at the northern façade of the school building contains six irregular ramps at entrances to the building. It appears that concrete landings at the entrances were paved over with asphalt to create a more gradual transition of grade. The unevenness and steepness of these ramps likely compromises their accessibility. The continuation of this drive along the eastern façade leads to an asphalt walkway traveling up the open lawn area slope. This walkway appears too steep to be accessible.

A narrow asphalt walkway connects an entrance at the eastern façade of the center wing of the school building to the playground. A secondary asphalt path branching off this walkway leads to a landing of the cantilevered stair. These walkways appear to be in poor condition. Cracks and puddling were observed. It is recommended that all sidewalks and walkways be repaired or replaced to remedy any damage that creates uneven surfaces and reduces safety and accessibility. Curbs are recommended to protect sidewalks from vehicular areas. It is further recommended that ADA and MAAB-compliant ramps be installed where necessary to provide accessibility throughout the site.

Play and Athletics

The playground is located in the open lawn area to the east of the school building, surrounded by a chain link fence. The playground contains Engineered Wood Fiber Mulch (EWFM) safety surface, which appears to be unevenly distributed. The playground contains wear mats that appear to help prevent displacement of EWFM and improve accessibility. The mats are located underneath the main climbing structure and lead to a molded, accessible swing seat. Additional wear mats are placed underneath four of the belt swing seats. Black plastic borders surround the EWFM along the interior of the chain link fence. The borders appear to be functioning well. The playground contains eight pieces of traditional play equipment. The equipment appears to be outdated and showing minimal signs of wear (chipped paints and coatings). However, damage to the swing sets appears more significant; the frame and seat chains appear heavily rusted.

Just north of the south wing of the building are two asphalt pads. One contains half-court basketball line-striping and a gooseneck basketball system that appears to be in fine condition. The second contains four square line-striping. A chain link baseball backstop stands at the northeastern corner of the open lawn space, oriented towards the school building. The backstop appears to be damaged and potentially hazardous. A derelict soccer goal sits next to this chain link fence backstop. Three metal posts with concrete footings stand in the vicinity of the playground. These do not appear to be in use. Two, broken-down basketball systems stand at the western edge of the north parking lot, with chipped paint, rusty surfaces, and dysfunctional or absent nets.

Site Furnishings

The western entry area features a granite memorial bench dedicated to a teacher, resting upon a concrete pad. An artistic installation of painted kindness rocks curves away from this bench, leading to a cluster of boulders. It appears that these painted rocks are bordered by stone dust set within rubber edging. However, the stone dust is currently blanketed in leaf litter. A brick privacy wall with a concrete foundation creates an enhanced sense of enclosure in the courtyard nestled between the north and center wings of the school building. Most of the courtyard is paved with engraved, donor bricks. The courtyard contains a concrete pagoda lantern statue. It also contains a plastic memorial bench, dedicated to a graduate of the school. A multicolored “Friendship” double Adirondack chair is located within the playground. Other seating on site includes two plastic benches, five wooden benches, five plastic picnic tables, and one plastic picnic table with an accessible space. These furnishings appear to be in good condition, apart from the wooden benches, which appear aged.

Signage on site includes a school sign in the western entry area that appeared to be constructed of wood with granite supports. The school sign appears to be in excellent condition. Two additional signs stand just inside the playground fence. One recognizes supporters and benefactors of the school playground. This sign is in poor condition, with rust and chipping paint. The second is a Landscape Structures educational sign. A flagpole stands just east of this sign, embedded in a concrete footing within the turf. The school contains one, grid-style bike rack atop bare ground near the canopy walkway, which does not appear to be secured. The paint appears chipped. Two metal storage containers and one plastic storage container are located around the south wing of the building. Two large clothing, shoes, and linen donation bins stand at the edge of the sidewalk along Preston Way. Two litter receptacles are present to the east of the building, and one dumpster on a concrete pad south of the school building. Four stone slabs on wood pallets are currently stored next to the dumpster.

An uncoated chain link fence begins at the northwest corner of the property, running behind the north end of the north parking lot. Logs line the interior of this stretch of fence. The fence turns south at the corner of the parking lot and continues between the parking lot and the open lawn area beyond, finally turning east to follow the edge of the service access drive. The fence seems to be missing a pedestrian gate between two gate posts just north of this drive. The fence terminates at a double swing gate connecting to the school building. The fence appears to be in poor condition, with concrete footings exposed in various locations, warped mesh, and leaning posts. The vehicular gate does not appear functional. Another uncoated chain link fence stretches between the western edge of the north parking lot and Gardner Way. This fence appears to be in very poor condition, with rusted mesh and several posts missing, detached, or leaning. Two short sections of chain link fence partially stretch from the south façade of the south wing of the building to the southern woodlands. These sections also appear to be in poor condition, with missing post caps and leaning posts. A chain link fence painted in black encloses the playground. It appears to be newly installed and in excellent condition. Another chain link fence painted in black encloses utility equipment in the western entry area. It also appears to be in excellent condition. It is recommended that all fences performing necessary functions that are in poor condition be replaced.

Site Lighting

One utility pole with line-voltage lighting was observed in a turf area adjacent to the south parking lot. The building canopy leading to the main entrance contains several lights to illuminate the walkway below. No low-voltage landscape lighting was observed on site. It is recommended that the installation of walkway lighting be considered to improve the safety of pedestrian egress.

Site – Civil

The site is developed and located within a residential neighborhood, east/southeast of Gardner Way and Wilmington Road, south of Cutting Lane, west/northwest of Davida Road, and north of Dennis Drive and Chestnut Avenue. The Pinewood Lutheran Church is located to the south. A narrow strip of the site's parcel extends southeast from Wilmington Road on the southside of Pine Glen Way. Another town-owned parcel extends southeast from Wilmington Road on the northside of Pine Glen Way. The site's main access driveway extends east/southeast from the intersection of Pine Glen Way and Gardner Way, and immediately splits to the southwest and northeast into two parking lots. The southern access driveway loops around the southern parking lot, continuing to the southwest, southeast, and northeast, to the front of the school and connects back with the main access driveway at the entrance to the site. There are two vehicle access points into and out of this parking lot on the southern edge and pedestrian access points into and out of this driveway on the north and west sides. A driveway continues southeast off the southernmost corner of the southern parking lot to another smaller parking lot along the southern edge of the site. The school's dumpster is located at the end of this driveway on the east/southeast side, and two clothes donation dumpsters are in the northernmost corner of this parking lot.

The northern parking lot is off the main access driveway entrance and has the vehicle entrance just north of the vehicle exit. Another driveway, likely for emergency access, is off the eastern side of this parking lot and connects to the northwest corner of the school building.

Immediately in front (i.e., west) of the school building is another asphalt area with informal parking. A pedestrian walkway with a canopy extends from this area to the school building's main entrance.

The school building is made up of three interconnected rectangular buildings forming an "I" shape in a southwest-northeast orientation. The northern building is longer than the central and southern buildings.

North of the school building is an unprogrammed grassy area, with forested areas to its north. This grassy area extends around the building to the east, with forested areas east/southeast of it. The school's playground and basketball court are located on the east side of the building in the grassy area. Grassed courtyards with trees are also present immediately to the east and west of the central school building. Immediately to the northeast of the site is the Pine Glen Conservation Area. A paved path connected to Gardner Way runs northwest-southeast to Pine Glen Conservation Area. The southeast corner of the site includes ledge outcrops in the grassy area.

Soils

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, the central portion of the site around the school building, other developed areas, and adjacent forested areas in the northern, southeastern, and southwestern portion of the site are soil type Udorthents-Urban land complex. The northeast portion of the site and areas extending to the northeast in Pine Glen Conservation Area are soil type Woodbridge-Urban land complex, 3 to 15 percent slopes and Scituate fine sandy loam, 3 to 8 percent slopes, extremely stony. The southeast and south portion of the site and areas extending to the southeast and south are soil type Montauk fine sandy loam, 0 to 8 percent slopes, extremely stony. The northwest corner of the site and residential areas extending to the west and northwest are soil type Canton fine sandy loam, 0 to 8 percent slopes, extremely stony.

Residential areas to the north are soil type Paxton-Urban land complex, 3 to 15 percent slopes and Montauk fine sandy loam, 8 to 15 percent slopes, extremely stony. Residential areas to the southwest are soil type Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes.

- According to NRCS, soil type Udorthents-Urban land complex is "level to hilly complex [and] consists of Udorthents and areas of Urban land. Individual areas of this unit are rectangular or irregular in shape and range from 6 to 1,020 acres in size. This complex is about 40 percent Udorthents, 40 percent Urban land, and 20 percent minor soils."
- According to NRCS, soil type Woodbridge-Urban land complex, 3 to 15 percent slopes "consists of areas of Urban land and very deep, moderately well drained Woodbridge and similar soils on smooth crests, side slopes, and toe slopes of glaciated hills. The areas are oval or irregular in shape and range 6 to 250 acres in size. These areas are 40 percent Woodbridge soils, 40 percent Urban land, and 20 percent other soils."
- According to NRCS, soil type Scituate fine sandy loam, 3 to 8 percent slopes, extremely stony consists of "very deep, gently sloping, moderately well drained soil [and] is on hill crests, on toe slopes, and in depressions of uplands. The areas of this soil are irregular in shape and range from 6 to 310 acres in size. Stones cover 3 to 15 percent of the surface."
- According to NRCS, soil type Montauk fine sandy loam, 3 to 8 percent slopes, extremely stony, consists of "very deep, gently sloping, well-drained soil [and] is on the tops and upper side slopes of glaciated hills. The areas are oval or irregular in shape and range from 6 to 210 acres in size. Stones cover 3 to 15 percent of the surface."
- According to NRCS, soil type Canton fine sandy loam, 3 to 8 percent slopes, extremely stony consists of "deep, gently sloping, well-drained soil [and] is on upper side slopes of uplands adjacent to plains and stream terraces. The areas are irregular in shape and range from 6 to 110 acres in size. Stones cover 3 to 15 percent of the surface."
- According to NRCS, soil type Paxton-Urban land complex, 3 to 15 percent slopes "consists of very deep, rolling, well drained Paxton and similar soils, and areas of Urban land on convex slopes of glaciated hills. The areas are oval or irregular in shape and range from 6 to 350 acres in size. These areas are 40 percent Paxton soils, 40 percent Urban land, and 20 percent other soils."

- According to NRCS, soil type, Montauk fine sandy loam, 8 to 15 percent slopes, extremely stony consists of "very deep, strongly sloping, well-drained soil [and] is on the side slopes of glaciated hills. The areas are oval or irregular in shape and range from 6 to 160 acres in size. Stones cover 3 to 15 percent of the surface."
- According to NRCS, soil type Charlton-Hollis-Rock outcrop complex, 3 to 8 percent slopes "consists of gently sloping very deep and shallow soils on uplands where the relief is affected by the underlying bedrock. The well drained Charlton soils are on toe slopes and in low pockets. The somewhat excessively drained Hollis soils are on hilltops and ridges. Stones and boulders cover up to 15 percent of the surface. Areas of the map unit are irregular in shape and range from 6 to 180 acres in size. The soils and exposed bedrock are so intermingled that it was not practical to map them separately. This complex is about 50 percent Charlton soils, 25 percent Hollis soils, 15 percent rock outcrop, and 10 percent other soils."

  (Source: USDA NRCS)

Wetlands and Floodplains

There are no MassDEP-designated wetlands on or immediately adjacent to the site. (Source: MassMapper). However, there appear to be wetlands in the forested area northeast of the school, a stream runs northwest-southeast into the Pine Glen Conservation Area. More detailed wetland delineation would be needed to confirm the limits of the resource areas.

The site is characterized by the Federal Emergency Management Agency (FEMA) as an area of minimal flood hazard. (Source: FEMA FIRM 25017C0289E, effective 6/4/10).

Zone II Aquifers and Regulated Water Supplies

There are no water supply aquifers (Zone IIs) or other surface water supplies on the site or the in the immediate vicinity. (Source: MassMapper)

Wildlife Habitat

There is no Natural Heritage and Endangered Species Program (NHESP) Estimated Habitats of Rare Wildlife or Priority Habitats of Rare Species on the site or in the immediate vicinity. (Source: MassMapper)

Trees

The southern, eastern, and northern edges of the site are forested, with denser forested areas to the northeast in the Pine Glen Conservation Area. These areas provide a buffer between the site and the residential areas around it. There are also several trees immediately in front (west) of the school's main entrance, including some large trees, between the school building and parking areas. A few trees are also present on the east side of the school building between it and the playground.

INFRASTRUCTURE

Stormwater Management

One catch basin is present in the access driveway in front of the school's entrance. Another catch basin is present in the grassy courtyard, north of the school building's covered pedestrian walkway entrance. One catch basin is present in the eastern side of the northern parking lot. A drain manhole is also present in Gardner Way at the intersection with Pine Glen Way, near the school's entrance driveway.

Other parking lot areas appear to sheet flow to adjacent grassy areas, and erosion was visible in some of these locations. Additional stormwater management is recommended in these areas.

The building's roof appears to be drained by a series of downspouts around the edges of the building.

These downspouts are in various conditions. Most direct runoff to the area immediately adjacent to the building. In some spots, this area is impervious; in others, it is pervious (grass); and in other areas, there is a gravel strip. Some downspouts also have a corrugated plastic pipe extensions to direct runoff to adjacent pervious (i.e., grassy) areas. A few of the downspouts on the northeast side of the building are connected to a subsurface stormwater infrastructure. It is assumed these downspouts along with the catch basin in the northern parking lot drain and outlet to a headwall that is on the north side of the property at the edge of the tree line. Improved and consistent stormwater management is recommended for the building's roof runoff.

More specific drainage connections should be confirmed, and the capacity of the closed drainage system and subsurface stormwater system will need to be verified.

Water Supply System

The site appears to be connected to Burlington's water system via a service connection from Pine Glen Way. One hydrant is present in a grassy area between the northern and southern parking lots. A second hydrant is located in a grassy area on the southern edge of the smaller parking lot along the southern edge of the site. A third hydrant is located immediately north of the school building in the grassy area, towards the middle of the building. A fourth hydrant is in a fenced area to the north of building.

The adequacy of the water system with respect to pressure should be verified by a hydrant flow test.

Sanitary Sewer

The site appears to be connected to Burlington's sewer system via a manhole at the intersection of Gardner Way and Pine Glen Way. The sewer service appears to exit the building via a manhole north of the school building's covered pedestrian walkway entrance and travel west/northwest to two manholes in the grassy area between the northern and southern parking lots. From there, the sewer service appears to continue west/northwest under the grassy area to the sewer manhole at the intersection of Gardner Way and Pine Glen Way. Precise locations and capacities of the sewer connections will need to be verified with the Burlington Department of Public Works.

Gas Utility

Based on utility markings (i.e., "dig safe") present on the ground in Pine Glen Way during a site visit, gas appears to enter the site from a 2-inch service connection at the intersection of Gardner Way and Pine Glen Way. Gas enters the building in the northwest corner of the northern section of the building, under an exterior staircase. Precise locations will need to be field verified.

Electrical Utility

Overhead electrical lines run via utility poles along Pine Glen Way and Gardner Way. These lines appear to connect to the building via a utility pole in the grassy area between the northern and southern parking lots, then underground via an electrical manhole in the informal parking area northwest of the school building's covered pedestrian walkway, and a transformer in the grassy courtyard north of the pedestrian walkway. A generator is also present in this area. Precise locations will need to be field verified.

Vehicular Circulation and Parking

It appears that buses pick-up and drop-off students in the main access driveway in the informal parking area in front of (i.e., west) the school building. It appears that parents and guardians pick-up and drop-off students in the northern parking lot.

There are three parking lots, in addition to the informal parking area immediately in front of (i.e., west) of the school building. The informal parking area has room for approximately 15 cars in unmarked spaces and one marked accessible space. The northern parking lot has approximately 56 spaces. The southern parking lot has approximately 39 spaces. The smaller parking lot along the southern edge of the site has approximately 15 parking spaces and three accessible spaces. Other paved areas around the site, such as off the northwest corner of the northern building, appear to provide additional informal parking. There does not appear to be evidence of vehicles parking on grass areas.

TRAFFIC STUDY

An existing traffic conditions assessment for the Pine Glen Elementary school has not been completed.

STRUCTURAL REVIEW

Introduction

Foley Buhl Roberts & Associates, Inc. (FBRA) is collaborating with *DiNisco Design, Inc. (DDI)* and their consultants in the review and evaluation of structural issues/conditions at the Pine Glen Elementary School in Burlington, Massachusetts. The purpose of this report is to identify and describe the structural systems of the building and to comment on the structural issues/conditions observed. General comments relating to potential renovations, alterations, and additions to the school (governed by the Existing Building Code of Massachusetts (EBCM - 9th Edition)) are presented as well.

Structural conditions at the Pine Glen Elementary School were reviewed at the site by FBRA on February 22, 2023.

The following documents were reviewed in the preparation of this Existing Conditions Structural Report:

Wilmington Road Elementary School Burlington, Massachusetts: Structural Plans S-1 to S-9, Architectural Plans A-1 to A-13, prepared by Edward J. Tedesco Associates Architects, Woburn, Massachusetts; dated September 12, 1961.

No exploratory demolition or structural materials testing was conducted in conjunction with this study; accordingly, observations are based solely on the documents referenced above and on a limited visual survey of those areas of the building which were accessible and exposed to view.

General Description

The Pine Glen Elementary School is located at 1 Pine Glen Way in Burlington, MA. The one-story and two-story building was constructed in 1961 on a site that slopes downwards from south to north. The building is I-shaped in plan with a two-story classroom wing at the north end, running east-west, a central one-story office wing running north-south, and a one-story community wing at the south end, running east-west. Programmed spaces in the community wing include a cafeteria, gymnasium, and a kitchen.

The total floor area is approximately 57,000 gross square feet. The building construction is a combination of steel, reinforced concrete, and wood framing. Typically, open web steel joists and structural steel beams span to steel columns and masonry bearing walls with conventional, shallow concrete spread and strip footing foundations. The first floor is a soil-supported concrete slab on grade. Exterior walls are 4” brick veneer with 8” unreinforced CMU backup. Interior partitions are typically unreinforced CMU construction.

An elevator shaft has been added to the classroom wing since the original construction, but drawings for that work were not available for review. No other major renovations, alterations, or additions to the building have been conducted since the original construction.

Structural Systems Description

Structural Materials: Per the available existing drawings, cast-in-place concrete is 3,000 psi strength at 28 days. Reinforcing steel bars are listed as ASTM A15 intermediate grade new billet steel with 20 ksi yield strength. Welded wire mesh is ASTM A185. Structural steel is ASTM A36, with a 36 ksi yield strength. Per the drawings, open web steel joists were required to conform to the requirements of the Steel Joist Institute at the time. Structural glued laminated lumber has a minimum allowable bending stress of 2400 psi. All stress grade lumber has a minimum allowable bending stress of 1500 psi.

Subsurface Soils/Foundations: Per the existing drawings, all footings were to be carried into undisturbed soil having an allowable bearing pressure of 2 tons per square foot.

Structural Bays/Spans: The structural bay sizes and framing configurations vary throughout the building. At the classroom wing, typical classroom bays are 27'-4" by 16'-0" separated by 13'-8" corridor. At the central office wing, bays are 32'-0" by 16'-0". The community wing is framed with glued laminated arches spanning 51'-6" and spaced at 16"-0".

Story Heights: Story heights are as follows:

First Floor to Second Floor:	11'-4"	(Classroom Wing)
Second Floor to Roof Edge	+/-10 ft	(Classroom Wing)
First Floor to Top of Wood Arch:	19'-9"	(Gymnasium/Cafeteria Wings)

Design Live Loads: Design live loads are noted on the existing Structural Drawings as follows:

Roof:	30 psf
Classroom Floors:	50 psf
Toilet Floors:	60 psf
Corridor:	100 psf
Folded Plate:	40 psf

Confirmation of the structural design and/or comprehensive structural evaluation of the building is beyond the scope of this preliminary report.

Expansion Joints: There do not appear to be any internal expansion joints in the building.

Roof Construction: Typical roof construction consists poured in place gypsum concrete on form board with blub tees at 2'-9" on center, spanning +/- 4 feet to open web steel joists. Steel joists are supported by steel beams, which span to steel columns. Roof construction at the cafeteria and gymnasium consists of 4" tongue and groove wood deck spanning 16 feet to glued laminated wood arches, which span 51'-6". At the kitchen space, the wood deck spans to steel beams and 12" masonry bearing walls.

Second Floor Construction: Floor construction at the Classroom wing is a combination of steel and reinforced concrete construction. The north classroom bay consists of 3" concrete slab on heavy duty corruform, reinforced with welded wire mesh spanning to 18" deep steel joists spaced at 2'-0" on center. Steel joists span to wide flange steel beams at the corridor and at the perimeter. Steel beams are supported by steel columns. The corridor is similarly framed but with 12" deep steel joists spanning 13'-8". The south classroom bay consists of 5" or 6" reinforced concrete flat slab spanning 16'-0" to 16" wide by 28" deep reinforced concrete beams. The north and south ends of the bay are supported by 10" thick concrete walls.

First Floor Construction: Typical first floor construction is a 4" thick, soil-supported concrete slab on grade, reinforced with welded wire mesh. A 6" thick concrete slab on grade occurs in the boiler room. The slab thickens to 12" below interior non-bearing CMU partitions and is reinforced with two continuous #6 bars.

Wall Construction: Exterior wall construction is a combination of brick veneer with CMU backup, window wall with integral architectural panels, and concrete basement retaining walls. The 4" brick veneer is bonded with an 8" thick unreinforced masonry backup wall at every 6th course. The 12" concrete basement wall is reinforced with #4 vertical reinforcing bars at 16" on center at the interior face, #4 vertical bars at 24" on center at the exterior face, and #4 horizontal bars at 12" on center at each face.

Interior wall construction consists of unreinforced masonry bearing and non-bearing walls.

Foundations: Foundations are conventional shallow concrete footings. Typical, reinforced concrete perimeter foundation walls are 12" thick, with a 20" wide by 12" deep continuous strip footing. Columns are supported on concrete spread footings.

Fire Resistance: The building is classified as Type IIB construction; the unprotected steel roof framing has no fire resistance rating. The concrete floor is non-combustible and provides a fire resistance rating. There are no sprinklers in the building. Plaster ceilings may provide a limited level of protection.

Lateral Load Resistance: As the building was designed and constructed prior to the introduction of the Massachusetts State Building Code (MBC), the structure does not meet current wind and seismic load requirements (strength and detailing). There is no clearly defined lateral force resisting system in either direction. The perimeter and interior masonry walls, including frame infill walls, and the perimeter and interior reinforced concrete walls provide a level lateral force resistance (by default); however, the construction of these walls does not meet current code requirements. Lateral force resistance and unreinforced masonry wall issues would need to be addressed in conjunction with a future, major renovation of the building.

Structural Condition/Comments

Structural Conditions at the Pine Glen Elementary School were reviewed (where accessible and exposed) on February 22, 2023. Generally speaking, floor and roof construction appear to be performing satisfactorily; there is no evidence of structural distress that would indicate significantly overstressed, deteriorated, or failed structural members.

Foundations appear to be performing adequately; there are no apparent signs of significant, total or differential settlements.

Structural/structurally related conditions observed during the February 22, 2023 site visit and associated comments are noted below. All items would be addressed in conjunction with a future renovation of the building, unless noted otherwise.

1. Building Exterior:
    - Masonry veneer is generally in satisfactory condition, with limited cracking or deterioration of the face brick observed. Repointing of approximately 10% of exterior brick veneer is recommended.
    - The brick masonry showed signs of efflorescence and deterioration in limited areas. Minor deterioration and cracking of bricks were observed at some building corners. A partial height brick wall showed signs of significant cracking and separation. Masonry repair and/or reconstruction is recommended.
    - Deterioration of canopy steel members was observed. The condition should be investigated further, and the members should be repaired or replaced.

- Exterior cantilever concrete stairs have deteriorated and spalled in some locations due to rusting reinforcement bars exacerbated by de-icing salts and freeze-thaw action. Repair/replacement of these elements should be undertaken.
- The base of the glued laminated arches that faced the exterior and were exposed to the elements appeared to be soft to the touch. The end fibers of the wood appear to be exposed to moisture but are not elevated to allow moisture to escape. Further review of the condition and repair is recommended.

2. Snow Loads: The snow load capacity of the roof was not evaluated. The 30 psf design roof load noted on the Structural Drawings does not meet the current code requirement for a flat roof (38.5 psf); in addition, snow drift loads were likely not considered where the one-story central office wing abuts the two-story classroom wing. FBRA recommends that snow loading (particularly at conditions of differential roof heights) be evaluated in conjunction with future renovations to the school (such an evaluation is beyond the scope of this report). In the interim, these areas should be monitored during periods of heavy snow.

3. Lateral Force Resistance/Seismic Hazards: As previously noted in this report, there is no clearly defined lateral force resisting system (LFRS) in the building. Exterior and interior masonry and concrete walls provide a degree of lateral force resistance (by default). The building does not meet current seismic code requirements. Lateral force resistance issues and seismic hazards would need to be evaluated and addressed in conjunction with a future renovation of the school. Refer to additional comments in the next section of this report.

4. Ponding: There are no parapets and many of the roofs are sloped so the potential for ponded water is minimal. Internal roof drains should be periodically inspected and maintained to ensure that they are clear and functioning properly.
5. Masonry Walls: Interior and perimeter CMU bearing walls are generally in satisfactory condition. The anchorage/bracing of all interior and exterior masonry walls as well as their height-to-thickness ratios will need to be evaluated (per code) if the building is renovated in the future.
6. There is significant spalling of one section of the interior face of the concrete perimeter basement wall. The spalling appears to be a result of a rusting embedded item, possibly conduit. Further review of the condition and repair is recommended.

Refer to the documents prepared by the Architect and the other disciplines for additional comments and recommendations relating to the building envelope and MEP/FP systems in the building.

Renovations and Additions – Code Requirements

General comments relating to potential renovations, alterations, and additions to the Pine Glen Elementary School are presented in this section. Renovations, alterations, repairs, and additions to existing buildings in Massachusetts are governed by the provisions of the Massachusetts State Building Code (MSBC; 780 CMR - 9th Edition) and the Existing Building Code of Massachusetts (EBCM; 780 CMR - 9th Edition, Chapter 34.00). These documents are based on amended versions of the 2015 *International Building Code (IBC)* and the 2015 *International Existing Building Code (IEBC),* respectively.

Code Compliance Methods

Section 104.2.2.1 of the EBCM requires that the existing building be investigated and evaluated in sufficient detail as to ascertain the effects of the proposed work on the structural systems (both gravity load carrying elements and lateral force (wind and seismic) resisting elements).

The EBCM defines three (3) compliance methods for the repair, alteration, change of occupancy, addition, or relocation of an existing building. The method of compliance is chosen by the Design Team (based on the project scope and cost considerations) and cannot be combined with other methods.

The *Prescriptive Compliance Method* (IEBC Chapter 4) prescribes specific minimum requirements for construction related to additions, alterations, repairs, fire escapes, glass replacement, change of occupancy, historic buildings, moved buildings and accessibility. If the impact of the proposed alterations and additions to structural elements carrying gravity loads and lateral loads is minimal (less than 5% and 10% respectively), structural/seismic reinforcing of an existing building are not required. Provided that not more than 50% of the spaces in the building are reconfigured, seismic hazards such as bracing the tops of interior masonry walls and partitions, anchorage of floor and roof diaphragms to the exterior walls, bracing of parapets and chimneys, etc. would not be required by code, but could be addressed on a voluntary basis. If the area of reconfigured spaces exceeds 50% of the gross floor area, these seismic hazards must be addressed by code. ***Note that, in determining the area of reconfigured spaces, the new floor layout would need to be compared to the original (not the current) floor layout (typical for all compliance methods).***

The *Work Area Compliance Method* (IEBC Chapters 5 through 13) is based on a proportional approach to compliance, where upgrades to an existing building are triggered by the type and extent of work. The Work Area Compliance Method includes requirements for three levels of alterations, in addition to requirements for repairs, changes in occupancy, additions, historic buildings or moved buildings. A complete seismic evaluation of the existing building is required under the following conditions: Level 2 alterations where the demand (mass/seismic force) to capacity (lateral force resistance) ratio of lateral load resisting elements has been increased by more than 10%, all Level 3 alterations, a change in occupancy to a higher category (not applicable to this project) and where structurally attached additions (vertical or horizontal) are planned (any major addition(s) to the building will be structurally separated, so this is not applicable). Provided that not more than 50% of the spaces in the building are reconfigured (since the original construction), renovations would be classified as ***Level 2***. Assuming that modifications to the existing masonry walls providing lateral force resistance and concrete frames will not be significant (i.e., less than 10%), seismic upgrades or seismic strengthening of the building would not be required by code. However, addressing certain seismic hazards by bracing the tops of interior masonry walls and partitions, anchoring floor and roof diaphragms to the exterior masonry walls, bracing of chimneys, etc. could be done on a voluntary basis. In a ***Level 3*** alteration (more than 50% of the building reconfigured), these seismic hazards must be addressed by code.

The less frequently chosen *Performance Compliance Method* (IEBC Chapter 14) provides for evaluating a building based on fire safety, means of egress and general safety (19 parameters total). This method allows for the evaluation of the existing building to demonstrate that proposed alterations, while not meeting new construction requirements, will maintain existing conditions to at their current levels (at a minimum) or improve conditions, as required. A structural investigation and analysis of the existing building is required to determine the adequacy of the structural systems for the proposed alteration, addition or change of occupancy. A report of the investigation and evaluation, along with proposed compliance alternatives must be submitted to the code official for approval.

Under all compliance methods, an evaluation of the roof diaphragm strength and anchorage of the diaphragm to the perimeter structure is required if the building is re-roofed, the building is in Risk Category IV, and the ultimate design wind speed at the site exceeds 150 mph. As the Pine Glen Elementary School is a Risk Category III building and the ultimate design wind speed is 136 mph, these requirements would not apply.

Additions – General Comments – EBCM

The design and construction of a new addition to the Pine Glen Elementary School would be conducted in accordance with the Code for new construction. Any planned, major additions should be structurally separated from the existing, adjacent construction by an expansion/seismic joint to avoid an increase in gravity loads or lateral loads to existing structural elements.

Renovations/Alterations – General Comments – EBCM

Where proposed alterations to existing structural elements carrying gravity loads result in a stress increase of over 5%, the affected element will need to be reinforced or replaced (if necessary) to comply with the Code for new construction.

Alterations to existing structural elements that are resisting lateral loads (i.e., full height, masonry walls/partitions), which result in an increase in the lateral force demand (seismic load) to capacity (seismic resistance) ratio of over 10% should be avoided, if possible. Essentially, this means that removal of masonry walls resisting lateral forces (or creating large openings in these walls) should be avoided; otherwise, seismic strengthening of the building as well as additional seismic upgrades may be triggered.

Repair/reinforcing of conditions that do not meet current code requirements must be evaluated to determine if any danger to the occupants exists. As the roof design snow load is unknown, and it does not appear that snow drift has been considered, a structural evaluation of the roof construction would be warranted.

ARCHITECTURAL SYSTEMS

Exterior Walls

The typical exterior wall assembly used throughout the original building is 4" brick veneer (no cavity) on 8" or 12" thick unreinforced concrete masonry block wall. Extensive amounts of curtainwall and storefront also comprise the exterior skin. Precast panels are also used on the northeast and southwest two story façades, and ends of the gym and cafeteria- set in the curtainwall frame.

The physical condition of the exterior walls appears generally in good condition from visual inspection. Some missing masonry was noted along the kitchen wall and minor cracking. Spalling has also occurred at the foundation wall in various locations.

The exterior wall assemblies do not meet current energy code requirements for new construction.

Exterior walls of the 2004 addition are comprised of 4" face brick on light gauge framing and sheathing with a cavity and insulation.

Roofing

The roof on the original building was replaced in 2016 and is an adhered single-ply membrane (EPDM), with aluminum flashings, transite facias, and soffits. The paint on the soffits and fascia are peeling.

Windows

The windows were replaced in 1997 with aluminum units with insulated glass. The operable sash are awnings. Many of these windows were replacements for the original steel sash set into the aluminum curtain wall frame, so the "new" windows are set into the original curtain wall framing. All of the window systems within the entire school are beyond their useful life and are in fair condition.

Exterior Doors

Most exterior doors are hollow metal leaves, set in original steel frames or aluminum curtainwall frame (lower level of the classroom wing). These leaves may have been replaced in 1997, and they are in fair condition. The vestibule doors were replaced in 2014 and the aluminum full lite doors in aluminum storefront are in good condition.

Interior Walls

Interior partitions are typically painted concrete masonry units. At the corridors, toilet rooms, and back of house spaces, glazed structural clay tile units are used. In some accent locations, the walls are covered with ceramic tile (elevator lobby and stair). Newer partitions are painted gypsum wall board on wood framing. In general, the interior walls are in good condition.

Interior Doors

The original flush wood doors in hollow metal frames remain in-place throughout the building. Some interior doors are equipped with vision panels. Knob hardware has been replaced with lever-type hardware at most doors, but some knob hardware remains. The condition of the wood veneer doors is generally fair, though some in worse condition and should be replaced.

Flooring

Finish flooring throughout the building varies. The main entry hall is multicolored slate flag stones in an ashlar pattern. Flooring is typically vinyl composition tile (VCT); this includes all classrooms, most corridors and the Cafeteria. The Stage and Gymnasium floor surfaces are hardwood flooring with game lines at the Gym. The Kitchen has quarry tile, while typical toilet rooms have ceramic mosaic tile. Mechanical and service spaces are exposed concrete.

Ceilings

The classrooms all have acoustic plaster ceilings with a “acoustic” texture applied. On the upper floor the classroom ceilings are sloped match the pitch of the roof. The toilet room ceilings are typically smooth plaster that is painted. The existing plaster ceilings are in good condition. Ceilings in the corridors main entry, and some toilet rooms are 2’x4’ acoustical ceiling tile that were added as part of past renovations, below the original plaster ceilings. Ceiling heights are 8’-0” at the classroom corridors and 8’-8” at the main entry hall. The lower level boys mulitfixture toilet room, media center, teacher’s dining, and EL room on second floor also have ACT ceilings. These ACT ceilings are in fair condition. Some of the rooms on the lower level west side have exposed concrete structure. The gym and cafeteria are exposed wood structure and wood decking. The wood structure and decking appear in good conditions with some issues at the exterior glue laminated members where they meet the ground.

Lockers & Cubbies

Wooden cubbies are located in corridors near classrooms on the upper and lower floors. These cubbies are in fair condition.

FOODSERVICE

General Overview

Crabtree McGrath Associates, a consulting group specializing in foodservice facilities planning and design. Crabtree has been retained by Dinisco Design to visit the Fox Hill and the Pine Glen School to inspect and report on the existing conditions of the kitchens.

The kitchen conditions at the two schools are similar. Both are in need of upgrades related to Plumbing and Health Code.

The following observations will reference codes and standards. For the purposes of this report when we reference the health code, we will be citing the Federal Food Code 2022 addition published by the FDA as well as the Merged Massachusetts Food Code.

Additionally, the National Sanitation Foundation (NSF) is an independent governing body and testing agency that develops standards for equipment design that is to be used in commercial foodservice applications. All equipment in a commercial kitchen must comply with NSF standards in order to be compliant for use with food preparation.

Pine Glen School

The Pine Glenn School Kitchen is spacious but antiquated. Both the kitchen finishes and equipment are in poor condition. The original kitchen in mostly intact with minor equipment replacements done throughout the years. A steamer and convection oven are newer that the 1960 construction and the balance of the equipment is original gas-powered deck ovens and a range. One of the deck ovens has failed and has been abandoned in place. The infrastructure items such as the exhaust hood and sinks have not change since the original installation.

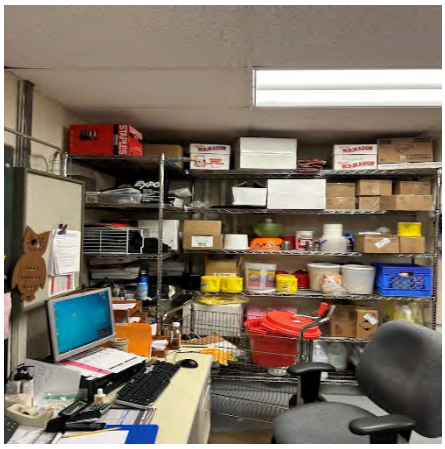


Image 1

What was once a walk-in refrigerated storage space in the far back corner was replaced with new walk-in units. However, these unit were then converted to gym equipment and janitorial supply storage. We observed that refrigerated and frozen food storage is being serviced by yet another walk-in cooler directly adjacent to the kitchen. This unit is new and is in good working order.

The kitchen walls are a durable glazed block and have held up well. The walls in the dry storage space are a painted block. Overall, the floor is in fair condition however, there appears to have been a repair at the three-compartment sink. The three-compartment sink is missing the overflow drains. This could cause a flood.

Image 2

The ceiling in the dry storage room and parts of the kitchen are a lay in tile that is not smooth thus it is not NSF or code complaint. The remaining ceiling in the kitchen is the original glued on tile and it is in fair condition. The dry goods storage room also serves as the office space. This makes for a very congested space (image 1).

The hood is original mesh style filter hood that was retrofitted and had baffle filters installed. This retrofit does not allow grease to collect into a grease collection cups because the filters have been installed in a horizontal position. This caused any grease to accumulate in the filter over time and is considered a hazard. The grease must be collected and disposed of. The lighting levels below the hood do not meet current Health Code standards (image 2).

Image 3

The serving line is in poor condition. It is original and lacks proper reach for some of the equipment. As a result, the equipment is not being used which takes up valuable space. The cold food is not able to be held in a refrigerated setting resulting in temperature maintenance of cold food not being possible. In both cases the food is not adequately protected by the existing sneeze shields. The sneeze shield in the serving counter is not compliant with current sneeze guard standards.

Food preparation sink is a hazard in its current state. The health code requires that any sink used in the preparation of food be air gapped. The air gap prevents sewer gas and backup form contaminating the sink bowls. In this case the prep sink is directly connected to the sanitary drain system (image 3).

Other food preparation work surfaces are not code complaint either. The table are a butcher block wood top (image4).

The Health Code states that wood surfaces are not allowed in a kitchen unless it is being used in the process of baking, or other dough processing.

Wood surfaces are difficult to maintain in the long term and they require frequent oiling. If not oiled the wood shrinks and splits causing health code violation since the gaps fill with debris and it is not possible to clean and sanitized thus becoming a health code violation. All materials in a kitchen should be stainless steel or other appropriate materials. The health code states materials must be durable and easy to clean and table must be built to NSF standards for use in a foodservice application.

Image 4

Similar to the Fox Hill School, this kitchen is in need of repair. An overhaul of the finished and infrastructure is long overdue. I refit of equipment is needed so that minimum health and safety concerns can be addressed. The staff do a wonderful job managing the protocols of the modern food code with an antiquated kitchen but it is with great difficulty and tremendous effort that they are able to make this kitchen function as it is.

Overall, the space is large enough to accommodate a reorganized kitchen. However, the extent of the renovation to infrastructure and equipment will require a complete overhaul of the space.

CODE

The existing Pine Glen Elementary School building was built as an educational facility in 1962. The building includes classrooms, a gymnasium, cafetorium, library, and administrative offices.

The following is a chart of codes applicable to the development of the project:

Code Type	Applicable Code (Model Code Basis)
Building	780 CMR: Massachusetts State Building Code, 9th Edition • Amended 2015 International Building Code (IBC) • Amended 2015 International Existing Building Code (IEBC)
Fire Prevention	527 CMR: Massachusetts Fire Prevention Regulations M.G.L. Chapter 148 Section 26G – Sprinkler Protection
Accessibility	521 CMR: Massachusetts Architectural Access Board Regulations 2010 ADA Standards
Electrical	527 CMR 12.00: Massachusetts Electrical Code • Amended 2023 National Electrical Code
Elevators	524 CMR: Massachusetts Elevator Code • Amended ASME A17.1-2013/CSA B44-13
Mechanical	2015 International Mechanical Code (IMC)
Plumbing	248 CMR: Massachusetts Plumbing Code
Energy Conservation	2021 International Energy Conservation Code (IECC) Updated Stretch Energy Code 225 CMR 23.00

Occupancy Classification

The existing building is considered Use Group E. Assembly spaces (i.e. cafeteria) that are associated with a Use Group E occupancy are also considered Use Group E (IBC 303.1.3). If these spaces are used for non-school events however they must be classified as a Use Group A occupancy.

Construction Type

From visual analysis and limited above-ceiling inspection, the building appears to be Type IIB construction (non-combustible, unprotected).

Interior Finishes

The existing finishes generally consist of painted drywall, tile or masonry that complies with the code requirements for new construction (IEBC 803.4). All wall finishes, ceiling finishes, and trim materials installed as part of a future project must comply with IBC Table 803.11.

Means of Egress

The means of egress including the number of exits and egress capacity must be sufficient for the number of occupants on all floors (780 CMR 102.6.4). The lower level has multiple exterior exit doors and the second floor includes three exit stairs (including two exterior stairs) that provide capacity well in excess of the building's occupant load and therefore comply with this requirement.

All of the larger assembly spaces with greater than 50 occupants are provided with at least two egress doors as required. All of the existing primary egress doors swing in the direction of egress as required. The existing primary egress doors with latches appear to include panic hardware as required.

The building does not contain dead-end corridors.

Energy Code

New work is subject to the International Energy Conservation Code (IECC) or ANSI/ASHRAE/IESNA 90.1 with Massachusetts Amendments (Massachusetts Energy Code). Alterations to existing buildings are permitted without requiring the entire building to comply with the energy requirements of the International Energy Conservation Code (IECC). The alterations (new elements and additions) must conform to the energy requirements of the IECC as they relate to new construction only (IEBC 811.1).

The Massachusetts Stretch Code has been adopted by the town of Burlington

Ventilation Requirements

All reconfigured spaces must provide mechanical or natural ventilation in accordance with the International Mechanical Code, except that existing ventilation systems are permitted to remain provided they achieve not less than 5cfm of outdoor air per person and not less than 15 cfm of ventilation air per person (IEBC Section 809).

Flood Hazard Requirements within Flood Hazard Areas

This site is not in a FEMA Flood Hazard Area.

Architectural Access Board Regulations (MAAB)

The existing building does not fully comply with MAAB regulations.

An elevator provides access to the classroom levels in the 2 story wing.

The building includes several toilet rooms with multiple fixtures that are not accessible. A single accessible toilet room on the upper floor was built within the past few years.

Classroom sinks and sink areas are not accessible. Signage does not meet current MAAB regulations and does not include raised characters or Braille.

While most doors along the main corridors of the original building have lever hardware, knob hardware remain in several locations. Also, door openings into many of the classrooms of the original building do not have the required clearance on the latch side of the door.

Handrails at the interior stair and both exterior stairs do not meet the MAAB requirements.

Future alterations to the building must comply with the requirements of the Massachusetts Architectural Access Board Regulations (521 CMR). For existing building alterations, the requirements of 521 CMR are based on the cost of the proposed work.

If the cost of the proposed work is greater than 30% of the full and fair cash value of the existing building, the entire building is required to comply with 521 CMR (521 CMR Section 3.3.2). All portions of the building open to the general public (students, visitors, etc) must be upgraded to comply in full with the current requirements of 521 CMR.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

An environment site assessment for Pine Glen Elementary School site has not been completed

HAZARDOUS MATERIALS ASSESSMENT SURVEY

A hazardous material assessment survey of Pine Glen Elementary School has not been completed.

MECHANICAL, FIRE PROTECTION & PLUMBING SYSTEMS

EXECUTIVE SUMMARY:

1. The HVAC System:
   a. Most of the system was installed in 1962 and are 61 years old, well past its useful life.
   b. Mostly hot water heating and ventilation system.
   c. Air conditioning is limited to split DX units, window AC units, and two packaged rooftop units for offices.
   d. Classrooms are served by heating and ventilating unit ventilators with wall intake louvers. Exhaust is through central roof exhaust fans.
   e. Kitchen is heated and ventilated. No dedicated makeup air unit for the kitchen cooking line hood.
   f. All components, with exception of boilers and pumps, are the original vintage which are well past its useful life.
   g. Due to exceptionally high level of maintenance, components are still operable, but despite these heroic efforts, the system is far past its useful life.
   h. Some parts of pipe insulated appears to have encapsulated ACM (Asbestos Contaminated Material), and the encapsulation in some areas may be compromised.
   i. Entire mechanical system needs to replaced.

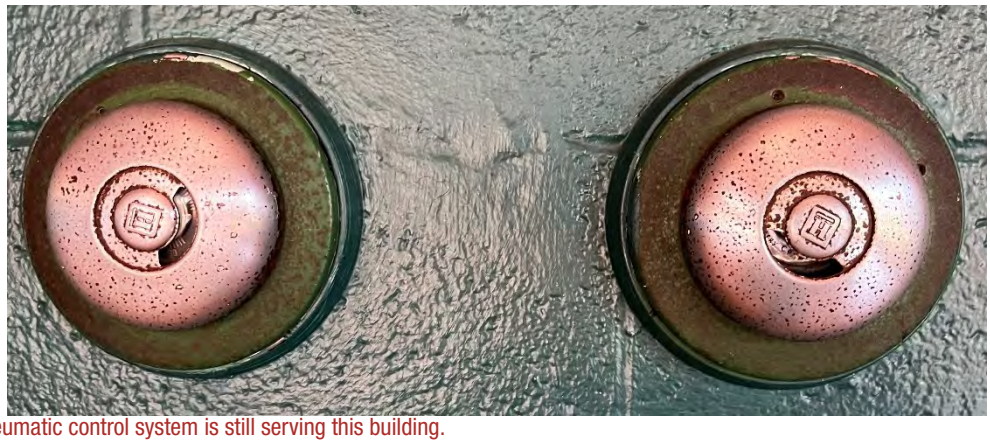
2. Plumbing System:
   a. Most of the system was installed in 1962 and are 61 years old.
   b. Potable water is fed from the municipal supply but lacks backflow preventor.
   c. Sanitary waste system is connected to the municipal system.
   d. Roofs are sloped and they are drained by downspouts.
   e. Domestic hot water is generated by gas fired tank type heaters.
   f. The system is far past its useful life and must be replaced.

3. Fire Protection System:
   a. This building does not have sprinkler system.
   b. Kitchen hood does not have Ansul system.
   c. Sprinkler and Ansul system must be added.

MECHANICAL:

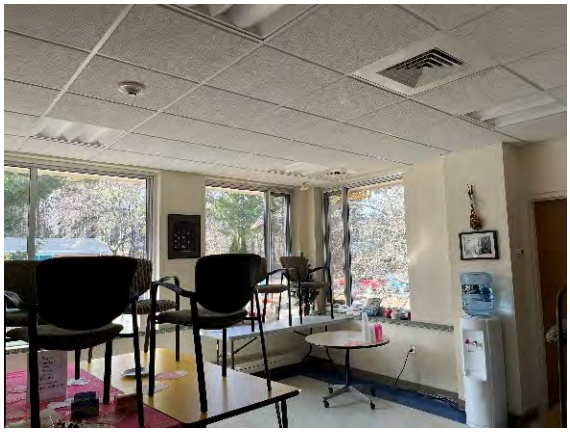
1. Photo Essay:

Typical classroom has a hot water unit ventilator and operable windows



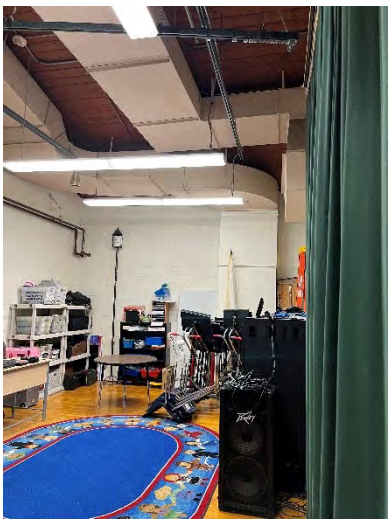
Original vintage pneumatic control system is still serving this building.

Outside air intake louvers for unit ventilators; note the ground level louvers are too close to the road surgace, which would promote debris and water ingestion.

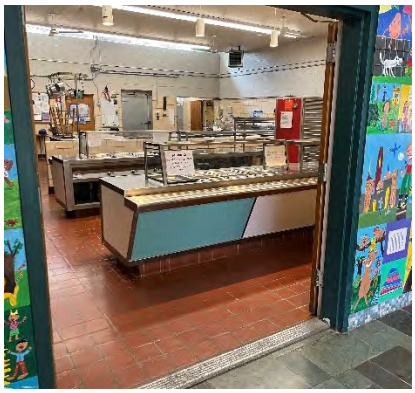


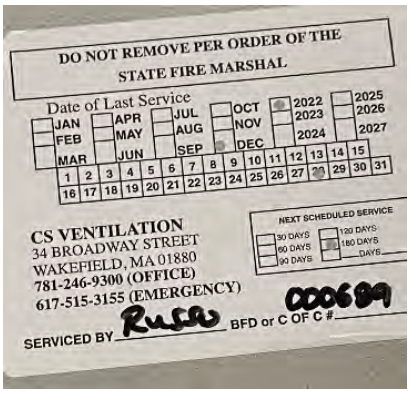
Offices are air conditioned with DX system and heated by hot water fintube

L-Corridor H&V intake louver
C&R-Gym is served by H&V units



Cafetorium is served by a H&V unit

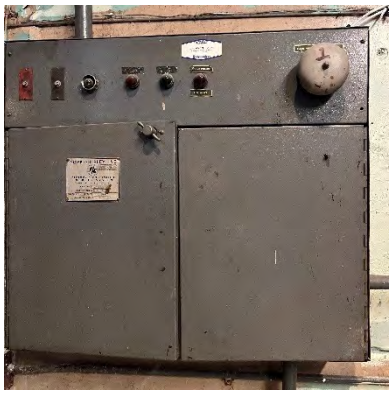




L-Servery. C-Cooking line hood does not have Ansul fire protection system. R-Hood is regularly cleaned inspected

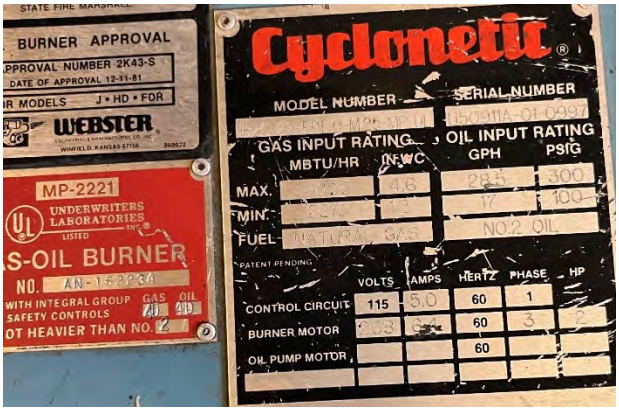
Kitchen hot water unit heater

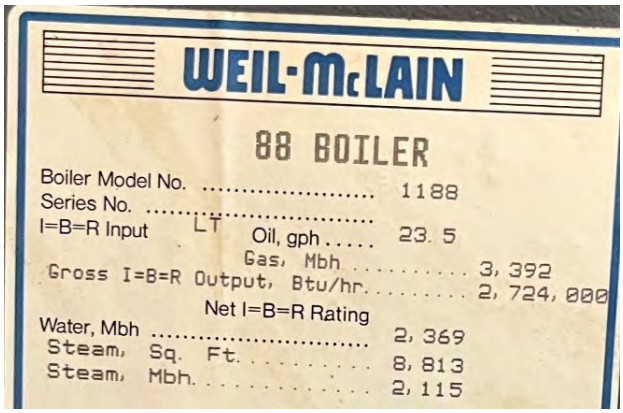
Boiler room view



L-Looks to be original vintage pumps. C-Pneumatic control compressor and control panel. R-Previous boiler control panel abandoned in place.

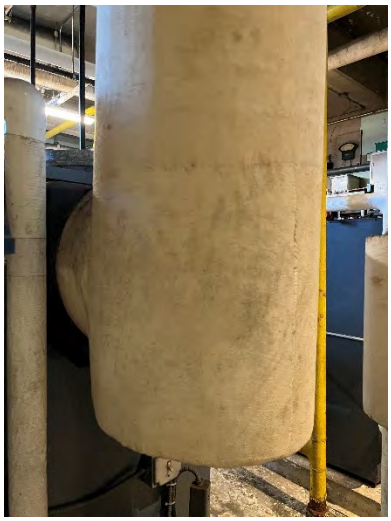
L-Former fuel oil piping is capped and abandoned in place.
C&R-Two cast iron hot water boilers





Dual gas/oil fuel Webster burner, serial number trace indicated it was made in 1977. Weil-McLain cast iron hot boiler, 3,392 MBH input.

Left side boiler did not show any leaks. Right side boiler showed leakage, likely from a cracked section.



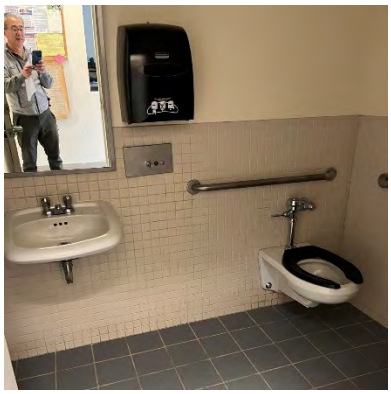
Boiler flues are encapsulated, suggesting they may contain ACM insulation.

2. Remaining Useful Life:

	Components	BOMA Useful Years	Actual Years In	BOMA Remain. Life (Yrs.)	Comments
a.	Air handling units	25	61	-36	
b.	Rooftop HVAC unit	18	15	+ 3	Estimated
c.	Boilers, cast iron	30	26	+ 4	Serial number
d.	Cabinet heaters	20	61	-41	
e.	Convectors, fintube	15	61	-46	
f.	Unit Heaters	20	61	-41	
g.	Ductwork	30	61	-31	
h.	Fans	20	61	-41	
i.	Pumps	25	61	-36	
j.	Controls	20	61	-41	
k.	Piping	30	61	-31	
l.	Boiler metal flues	20	61	-41	

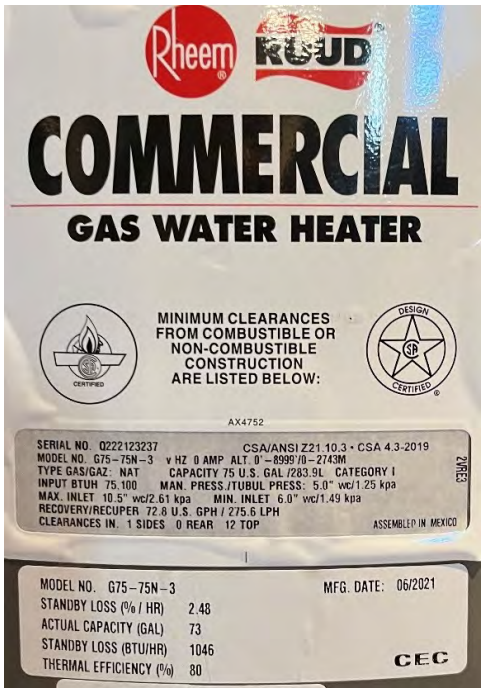
PLUMBING:

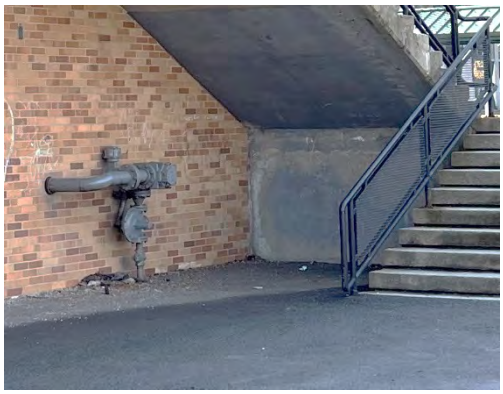
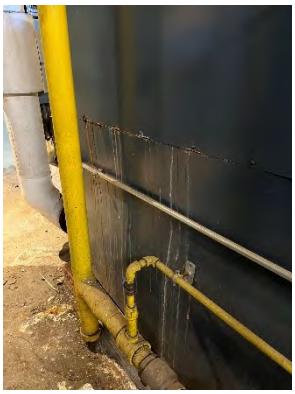
1. Photo Essay:



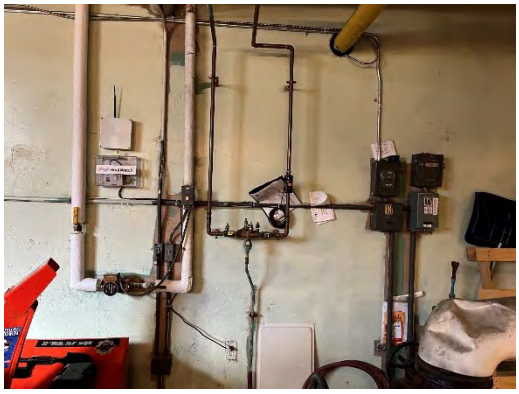
WC's are wall-hung back discharge flush valves, Lavs are wall hung with two handle faucets, and urinals are wall hung back discharge flush valves. Vitreous china fixtures are in good shape and all faucets are in working order, indicative of good maintenance.

L-Water cooler / bottle filler. R-Domestic hot water heater



L-Rheem gas fired tank water heater model G75-75N-3, 73 gallon tank, 80% efficient, and 75,100 BTUH input, manufactured in 2021.
C-Gas Service. R-Gas piping to the boilers



L-BFP for the boiler makeup water. R-Typical downspout connected to a footpiece

2. Remaining Useful Life:

	Components	BOMA Useful Years	Actual Years In	BOMA Remain. Life (Yrs.)	Comments
a.	Water heater	15	2	+13	Nameplate
b.	Fixtures	30	61	-32	Faucets were replaced as needed.
c.	Potable water piping	30	61	-32	
d.	Waste water piping	30	61	-32	
e.	Storm water piping	30	61	-32	
f.	Gas piping, LP, threaded	30	26	+19	Estimated to be same as boilers.

FIRE PROTECTION:

1. Overall Description:
   a. This building has no sprinkler system for the general area.
   b. Kitchen hood does not have Ansul system.
   c. Both of the above code requirements must be met.

ELECTRICAL

Existing Conditions Evaluations:

The building was constructed in 1962. The switchboard, generator and many of the panels were replaced in 2002. However, a few of the original panels remain, are over 60 years old and are well past their life expectancies. The electrical systems have been maintained by the owner over the years, however but most of the equipment does not properly support current educational needs including all-electric heating systems.

Electrical Service

The incoming underground primary underground electric service emanates from a pole on Pine Glen Way. The pole serves electric and communication utilities to the building. The electric utility serves a pad mounted transformer located on school property located adjacent to the switchboard which is located in the main electric room. Utility meter is located adjacent to the main switchboard. Pad mounted transformer and primary electric service cables were installed and maintained by Eversource.

Pat Mounted Transformer

Eversource Meter

Electrical Distribution

The electric service equipment is rated at 1200-amperes, 120/208-volts, 3-phase and consists of a main circuit breaker section and CT cubicle section, and one distribution section. The main distribution equipment was installed in 2002 The equipment was manufactured by Eaton. The equipment is located in the first floor main electric room. Eversource meter is located in the room.

The room is being used for storage. The existing electric service equipment shares the electric room with the automatic transfer switch (ATS), and emergency panels, and does not meet current electrical code requirements for equipment space, working space, egress, separation between normal and emergency equipment, and separation from non-trained staff.

The electric service equipment would be rated in good condition, due to being only 20 years old. Electrical distribution equipment has a life expectancy of 35 to 40 years.

Main breaker and CT cubicle section

MDP Panel

During our walk-through of the building, it appeared to us that many of original General Electric panelboards and associated feeders have not been upgraded or replaced. We did notice that newer panelboards were installed to serve selected new loads.

Original receptacle and lighting panels are located in small electric rooms in each building wing. Panels are recessed mounted into the CMU or gyp walls. HVAC panels are located in storage rooms through the building. There does not appear to be any spare capacity or breakers in the original panels 208V panels for additional receptacles.

In 2002, new electrical panels were installed to the installation of receptacles and a data network upgrade. One 100A-3P panel was installed in each section of the building, first and second floor. The new panels were manufactured by Eaton.

HVAC Panel

Old Panel

Emergency Light and Power System

The building is served by a 30 KW, 120/208V, 3-phase natural gas driven emergency generator manufactured by Olympian. The generator, automatic transfer switch (ATS), distribution panel are located in the main electric room and all equipment is original. There is one emergency panels for the building. A new ATS was installed in the past few years.

The generator and associated equipment being located in the same room as the normal electric service panels is a present day electrical code violation. MA Electrical Code Article 700 requires the normal and emergency electrical equipment to be separated from normal power equipment. Also, in a building with no sprinkler system, the separation between normal and emergency power needs to be two hour rated. In addition, the generator location does not allow for code required work space for the generator and wall mounted electrical panels.

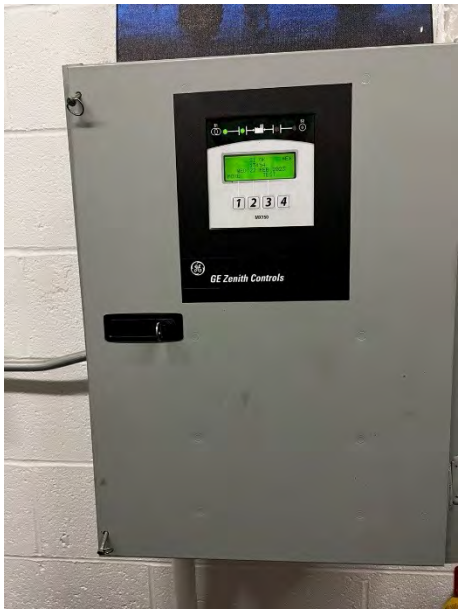
TEC did not observe the emergency lighting levels. Based on past experience, it is doubtful that all areas are properly covered by emergency lighting as required by code. TEC did observe emergency battery units in several areas of the building.

The generator is not sized to support the systems that are typically connected to emergency power in a present day school – communications, security system, kitchen refrigeration, HVAC systems.

The emergency electric service including generator, and automatic transfer switch are in poor condition. The generator and associated panels are almost 50 years old and well past its life expectancy, do not meet current life safety codes, and need to be replaced.

Generator

Generator



ATS

Emergency Battery Unit

Lighting Systems

There are multiple types of lensed lighting fixtures in the building:

- Classrooms, kitchen, cafeteria: Linear 1'x4' surface mounted fixtures with wrap around lens
- Gym: 18"x48" pendants with wireguards in the gym
- Offices: 1'x4' lensed surface fixtures and 2'x4' parabolic
- Corridors: 1'x4' surface linear fixtures and 2'x2' recessed fixtures.

During utility retrofit programs, fluorescents lamps have been replaced with LED tube lamps or the fixture has been replaced with a LED fixture.

Overall quality of the lighting is fair to poor condition but the lighting creates glare. Glare was observed on whiteboards and computer screens.

All lighting appears to be controlled by local switches including corridors. Corridors are controlled by local switches. There are occupancy sensors in most rooms in the building. Sensors were installed during a utility retrofit program. TEC did not test the occupancy sensors.

Site lighting: The parking lots are illuminated by one utility pole with three flood lights controlled by integral photocells. The bus drop area has no lighting fixtures. There are spot lights under the entrance canopy. There is no lighting around the play area.

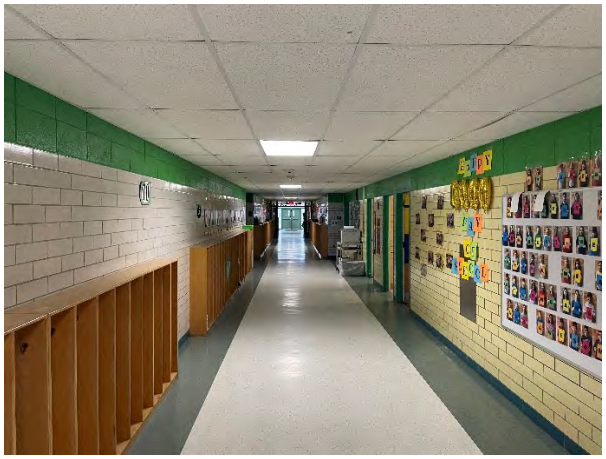
There are wall mounted fixtures along the exterior of the building, however in some areas the wall mounted lighting is at least 20'-0" from exterior doors. TEC did not test the wall mounted lighting, and therefore we cannot confirm if the lighting is connected to emergency power.

Based on the layout observed, it is assumed that the site lighting does not completely cover the parking lot and walkways.

Typical Classroom

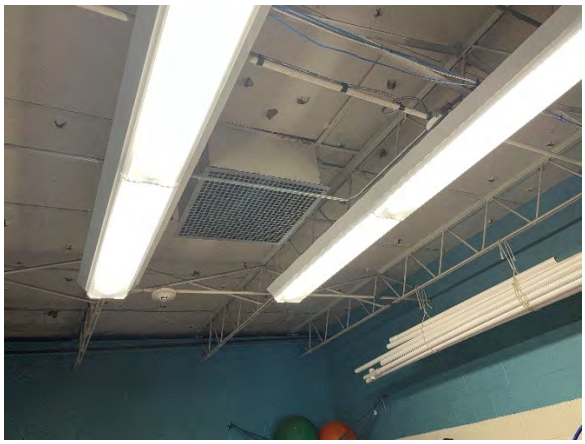
Kitchen

Bathroom


Corridor

Canopy Lighting

Gym


Corridor

Receptacle Systems

The original design provided two receptacles in each classroom.

In 2002, surface mounted raceways with receptacles and data were added throughout the building including classrooms and other spaces to meet increased power needs for technology, wall mounted smartboards and projectors, however the overall quantity of receptacles is insufficient for current classroom and office requirements.

Vertical raceway

Raceways

Raceways

Emergency battery light and raceway

Raceway

Fire Alarm System

The building is not sprinkled. The fire alarm system was replaced in the last five to ten years and consists of a control panel, annunciator, manual pull stations, smoke detectors, heat detectors, and horn/strobe notification devices. The control panel (FACP) is a Firelite ES-200X and the panel is located adjacent to the original FACP in the main electric room.

The fire alarm system serves the original building and modular classrooms.

An annunciator is located in the main entrance. The original master box has been removed, and replaced with a radio mater box and antenna.

The building appears to have 100% smoke detector coverage. Pull stations at every egress door. Ceiling mounted horn/strobe units in all spaces including classrooms, office suites, and corridors.

TEC did not witness the fire alarm system operation, but it is assumed that the system is functioning properly. The last test was performed 1/19/2023.

Per NFPA 72 Fire Alarm System Code, AV notification devices shall be installed at a minimum mounting height of 6'-8" AFF to a maximum of 8'-0" AFF, and at least 6" from the ceiling, whichever is lower. There are many locations where the devices are closer than 6" from the ceiling, or above 8'-0" AFF.

The current system does not have a voice evacuation system, and it used 55 year old wiring in some places, therefore the system should be replaced if the building is renovated.

Smoke detector and horn/strobe unit

Exit Signs

There appears to be exit signs in all paths of egress. There are several different generations of exit signs in the building, including exit signs with battery heads. Overall exit signs conditions are fair.

Exit Sign

Exit Sign with battery heads

Structured Cabling System

Figure 1

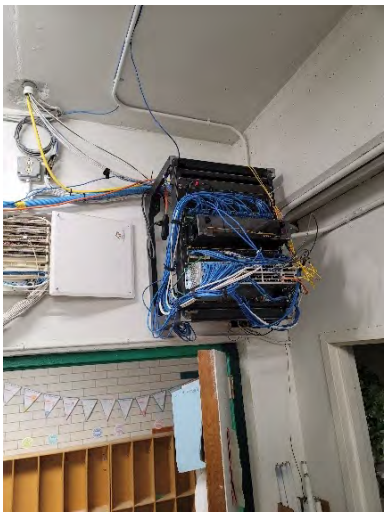


Figure 2

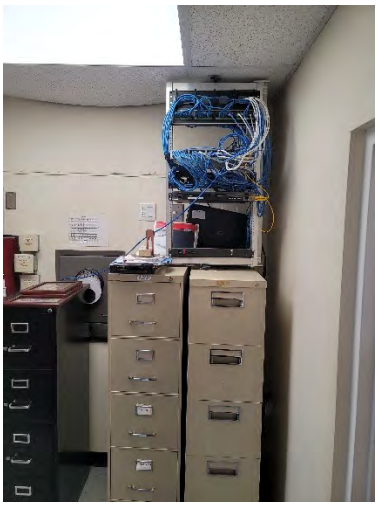


Figure 3

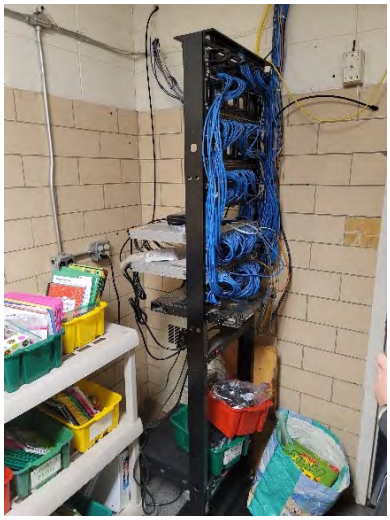


Figure 4

Figure 5

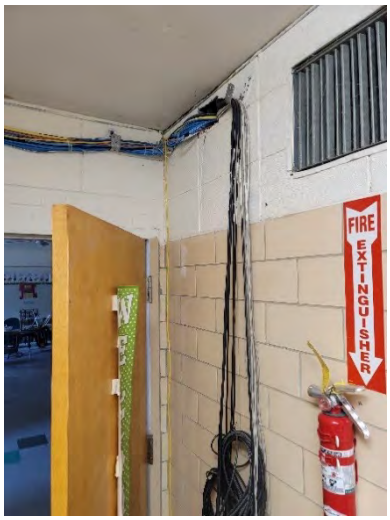


Figure 6

Figure 7

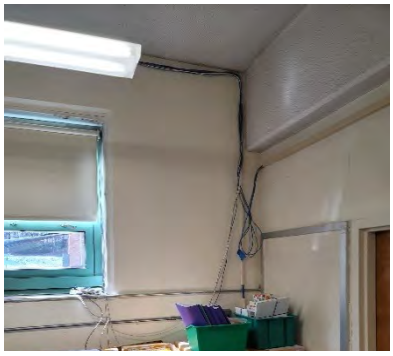


Figure 8

The School has Category 6 UTP cabling installed throughout the building and cabling is installed mostly above suspended ceilings to individual data outlets. However, in many locations, structured cabling was observed running outside of raceway or conduit (Figures 6, 7 and 8). All the voice and data cabling appears to be in good working order, even though it does not meet the most current standard for structured cabling. Building communication services come into a demarcation room (Figure 1) and are distributed to a MDF cabinet mounted above the door (Figures 2). Fiber optic communications cabling that ties the school to the wide area network is terminated in this room. This includes dual 10Gb connections over dual 12 strand fiber to the Town Hall, which is the hub of the network. The MDF is connected via multimode fiber optic cabling running between MDF cabinet and three other wiring racks or cabinets used as intermediate distribution frame closets (Figures 3, 4 and 5). The Structured voice and data cabling is organized and terminated onto data patch panels, with patch cords running between network switches patch panel ports and network switches (Figures 5).

Structure voice and data network cabling appears to be installed to all rooms and spaces throughout the school providing connectivity for telephones, network peripherals, and wireless access devices.

The MDF cabinet and IDF rooms are in areas that share other purposes such as storage rooms, classrooms, office space, and utility spaces. This is not a criticism, as the building was never designed to support the level of technology and cabling that is required, and finding space for wiring centers is a major challenge in older buildings. However, because these wiring centers are in shared spaces, they are not totally secure, and do not have dedicated power and environmental conditioning. Any major facilities project should include providing dedicated and secure spaces for wiring closets, which can also be properly equipped with power and environmental conditioning.

Distributed Communications System

Figure 9

Figure 10

Figure 11

The public address main system cabinet is located in an administrative office area. It is an analog Valcom Class Connection System (Figure 9). There are wall mounted clocks (Figure 10) and flush mounted wall and ceiling speakers throughout. The secondary clock system does not appear to be fully functional as battery operated secondary clocks appear throughout the school, and at all of the locations where the original secondary clocks were located in the clock speaker panels (Figure 10). There are older style horn speakers in the larger assembly spaces such as the cafeteria, and the building exterior (Figure 11). There are what appear to be older style call switches throughout the school (Figure 10). There are what appear to be speakers in the Gym, but they appear to be tied to the PA system and not a separate sound system for that space. The PA system operation was not observed, however, it was mentioned by office personnel that it is functioning.

Local Sound Systems

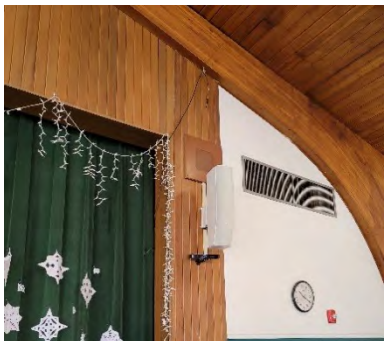


Figure 12

Figure 13

Figure 14

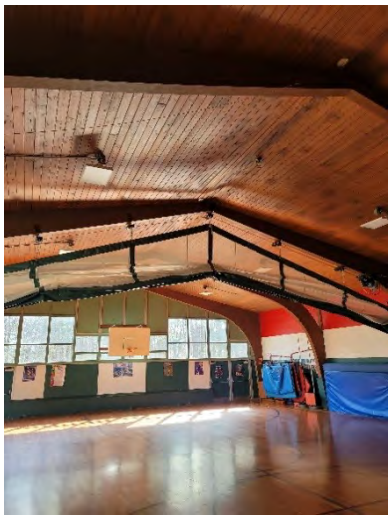


Figure 15

A Cafeteria sound system was observed to include program loudspeakers on either side of the proscenium (Figure 12), an electric dual vision (rear projection) screen was located on the stage. A high lumen projector was mounted on the back wall of the stage (Figure 13), which is used with the rear projection screen. A state-of-the art sound system cabinet was located on the stage, which included a touch screen control panel (Figure 14). The System was not turned on or tested, but a comment was made that the system was recently installed within the last 5 years and was fully functioning. Some of the audio-visual system equipment could be reused as part of any facility renovation projects. The Gym as a large assembly space did not have any building in audio visual equipment (Figure 15).

Network and Wireless

Figure 16

Figure 17

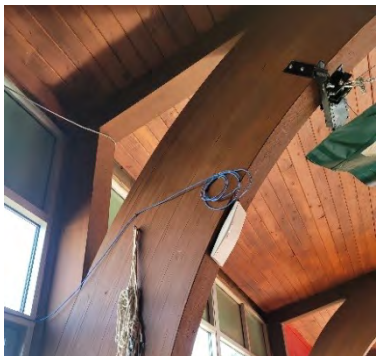


Figure 18

Older Cisco Catalyst network switches were located in the MDF and IDF racks and cabinets, where structured network voice and data cabling originates and is terminated (Figure 17). Network switches support all hard-wired voice and data cabling and wireless access points throughout the school.

Cisco Wireless Access devices mounted to the underside of the suspended ceiling were observed throughout the school (Figure 16). In the Gym, cabling can be seen running exposed to a wireless access point (Figure 18).

Security Systems

Figure 19

Figure 20

Figure 21

Figure 22

Figure 23

Figure 24

An Aiphone Video Intercom system was observed at the main entrance to the building (Figure 19). This system has a management console in the main office for remotely unlocking the main entrance door (Figure 20).

These Aiphone systems are an industry standard for managing visitors remotely from the main office. However, there is no separate transaction window for screening visitors after they are allowed to enter the building and before they enter the school.

There is an intrusion alarm system with older long-range motion sensors in the corridors (Figure 21).

Surveillance cameras were observed at various locations on the exterior perimeter of the school (Figure 22). A small number of cameras were also observed in strategic areas throughout the interior ceilings of the School (Figures 23). However, cameras were lacking at critical exterior perimeter locations and in many corridors and stairwells inside the school. The system could be enhanced with additional cameras as part of a facilities projecct.

There is also a wireless key access system observed at the main entrance and at various strategic entrance doors (Figure 24).

The functionality of the installed system was not observed but we were informed that it is operational.

Classroom Technology

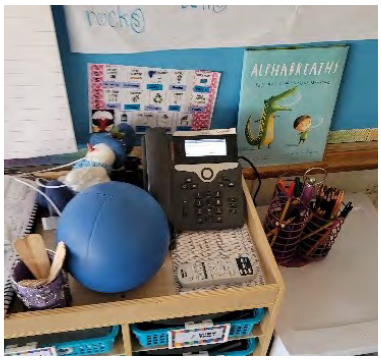


Figure 25

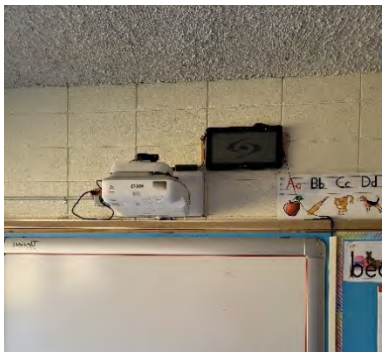


Figure 26

Figure 27

Figure 28

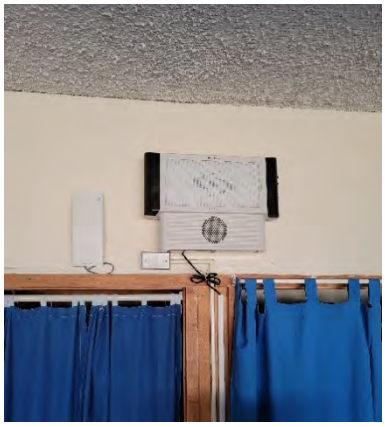


Figure 29

Figure 30

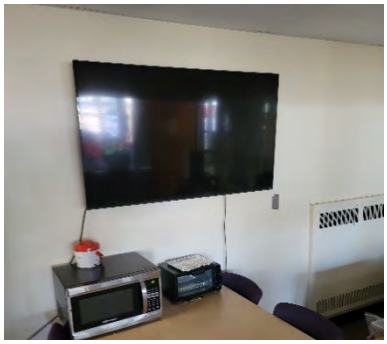


Figure 31

Figure 32

Figure 33

A VoIP Cisco IP telephone handset was observed in all classrooms and workspaces (Figure 25). A place for a wall phone was observed in most classrooms, however, telephones were located at teacher workstation areas in the classrooms.

Wireless Access Points were observed in classrooms and throughout the school.

Epson ultrashort projectors were observed in most classrooms (Figures 26 and 28).

Teaching stations in classrooms included a teacher Chromebook or laptop, and cabling between teacher location and projector, which appears to have been added when the projector were installed.

Most of the classrooms were equipped with older Lightspeed speech reinforcement systems that include a speaker mounted in the wall (Figure 26 and 29). The operation of this equipment was not observed, but it was verified to be working. Any new facilities project should include built-in speech reinforcement systems in all classroom ceilings.

Chromebook charging carts were observed in the classrooms (Figure 27).

Large flat panel displays were observed for various functions including as teaching aids in the Teacher's Workroom area (Figure 31) as signage (Figure 32); as teaching aids in the Library (Figure 30).

Large Printer/Copier devices were observed in Corridor space (Figure 33)

5

FOX HILL ELEMENTARY SCHOOL

- Plans
- Space Summary
- Narratives
- Cost Estimates

FOX HILL AERIAL PLAN
1/32" = 1'-0"

0 16' 32' 64'
SCALE: 1/32" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX

Drawn By: KJL

Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

N

Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT

123 CAMBRIDGE STREET
BURLINGTON, MA

Stamp:

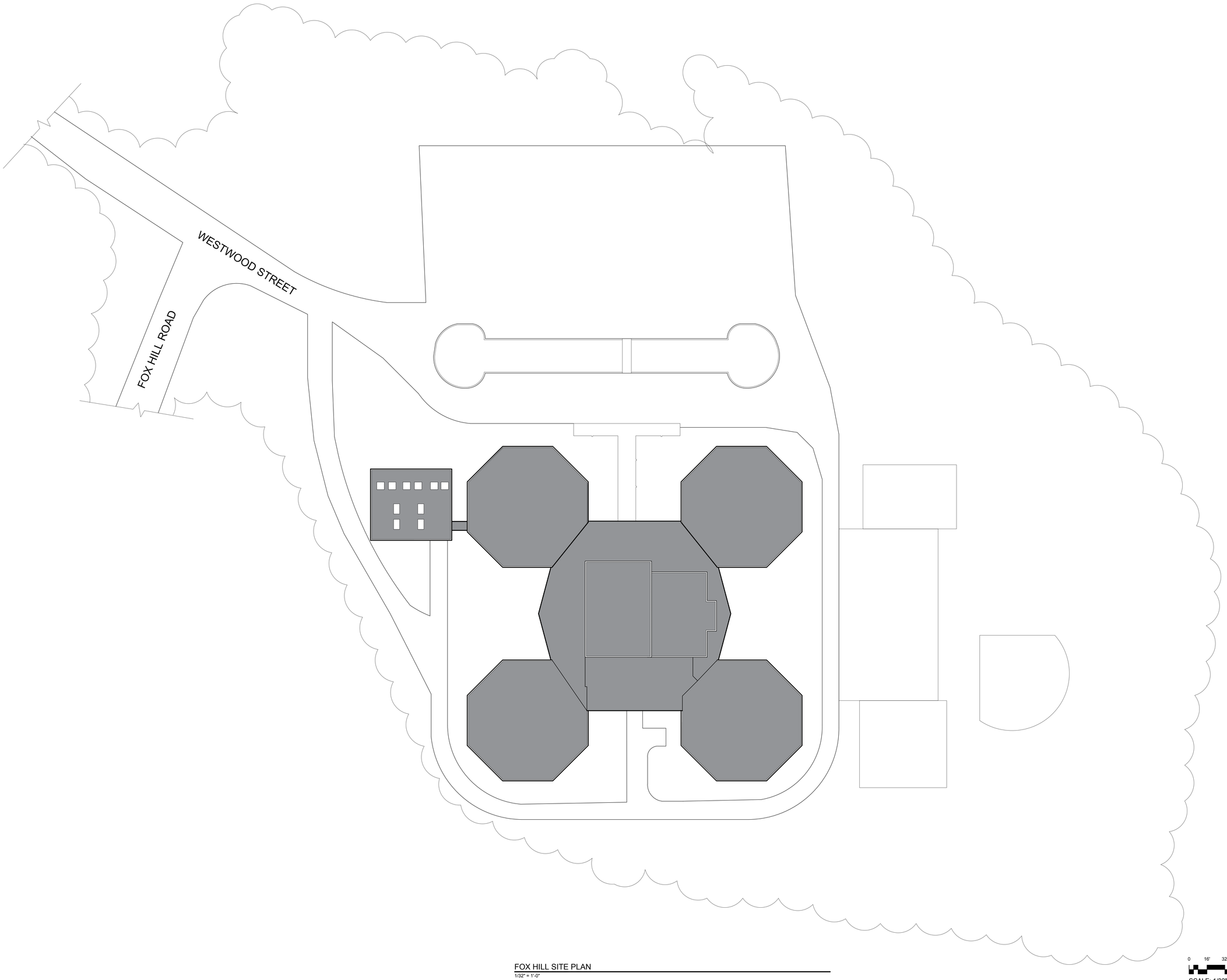
Drawing Name:

FOX HILL
SCHOOL
AERIAL PLAN

Job No.: S119416-PP

Date: 03/22/2017

Drawing No. A5.00



FOX HILL SITE PLAN
1/32" = 1'-0"

0 16' 32' 64'
SCALE: 1/32" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.
6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX
Drawn By: KJL
Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

N

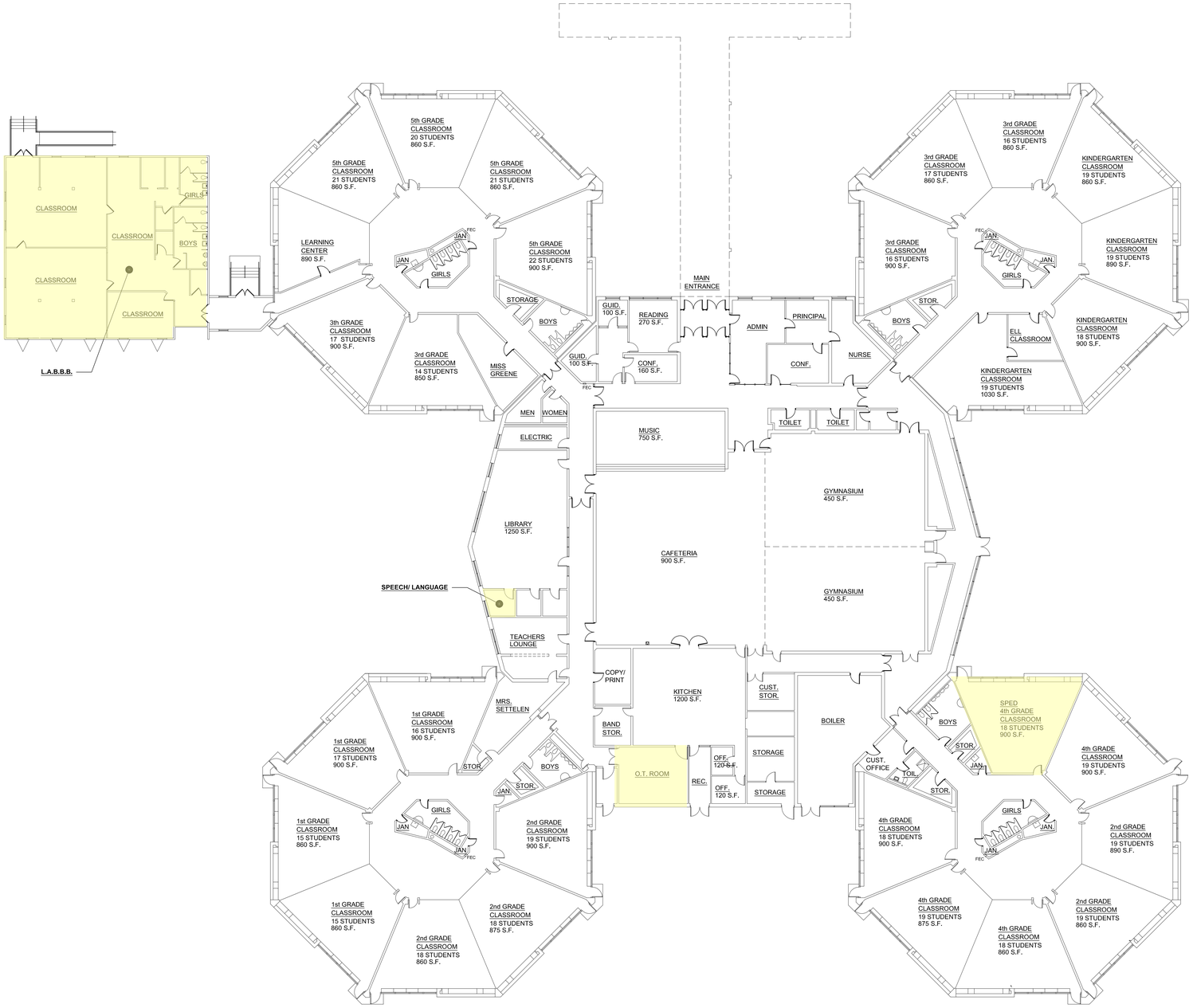
Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT
123 CAMBRIDGE STREET
BURLINGTON, MA

Stamp:

Drawing Name:
FOX HILL
SCHOOL
SITE PLAN

Job No.: S119416-PP
Date: 03/22/2017
Drawing No. A5.01



FOX HILL FLOOR PLAN

1/16" = 1'-0"

0 8' 16' 32'

SCALE: 1/16" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.
6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX

Drawn By: KJL

Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

N

Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT

123 CAMBRIDGE STREET
BURLINGTON, MA

Stamp:

Drawing Name:

FOX HILL
SCHOOL
FLOOR PLAN

Job No.: S119416-PP

Date: 03/22/2017

Drawing No. A5.10

Proposed Space Summary- Elementary Schools

FOX HILL ES	Existing Conditions			PROPOSED: Existing to Remain/Renovated			PROPOSED: New			PROPOSED: Total			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**22,580**			**0**			**0**			**0**		**17**	**16,900**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet													1,200		-	1,100 SF min - 1,300 SF max
Kindergarten		4	3,680										1,200	3	3,600	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-5		21	18,900										950	14	13,300	900 SF min - 1,000 SF max
Modular Classrooms																
SPECIAL EDUCATION			**5,745**			**0**			**0**			**0**			**4,530**	
(List rooms of different sizes separately)																
SPED Classroom		1	900										950	3	2,850	8% of pop. in self-contained SPED
LABBB		3	3,850													
Self-Contained SPED - toilet													60	3	180	
ELL Classroom		1	225													
Reading Room		1	270													
Speech Language		1	80										500	2	1,000	1/2 size Genl. Clrm.
Small Group Room / Reading													500	1	500	1/2 size Genl. Clrm.
OT Room		1	420													
ART & MUSIC			**570**			**0**			**0**			**0**			**2,575**	
Art Classroom - 25 seats													1,000	1	1,000	assumed schedule 2 times / week / student
Art Workroom w/ Storage & kiln													150	1	150	
Music Classroom / Large Group - 25-50 seats													1,200	1	1,200	assumed schedule 2 times / week / student
Music Practice / Ensemble													75	3	225	
Band Storage		1	150													
Music Office		1	420													
HEALTH & PHYSICAL EDUCATION			**900**			**0**			**0**			**0**			**6,300**	
Gymnasium		1	900										6,000	1	6,000	6000 SF Min. Size
Gym Storeroom													150	1	150	
Health Instructor's Office w/ Shower & Toilet													150	1	150	
MEDIA CENTER			**1,454**			**0**			**0**			**0**			**2,443**	
Media Center / Reading Room		1	1,250										2,443	1	2,443	
Reading Room		3	204													
DINING & FOOD SERVICE			**3,495**			**0**			**0**			**0**			**6,180**	
Cafeteria / Dining		1	900										2,955	1	2,955	2 seatings - 15SF per seat
Stage		1	750										1,000	1	1,000	
Chair / Table / Equipment Storage													331	1	331	
Kitchen		1	1,325										1,694	1	1,694	1600 SF for first 300 + 1 SF/student Add'l
Kitchen Office		2	240													
Staff Lunch Room		1	280										200	1	200	20 SF/Occupant
MEDICAL			**330**			**0**			**0**			**0**			**510**	
Medical Suite Toilet													60	1	60	
Nurses' Office / Waiting Room		1	330										250	1	250	
Examination Room / Resting													100	2	200	
ADMINISTRATION & GUIDANCE			**1,429**			**0**			**0**			**0**			**2,109**	
General Office / Waiting Room / Toilet													347	1	347	
Teachers' Mail and Time Room													100	1	100	
Duplicating Room													150	1	150	
Records Room													110	1	110	
Principal's Office		1	200										375	1	375	
Principal's Secretary / Waiting		1	400										125	1	125	
Assistant Principal's Office													120	0	-	
Supervisory / Spare Office													120	1	120	
Conference Room		1	254										250	1	250	
Guidance Office		2	200										150	1	150	
Guidance Conference		1	160													
Guidance Storeroom													35	1	35	
Teachers' Work Room		1	215										347	1	347	
CUSTODIAL & MAINTENANCE			**800**			**0**			**0**			**0**			**1,994**	
Custodian's Office		1	150										150	1	150	
Custodian's Workshop													375	1	375	
Custodian's Storage		3	520										375	1	375	
Recycling Room / Trash													400	1	400	
Receiving and General Supply		1	130										231	1	231	
Storeroom													263	1	263	
Network / Telecom Room													200	1	200	
OTHER			**0**			**0**			**0**			**0**			**0**	
Other *(specify)*																
Total Building Net Floor Area (NFA)			**37,303**			**0**			**0**			**0**			**43,541**	
Proposed Student Capacity / Enrollment			**394**												**394**	
Total Building Gross Floor Area (GFA)[2]			**61,700**												**66,599**	
Grossing factor (GFA/NFA)			**1.65**									**#DIV/0!**			**1.53**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

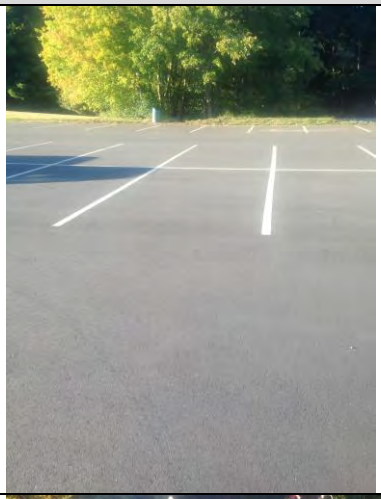
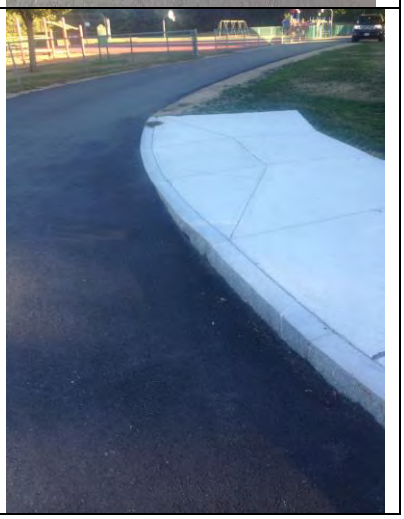
Signature of Principal Architect: _____

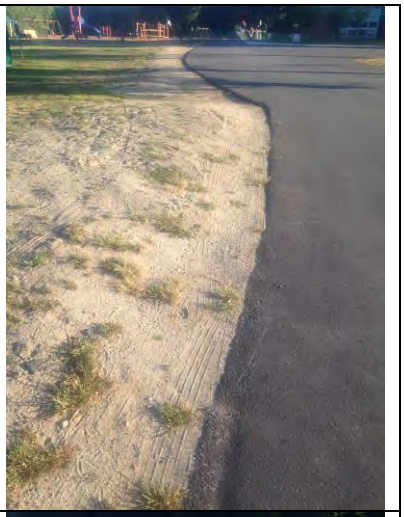
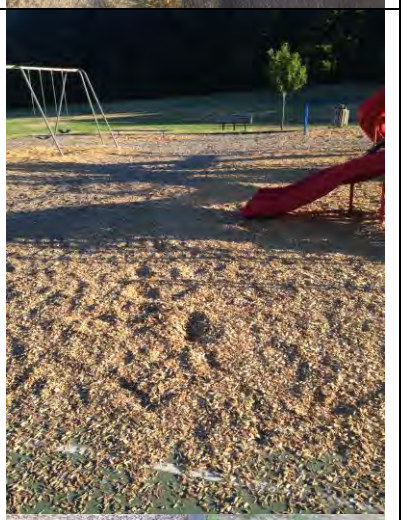
Date: _____

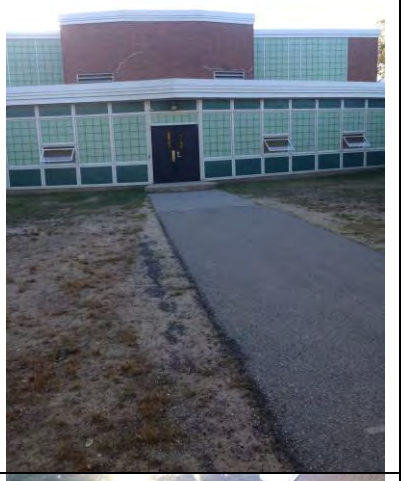
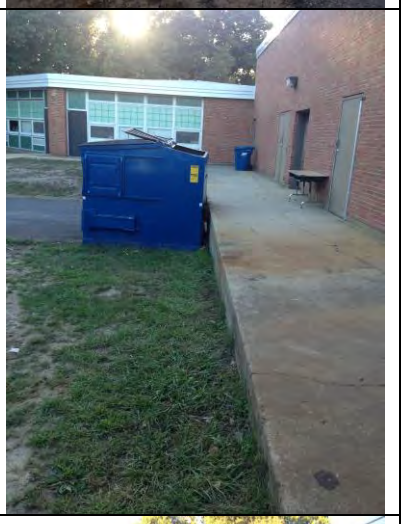
Nitsch Engineering

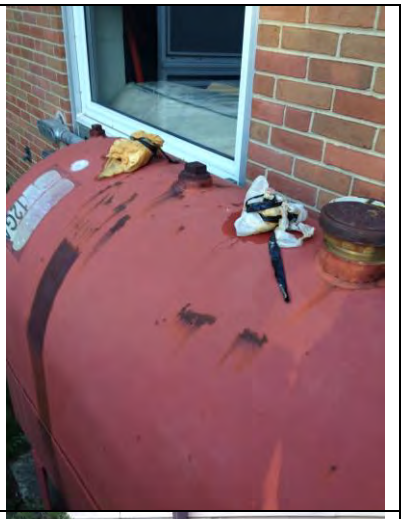
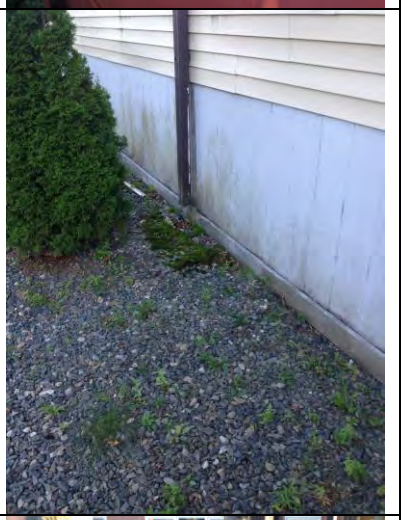
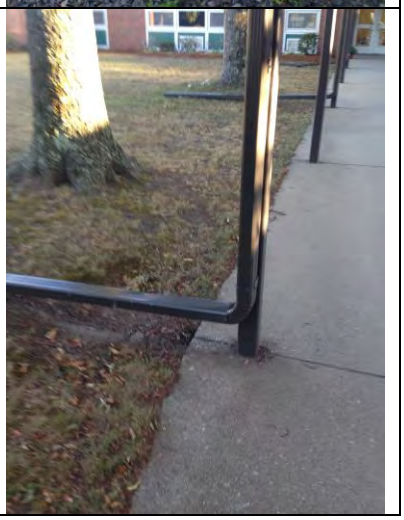
SITE AND CIVIL
FOX HILL ES

	GENERAL INTRODUCTION
Description	**Photograph**
Fox Hill Elementary sits on 37.9-acre parcel at the end of Fox Hill Road. Most of the parcel is wooded, the developed portion of the site is approximately 16 acres.	

			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
1	Paving: Parking lot is in good condition. No drainage structures were visible. Drainage appeared to be by surface runoff only.	Moving forward any cracking or damage should be promptly repaired to prevent further deterioration. The landscaped area where the surface drainage runs off the parking lot should be reinforced to prevent erosion.	
2	Walkways/sidewalks: It appears a new sidewalk has been installed in the front of the school. The curb cut opposite the parking lot has no tactile warning strip.	Install a new tactile warning strip at the curb cut.	

3	Groundcover: High traffic areas and areas adjacent to the site drive have little to no grass coverage.	Remove accumulated sand along roadway edges, loam and reseed as needed to reestablish groundcover. Areas that are denuded because of heavy foot traffic should have bituminous pathways installed.	
4	Playground: The play equipment looks relatively new. The playground areas have woodchip groundcover. Some of the playground area is bordered by plastic curb.	Woodchips should be provided to the recommended minimum depth. To keep the woodchips from migrating out of the play area, new durable curbing should be installed around the perimeter of the play area.	

5	Accessible entrance: The doorway from the school to the playground area is not handicap accessible.	Provide an accessible ramp up to the doorway.	
6	Dumpster placement: The dumpster is not located on a dedicated dumpster pad nor is it enclosed in any way.	Provide a dedicated dumpster pad and enclose the dumpster in a fenced in area.	
7	Transformer/oil tank proximity: An oil tank (possibly no longer used) is immediately adjacent to the electrical transformer.	Remove the oil tank if it is no longer used or if needed, install a new oil tank a safe distance from the transformer.	

			
8	Drainage at modular classroom: Roof downspouts for the modular classroom building discharge at the base of the building resulting in water and mildew damage.	Extend the downspouts away from the building or connect them into a new drywell.	
9	Drainage at main entrance: The roof drainage from the canopy at the main entrance is exposed and has been damaged.	Install a new below-grade drain line that discharges to a drywell and connect the downspouts to the new system.	

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

ARCHITECTURAL EXTERIOR ENVELOPE

FOX HILL ES

GENERAL INTRODUCTION

Description	Photograph
Fox Hill School built in 1960 with some minor upgrades in 1967. The building is a steel frame structure with brick veneer primarily set on concrete slab (no basement area). Resting on a 37 acre parcel the building had some recent upgrades such as, new windows in 1996-1997 (20 years old), new secure entrance vestibule in 2014 and new membrane roof (EPDM) in 2015.	

OBSERVED CONDITIONS

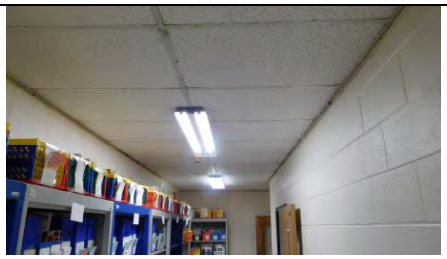
No.	Noted item	Recommendation	Photograph
1	Exterior doors and entrances Combination older hollow metal Newer (1997) Fiberglass Newest aluminum entrance installed 2014 at the main entrance and vestibule.	Hollow metal doors and frames in poor condition. Replace hollow metal doors in 1 - 5 years. Newer doors and frames of fiberglass installed in 1997. Good condition, review within 5 – 7 years.	
2	Windows and skylights Newer (1997) aluminum windows with translucent (Kalwall) and operable glass hopper and insulated panel below operable sash or selective louvers.	Exterior fenestration should be adequate for next 10 years at which time entire window system will be over thirty years old and should be analyzed to considered cost benefit analysis for new upgrade.	
3	Concrete foundations or walls Although limited exposure of concrete walls in most areas, some spalling and cracking of the superficial nature observed in multiple locations.	Concrete foundations appear in good condition with some minor spalling. Pargeting of spalling concrete for aesthetics only. See attached structural report for more detail.	

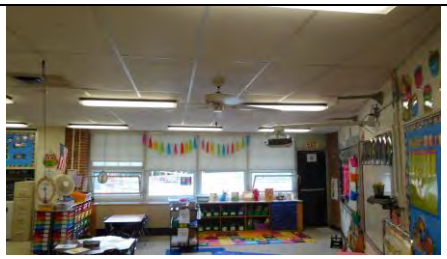
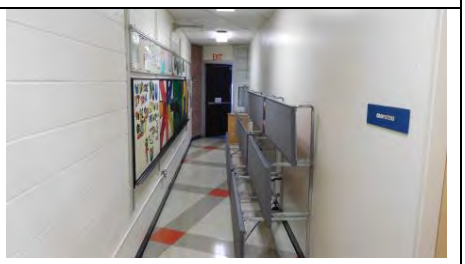
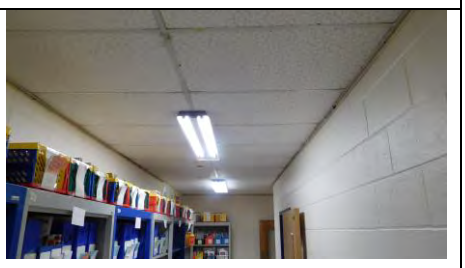
4	Masonry Brick exterior walls (Brick veneer on CMU backup with steel framed structure)	Brick appears to be in very good condition with mortar jointing in solid state. No work required. Brick veneer shold be monitored to determine need for re-pointing and/or moisture waterproofing.	
5	Siding Vinyl siding at temporary classrooms (Vinyl siding at portable classrooms only)	A few vinyl clapboards are damaged adjacent to grade & stoop. Replace & power wash. Vinyl siding is cracked and loose in areas and showing need to clean mold and mildew from exterior surfaces.	
6	Roofing Flat roof with EPDM membrane (Membrane installed over new insulation to improve energy efficiency)	Newly installed 2015. EPDM and edge metal. No leaks, ponding. Under 20 yr. warranty. Only normal maintenance required for foreseeable future by cleaning roof drains etc.	
7	Roofing – sloped roofs (Sloped roofs occur at each classroom “pod”) Pods are octagon shapes which adds to the number of metal breaks and joints.	Newly installed 2015 EPDM and edge metal. No leaks, ponding. Under 20 yr. warranty.	
8	Drainage elements Paved roads Generally draining well. (See Nitsch Engineering civil engineering report for more detail.)	Install berm within 1 - 2 years to avoid extensive erosion at shoulders and beyond. See additional comments on civil engineering report.	

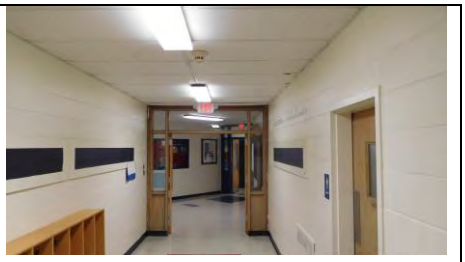
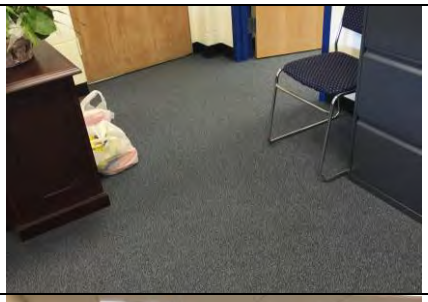
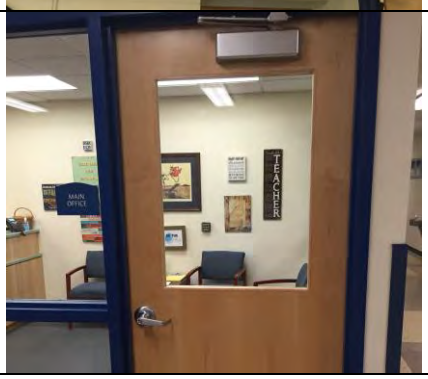
KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

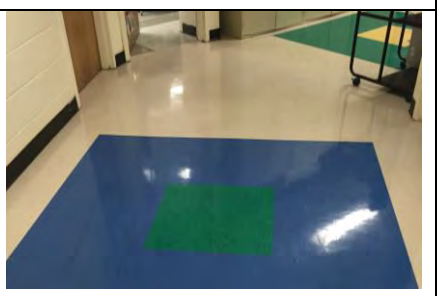
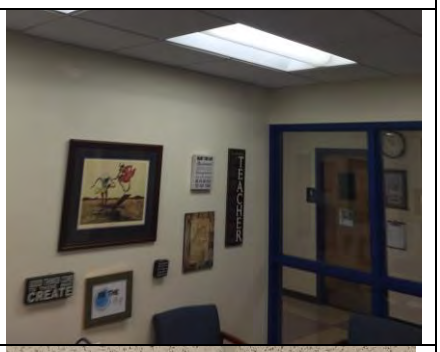
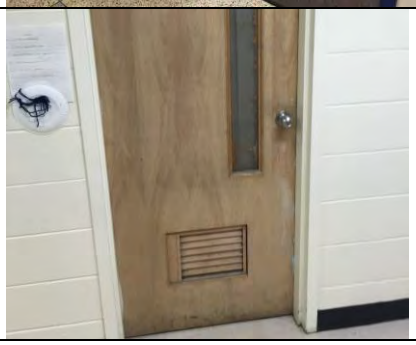
ARCHITECTURAL INTERIORS
FOX HILL ES

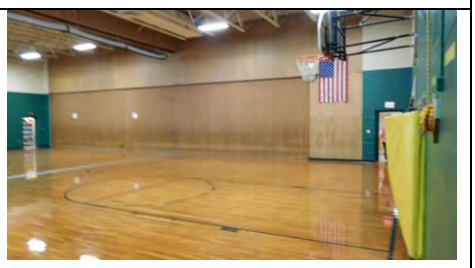
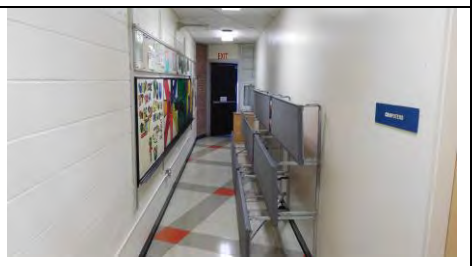
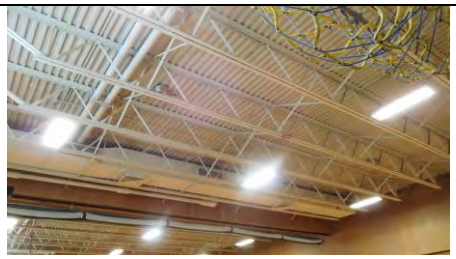
	GENERAL INTRODUCTION
Description	**Photograph**
Fox Hill School built in 1960 with some minor upgrades in 1967. The building is a steel frame structure with brick veneer primarily set on concrete slab (no basement area). Resting on a 37 acre parcel the building had some recent upgrades such as, new windows in 1996-1997 (20 years old), new secure entrance vestibule in 2014 and new membrane roof (EPDM) in 2015.	

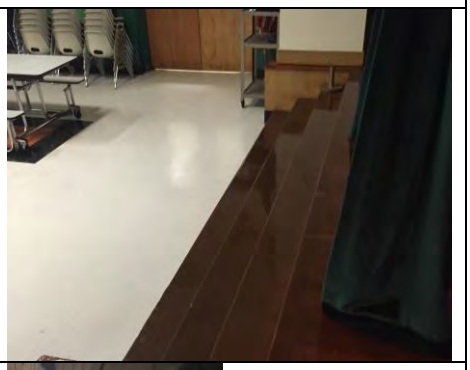
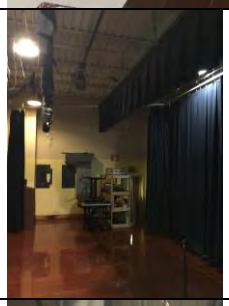
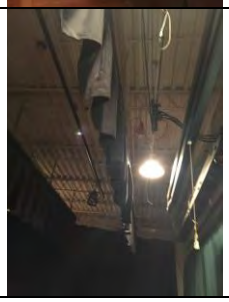
			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
CLASSROOMS			
1	Floors VCT flooring in corridors in good condition. Maintain quality maintenance program to keep conditions positive. ACM contained in some products.	VCT in generally good condition. Some areas do require replacement. Much of vinyl cove base requires replacement within 1 – 2 years. Cracked tiles at some corners present most concern (See UEC report attached)	
2	Walls Painted concrete block walls. Mortar joints in good condition, CMU in good condition, paint requires maintenance program.	CMU shows no signs of stress cracks or mortar deterioration. Clean scuffs. Re-coat as necessary. Generally provide painting program within every 5 years is recommended.	
3	Ceilings Suspended acoustical ceilings. Generally 2 x 4 acoustical ceiling tile set in 1 ¼" aluminum track system.	Many tiles have been damaged; replace with new resulting in poor aesthetics. Grid system old, showing misalignment of system. Replace within 1 – 2 years. Provide "drop-in" tectum panels at any low areas.	

4	Doors and Hardware Wood interior doors and hardware showing dated look and condition.	Change all doors with knobs with lever type. No work necessary. Some passage hardware sets required to be changed to lever type. Replacement of all wood doors could help facilitate hardware changes.	
5	Chalkboards/Tackboards Smart boards and tackboards in use.	Smart boards in good condition as well as tackboards. May consider upgrading technology in 5 - 7 years.	
LOBBY/CORRIDORS			
6	Floors 12 x 12 Terrazo	well maintained. Very good condition. Replacement should be considered in the next 5 - 7 year period if wear patterns become evident.	
7	Walls Painted CMU & GWB.	Touch up as needed. New coating 3 - 5 years. Avoid adhering items to walls that allows staining or removal of paint. Otherwise, very good condition.	
8	Ceilings Suspended acoustical ceilings.	Dated but in fair condition. Consider upgrade of grid & panels 3 - 5 years.	

9	Doors and Hardware Wood door with push/pull hardware, panic devices at exits and knobs at rooms off corridor	Fire doors require refurbishing. Remove hardware with knobs and replace with lever type. Consider installation of toe kicks.	
ADMINISTRATION/NURSE/SPED SUITES			
10	Floors (Central Office area received an upgrade in 2013 to expand space and improve finishes	Carpet Good Condition. No work required. Continue maintenance program. Carpet was installed as part of renovation and should last 10 years with good care.	
11	Walls Concrete block Existing CMU and concrete vault was demolished to create more space and add conference room.	No work, good condition. Touch up as needed. Walls were painted, CMU and gypsum board partitions and should be part of re-paint program every 5 years.	
12	Ceilings 2 x 2 rev. edge good condition All new ceilings and lighting was installed as part of 2013 office expansion / renovation	No work required. New 2 x 2 acoustical panel ceilings set in new low profile aluminum T-rack system with “drop-in” 2 x 2 florescent light fixtures.	
13	Doors and Hardware Wood and lever type hardware New wood doors with glass borrowed lights and new lever hardware was installed into existing hollow metal frame system.	No work required. All new wood work doors, central counter and receiving desk and mail slots. Should remain in good condition for at least the next 10 years.	

CAFETERIA/KITCHEN			
14	Floors VCT	Tiles are well maintained. 6 years old in good condition. No work required.	
15	Walls Painted GWB	No Work. Painted GWB in good condition. Re-coat on 3 – 5 year cycle.	
16	Ceilings SAC 2 x 4 tiles	Replace all tiles and consider replacing grid system.	
17	Doors and Hardware Wood doors with vision panel and louvered vent.	75% wood doors in good condition. Those with knob type passage sets must be changed to accessible lever type within 1 year.	
17A	Doors and Hardware Others poor refinish with new hardware	25% Require refinish with new hardware.	

GYMNASIUM			
18	Floors Hardwood	Appear to be well maintained and in good condition. Screening and re-coat annually / bi-annually dependent on use.	
19	Walls CMU painted walls.	CMU walls in good condition. Touch-up as needed. Wood diminishing wall requires sanding with 2 coats of polyurethane.	
20	Ceilings Ceiling / roof corrugated steel deck open web steel joists	Looks to be in good condition. No evidence of staining due to roof leaks. Be vigilant of leaks that can impact ceiling condition as well as hardwood flooring.	
21	Doors and Hardware Wood doors, standard hardware with knobs	Door face should be lightly sanded. Apply 1 coat of finish 3 - 5 years. Convert hardware to lever type within 1 year.	

AUDITORIUM/STAGE			
22	Floors Hardwood flooring Accessed by 4 stair risers at front of stage	Flooring in very good condition Handicapped access must be provided via ramp or lift	
23	Walls CMU – Painted	Appear to be generally in good condition. Avoid penetrating CMU to support various elements.	
24	Ceilings Corrugated steel deck open web joists	No adverse issues observed. Caution should be taken in suspending lighting fixture from joists.	

BLW ENGINEERS

PLUMBING & FIRE PROTECTION
FOX HILL ES

GENERAL INTRODUCTION	
Description	**Photograph**
The Fox Hill Elementary School is currently provided with dedicated utilities located within the main Boiler Room. (2) 120 gallon direct fired storage tank hot water heater is provided for the building's domestic hot water use. Commercial grade plumbing fixtures are supplied throughout the building's core and accessory bathrooms. A commercial kitchen is located within the building for meal preparation and cooking. Most classrooms are typical inclusive of a classroom sink. The building does not have a fire protection system.	

OBSERVED CONDITIONS			
No.	**Noted item**	**Recommendation**	**Photograph**
1	One existing domestic hot water heater has outlived its life expectancy.	Replace tank with new high efficient appliance.	
2	Water piping in general appears to be in poor conditions with multiple locations of "pitting", oxidizing and previous patches/replacement.	A thorough investigation should be provided on the building domestic water system. The investigation may include but not be limited to: a water analysis, potential for water treatment and/or replacement of the existing domestic water piping.	
3	Plumbing fixtures appear to be in fair condition however, many have outlived their expected lifetime.	Plumbing fixtures should be selectively replaced with new water efficient fixtures.	

4	Commercial kitchen is not equipped with an interlock system to stop the flow of gas when the kitchen exhaust is not operational, as required by the latest Plumbing Code.	Hoods should be equipped with the latest safety standards.	
5	The hand sinks in both the kitchen and bathrooms did not appear to have mixing valves to safely wash hands between 110-120F.	Mixing valves should be installed per the latest safety standards.	
6	The commercial kitchen only appears to have the 3-compartment sink terminate to a grease trap. Current plumbing codes require dish machines, floor drains and various other sinks to terminate to a grease trap.	A central grease trap should be provided in accordance with the latest plumbing codes.	
7	It was noted throughout the facility that janitorial soap dispensers were installed without the use of a reduced pressure backflow assembly.	Soap dispensers should be equipped with a reduced pressure backflow to avoid any back syphoning of chemicals to the potable water system.	
8	The building does not currently have a fire protection system.	A fire protection system should be installed as a life safety measure.	

No.	Noted Item	Recommendations	Priority Items Photographs
1	The building does not currently have a fire protection system.	A fire protection system should be installed as a life safety measure.	
2	One existing domestic hot water heater has outlived its life expectancy.	Replace tank with new high efficient appliance.	
3	**Water piping in general appears to be in fair/poor conditions with multiple locations of "pitting", oxidizing and previous patches/replacement.**	**A thorough investigation should be provided on the building domestic water system. The investigation may include but not be limited to: a water analysis, potential for water treatment and/or replacement of the existing domestic water piping.** **Approximate cost for replacement, $250,000.00**	
4	Plumbing fixtures appear to be in fair condition however, many have outlived their expected lifetime.	Plumbing fixtures should be selectively replaced with new water efficient fixtures.	

HVAC
FOX HILL ES

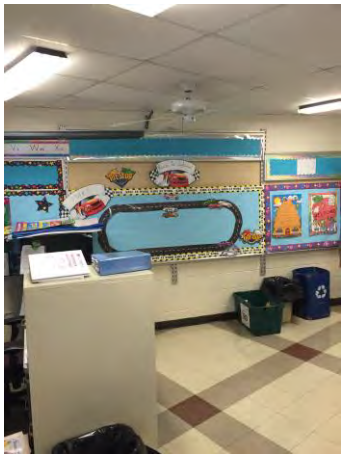
GENERAL INTRODUCTION	
Description	**Photograph**
The boiler room is located on the main level; it provides hot water for heating to the building. The hot water heating system consists of two Cleaver Brooks LB200-100A gas fired fire tube boilers, four 5 hp hot water circulating pumps to two heating zones, water specialties, insulated hot water distribution piping system, boiler breeching system and pneumatic controls. Insulated hot water distribution system from the boilers to the zone circulating pumps provides heating hot water into the insulated hot water distribution piping system. The insulation appears to be asbestos containing materials	Hot Water Boilers
Classrooms are provided with unit ventilators to provide classroom heating and ventilating. Each unit is controlled by a wall mounted pneumatic thermostat. Units are provided with a hot water heating coils interconnected to the hot water distribution piping system. Each classroom is provided destratification ceiling fans. The Media Center classroom is provided with cooling from an outdoor air cooled condensing unit, DX cooling coil in the unit ventilator and interconnecting refrigerant piping.	Hot Water Pumps & ATC Pneumatic Compressor
Adminstration areas have been provided with fintube radiation for heating and through wall air conditioning units for cooling; ventilation is through operable windows. The Teacher's Room is provided with fintube radiation for heating and a window air conditioning unit for cooling; ventilation is through operable windows.	
The Cafeteria is provided with heating and ventilation from two hot water heating air handling units. Low pressure supply air duct systems distribute air through ductwork that terminates at wall supply registers diffusers; air is returned to unit through return registers and return ductwork. Units are provided with a hot water heating interconnected to the hot water distribution piping system.	Classroom Unit Ventilator

The Gymnasium is provided with heating and ventilation from two hot water heating air handling units. Low pressure supply air duct systems distribute air through ductwork that terminates at wall supply registers diffusers; air is returned to unit through return registers and return ductwork. Units are provided with a hot water heating interconnected to the hot water distribution piping system.

The Kitchen/Servery has been provided with heating and ventilating from a hot water heating air handling unit, an insulated low pressure supply air duct distribution systems. The kitchen hoods are provided with a grease duct system and exhaust fan.

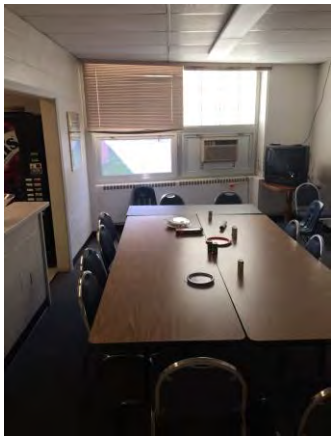
The corridors are provided with heating by convectors or fintube radiation interconnected to the hot water distribution piping system. Entries and vestibules are heated by convectors interconnected to the hot water distribution piping system.

Each toilet is provided with exhaust through ceiling mounted exhaust register(s) to provide exhaust from the space by a roof mounted exhaust fans through a low pressure duct distribution system. Each exhaust fan operates continuously during occupied hours and be deenergized during unoccupied hours. Heating is provided by fintube radiation.



Classroom Destratification Fan

Administration AC Unit



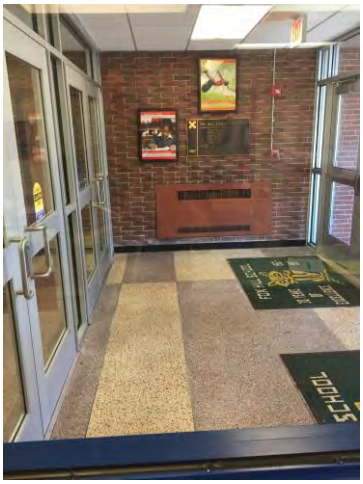
Teacher's Room

Miscellaneous spaces, such as storage rooms, are provided with hot water heating, where required, and an exhaust air system in accordance with applicable code requirements.

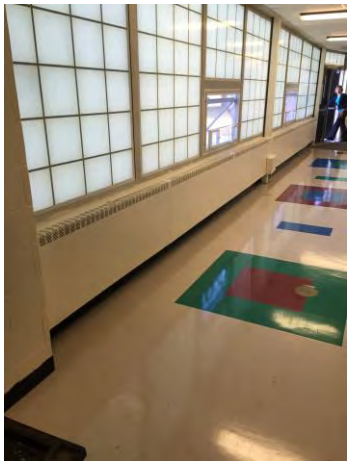
All automatic temperature controls are pneumatic.

The modular classrooms have been provided with packaged rooftop units for gas heating, DX cooling and ventilation. Miscellaneous spaces have electric fintube radiation.

Gymnasium HVAC

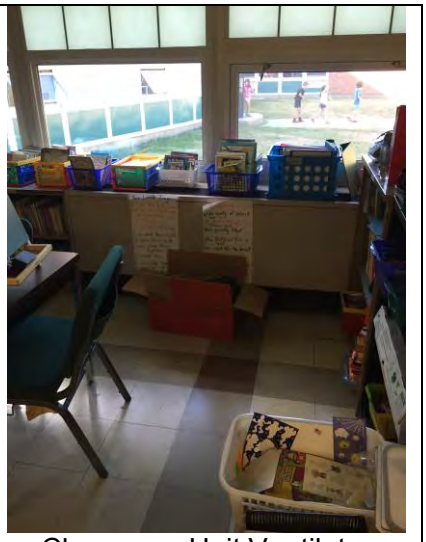


Entry Convector



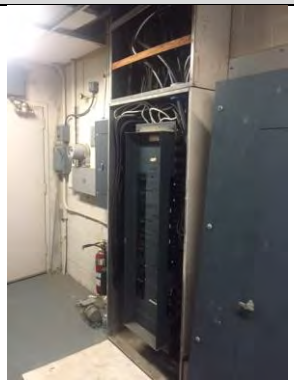
Corridor Fintube Radiation

No.	Noted item	Recommendation	OBSERVED CONDITIONS Photograph
1	Boilers were installed in 1999 and appear in good operating condition. The boilers are gas fired and standard efficiency.	The boilers will require replacement in approximately 10 years. Boilers should be replaced with condensing type boilers for high efficiency operation.	 Hot Water Boilers
2	Hot water pumps were replaced as part of the 1999 boiler renovation project. The pumps do not have variable speed drives.	The pumps will require replacement in approximately 10 years. Pumps should be provided with variable speed drives for high efficiency operation.	 Hot Water Pumps & ATC Pneumatic Compressor
3	Building controls are pneumatic.	When the building is renovated the controls should be completely replaced with new direct digital controls.	 Hot Water Pumps & ATC Pneumatic Compressor

4	Building HVAC equipment, in general, appear to be in good operating condition. The building equipment is standard operating efficiency.	The HVAC system will require replacement in approximately 10 years.	 Classroom Unit Ventilator

ELECTRICAL
FOX HILL ES

GENERAL INTRODUCTION	
Description	**Photograph**
The Fox Hill Elementary School was built in 1967. The electrical service and panels are original to the building. The standby generator has been replaced recently and is in good condition. The fire alarm system is in good working condition. The lighting fixtures have been replaced, retrofitted over the years.	

OBSERVED CONDITIONS			
No.	**Noted item**	**Recommendation**	**Photograph**
1	The electric service consists of a 1200 amp main circuit breaker/CT metering compartment, a 1200 amp distribution board. The gear was manufactured by General Electric.	The service equipment has surpassed its expected lifespan and should be replaced within the next 2 years.	
2	The electrical panels were also manufactured by General Electric and are also original to the building construction.	The panels have surpassed their expected lifespan and should be replaced within the next 2 years.	

3	The clock/paging system is a Multicom-2000. Some clocks were reported to be non-functioning or missing completely.	The system is approaching its expected useful life and should be replaced in the next 3-5 years.	
4	The fire alarm system is a Fire Lite Alarms catalog MS-9200 UDLS, an addressable fire alarm system.	The system is in good condition and should continue to be tested and maintained for the next 5-7 years. After that time, it would be recommended to replace in its entirety.	
5	Lighting fixtures are in decent condition. All fixtures have been retrofitted with energy efficient fluorescent lamps. Some fixtures are relatively new. Some fixture lenses are missing or damaged.	A series of lighting replacement should be made to include LED fixtures.	

6	Lighting Controls	There were little to no automatic lighting controls throughout the building. New occupancy sensors should be provided throughout.	
7	A backup generator is existing. It is a 45KW/56KVA Superior Model No. 45R431. There is an automatic transfer switch, ASCO model 200 AMP ATS. They were installed in 2015.	Both generator and ATS are new and in good condition. Yearly maintenance is all that is required for both.	
8	Temporary portable classrooms contain relatively new lighting panels, etc., and all are in good working condition.	No work required at this time.	

ELECTRICAL
FOX HILL ES

			Priority Items
No.	**Noted Item**	**Recommendations**	**Photographs**
1	1200 Amp Service and Panels	Replace in kind.	
2	Clock/Paging System	Replace in the next 3-5 years.	
3	Fire Alarm System	Replace in the next 5-7 years.	
4	Lighting	Retrofit/replace in the next 2-3 years.	
5	Occupancy Sensors	Provide in the next 2-3 years.	

Burlington Public Schools
Facilities Audit Cost Estimate
(For anticipated items over the next 1-5 years)

FoxHill Elementary School			64,130
Architectural Access compliance trigger amount		$	1,984,260

Trade or Work Category		**Amount**	
Sitework		$	100,000
Haz Mat		$	1,551,946
Exterior Envelope		$	100,000
Architectural Interiors		$	487,388
Security	Not included	$	-
Structural		$	50,000
Plumbing		$	256,520
Fire Protection		$	641,300
HVAC		$	705,430
Electrical		$	192,390
	Subtotal	**$**	**4,084,974**
Accessibility Upgrades		$	961,950
	Trade cost Subtotal	$	5,046,924
O&P, General Conditions, Contingency (40%)		$	2,018,770
	Construction total 2017	**$**	**7,065,694**
Escalation for 5 years	4% annually	$	1,531,136
	Total construction in 2022	**$**	**8,596,829**

6

PINE GLEN ELEMENTARY SCHOOL

- Plans
- Space Summary
- Narratives
- Cost Estimates

PINE GLEN AERIAL PLAN
1/64" = 1'-0"

0 32' 64' 128'
SCALE: 1/64" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX

Drawn By: KJL

Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

N

Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT

123 CAMBRIDGE STREET
BURLINGTON, MA

Stamp:

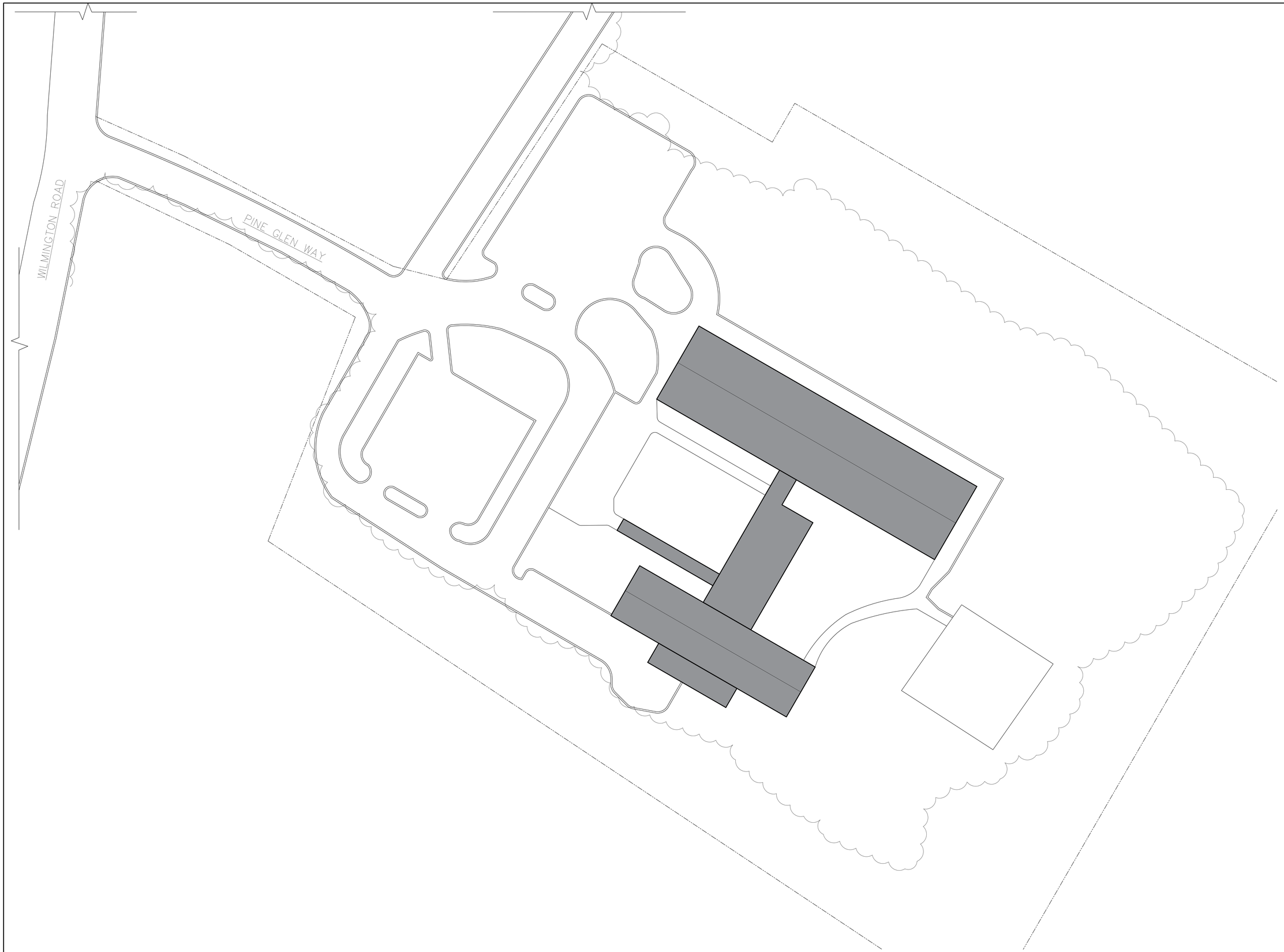
Drawing Name:

PINE GLEN
SCHOOL
AERIAL PLAN

Job No.: S119416-PP

Date: 03/22/2017

Drawing No. A6.00



PINE GLEN SITE PLAN
1/32" = 1'-0"

0 16' 32' 64'
SCALE: 1/32" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.
6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX
Drawn By: KJL
Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

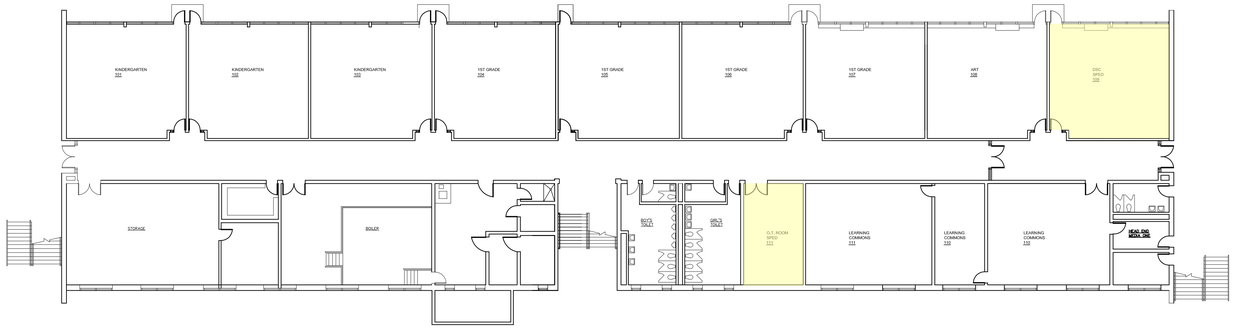
Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT
123 CAMBRIDGE STREET
BURLINGTON, MA

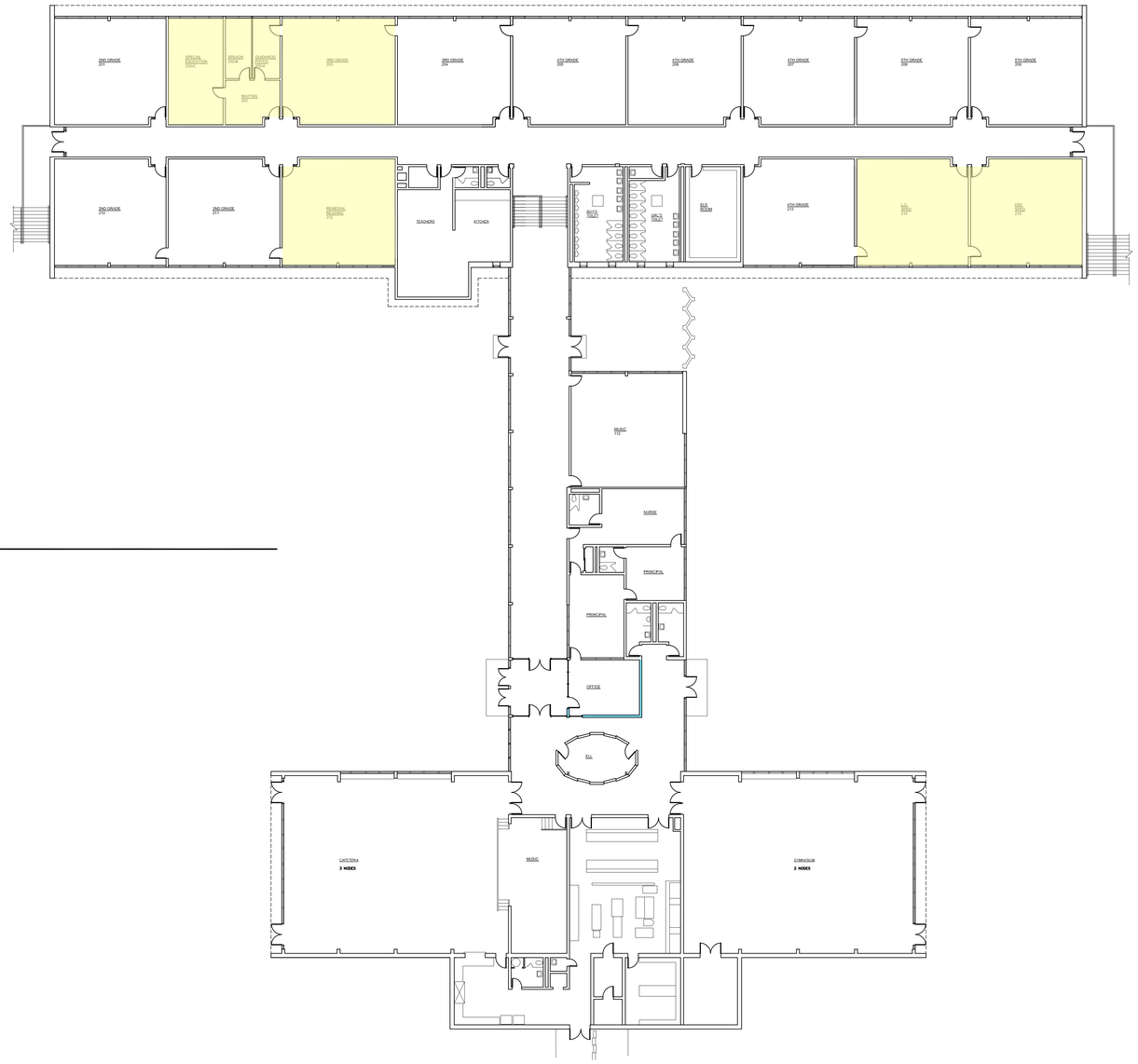
Stamp:

Drawing Name:
PINE GLEN
SCHOOL
SITE PLAN

Job No.: S119416-PP
Date: 03/22/2017
Drawing No. A6.01



LOWER LEVEL FLOOR PLAN
1/16" = 1'-0"



UPPER LEVEL FLOOR PLAN
1/16" = 1'-0"

0 8' 16' 32'
SCALE: 1/16" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.
6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX
Drawn By: KJL
Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT
123 CAMBRIDGE STREET
BURLINGTON, MA

Stamp:

Drawing Name:
PINE GLEN SCHOOL FLOOR PLAN

Job No.: S119416-PP
Date: 03/22/2017
Drawing No. A6.10

Proposed Space Summary- Elementary Schools

PINE GLEN ES	Existing Conditions			PROPOSED: Existing to Remain/Renovated			PROPOSED: New			PROPOSED: Total			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**17,694**			**0**			**0**			**0**		**13**	**12,850**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet													1,200		-	1,100 SF min - 1,300 SF max
Kindergarten		3	2,760										1,200	2	2,400	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-5		14	12,880										950	11	10,450	900 SF min - 1,000 SF max
Learning Commons		3	2,054													
SPECIAL EDUCATION			**5,930**			**0**			**0**			**0**			**3,020**	
(List rooms of different sizes separately)																
Self-Contained SPED		4	3,680										950	2	1,900	8% of pop. in self-contained SPED
DSC		1	920										60	2	120	
Speech/Guidance Psych Suite		1	920										500	1	500	1/2 size Genl. Clrm.
OT		1	410										500	1	500	1/2 size Genl. Clrm.
ART & MUSIC			**1,920**			**0**			**0**			**0**			**2,500**	
Art Classroom - 25 seats		1	920										1,000	1	1,000	assumed schedule 2 times / week / student
Art Workroom w/ Storage & kiln													150	1	150	
Music Classroom / Large Group - 25-50 seats		1	1,000										1,200	1	1,200	assumed schedule 2 times / week / student
Music Practice / Ensemble													75	2	150	
HEALTH & PHYSICAL EDUCATION			**3,475**			**0**			**0**			**0**			**6,300**	
Gymnasium		1	3,190										6,000	1	6,000	6000 SF Min. Size
Gym Storeroom		1	285										150	1	150	
Health Instructor's Office w/ Shower & Toilet													150	1	150	
MEDIA CENTER			**0**			**0**			**0**			**0**			**2,020**	
Media Center / Reading Room													2,020	1	2,020	
DINING & FOOD SERVICE			**5,640**			**0**			**0**			**0**			**5,228**	
Cafeteria / Dining		1	3,120										2,228	1	2,228	2 seatings - 15SF per seat
Stage		1	600										1,000	1	1,000	
Chair / Table / Equipment Storage													200	1	200	
Kitchen		1	1,595										1,600	1	1,600	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room		1	325										200	1	200	20 SF/Occupant
MEDICAL			**525**			**0**			**0**			**0**			**510**	
Medical Suite Toilet		1	75										60	1	60	
Nurses' Office / Waiting Room		1	450										250	1	250	
Examination Room / Resting													100	2	200	
ADMINISTRATION & GUIDANCE			**1,813**			**0**			**0**			**0**			**2,015**	
General Office / Waiting Room / Toilet		1	310										300	1	300	
Teachers' Mail and Time Room													100	1	100	
Duplicating Room													150	1	150	
Records Room													110	1	110	
Principal's Office w/ Conference Area		1	245										375	1	375	
Principal's Secretary / Waiting		1	355										125	1	125	
Assistant Principal's Office													120	0	-	
Supervisory / Spare Office													120	1	120	
Conference Room													250	1	250	
Guidance Office													150	1	150	
Guidance Waiting		1	178													
Guidance Storeroom													35	1	35	
Teachers' Work Room		1	475										300	1	300	
Speech		1	125													
Psychology		1	125													
CUSTODIAL & MAINTENANCE			**2,725**			**0**			**0**			**0**			**1,900**	
Custodian's Office		1	750										150	1	150	
Custodian's Workshop													375	1	375	
Custodian's Storage		1	1,050										375	1	375	
Recycling Room / Trash		1	575										400	1	400	
Receiving and General Supply													200	1	200	
Storeroom		1	245										200	1	200	
Network / Telecom Room		1	105										200	1	200	
OTHER			**0**			**0**			**0**			**0**			**0**	
Other *(specify)*																
Total Building Net Floor Area (NFA)			**39,722**			**0**			**0**			**0**			**36,343**	
Proposed Student Capacity / Enrollment			**297**												**297**	
Total Building Gross Floor Area (GFA)[2]			**55,577**												**53,460**	
Grossing factor (GFA/NFA)			**1.40**									**#DIV/0!**			**1.47**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

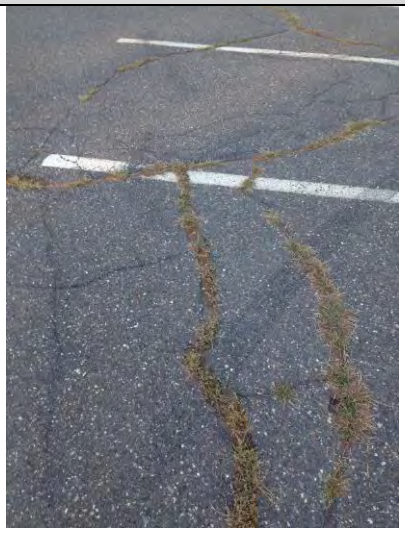
Signature of Principal Architect: _____

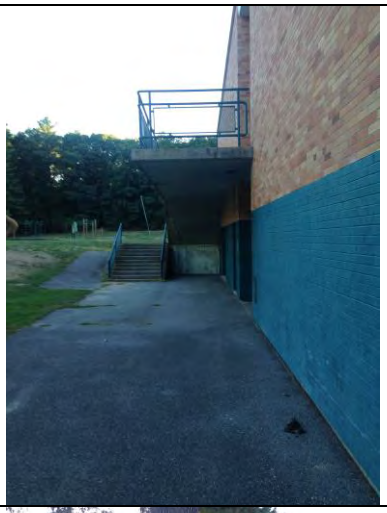
Date: _____

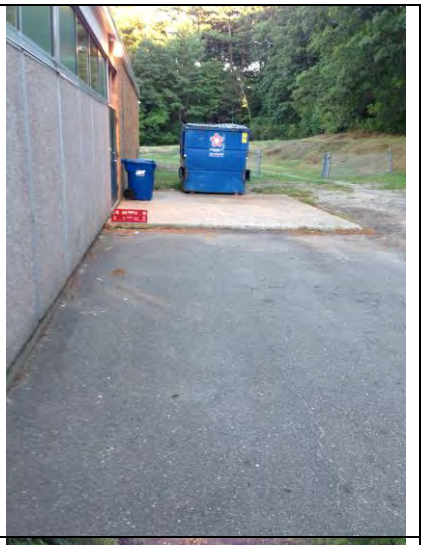
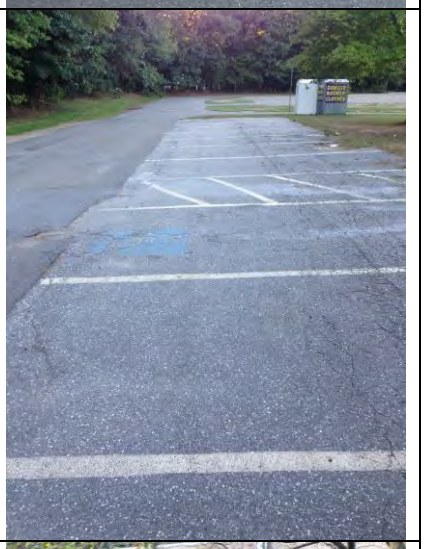
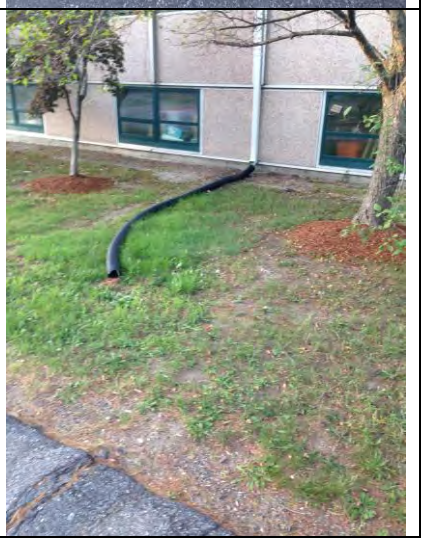
Nitsch Engineering

SITE AND CIVIL
PINE GLEN ES

	GENERAL INTRODUCTION
Description	**Photograph**
Pine Glen Elementary School is located 11.8-acre parcel on Pine Glen Way off of Wilmington Road.	

			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
1	Parking lot pavement: The pavement in the main parking lot is uneven and is severely cracked.	Reconstruction of the parking lot should be considered as part of any major renovation or reconstruction of the school. Any reconstruction of the parking lot should include new drainage structures.	
2	Accessibility to playfields: Some of the classroom doors to the playfields are not handicap accessible.	The non-compliant ramps at the doorways should be removed and new landings and accessible ramps should be installed.	

3	Accessibility at back entrance: The doorway from the rear fields to the second floor of the building can only be accessed by a set of stairs. In addition, the walkway from the ground level to the rear playground is not compliant.	Accessible routes from the building to all of the exterior site features, and between site features should be provided as part of any major renovation or reconstruction.	
4	Tree health: Some of the major trees on the site appear to be in decline.	An arborist should review the health of the trees on the site and those trees in declining health or that pose a potential risk should be removed.	
5	Playground area: The curb around the playground prevents accessible access to the play area.	Provide accessible access to the playground by installing a new compliant walkway which meets curb around the playground in a flush condition and provide additional wood chip mulch on the playground side of the curb.	

6	Dumpster pad and enclosure: The dumpster is not located on a dumpster pad or is it enclosed in any way.	Provide a concrete pad and fenced in enclosure for the dumpster.	
7	Accessible parking: The accessible parking along the side of the school appears to be not be compliant.	The accessible parking area should be reconstructed so that proper signage and pavement markings are provided and maximum slopes are not exceeded.	
8	Roof leaders: Several roof leaders discharge onto the ground adjacent to the building.	The roof leaders should be connected to a new, below-grade drain that is connected to the site drainage system or to a new drywell.	

9	Walkways and paths: Many of the pathways area cracked and uneven.	Deteriorating pathways should be reconstructed and made handicapped accessible.	
10	Paving at play area: The paving at the play area located at the front of the school is cracked and deteriorating.	The play area should be regraded and repaved so that is handicap accessible.	

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

ARCHITECTURAL EXTERIOR ENVELOPE

PINE GLEN ES

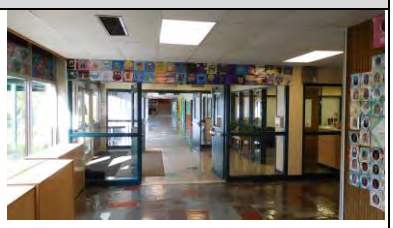
GENERAL INTRODUCTION	
Description	**Photograph**
Pine Glen is the smallest property size of Burlington's elementary schools at 11.8 acres. Built in 1962 the building consists of a variety of framing sections at the different wings, varying from steel frame to concrete construction. A new EPDM roof was completed in 2016, preceded by new entrance vestibule in 2014, new elevator in 2004 and new boilers in the late 1990's.	

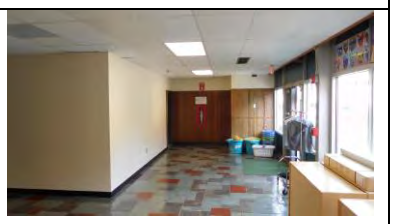
			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
1	Exterior doors and entrances Aluminum doors with insulated glass and hollow metal frames (new at main entrance but dated and showing some wear throughout the building.)	Replace within 1 – 5 years except for few aluminum entrance door and cross corridor doors at 2014 entrance vestibule upgrade all remaining exterior doors should be planned for replacement.	
2	Windows and skylights Combination of insulated fixed glass and insulated panel in storefront frame Mostly older aluminum window frames without proper thermal break.	Assembly is fine for 8 - 10 years from appearance standpoint but would receive a much improved energy efficiency upgrade if they were to be replaced with new thermally broken system.	
3	Concrete foundations or walls Concrete soffit overhangs appear to have most deterioration but also contain ACM materials as shown in UEC report.	Sporadic spalling throughout. Parge affected areas for aesthetic purposes only. Structural report from Souza, True recommends replacement in next 1 – 5 years of concrete soffits.	

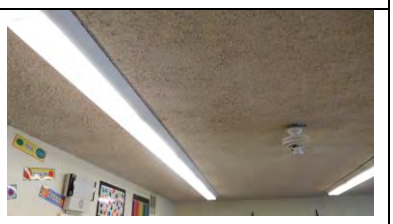
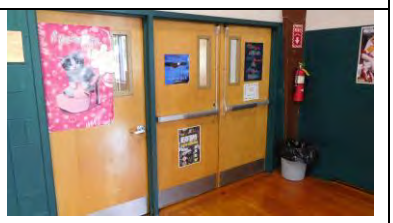
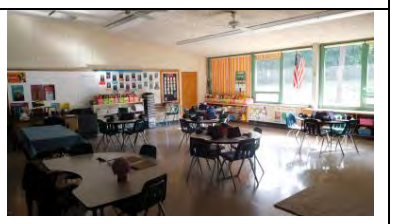
4	Masonry Appears to be in good condition with minor signs of distress associated with building of this vintage	Address joint mortar failure as needed and should be fine for a minimum of 10 - 15 years. Structural report primarily identified some loose window sills that require re-anchoring back into masonry.	
5	Siding Pebble finish insulated panels at portions of classroom wings and cafetorium space.	Panel appear to be in good condition. Maintain caulking and good for maintenance and panels, although energy inefficient, could remain adequate for next 5 – 7 years.	
6	Roofing – sloped roofs New EPDM 2016 on the two sloped wing sections. One, the classroom wing and the other sloped area covers the gym/cafeteria/kitchen area.	25 year warranty on the new 2016 EPDM roof and roughly the exact same for the flat roof area replaced with EPDM in the summer of 2013 and the replacement of the standing seam metal canopy.	
7	Roofing – flat roofs New EPDM 2013 during replacement of flat roof sections all new urethane board insulation was added for significant thermal upgrade.	22 years remaining on warranty for complete system of glued down membrane (EPDM) flashing and mechanically fastened insulation board.	
8	Drainage elements Minor ponding on flat roof Downspouts connected to inverts roofing manufacturer allows minor ponding after rainstorm to account for settlement and movement.	No concerns for ponding. Jet clean inverts and downspouts regularly to keep debris from roof drains and downspouts and effectively keep roof in good condition.	

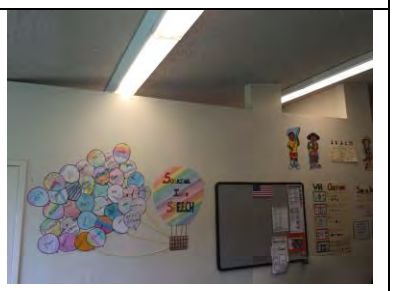
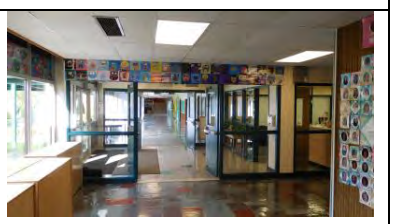
KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

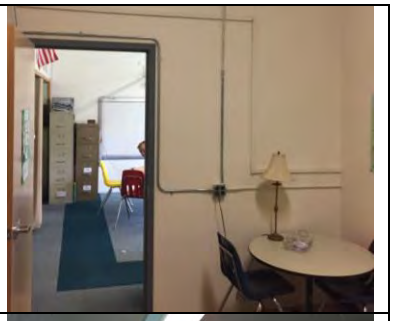
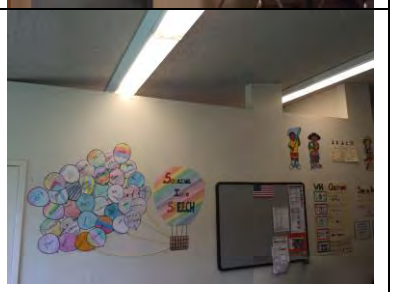
ARCHITECTURAL INTERIORS
PINE GLEN ES

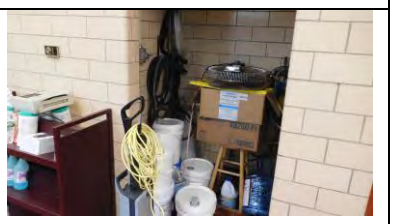
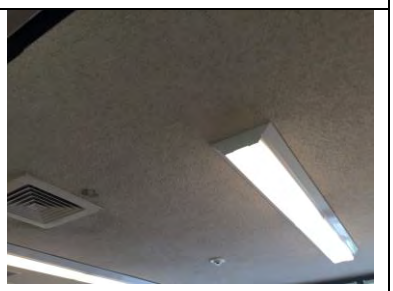
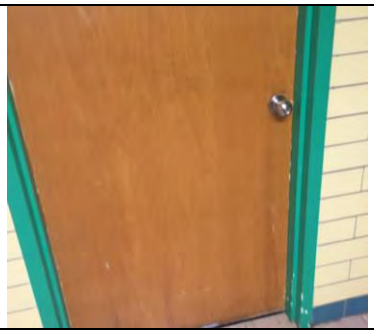
GENERAL INTRODUCTION	
Description	**Photograph**
Pine Glen is the smallest property size of Burlington's elementary schools at 11.8 acres. Built in 1962 the building consists of a variety of framing sections at the different wings, varying from steel frame to concrete construction. A new EPDM roof was completed in 2016, preceded by new entrance vestibule in 2014, new elevator in 2004 and new boilers in the late 1990's.	

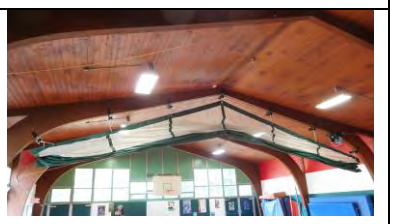
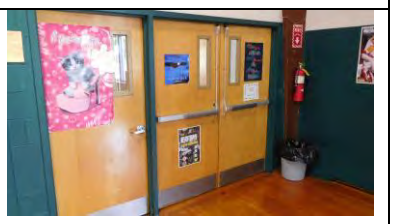
			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
CLASSROOMS			
1	Floors consist of sheet vinyl with welded seams Universal Environmental Consultants (UEC) has previously confirmed that most floor materials contain some form of asbestos containing material.	Sheet vinyl in good condition. Continue maintenance program, being vigilante at seams. Overall floors are secure and encapsulated but should eventually be replaced.	
2	Walls Painted GWB Vertical matched wood	Patch as needed. Re-coat within 3 – 5 years. Some areas require patching with joint compound. Sand, prime, add 2 coats finish. Other areas with minor blemishes can be addressed with spackle, sand and paint. Ongoing maintenance.	
3	Ceilings Suspended acoustical ceilings tiles – fair condition grid – good condition Replacement would significantly improve acoustic values	Ceiling tiles should be replaced within 1 – 2 years. Ceiling grid in good condition but of 1 ½" deep grid and older acoustical tile with limited STC (Sound Transmission Coefficient)	

3A	Ceilings GWB sloped with textured finish	No evidence of cracks or water staining. Appears to be in good condition. Due to rough texture it is difficult to maintain. Clean appearance, i.e. diffuser locations. Apply paint 3 – 4 year cycle	
3B	Ceilings Flat with textured finish appears in good condition	No evidence of cracks or water staining. Appears to be in good condition. Due to rough texture it is difficult to maintain. Clean appearance, i.e. diffuser locations. Apply paint 3 – 4 year cycle	
4	Doors and Hardware Wood door in HMF with lever type passage sets	Base of most doors are scuffed but with no evidence of de-lamination. Lightly sand, apply 2 coats of polyurethane. Should extend life to 3 – 5 years.	
4A	Doors and Hardware Knob type hardware at various locations	There are numerous locations where knob type hardware exists. Should be removed and replaced with lever type in all areas required.	
5	Chalkboards/Tackboards Whiteboard with tackboard above	All whiteboards appear to be in good condition as well as tackboards.	

LOBBY/CORRIDORS			
6	Floors Slate appears in good condition and provides good surface for heavy traffic areas such as lobbies and vestibules	Continued maintenance should assure added 5 – 7 years	
7	Walls Areas of partitions installed below ceiling which creates poor acoustical environment	Wall surface not appropriate for taping and tacking materials. Consider replacing with material more conducive for this use, i.e. tackboard and hard gloss surface.	
8	Ceilings 2 x 4 SAC Fair condition	Some replacement tiles have been obviously installed. This makes for poor aesthetics. Consider replacing all ceiling tiles for consistency	
9	Doors and Hardware Wood doors in hollow metal frames. Knob type hardware.	Remove knob type hardware and replace with lever type. Refinish door faces by lightly sanding, apply 2 coats of polyurethane.	
ADMINISTRATION/NURSE/SPED SUITES			
10	Floors VCT Carpet	VCT in good condition. Continue maintenance program. Consider replacing in 5 – 7 years. Carpet in fair condition. Wearing patterns evident. Consider replacing in 1 – 3 years.	

11	Walls GWB Painted	Good Condition Touch up as needed. Repaint entire surface within 5 years.	
12	Ceilings GWB with heavy stucco painted finish.	No cracks or staining evident. Due to textured surface, maintaining a clean appearance is difficult, especially at diffuser locations. Painting cycle at 3 – 5 years.	
13	Doors and Hardware Wood, HMF and vision panel	Some doors continue to have knob type passage sets. These must be replaced with accessible lever type within 1 year.	
CAFETERIA/KITCHEN			
14	Floors VCT at cafeteria	VCT at Cafeteria shows little or no signs of wear, cracking or adhesion issues. 7 – 10 years.	
14A	Floors 6 x 6 quarry at kitchen	Quarry tiles at kitchen floor are in very good condition. No cracks in tiles or voids in jointing. Avoid unnecessary impacts. 7 – 10 years.	

15	Walls – Cafeteria Textured, painted walls	Minor blemishes at louver level are not evident due to dark coloring no cracks or staining. Recoat on 3 – 4 year cycle	
15A	Walls – Kitchen Glazed wall tiles	Glazed wall tiles are secure. No damaged tiles or grout issues. Minor maintenance required.	
16	Ceilings – Cafeteria Stained Wood pine boards	No signs of water intrusion or staining. No work currently required.	
16A	Ceilings – Kitchen Spray applied textured	Good condition. Due to the work environment a re-coating of paint should be done on a 2 – 3 year cycle.	
17	Doors and Hardware All doors and hardware should be considered for new replacement	Upgraded lever handle hardware may be requires as part of overall renovation exceeding thresholds but good practice to replace all hardware this year.	

GYMNASIUM			
18	Floors Hardwood flooring	Floor currently in very good condition. Maintenance program consisting of screening and re-coat annually / bi-annually depending on use.	
19	Walls Combination of painted CMU block and insulated exterior panels	Both materials appear to be in good condition despite the se of the space. Re-coat on 5 – 7 year cycle	
20	Ceilings Stained pine board with beveled edge.	Simply maintain roof otherwise no work. The ceiling is in very good condition. The continued state of this ceiling is a direct result of maintaining a roof in optimal condition at all times.	
21	Doors and Hardware 2 sets of hollow metal double doors to the exterior with panic devices.	Doors, panic devices and closers are all in operable condition.	
AUDITORIUM/STAGE			
22	Floors Stage with hardwood floor	Stage floor in good condition. Stage access is not compliant with accessibility laws. Introduction of ramp or lift is required within 1 year.	

23	Walls Painted, textured GWB	Good condition. Re-coat 5 – 7 year cycle.	
24	Ceilings Pine board with beveled edge.	Ceiling in very good condition. Now work needed currently. Roof must be maintained to assure existing condition going forward.	
25	Doors and Hardware Hollow metal frame and fiberglass doors	Insulated panels at exterior window wall and exterior fiberglass doors with operating panic hardware in good condition	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

STRUCTURAL

PINE GLEN ES

GENERAL INTRODUCTION

Description	Photograph
The existing building located at Pine Glen Way in Burlington, MA, which was constructed around 1965, is comprised of three different sections; a one-story office area, a two-story classroom wing (which has a lower level), and a one-story auditorium / gymnasium wing. There appears to be a building expansion joint between the one and two story sections of the building. The roof framing system of the one-story central office area appears to be constructed with tectum plank supported by bulb tees, steel joists, beams and columns. The auditorium / gymnasium roof is constructed with tongue and grooved wood decking supported by glulam arched-beams. The two-story wing consists of CIP concrete construction at the first floor level and tectum plank and sloped steel joists at the upper roof level. The first floor level (not above the basement) and the lower level slab appears to be a conventional concrete slab-on-grade. An elevator addition was apparently constructed around 2003 at the juncture between the two-story wing and office wing. The roof of the building was apparently replaced in 2015. Modifications to the entrance canopy were made in 2014. Most of the interior walls appear to be CMU walls. There are a few roof-top units, although access to the roof was not provided during our walk-through. Apparently, termite and water damage to the base of the glulam arches required structurally repairs to the building about 20 years ago. We understand a new “shoe” base was constructed at several of the arched glulam bases (although the shoe was not visible at the time of our visit, due to architectural finishes). Based on our limited field observations and walk-through of the building, the structural behavior of the building appears to be satisfactorily with only a few minor signs of distress. Please note that our structural observations were based on our review of the exposed-to-view structural elements only. None of the architectural finishes were removed as part of our assessment.	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

STRUCTURAL

PINE GLEN ES

			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
1	Spalled concrete and corroded reinforcing steel at underside of exterior concrete stair slab at the east end of the building.	The reinforcing steel in the concrete stair slab is moderately corroded, particularly where the steel post for the railing system anchors to the slab. The corroded rebar and spalled concrete should be structurally repaired within the next 5 years or so. This slab is most likely exposed to heavy de-icing salts during the winter months, which has exacerbated the corrosion of the exposed rebar.	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
2	Spalled and cracked brick veneer at base of exterior brick wall at the auditorium.	A portion of the exterior brick wall at the base of the wall has spalled off. It appears that this spall has been caused by freezing and thawing action during the winter months or by de-icing salts. The brick overhang appears to be supported by a steel angle that has become corroded. The portion of the spalled wall shall be structurally repaired by re-bricking and re-pointing of the wall within the next five years or so. The support of the brick overhang shall also be investigated in more detail for structural integrity.	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

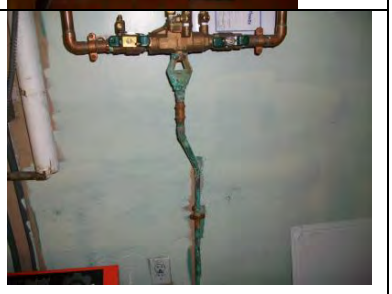
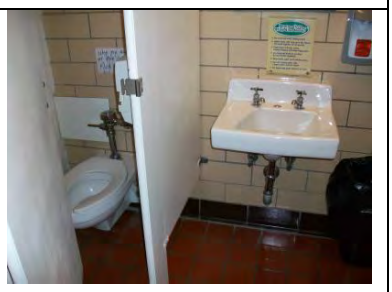
STRUCTURAL

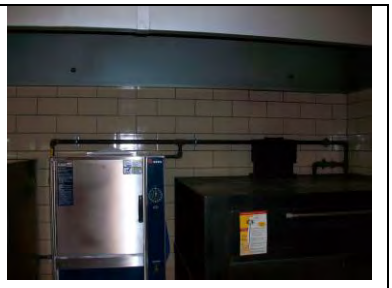
PINE GLEN ES

			PRIORITY ITEMS
No.	**Noted item**	**Recommendation**	**Photograph**
1	There are no priority items related to the structure that would need to be addressed within the next 1-3 years.	N/A	N/A

PLUMBING & FIRE PROTECTION
PINE GLEN ES

GENERAL INTRODUCTION	
Description	**Photograph**
The Pine Glen Elementary School is currently provided with dedicated utilities located within the main Boiler Room. (2) 75 gallon direct fired storage tank hot water heaters is provided for the building's domestic hot water use and kitchen use respectively. Commercial grade plumbing fixtures are supplied throughout the building's core and accessory bathrooms. A commercial kitchen is located within the building for meal preparation and cooking. Most classrooms are typical inclusive of a classroom sink. The building does not have a fire protection system.	

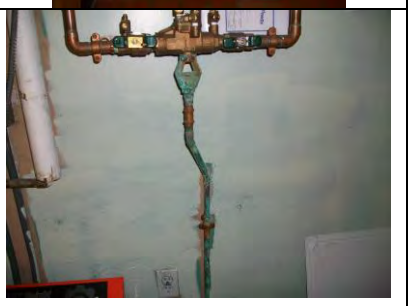
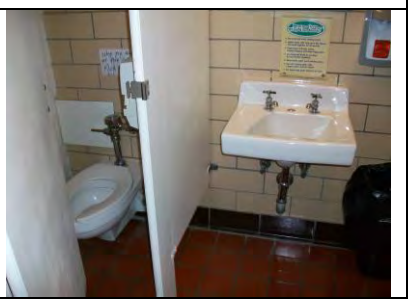
OBSERVED CONDITIONS			
No.	**Noted item**	**Recommendation**	**Photograph**
1	Kitchen domestic hot water heater has outlived its life expectancy.	Replace tank with new high efficient appliance.	
2	Water piping in general appears to be in poor conditions with multiple locations of "pitting", oxidizing and previous patches/replacement.	A thorough investigation should be provided on the building domestic water system. The investigation may include but not be limited to: a water analysis, potential for water treatment and/or replacement of the existing domestic water piping.	
4	Plumbing fixtures appear to be in fair condition however, many have outlived their expected lifetime.	Plumbing fixtures should be selectively replaced with new water efficient fixtures.	

5	Commercial kitchen is not equipped with an interlock system to stop the flow of gas when the kitchen exhaust is not operational, as required by the latest Plumbing Code.	Hoods should be equipped with the latest safety standards.	
6	The hand sinks in both the kitchen and bathrooms did not appear to have mixing valves to safely wash hands between 110-120F.	Mixing valves should be installed per the latest safety standards.	
7	The commercial kitchen only appears to have the 3-compartment sink terminate to a grease trap. Current plumbing codes require dish machines, floor drains and various other sinks to terminate to a grease trap.	A central grease trap should be provided in accordance with the latest plumbing codes.	
10	It was noted throughout the facility that janitorial soap dispensers were installed without the use of a reduced pressure backflow assembly.	Soap dispensers should be equipped with a reduced pressure backflow to avoid any back syphoning of chemicals to the potable water system.	
11	The building does not currently have a fire protection system.	A fire protection system should be installed as a life safety measure.	

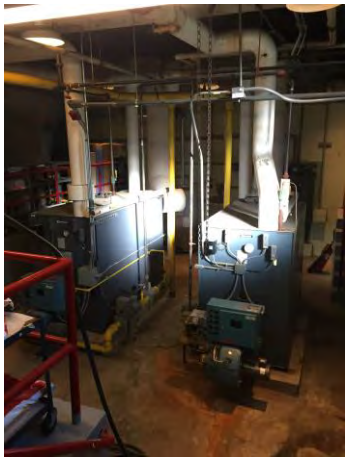
BLW ENGINEERS

PLUMBING & FIRE PROTECTION

PINE GLEN ES

No.	Noted Item	Recommendations	Priority Items Photographs
1	The building does not currently have a fire protection system.	A fire protection system should be installed as a life safety measure.	
2	**Kitchen existing domestic hot water heater has outlived its life expectancy.**	**Replace tank with new high efficient appliance.** **Approx. cost for replacement $10,000.00**	
3	**Water piping in general appears to be in fair/poor conditions with multiple locations of "pitting", oxidizing and previous patches/replacement.**	**A thorough investigation should be provided on the building domestic water system. The investigation may include but not be limited to: a water analysis, potential for water treatment and/or replacement of the existing domestic water piping.** **Approx. cost for replacement of domestic water piping system $250,000.000**	
4	Plumbing fixtures appear to be in fair condition however, many have outlived their expected lifetime.	Plumbing fixtures should be selectively replaced with new water efficient fixtures.	

HVAC
PINE GLEN ES

GENERAL INTRODUCTION	
Description	**Photograph**
The boiler room is located on the lower level; it provides hot water for heating to the building. The hot water heating system consists of two Weil McLein gas cast iron sectional boilers, two 5 hp hot water circulating pumps to two heating zones, water specialties, insulated hot water distribution piping system, boiler breeching system and pneumatic controls. Insulated hot water distribution system from the boilers to the building circulating pumps provides heating hot water into the insulated hot water distribution piping system. The boiler room entry indicates asbestos containing materials but the insulation did not appear to be asbestos containing materials	 Hot Water Boilers Hot Water Pumps ATC Compressor

Classrooms are provided with unit ventilators to provide classroom heating ventilating. Each unit is controlled by a wall mounted pneumatic thermostat. Units are provided with a hot water heating coils interconnected to the hot water distribution piping system. Each classroom is provided destratification ceiling fans. The Library, Media Center and Computer classrooms are provided with cooling from a window type air conditioning unit; heating and ventilating is provided by a unit ventilator interconnected to the heating hot water piping distribution system. Classrooms with floor level lower than grade level have been provided with louvers in former window areas and ductwork extensions to unit ventilator intake on the backside of the unit.

Administration exterior areas have been provided with fintube radiation for heating and a rooftop air conditioning unit for cooling and ventilation; supply and return ductwork from the rooftop air conditioning unit is run along the roof and down to ceiling air outlets in each space. Administration interior areas have been provided with supplemental split system air conditioning units consisting of a wall mounted unit, remote air cooled unit and interconnecting refrigerant pipe.

Computer Classroom

Classroom Unit Ventilator

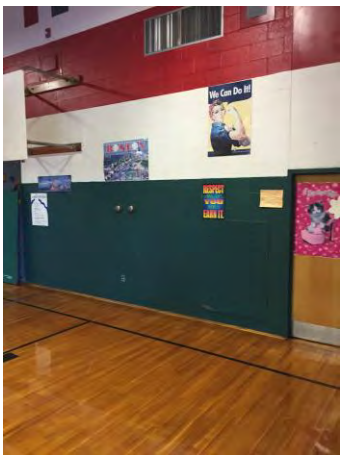
Classroom Exhaust

The Cafeteria is provided with heating and ventilation from hot water heating air handlings unit at the stage. Low pressure supply air duct systems distribute air through ductwork that terminates at wall supply registers; air is returned to unit through return registers and return ductwork. The unit is provided with a hot water heating interconnected to the hot water distribution piping system. The Cafeteria is provided by supplemental heat by fintube radiation along the exterior perimeter of the space.

The Gymnasium is provided with heating and ventilation from a hot water heating air handling units on the interior side of the gymnasium. Low pressure supply air duct systems distribute air through ductwork that terminates at wall supply registers; air is returned to unit through return registers and return ductwork. The unit is provided with a hot water heating interconnected to the hot water distribution piping system. The gymnasium is provided by supplemental heat by fintube radiation along the exterior perimeter of the space.

Kitchen Hood Exhaust

Cafeteria/Stage

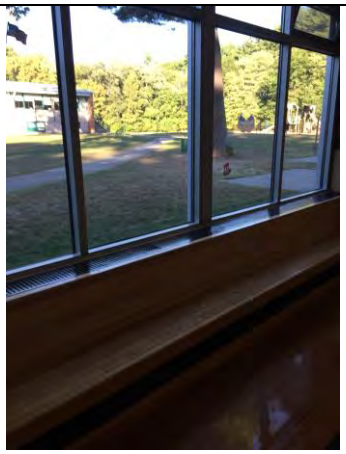


Gymnasium AH Registers

The Kitchen/Servery has been provided with heating by a hot water unit heater; makeup air is provided by a hot water heating air handling unit. The kitchen hoods are provided with a grease duct system and exhaust fan.

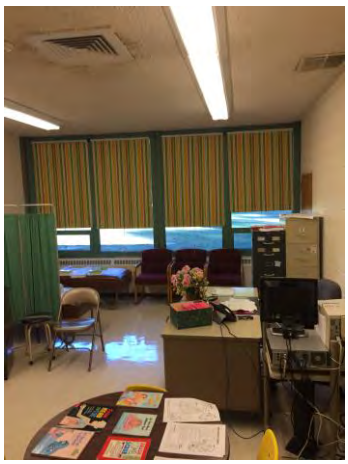
The corridors are provided with heating by convectors or fintube radiation interconnected to the hot water distribution piping system. Entries and vestibules are heated by hot water cabinet heaters located above the ceiling ducted to supply/return ceiling registers and interconnected to the hot water distribution piping system.

Each toilet is provided with exhaust through ceiling mounted exhaust register(s) to provide exhaust from the space by a roof mounted exhaust fans through a low pressure duct distribution system. Each exhaust fan operates continuously during occupied hours and be deenergized during unoccupied hours. Heating is provided by fintube radiation.



Gymnasium FTR

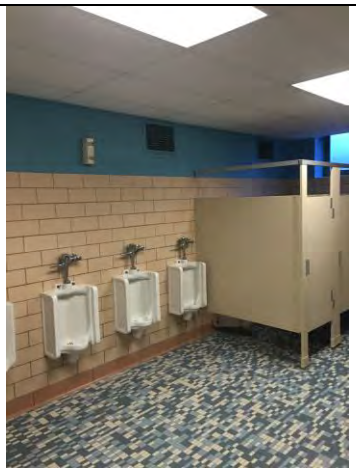
Interior Office HVAC



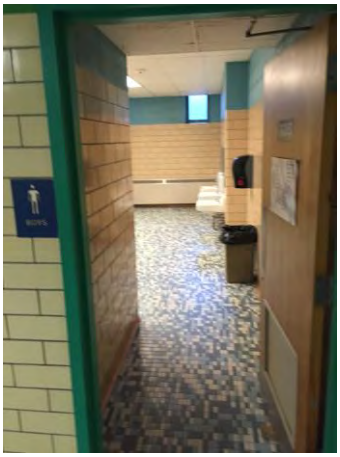
Exterior Office HVAC

Miscellaneous spaces, such as storage rooms, are provided with hot water heating, where required, and an exhaust air system in accordance with applicable code requirements.

All automatic temperature controls are pneumatic except for packaged rooftop units and split air conditioning systems.

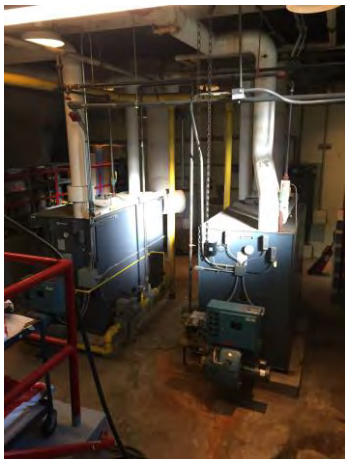
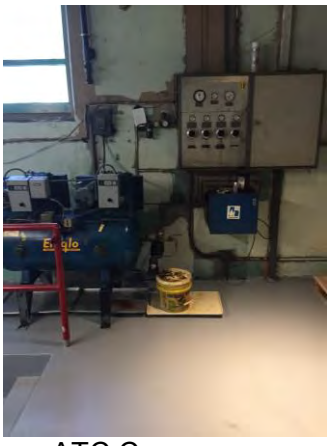


Bathroom Exhaust



Bathroom FTR

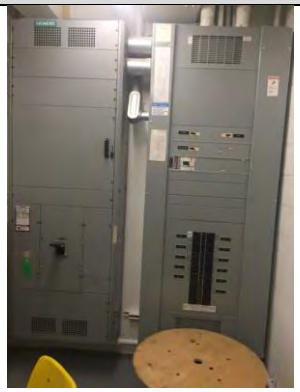
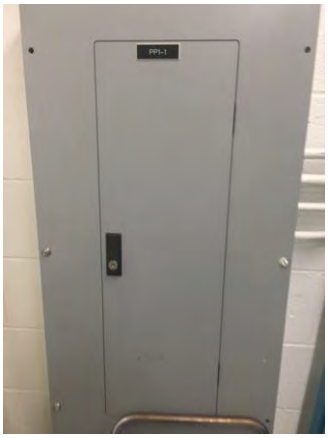
Rooftop Units

No.	Noted item	Recommendation	OBSERVED CONDITIONS Photograph
1	Boilers were installed in 1999 and appear in good operating condition. The boilers are gas fired and standard efficiency.	The boilers will require replacement in approximately 10 years. Boilers should be replaced with condensing type boilers for high efficiency operation.	 Hot Water Boilers
2	Hot water pumps were replaced as part of the 1999 boiler renovation project. The pumps do not have variable speed drives.	The pumps will require replacement in approximately 10 years. Pumps should be provided with variable speed drives for high efficiency operation.	 Hot Water Pumps
3	Building controls are pneumatic.	When the building is renovated the controls should be completely replaced with new direct digital controls.	 ATC Compressor

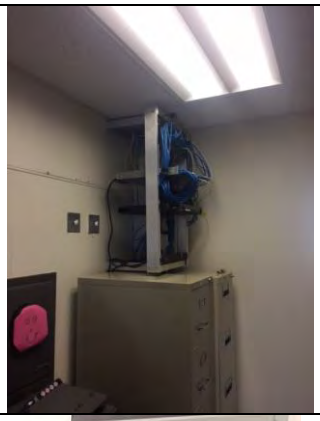
4	Building HVAC equipment, in general, appear to be in good operating condition. The building equipment is standard operating efficiency.	The HVAC system will require replacement in approximately 10 years.	 Classroom Unit Ventilator

ELECTRICAL
PINE GLEN ES

GENERAL INTRODUCTION	
Description	**Photograph**
The Pine Glen Elementary School was built in 1965. The electrical service equipment is original to the building. The standby generator was installed 12-13 years ago and is in good condition. The fire alarm system is in adequate condition, is approximately 10 years old.	

OBSERVED CONDITIONS			
No.	**Noted item**	**Recommendation**	**Photograph**
1	The electric service equipment consists of a 1200 amp Siemens main circuit breaker and a 1200 amp Eaton Cutler Hammer Power Line C distribution brand, installed in 2003.	Equipment is in good condition and has a remaining 20 years of expected life.	
2	The electrical panels were also manufactured by Cutler Hammer in 2003. There are a few original panels remaining.	Panels are in good condition and have a remaining 20 years of expected life. The original panels should be replaced.	

3	The clock/speaker system is a Valcom Communications system, original to the building. It has been reported that clocks do not work or have been replaced.	Replace the entire system within the next 2-3 years.	
4	The fire alarm system is an addressable Fire Lite MS-9200UDLS and is connected to a Sig Com radio master box.	The coverage is not completely up to present codes. Additional devices should be provided to bring up to present code, immediately.	

5	Lighting fixtures are in decent condition. They have been replaced or retrofitted in recent years.	Fixtures should be replaced with LED energy efficient fixtures within the next 305 years.	
6	There is an exterior Olympian G30F gas generator and a GE Zenith automatic transfer switch. Both are in good condition.	Provide yearly maintenance on both generator and ATS.	

			Priority Items
No.	**Noted Item**	**Recommendations**	**Photographs**
1	Clock/Speaker System	Replace in the next 2-3 years.	
2	Lighting System	Replace with LED light fixtures in the next 3-5 years.	

OCT 22-65 PM 1:20 418M ** 9.00

M 9.60

ORDER OF TAKING

We, the members of the Board of Selectmen for the Town of Burlington, hereby take, by eminent domain, the fee simple in the following described property:

A parcel of land situated in Burlington, Massachusetts, bounded and described as follows:

Beginning at the most southerly point at a concrete bound at land now or formerly of John R. Seminatore; thence, N.70°-33'42"W., 140.25 feet by the wall to a drill hole;

thence, N.68°25'30"W., 151.29 feet by the wall to a drill hole,

thence, N.71°00'03"W., 114.85 feet by the wall to a drill hole,

thence, N.70°27'08"W., 188.56 feet by the wall to a land court disc;

thence, N.32°19'49"E., 554.46 feet by the wall to a drill hole,

thence, N.67°03'17"W., 351.28 feet by the wall to a drill hole,

thence, N.69°14'50"W., 116.30 feet by the wall to a drill hole,

thence, N.70°10'28"W., 214.81 feet by the wall to a drill hole,

thence, N.21°26'06"E., 223.34 feet by the wall to a drill hole,'

thence, N.59°49'30"W., 182.33 feet by the wall to a drill hole,

thence, N.59°53'56"W., 353.09 feet by the wall to a drill hole,

thence, N.61°36'24"W., 82.63 feet to a drill hole,

thence, N.55°01'22"W., 82.22 feet to a drill hole,

thence, N.70°30'41"W., 46.86 feet to a drill hole,

thence, N.23°56'25"E., 227.41 feet to a drill hole,

thence, N.23°52'55"E., 372.95 feet to a drill hole,

thence S.73°03'00"E., 17.79 feet by the wall to a cross on wall;

thence S.59°25'09"E., 191.56 feet by the wall to a drill hole,

thence, S.58°57'20"E., 197.54 feet by the wall to a drill hole,

thence, S.60°13'50"E., 329.11 feet by the wall to an iron pipe,

thence, S.61°32'15"E., 329.07 feet to a point on the town line between the towns of Wilmington and Burlington, thence by said town line S.41°58'44"E., 1441.44 feet to a point;

1347

SEE PLAN IN RECORD BOOK 6967 PAGE 296

BUTTERWORTH & GOOD
COUNSELLORS AT LAW
SEVEN WILLOW STREET
LYNN, MASSACHUSETTS

thence, S.46°10'20"W., 97.30 feet by the wall to a stake and nail

thence, S.49°32'10"W., 77.12 feet to a drill hole,

thence, N.66°23'48"W., 81.72 feet to a drill hole,

thence, N.67°17'10"W., 91.51 feet by the wall to a stake and nail

thence, N.44°21'15"W., 265.68 feet by the wall to a drill hole,

thence, S.41°56'37"W., 154.80 feet by the wall to a drill hole...
.....

thence, S.43°19'16"W., 136.14 feet by the wall to the point of beginning.....

Containing 36.3 acres more or less, all as shown on a plan entitled "Plan of Land in Burlington, Massachusetts" to be taken by the Town of Burlington for school purposes.

Scale: 1 inch = 100 feet May, 1965

EMMONS, FLEMING & BIENVENU

Billerica, Massachusetts

Said plan is recorded herewith.

The above described land is taken for school purposes.

All trees included in the above described land are intended to be included in this taking.

The above described land is shown as twelve (12) parcels on said plan. The present owners of the said twelve (12) parcels are:

Parcel 1 WILLIAM ABBWDANZIC, 22 ABBY ROAD, BRIGHTON, MASS

Parcel 2 DORIS P. PIPER, 12 SENALL ST, BURLINGTON, MASS.

Parcel 3 JAMES E. AND MICHAEL J. O'BRIEN, 193 RIVERSIDE AVE, WEDFORD, MASS.

Parcel 4 MURRAY HILLS INC., 1000 CAMBRIDGE ST, BURLINGTON, MASS.

Parcel 5 LAWRENCE SWIM, R.F.D. #4, PEMBROKE, N.H.

Parcel 6 MURRAY HILLS, 1000 CAMBRIDGE ST., BURLINGTON, MASS.

Parcel 7 MURRAY HILLS INC. " " "

Parcel 8 MURRAY HILLS INC. " " "

Parcel 9 MURRAY HILLS INC. " " "

BUTTERWORTH & GOOD
COUNSELLORS AT LAW
SEVEN WILLOW STREET
LYNN, MASSACHUSETTS

Parcel 10 MURRAY HILLS INC, 1000 CAMBRIDGE ST, BURLINGTON, MASS.

Parcel 11 HAROLD S. MILLER, 25 KING ST, WILMINGTON, MASS.

Parcel 12 - 3 ACRES - THOMAS J. AND FRANCIS P. MURPHY
298 LOWELL ST., SOMERVILLE, MASS.
11.4 ACRES - MURRAY HILLS

Dated this twenty-second day of September, 1965.

Town of Burlington by its Board of Selectmen:

Charles L. Shea
CHARLES L. SHEA, CHAIRMAN

Robert A. Vigneau
ROBERT A. VIGNEAU

John M. Kilmartin
JOHN M. KILMARTIN

BUTTERWORTH & GOOD
COUNSELLORS AT LAW
SEVEN WILLOW STREET
LYNN, MASSACHUSETTS

MEMORANDUM

DATE: June 14, 2023

TO: Neil Harrigan - DiNisco Design

CC: Donna DiNisco - DiNisco Design
Vivian Low - DiNisco Design
Derek Hug - Pare Corporation

FROM: Tim Thomson

RE: **Fox Hill Elementary School**
Traffic Engineering Services
Traffic Impact Assessment Progress
Burlington, Massachusetts
Pare Project No. 23052.00

Pare Corporation (Pare) has continued preparation of the Traffic Impact Assessment (TIA) for the Fox Hill Elementary School in Burlington, MA. The Town of Burlington is pursuing the replacement of the existing Fox Hill Elementary School situated at the end of two roads: Fox Hill Road and Westwood Street. The new school will most likely be located on the same site and will continue to hold grades Kindergarten through Grade 5. There are currently approximately 480 students enrolled at the existing school. Due to the anticipated reduction in overall enrollment, two alternatives for the new school are currently under consideration, including:

- Enrollment for Grades K-5, at current Fox Hill Elementary School site: 325 students
- Enrollment for Grades K-5, at a Consolidated Fox Hill Elementary School and Pine Glen Elementary School: 640 students, at current Fox Hill Elementary School site

This memorandum summarizes Pare's progress on the TIA since the submission of the Existing Conditions Report in April 2023. A summary of the data collected to date is included as well as preliminary recommendations for consideration as the project progresses. The full traffic study and final recommendations will be prepared upon final selection of the preferred new school alternative and preliminary site design.

TRAFFIC DATA

Turning movements counts (TMCs) at designated study intersections near the Fox Hill Elementary School were performed on Tuesday, May 9, 2023 while the school was operating under a typical schedule. The TMCs included vehicle movements, bicycle volumes, and pedestrian crossings at each of the intersections during the morning school arrival and afternoon school dismissal periods. Figures summarizing the peak hour traffic volumes are included within Attachment A.

Traffic data on Fox Hill Road and Westwood Road was collected over a 48-hour period using automatic traffic recorders (ATR). Information obtained though the ATRs included vehicle volume, vehicle speed and vehicle classification data. Tables 1 and 2 summarize vehicle speed data at each location.

Table 1: Fox Hill Road Vehicle Speed Summary

Direction	Posted Speed Limit	Average Speed	Median Speed	85 Percentile Speed	10 mph Pace Speed	Percent Over 25 MPH
Northbound	25	25	26	30	21-30	59.2%
Southbound	25	27	26	32	21-30	63.2%

1. All speed data reported in miles per hour (mph).
2. Data was collected north of Sumner Street over a 48-hour period, May 9-10, 2023.

Table 2: Westwood Street Vehicle Speed Summary

Direction	Posted Speed Limit	Average Speed	Median Speed	85 Percentile Speed	10 mph Pace Speed	Percent Over 25 MPH
Eastbound	30	26	26	31	21-30	63.0%
Westbound	30	28	27	32	26-35	76.5%

1. All speed data reported in miles per hour (mph).
2. Data was collected west of Fox Hill Road over a 48-hour period, May 9-10, 2023.

Conclusion: Traffic volumes collected at the intersection of Westwood Street and Fox Hill Road align with observations described by Pare in the Existing Conditions report. The intersection experiences significant pedestrian crossing volumes and some bicycle activity during the morning arrival afternoon dismissal periods. Additionally, the majority of traffic at this intersection during arrival and dismissal times is associated with the School and only a small portion appears to be through traffic associated with the adjacent neighborhood.

Vehicle speeds collected through the ATRs are typical given the roadway characteristic, presence of the school zone, and proximity to the Westwood Street and Fox Hill Road intersection. Pare understands that vehicle speeds on other sections of Westwood Street and Fox Hill Road are of concern to neighbors. The speed data gathered to date only represents conditions closer to Fox Hill Elementary School and not the entirety of the Westwood Street or Fox Hill Road corridors. Additional speed studies would need to be performed to assess vehicle speeds farther from the School.

CAPACITY ANALYSIS – EXISTING CONDTIONS

A capacity analysis was completed for study area intersections for existing conditions. Capacity analyses characterize intersections based on their level of service (LOS). LOS is a quality measure describing operational conditions within a traffic stream, generally in terms of service measures such as speed, travel times, traffic interruptions, etc. Six LOS values, from A to F, are defined for each type of facility, with A representing the best operating conditions and F representing the worst operating conditions. The LOS criteria for unsignalized intersections are provided in Table 3 below. Table 4 summarizes the capacity analysis results for the morning, school dismissal and afternoon commuter peak hours.

Table 3: LOS Criteria for Unsignalized Intersections

LOS	Unsignalized Intersections Delay Time (sec/veh)
A	0-10
B	> 10-15
C	> 15-25
D	> 25-35
E	> 35-50
F	> 50

Table 4: Intersection Capacity Analysis Results

Intersection	Movement		2023 Existing Conditions		
			LOS	Delay[1]	Queue Length[2]
Wilmington Road (Rte. 62) & Westwood Street	Weekday AM Peak Hour (7:00 – 8:00 a.m.)				
	NB	T, R	A	0.0	0
	SB	L, T	A	0.7	1
	WB	L, R	C	21.0	2
	Weekday PM School Peak Hour (2:00 – 3:00 p.m.)				
	NB	T, R	A	0.0	0
	SB	L, T	A	0.6	1
	WB	L, R	B	14.6	1
	Weekday PM Commuter Peak Hour (4:45 – 5:45 p.m.)				
	NB	T, R	A	0.0	0
	SB	L, T	A	0.9	1
	WB	L, R	C	18.9	1
Westwood Street & Fox Hill Road	Weekday AM Peak Hour (7:00 – 8:00 a.m.)				
	NB	L, R	B	12.8	2
	EB	T, R	A	0.0	0
	WB	L, T	A	5.4	1
	Weekday PM School Peak Hour (2:00 – 3:00 p.m.)				
	NB	L, R	B	13.6	1
	EB	T, R	A	0.0	0
	WB	L, T	A	4.7	1
	Weekday PM Commuter Peak Hour (4:45 – 5:45 p.m.)				
	NB	L, R	A	9.5	1
	EB	T, R	A	0.0	0
	WB	L, T	A	4.2	1

1. Delay is measured in seconds/vehicle.
2. Queue Length shown represents the 95th percentile queue length in vehicles.

Conclusion: The results of the capacity analysis indicate that the two study intersections currently operate well below capacity with acceptable LOS and vehicle delay. Given the existing operations at the intersections, the existing traffic volumes, the LOS, and vehicle delay experienced, it is Pare opinion that these intersections will likely have the necessary excess capacity to accommodate the scenario in which the Fox Hill Elementary School site hosts additional students. A final assessment will be performed to confirm this opinion upon determination of the preferred future condition as part of the final traffic study.

VEHICLE CRASH DATA REVIEW

Vehicle crash history within the study has been reviewed by Pare to identify any crash trends, roadway characteristics or design elements that may be contributing to safety related issues.

Pare was provided with a report from the Burlington Police Department which reviewed the crash history at and around multiple schools throughout Town. At Fox Hill Elementary School, the report reviewed crash history over a ten-year period from 2012 to 2022. The report identified three crashes, all occurring within the Fox Hill Elementary School parking lot, and all identified as hit-and-runs. Little additional detail was provided in the report. No crashes were reported at the intersection of Westwood Street and Fox Hill Road or on roadways within close proximity to the School.

Pare also reviewed crash data over the last 5-year period (June 2018 - June 2023) for the entirety of Westwood Street and Fox Hill Road. This data was available through the MassDOT IMPACT Crash Data Portal. A total of 6 crashes were reported during this period. Details on each crash are summarized in Table 3 below.

Table 5: Study Area Crash Data Summary

Date	Location	Crash Severity	No. of Vehicles	Direction of Travel	Weather / Roadway Condition	Crash Description	Contributing Factor
2/28/2019	176 Fox Hill Road	Non-fatal Injury	1	Southbound	Snow	Collision with Utility Pole	Driving too fast for conditions
8/28/2019	Wilmington Road / Westwood Street	Non-fatal Injury	3	Westbound/ Westbound/ Westbound	Rain / Wet	Rear End	Trailing vehicle following too closely
7/21/2020	Fox Hill Road / Barnum Road	Non-fatal Injury	2	Southbound	Clear / Dry	Collision with parked car, Sideswipe, Same Direction	Unknown
9/21/2020	Fox Hill Road / Upland Road	Property damage only	2	Southbound	Clear / Dry	Single vehicle struck curb, mailbox, tree and parked vehicle	Reckless Driving, Excessive Speed, Younger driver, Late night
12/13/2021	190 Fox Hill Road	Non-fatal Injury	1	Northbound	Cloudy / Dry	Collision with Utility Pole	Driver distracted by use of hand-held device
2/13/2022	Fox Hill Road @ utility Corridor approx. 300' north of Skilton Lane	Property damage only	1	Southbound	Snow / Snow	Collision with Utility Pole	Driving too fast for conditions

Conclusion: Pare's review of available crash data has indicated no presence of crash trends, nor roadway characteristics or design issues contributing to safety issues. Additionally, no discernable pattern of the crashes occurring within the School parking lot could be identified based on the Burlington Police Department report. The crashes occurring on Fox Hill Road and Westwood Street all appeared to be the result of operator error. Several of the crashes were single-vehicle crashes. Two of these crashes occurred during snow events where drivers lost control of their vehicle and struck a utility pole. One single-vehicle crash was the result of a distracted driver using a hand-held device and another was the result of reckless vehicle operation. The rear end collision can also be attributed to driver operation error.

The crashes occurring within the study area do not appear to be susceptible to correction through roadway design measures and primarily occurred as the result of driver error.

SAFETY IMPROVEMENT OPPORTUNITIES

Pare understands that neighborhood residents have voiced concerns associated with vehicle speed and pedestrian safety. Notably, Westwood Street, Fox Hill Road, Donald Road, and Beaverbrook Road have each been the subject of such discussions. Speed control and pedestrian safety are important for neighborhood streets, particularly those used by children walking to/from school. As indicated through Pare's observations and data collection, a substantial number of students currently walk or bike to Fox Hill Elementary School and providing a safe environment for those modes of transportation is essential.

Safety measures to reduce vehicle speed and provide pedestrian facilities are currently installed in many areas of the neighborhood, including speed bumps on Fox Hill Road and sidewalks along Westwood Street, Fox Hill Road, Beaverbrook Road. While these measures provide valuable traffic safety resources, Pare recommends that the Town consider additional safety improvement measures. These include:

- Providing school zone and student crosswalk signage and striping to meet current standards.
- Providing crosswalks and related signage between sidewalks along Westwood Street and Fox Hill Road and side street on opposite of sidewalks (i.e., Fox Hill Road & Vincent Road, Westwood Road & Richard Road)
- Widening existing sidewalks to 8' minimum to provide space for students to walk and bike.
- Considering installing buffer space between the curb and sidewalk on Westwood Street, Fox Hill Road, Beaverbrook Road to provide additional separation between vehicles and pedestrians.
- Considering installing traffic calming measures on neighborhood streets such as chicanes, chokers, curb extensions, median islands, narrowing lanes, speed humps, or speed tables.

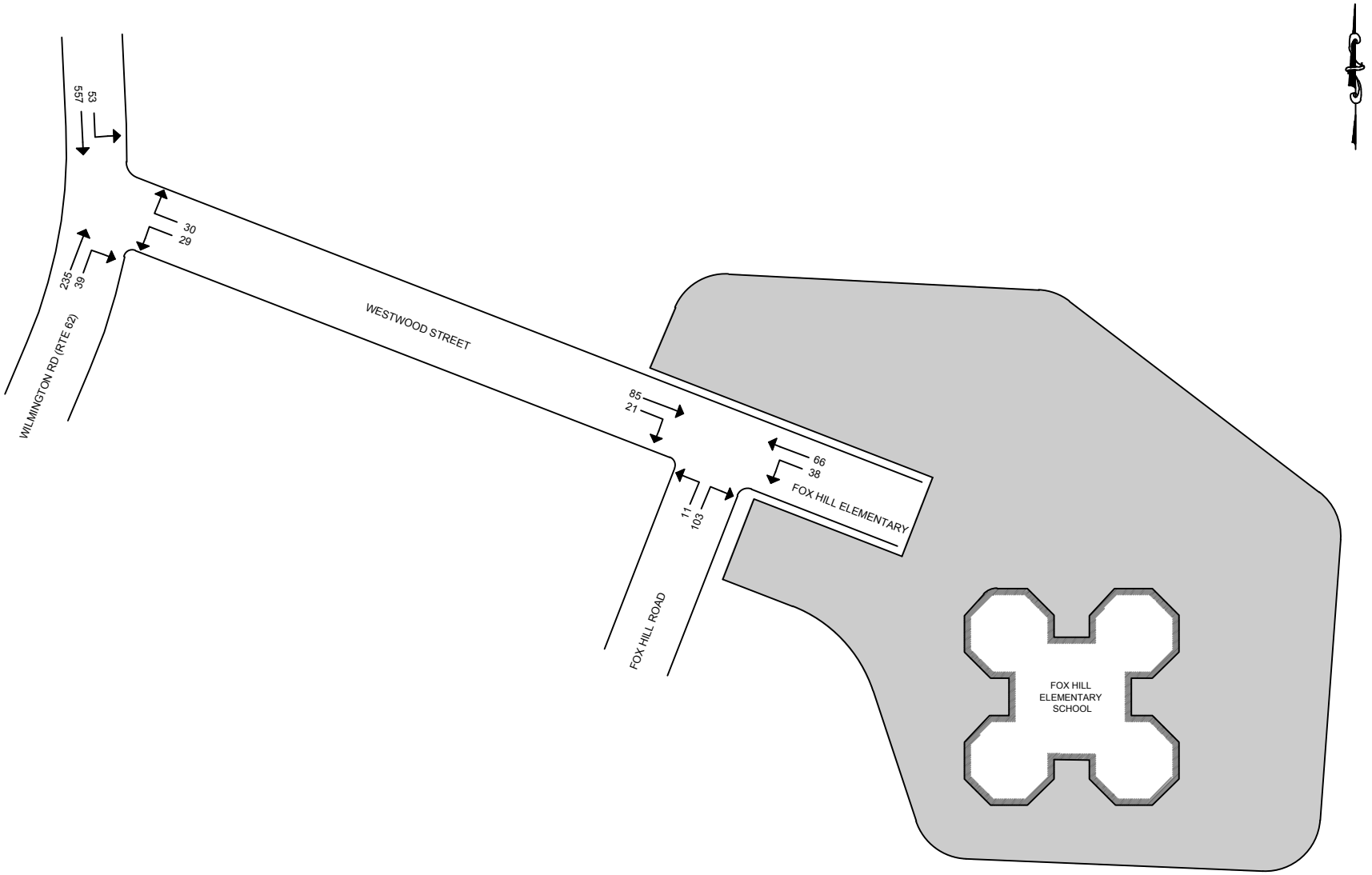
We are available to discuss these findings at your convenience.

Sincerely,

Tim Thomson
Senior Project Engineer

Attachments
Attachment A – Traffic Count Data
Attachment B – Capacity Analysis Results

ATTACHMENT A: TRAFFIC COUNT DATA



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

PROJECT NO. 23052.00

DATE: JUNE 2023

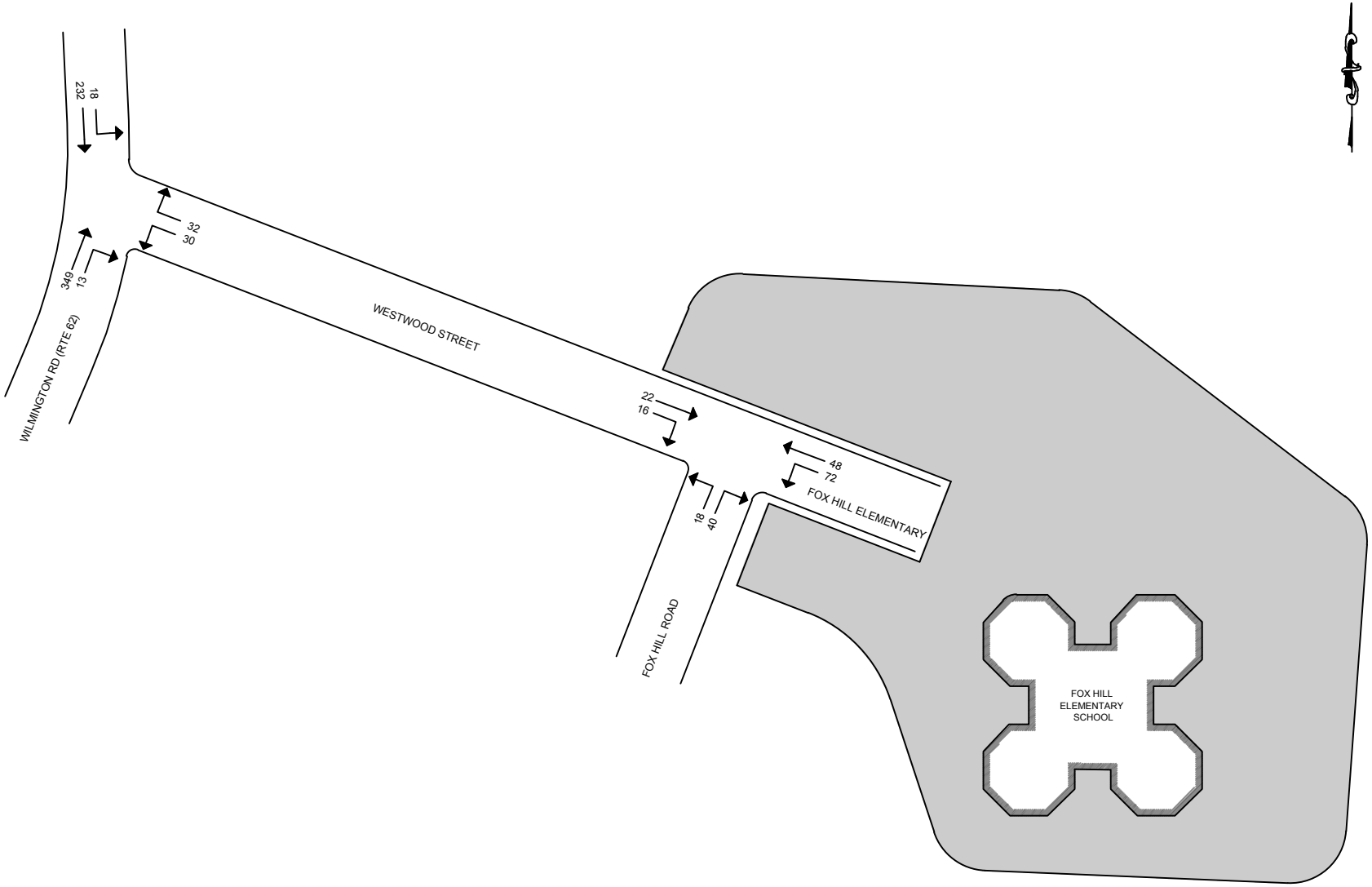
TRAFFIC VOLUME DIAGRAM
VEHICULAR MOVEMENTS

AM PEAK HOUR (7:15 - 8:15 AM)

BURLINGTON, MASSACHUSETTS

SCALE: NOT TO SCALE

Z:\JOBS\23 Jobs\23052.00 DiNisco – Fox Hill Elem Traffic – MA\DWGS\Traffic Volume Figure.dwg



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

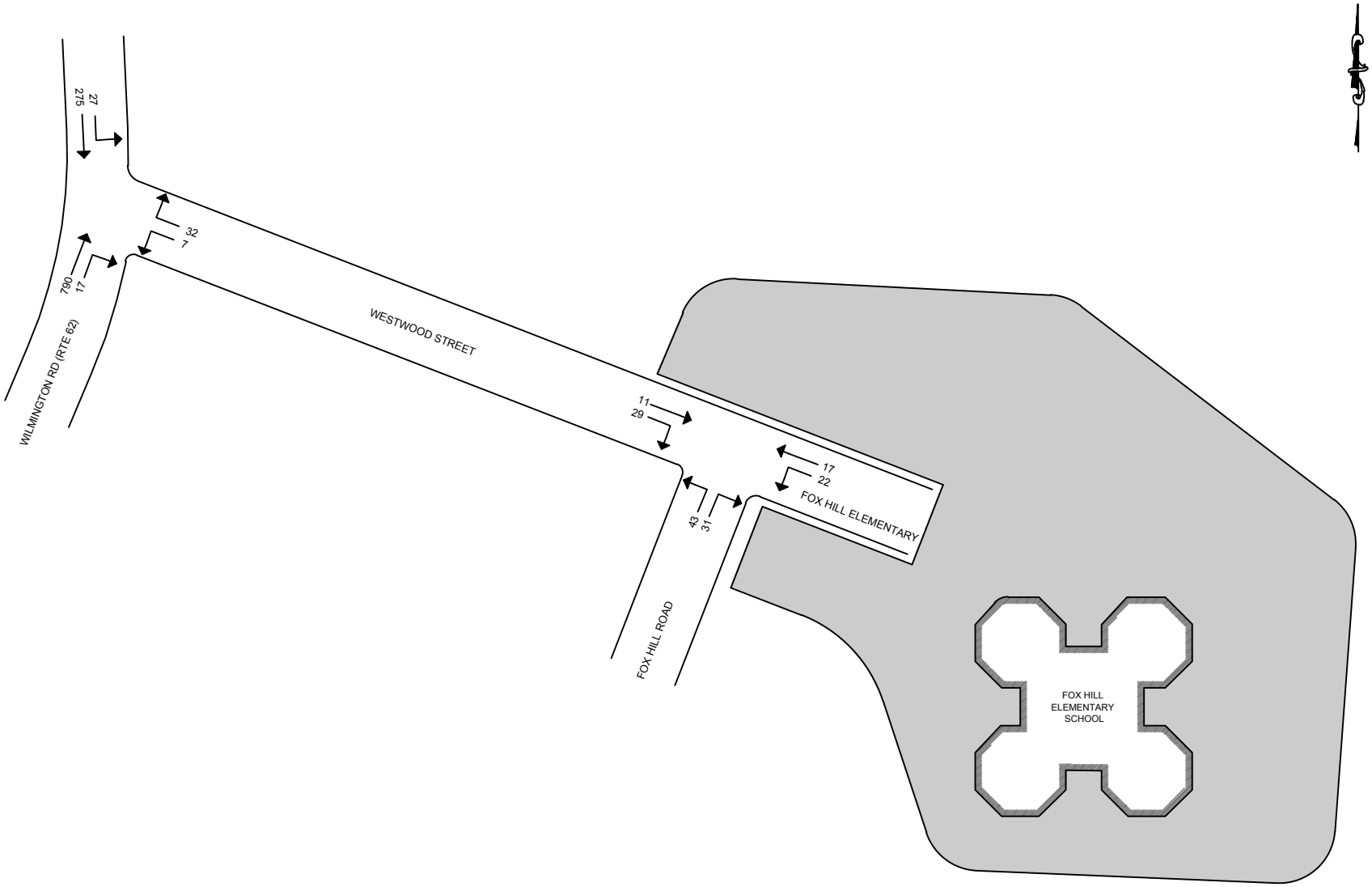
PROJECT NO. 23052.00 DATE: JUNE 2023

TRAFFIC VOLUME DIAGRAM
VEHICULAR MOVEMENTS

PM SCHOOL PEAK HOUR (2:00 - 3:00 PM)

BURLINGTON, MASSACHUSETTS SCALE: NOT TO SCALE

Z:\JOBS\23 Jobs\23052.00 DiNisco – Fox Hill Elem Traffic – MA\DWGS\Traffic Volume Figure.dwg



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

PROJECT NO. 23052.00

DATE: JUNE 2023

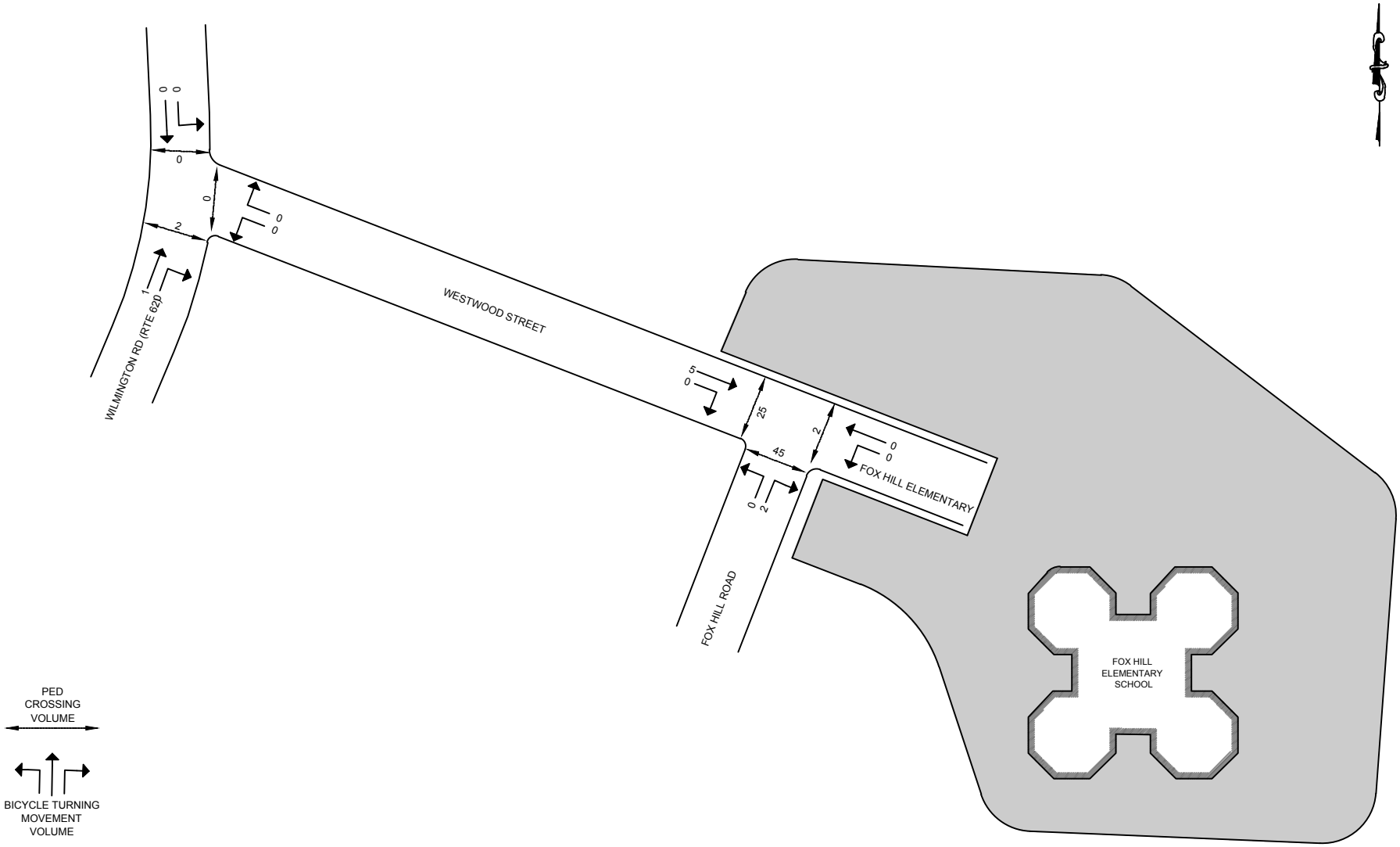
TRAFFIC VOLUME DIAGRAM
VEHICULAR MOVEMENTS

PM COMMUTER PEAK HOUR (4:45 - 5:45 PM)

BURLINGTON, MASSACHUSETTS

SCALE: NOT TO SCALE

Z:\JOBS\23 Jobs\23052.00 DiNisco – Fox Hill Elem Traffic – MA\DWGS\Traffic Volume Figure.dwg



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

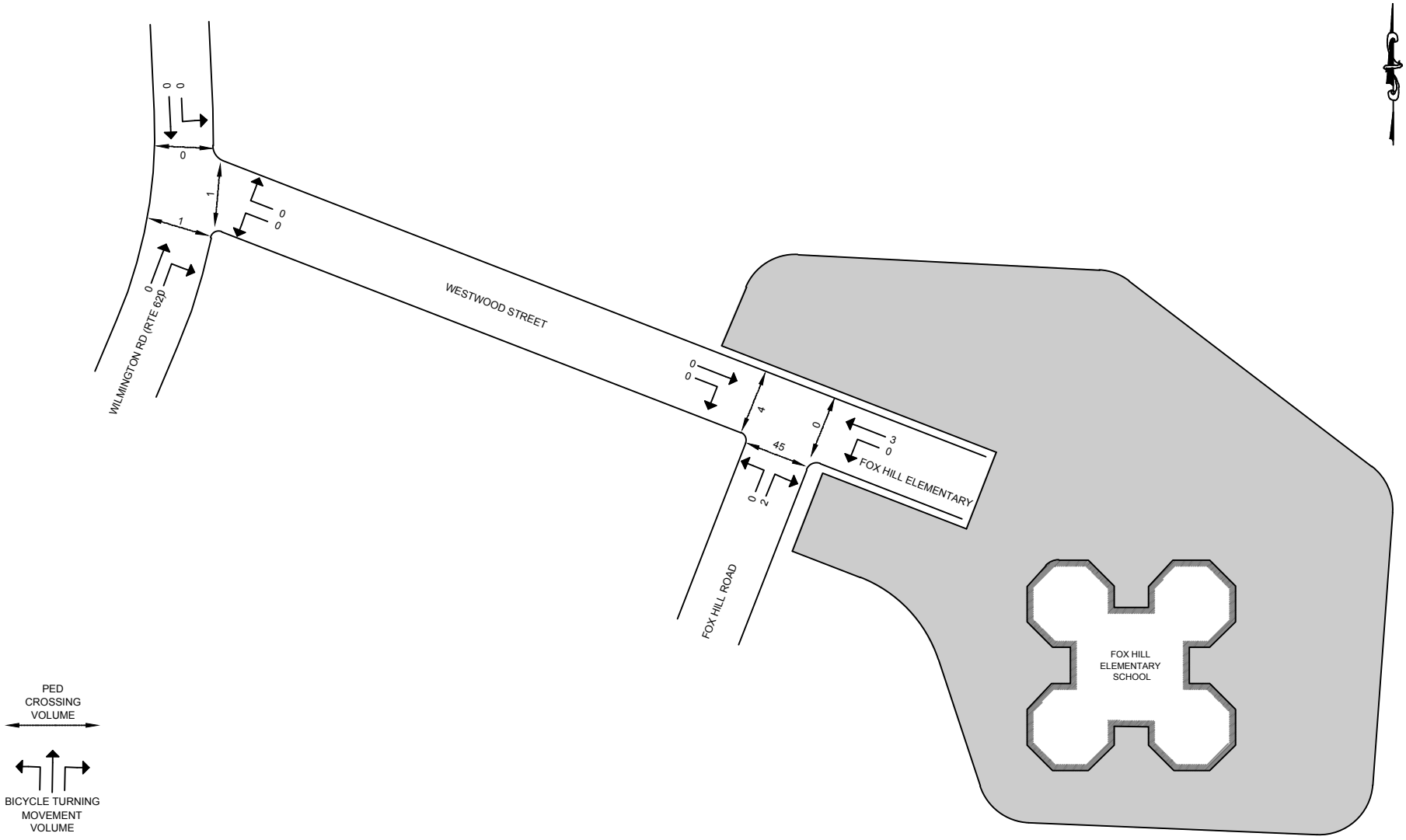
PROJECT NO. 23052.00 DATE: JUNE 2023

TRAFFIC VOLUME DIAGRAM
PEDESTRIAN AND BICYCLE MOVEMENTS

AM PEAK HOUR (7:15 - 8:15 AM)

BURLINGTON, MASSACHUSETTS SCALE: NOT TO SCALE

Z:\JOBS\23 Jobs\23052.00 DiNisco – Fox Hill Elem Traffic – MA\DWGS\Traffic Volume Figure.dwg



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

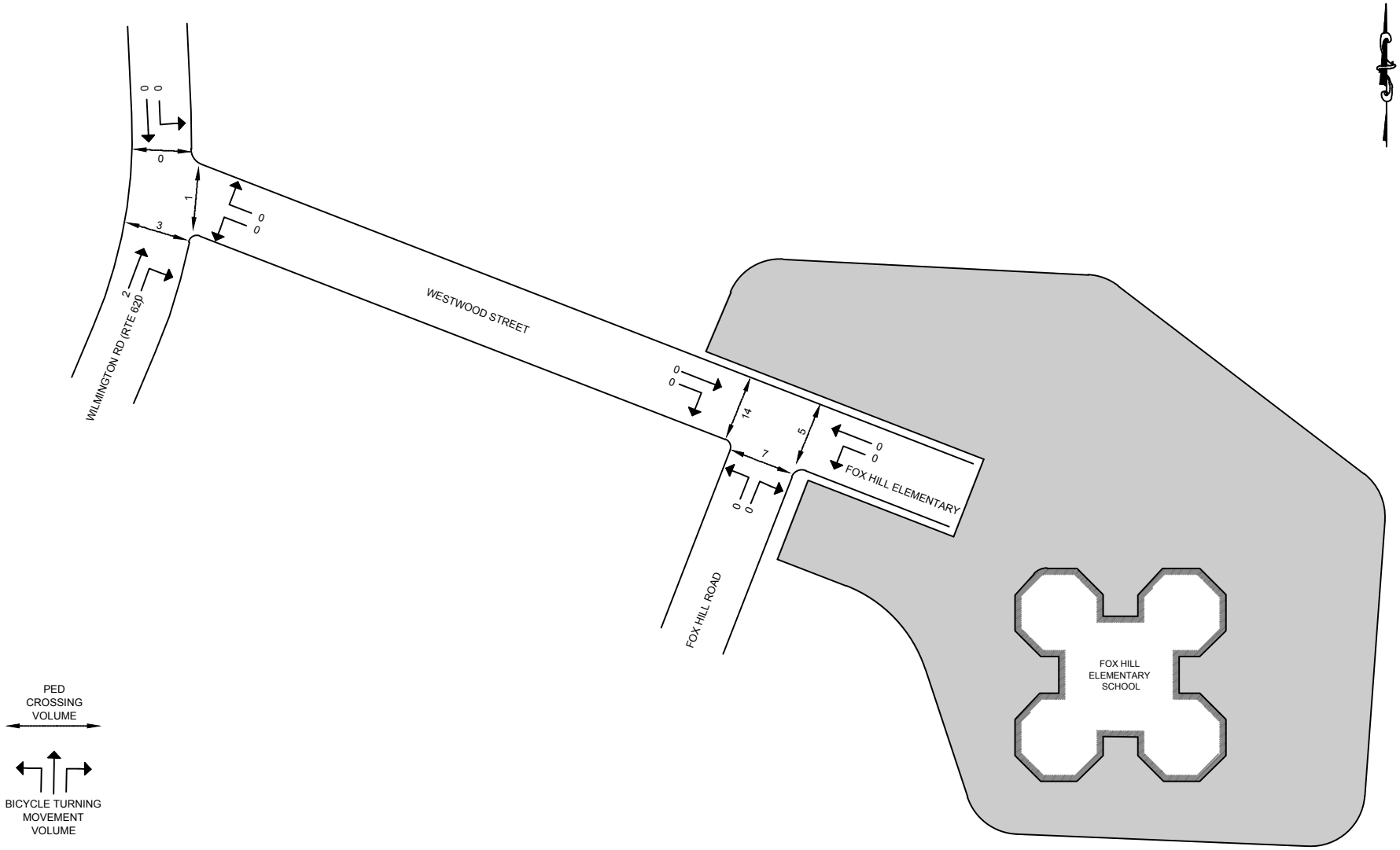
PROJECT NO. 23052.00 DATE: JUNE 2023

TRAFFIC VOLUME DIAGRAM
PEDESTRIAN AND BICYCLE MOVEMENTS

PM SCHOOL PEAK HOUR (2:00 - 3:00 PM)

BURLINGTON, MASSACHUSETTS SCALE: NOT TO SCALE

Z:\JOBS\23 Jobs\23052.00 DiNisco – Fox Hill Elem Traffic – MA\DWGS\Traffic Volume Figure.dwg



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

PROJECT NO. 23052.00 DATE: JUNE 2023

TRAFFIC VOLUME DIAGRAM
PEDESTRIAN AND BICYCLE MOVEMENTS

PM COMMUTER PEAK HOUR (4:45 - 5:45 PM)

BURLINGTON, MASSACHUSETTS SCALE: NOT TO SCALE

Z:\JOBS\23 Jobs\23052.00 DiNisco – Fox Hill Elem Traffic – MA\DWGS\Traffic Volume Figure.dwg

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706A
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	1	2	0	4	8	0	6	4	0	25
07:15 AM	1	4	0	9	1	1	9	8	1	34
07:30 AM	2	1	0	16	6	0	5	15	1	46
07:45 AM	3	2	2	38	3	12	4	27	8	99
Total	7	9	2	67	18	13	24	54	10	204
08:00 AM	32	59	0	40	1	32	3	35	15	217
08:15 AM	2	10	0	2	4	0	6	8	1	33
08:30 AM	0	2	0	1	9	0	9	2	0	23
08:45 AM	0	3	0	4	4	0	7	3	0	21
Total	34	74	0	47	18	32	25	48	16	294
Grand Total	41	83	2	114	36	45	49	102	26	498
Apprch %	32.5	65.9	1.6	58.5	18.5	23.1	27.7	57.6	14.7	
Total %	8.2	16.7	0.4	22.9	7.2	9	9.8	20.5	5.2	
Cars & Peds	40	74	2	106	36	45	48	91	26	468
% Cars & Peds	97.6	89.2	100	93	100	100	98	89.2	100	94
Trucks & Buses	1	9	0	6	0	0	1	4	0	21
% Trucks & Buses	2.4	10.8	0	5.3	0	0	2	3.9	0	4.2
Bikes by Direction	0	0	0	2	0	0	0	7	0	9
% Bikes by Direction	0	0	0	1.8	0	0	0	6.9	0	1.8

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	1	4	0	5	9	1	1	11	**9**	8	1	18	34
07:30 AM	2	1	0	3	16	**6**	0	22	5	15	1	21	46
07:45 AM	3	2	**2**	7	38	3	12	53	4	27	8	39	99
08:00 AM	**32**	**59**	0	**91**	**40**	1	**32**	**73**	3	**35**	**15**	**53**	**217**
Total Volume	38	66	2	106	103	11	45	159	21	85	25	131	396
% App. Total	35.8	62.3	1.9		64.8	6.9	28.3		16	64.9	19.1		
PHF	.297	.280	.250	.291	.644	.458	.352	.545	.583	.607	.417	.618	.456
Cars & Peds	38	61	2	101	97	11	45	153	21	77	25	123	377
% Cars & Peds	100	92.4	100	95.3	94.2	100	100	96.2	100	90.6	100	93.9	95.2
Trucks & Buses	0	5	0	5	4	0	0	4	0	3	0	3	12
% Trucks & Buses	0	7.6	0	4.7	3.9	0	0	2.5	0	3.5	0	2.3	3.0
Bikes by Direction	0	0	0	0	2	0	0	2	0	5	0	5	7
% Bikes by Direction	0	0	0	0	1.9	0	0	1.3	0	5.9	0	3.8	1.8

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706A
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	0	1	0	4	8	0	5	3	0	21
07:15 AM	1	4	0	9	1	1	9	8	1	34
07:30 AM	2	1	0	16	6	0	5	15	1	46
07:45 AM	3	2	2	34	3	12	4	23	8	91
Total	6	8	2	63	18	13	23	49	10	192
08:00 AM	32	54	0	38	1	32	3	31	15	206
08:15 AM	2	9	0	2	4	0	6	6	1	30
08:30 AM	0	2	0	1	9	0	9	2	0	23
08:45 AM	0	1	0	2	4	0	7	3	0	17
Total	34	66	0	43	18	32	25	42	16	276
Grand Total	40	74	2	106	36	45	48	91	26	468
Apprch %	34.5	63.8	1.7	56.7	19.3	24.1	29.1	55.2	15.8	
Total %	8.5	15.8	0.4	22.6	7.7	9.6	10.3	19.4	5.6	

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	1	4	0	5	9	1	1	11	**9**	8	1	18	34
07:30 AM	2	1	0	3	16	**6**	0	22	5	15	1	21	46
07:45 AM	3	2	**2**	7	34	3	12	49	4	23	8	35	91
08:00 AM	**32**	**54**	0	**86**	**38**	1	**32**	**71**	3	**31**	**15**	**49**	**206**
Total Volume	38	61	2	101	97	11	45	153	21	77	25	123	377
% App. Total	37.6	60.4	2		63.4	7.2	29.4		17.1	62.6	20.3		
PHF	.297	.282	.250	.294	.638	.458	.352	.539	.583	.621	.417	.628	.458

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706A
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Trucks & Buses

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	1	1	0	0	0	0	1	1	0	4
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	2	0	0	0	1	0	3
Total	1	1	0	2	0	0	1	2	0	7
08:00 AM	0	5	0	2	0	0	0	2	0	9
08:15 AM	0	1	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	2	0	2	0	0	0	0	0	4
Total	0	8	0	4	0	0	0	2	0	14
Grand Total	1	9	0	6	0	0	1	4	0	21
Apprch %	10	90	0	100	0	0	20	80	0	
Total %	4.8	42.9	0	28.6	0	0	4.8	19	0	

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	0	**5**	0	**5**	**2**	0	0	**2**	0	**2**	0	**2**	**9**
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	2	0	2	2	0	0	2	0	0	0	0	4
Total Volume	0	8	0	8	4	0	0	4	0	2	0	2	14
% App. Total	0	100	0		100	0	0		0	100	0		
PHF	.000	.400	.000	.400	.500	.000	.000	.500	.000	.250	.000	.250	.389

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706A
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Bikes by Direction

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	2	0	0	0	3	0	5
Total	0	0	0	2	0	0	0	3	0	5
08:00 AM	0	0	0	0	0	0	0	2	0	2
08:15 AM	0	0	0	0	0	0	0	2	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	4	0	4
Grand Total	0	0	0	2	0	0	0	7	0	9
Apprch %	0	0	0	100	0	0	0	100	0	
Total %	0	0	0	22.2	0	0	0	77.8	0	

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30 AM													
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	**2**	0	0	**2**	0	**3**	0	**3**	**5**
08:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	2	0	0	2	0	7	0	7	9
% App. Total	0	0	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.583	.000	.583	.450

Transportation Data Corporation

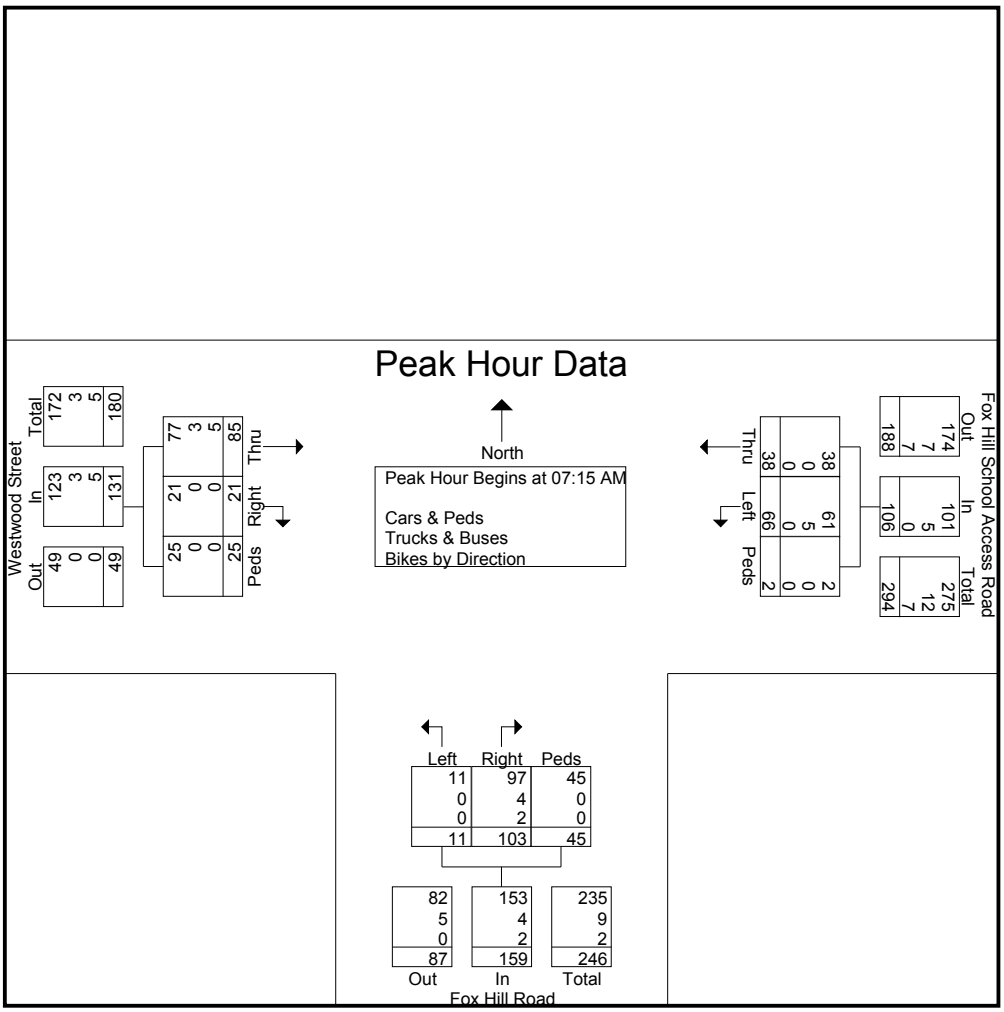
Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706A
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	1	4	0	5	9	1	1	11	**9**	8	1	18	34
07:30 AM	2	1	0	3	16	**6**	0	22	5	15	1	21	46
07:45 AM	3	2	**2**	7	38	3	12	53	4	27	8	39	99
08:00 AM	**32**	**59**	0	**91**	**40**	1	**32**	**73**	3	**35**	**15**	**53**	**217**
Total Volume	38	66	2	106	103	11	45	159	21	85	25	131	396
% App. Total	35.8	62.3	1.9		64.8	6.9	28.3		16	64.9	19.1		
PHF	.297	.280	.250	.291	.644	.458	.352	.545	.583	.607	.417	.618	.456
Cars & Peds	38	61	2	101	97	11	45	153	21	77	25	123	377
% Cars & Peds	100	92.4	100	95.3	94.2	100	100	96.2	100	90.6	100	93.9	95.2
Trucks & Buses	0	5	0	5	4	0	0	4	0	3	0	3	12
% Trucks & Buses	0	7.6	0	4.7	3.9	0	0	2.5	0	3.5	0	2.3	3.0
Bikes by Direction	0	0	0	0	2	0	0	2	0	5	0	5	7
% Bikes by Direction	0	0	0	0	1.9	0	0	1.3	0	5.9	0	3.8	1.8



Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706AA
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	3	14	0	29	4	3	6	15	0	74
02:15 PM	28	35	0	4	3	42	4	2	0	118
02:30 PM	13	12	0	3	7	0	2	0	3	40
02:45 PM	4	11	0	4	4	0	4	5	1	33
Total	48	72	0	40	18	45	16	22	4	265
03:00 PM	5	8	0	1	7	1	8	5	0	35
03:15 PM	4	9	0	1	10	2	2	2	2	32
03:30 PM	0	3	0	4	9	4	3	1	2	26
03:45 PM	1	5	0	5	7	0	6	0	0	24
Total	10	25	0	11	33	7	19	8	4	117
04:00 PM	7	3	0	3	8	1	5	3	0	30
04:15 PM	2	1	0	3	7	1	5	4	1	24
04:30 PM	6	4	0	8	18	3	8	5	1	53
04:45 PM	9	7	0	7	8	0	8	5	3	47
Total	24	15	0	21	41	5	26	17	5	154
05:00 PM	5	2	0	8	18	1	10	2	1	47
05:15 PM	2	6	4	9	7	2	3	0	9	42
05:30 PM	1	7	1	7	10	4	8	4	1	43
05:45 PM	4	2	0	2	16	2	6	1	2	35
Total	12	17	5	26	51	9	27	7	13	167
Grand Total	94	129	5	98	143	66	88	54	26	703
Apprch %	41.2	56.6	2.2	31.9	46.6	21.5	52.4	32.1	15.5	
Total %	13.4	18.3	0.7	13.9	20.3	9.4	12.5	7.7	3.7	
Cars & Peds	85	127	5	94	142	66	87	45	26	677
% Cars & Peds	90.4	98.4	100	95.9	99.3	100	98.9	83.3	100	96.3
Trucks & Buses	9	2	0	2	1	0	1	2	0	17
% Trucks & Buses	9.6	1.6	0	2	0.7	0	1.1	3.7	0	2.4
Bikes by Direction	0	0	0	2	0	0	0	7	0	9
% Bikes by Direction	0	0	0	2	0	0	0	13	0	1.3

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	3	14	0	17	**29**	4	3	36	**6**	**15**	0	**21**	74
02:15 PM	**28**	**35**	0	**63**	4	3	**42**	**49**	4	2	0	6	**118**
02:30 PM	13	12	0	25	3	**7**	0	10	2	0	**3**	5	40
02:45 PM	4	11	0	15	4	4	0	8	4	5	1	10	33
Total Volume	48	72	0	120	40	18	45	103	16	22	4	42	265
% App. Total	40	60	0		38.8	17.5	43.7		38.1	52.4	9.5		
PHF	.429	.514	.000	.476	.345	.643	.268	.526	.667	.367	.333	.500	.561
Cars & Peds	40	70	0	110	36	18	45	99	16	18	4	38	247
% Cars & Peds	83.3	97.2	0	91.7	90.0	100	100	96.1	100	81.8	100	90.5	93.2
Trucks & Buses	8	2	0	10	2	0	0	2	0	1	0	1	13
% Trucks & Buses	16.7	2.8	0	8.3	5.0	0	0	1.9	0	4.5	0	2.4	4.9
Bikes by Direction	0	0	0	0	2	0	0	2	0	3	0	3	5
% Bikes by Direction	0	0	0	0	5.0	0	0	1.9	0	13.6	0	7.1	1.9

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706AA
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	3	14	0	29	4	3	6	14	0	73
02:15 PM	20	35	0	4	3	42	4	2	0	110
02:30 PM	13	12	0	2	7	0	2	0	3	39
02:45 PM	4	9	0	1	4	0	4	2	1	25
Total	40	70	0	36	18	45	16	18	4	247
03:00 PM	5	8	0	1	7	1	8	3	0	33
03:15 PM	4	9	0	1	10	2	2	0	2	30
03:30 PM	0	3	0	4	9	4	3	1	2	26
03:45 PM	1	5	0	5	7	0	6	0	0	24
Total	10	25	0	11	33	7	19	4	4	113
04:00 PM	7	3	0	3	8	1	5	3	0	30
04:15 PM	2	1	0	3	7	1	5	3	1	23
04:30 PM	5	4	0	8	18	3	7	5	1	51
04:45 PM	9	7	0	7	8	0	8	5	3	47
Total	23	15	0	21	41	5	25	16	5	151
05:00 PM	5	2	0	8	17	1	10	2	1	46
05:15 PM	2	6	4	9	7	2	3	0	9	42
05:30 PM	1	7	1	7	10	4	8	4	1	43
05:45 PM	4	2	0	2	16	2	6	1	2	35
Total	12	17	5	26	50	9	27	7	13	166
Grand Total	85	127	5	94	142	66	87	45	26	677
Apprch %	39.2	58.5	2.3	31.1	47	21.9	55.1	28.5	16.5	
Total %	12.6	18.8	0.7	13.9	21	9.7	12.9	6.6	3.8	

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	3	14	0	17	**29**	4	3	36	**6**	**14**	0	**20**	73
02:15 PM	**20**	**35**	0	**55**	4	3	**42**	**49**	4	2	0	6	**110**
02:30 PM	13	12	0	25	2	**7**	0	9	2	0	**3**	5	39
02:45 PM	4	9	0	13	1	4	0	5	4	2	1	7	25
Total Volume	40	70	0	110	36	18	45	99	16	18	4	38	247
% App. Total	36.4	63.6	0		36.4	18.2	45.5		42.1	47.4	10.5		
PHF	.500	.500	.000	.500	.310	.643	.268	.505	.667	.321	.333	.475	.561

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706AA
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Trucks & Buses

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	0	0	0	0	0	0	0	1	0	1
02:15 PM	8	0	0	0	0	0	0	0	0	8
02:30 PM	0	0	0	1	0	0	0	0	0	1
02:45 PM	0	2	0	1	0	0	0	0	0	3
Total	8	2	0	2	0	0	0	1	0	13
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	1	0	1
04:30 PM	1	0	0	0	0	0	1	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1	1	0	3
05:00 PM	0	0	0	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	0	0	1
Grand Total	9	2	0	2	1	0	1	2	0	17
Apprch %	81.8	18.2	0	66.7	33.3	0	33.3	66.7	0	
Total %	52.9	11.8	0	11.8	5.9	0	5.9	11.8	0	

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
02:15 PM	**8**	0	0	**8**	0	0	0	0	0	0	0	0	**8**
02:30 PM	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
02:45 PM	0	**2**	0	2	1	0	0	1	0	0	0	0	3
Total Volume	8	2	0	10	2	0	0	2	0	1	0	1	13
% App. Total	80	20	0		100	0	0		0	100	0		
PHF	.250	.250	.000	.313	.500	.000	.000	.500	.000	.250	.000	.250	.406

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706AA
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Bikes by Direction

	Fox Hill School Access Road From East			Fox Hill Road From South			Westwood Street From West			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	2	0	0	0	3	0	5
Total	0	0	0	2	0	0	0	3	0	5
03:00 PM	0	0	0	0	0	0	0	2	0	2
03:15 PM	0	0	0	0	0	0	0	2	0	2
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	4	0	4
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	2	0	0	0	7	0	9
Apprch %	0	0	0	100	0	0	0	100	0	
Total %	0	0	0	22.2	0	0	0	77.8	0	

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:30 PM													
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	**2**	0	0	**2**	0	**3**	0	**3**	**5**
03:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
03:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	2	0	0	2	0	7	0	7	9
% App. Total	0	0	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.583	.000	.583	.450

Transportation Data Corporation

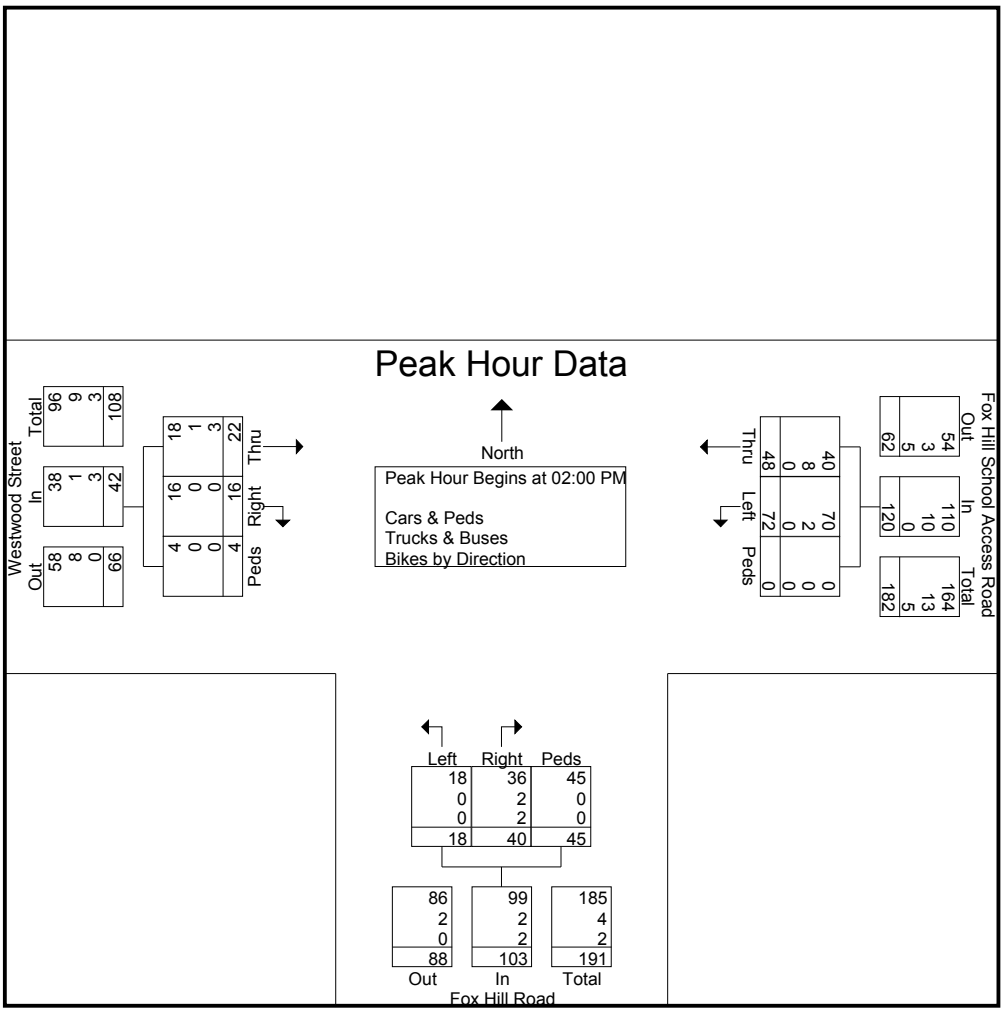
Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

S: Fox Hill Road
E/W: Fox Hill School/Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706AA
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

	Fox Hill School Access Road From East				Fox Hill Road From South				Westwood Street From West				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:00 PM													
02:00 PM	3	14	0	17	**29**	4	3	36	**6**	**15**	0	**21**	74
02:15 PM	**28**	**35**	0	**63**	4	3	**42**	**49**	4	2	0	6	**118**
02:30 PM	13	12	0	25	3	**7**	0	10	2	0	**3**	5	40
02:45 PM	4	11	0	15	4	4	0	8	4	5	1	10	33
Total Volume	48	72	0	120	40	18	45	103	16	22	4	42	265
% App. Total	40	60	0		38.8	17.5	43.7		38.1	52.4	9.5		
PHF	.429	.514	.000	.476	.345	.643	.268	.526	.667	.367	.333	.500	.561
Cars & Peds	40	70	0	110	36	18	45	99	16	18	4	38	247
% Cars & Peds	83.3	97.2	0	91.7	90.0	100	100	96.1	100	81.8	100	90.5	93.2
Trucks & Buses	8	2	0	10	2	0	0	2	0	1	0	1	13
% Trucks & Buses	16.7	2.8	0	8.3	5.0	0	0	1.9	0	4.5	0	2.4	4.9
Bikes by Direction	0	0	0	0	2	0	0	2	0	3	0	3	5
% Bikes by Direction	0	0	0	0	5.0	0	0	1.9	0	13.6	0	7.1	1.9



Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706B
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	120	4	0	7	1	0	2	47	0	181
07:15 AM	133	5	0	4	5	0	9	55	0	211
07:30 AM	147	14	0	6	2	0	5	55	1	230
07:45 AM	163	19	0	8	5	0	11	58	0	264
Total	563	42	0	25	13	0	27	215	1	886
08:00 AM	114	15	0	12	17	0	14	67	1	240
08:15 AM	127	7	0	4	3	0	3	43	0	187
08:30 AM	104	3	0	3	3	0	2	61	1	177
08:45 AM	99	3	0	3	4	0	3	51	0	163
Total	444	28	0	22	27	0	22	222	2	767
Grand Total	1007	70	0	47	40	0	49	437	3	1653
Apprch %	93.5	6.5	0	54	46	0	10	89.4	0.6	
Total %	60.9	4.2	0	2.8	2.4	0	3	26.4	0.2	
Cars & Peds	991	68	0	46	40	0	47	417	3	1612
% Cars & Peds	98.4	97.1	0	97.9	100	0	95.9	95.4	100	97.5
Trucks & Buses	16	2	0	1	0	0	2	19	0	40
% Trucks & Buses	1.6	2.9	0	2.1	0	0	4.1	4.3	0	2.4
Bikes by Direction	0	0	0	0	0	0	0	1	0	1
% Bikes by Direction	0	0	0	0	0	0	0	0.2	0	0.1

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	133	5	0	138	4	5	0	9	9	55	0	64	211
07:30 AM	147	14	0	161	6	2	0	8	5	55	**1**	61	230
07:45 AM	**163**	**19**	0	**182**	8	5	0	13	11	58	0	69	**264**
08:00 AM	114	15	0	129	**12**	**17**	0	**29**	**14**	**67**	1	**82**	240
Total Volume	557	53	0	610	30	29	0	59	39	235	2	276	945
% App. Total	91.3	8.7	0		50.8	49.2	0		14.1	85.1	0.7		
PHF	.854	.697	.000	.838	.625	.426	.000	.509	.696	.877	.500	.841	.895
Cars & Peds	549	53	0	602	29	29	0	58	37	231	2	270	930
% Cars & Peds	98.6	100	0	98.7	96.7	100	0	98.3	94.9	98.3	100	97.8	98.4
Trucks & Buses	8	0	0	8	1	0	0	1	2	3	0	5	14
% Trucks & Buses	1.4	0	0	1.3	3.3	0	0	1.7	5.1	1.3	0	1.8	1.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0.4	0	0.4	0.1

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706B
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	117	2	0	7	1	0	2	46	0	175
07:15 AM	131	5	0	4	5	0	9	55	0	209
07:30 AM	146	14	0	6	2	0	5	52	1	226
07:45 AM	160	19	0	8	5	0	9	57	0	258
Total	554	40	0	25	13	0	25	210	1	868
08:00 AM	112	15	0	11	17	0	14	67	1	237
08:15 AM	125	7	0	4	3	0	3	42	0	184
08:30 AM	102	3	0	3	3	0	2	51	1	165
08:45 AM	98	3	0	3	4	0	3	47	0	158
Total	437	28	0	21	27	0	22	207	2	744
Grand Total	991	68	0	46	40	0	47	417	3	1612
Apprch %	93.6	6.4	0	53.5	46.5	0	10.1	89.3	0.6	
Total %	61.5	4.2	0	2.9	2.5	0	2.9	25.9	0.2	

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	131	5	0	136	4	5	0	9	9	55	0	64	209
07:30 AM	146	14	0	160	6	2	0	8	5	52	**1**	58	226
07:45 AM	**160**	**19**	0	**179**	8	5	0	13	9	57	0	66	**258**
08:00 AM	112	15	0	127	**11**	**17**	0	**28**	**14**	**67**	1	**82**	237
Total Volume	549	53	0	602	29	29	0	58	37	231	2	270	930
% App. Total	91.2	8.8	0		50	50	0		13.7	85.6	0.7		
PHF	.858	.697	.000	.841	.659	.426	.000	.518	.661	.862	.500	.823	.901

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706B
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Trucks & Buses

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	3	2	0	0	0	0	0	1	0	6
07:15 AM	2	0	0	0	0	0	0	0	0	2
07:30 AM	1	0	0	0	0	0	0	2	0	3
07:45 AM	3	0	0	0	0	0	2	1	0	6
Total	9	2	0	0	0	0	2	4	0	17
08:00 AM	2	0	0	1	0	0	0	0	0	3
08:15 AM	2	0	0	0	0	0	0	1	0	3
08:30 AM	2	0	0	0	0	0	0	10	0	12
08:45 AM	1	0	0	0	0	0	0	4	0	5
Total	7	0	0	1	0	0	0	15	0	23
Grand Total	16	2	0	1	0	0	2	19	0	40
Apprch %	88.9	11.1	0	100	0	0	9.5	90.5	0	
Total %	40	5	0	2.5	0	0	5	47.5	0	

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	**3**	0	0	**3**	0	0	0	0	**2**	1	0	3	6
08:00 AM	2	0	0	2	**1**	0	0	**1**	0	0	0	0	3
08:15 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
08:30 AM	2	0	0	2	0	0	0	0	0	**10**	0	**10**	**12**
Total Volume	9	0	0	9	1	0	0	1	2	12	0	14	24
% App. Total	100	0	0		100	0	0		14.3	85.7	0		
PHF	.750	.000	.000	.750	.250	.000	.000	.250	.250	.300	.000	.350	.500

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706B
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Bikes by Direction

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	1	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	1	0	1
Apprch %	0	0	0	0	0	0	0	100	0	
Total %	0	0	0	0	0	0	0	100	0	

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**1**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

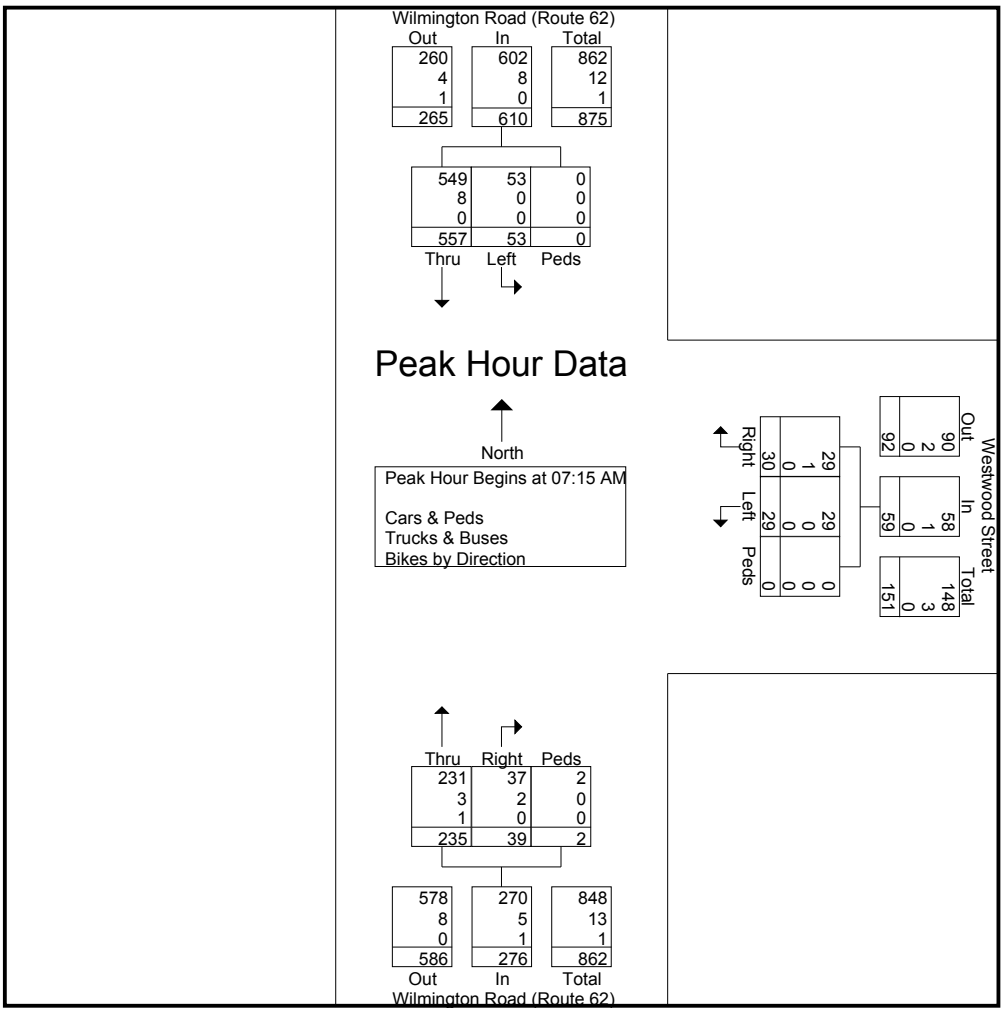
Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706B
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	133	5	0	138	4	5	0	9	9	55	0	64	211
07:30 AM	147	14	0	161	6	2	0	8	5	55	**1**	61	230
07:45 AM	**163**	**19**	0	**182**	8	5	0	13	11	58	0	69	**264**
08:00 AM	114	15	0	129	**12**	**17**	0	**29**	**14**	**67**	1	**82**	240
Total Volume	557	53	0	610	30	29	0	59	39	235	2	276	945
% App. Total	91.3	8.7	0		50.8	49.2	0		14.1	85.1	0.7		
PHF	.854	.697	.000	.838	.625	.426	.000	.509	.696	.877	.500	.841	.895
Cars & Peds	549	53	0	602	29	29	0	58	37	231	2	270	930
% Cars & Peds	98.6	100	0	98.7	96.7	100	0	98.3	94.9	98.3	100	97.8	98.4
Trucks & Buses	8	0	0	8	1	0	0	1	2	3	0	5	14
% Trucks & Buses	1.4	0	0	1.3	3.3	0	0	1.7	5.1	1.3	0	1.8	1.5
Bikes by Direction	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0.4	0	0.4	0.1



Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706BB
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	57	7	0	8	6	0	4	63	1	146
02:15 PM	54	7	0	8	10	0	3	67	0	149
02:30 PM	64	2	0	9	9	0	2	99	0	185
02:45 PM	57	2	0	7	5	1	4	120	0	196
Total	232	18	0	32	30	1	13	349	1	676
03:00 PM	51	2	0	8	1	0	4	97	0	163
03:15 PM	65	2	0	12	1	0	1	120	0	201
03:30 PM	71	4	0	4	2	0	2	117	0	200
03:45 PM	81	4	0	5	3	0	2	148	0	243
Total	268	12	0	29	7	0	9	482	0	807
04:00 PM	76	5	0	11	3	0	0	134	0	229
04:15 PM	81	8	0	7	1	0	6	134	0	237
04:30 PM	78	5	0	14	6	0	1	175	0	279
04:45 PM	64	6	0	11	3	0	3	200	1	288
Total	299	24	0	43	13	0	10	643	1	1033
05:00 PM	71	9	0	9	1	1	5	176	0	272
05:15 PM	71	6	0	4	2	0	4	206	0	293
05:30 PM	69	6	0	8	1	0	5	208	2	299
05:45 PM	55	11	0	6	10	0	4	169	0	255
Total	266	32	0	27	14	1	18	759	2	1119
Grand Total	1065	86	0	131	64	2	50	2233	4	3635
Apprch %	92.5	7.5	0	66.5	32.5	1	2.2	97.6	0.2	
Total %	29.3	2.4	0	3.6	1.8	0.1	1.4	61.4	0.1	
Cars & Peds	1049	85	0	129	61	2	46	2195	4	3571
% Cars & Peds	98.5	98.8	0	98.5	95.3	100	92	98.3	100	98.2
Trucks & Buses	15	1	0	2	3	0	2	36	0	59
% Trucks & Buses	1.4	1.2	0	1.5	4.7	0	4	1.6	0	1.6
Bikes by Direction	1	0	0	0	0	0	2	2	0	5
% Bikes by Direction	0.1	0	0	0	0	0	4	0.1	0	0.1

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	64	6	0	70	**11**	**3**	0	**14**	3	200	1	204	288
05:00 PM	**71**	**9**	0	**80**	9	1	**1**	11	**5**	176	0	181	272
05:15 PM	71	6	0	77	4	2	0	6	4	206	0	210	293
05:30 PM	69	6	0	75	8	1	0	9	5	**208**	**2**	**215**	**299**
Total Volume	275	27	0	302	32	7	1	40	17	790	3	810	1152
% App. Total	91.1	8.9	0		80	17.5	2.5		2.1	97.5	0.4		
PHF	.968	.750	.000	.944	.727	.583	.250	.714	.850	.950	.375	.942	.963
Cars & Peds	275	27	0	302	31	7	1	39	17	786	3	806	1147
% Cars & Peds	100	100	0	100	96.9	100	100	97.5	100	99.5	100	99.5	99.6
Trucks & Buses	0	0	0	0	1	0	0	1	0	2	0	2	3
% Trucks & Buses	0	0	0	0	3.1	0	0	2.5	0	0.3	0	0.2	0.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	2	0	2	2
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0.3	0	0.2	0.2

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706BB
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Cars & Peds

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	54	7	0	7	6	0	4	63	1	142
02:15 PM	52	6	0	8	10	0	1	67	0	144
02:30 PM	63	2	0	9	8	0	2	96	0	180
02:45 PM	52	2	0	7	5	1	4	112	0	183
Total	221	17	0	31	29	1	11	338	1	649
03:00 PM	51	2	0	8	1	0	4	93	0	159
03:15 PM	65	2	0	12	1	0	1	117	0	198
03:30 PM	71	4	0	4	1	0	2	110	0	192
03:45 PM	81	4	0	5	3	0	1	144	0	238
Total	268	12	0	29	6	0	8	464	0	787
04:00 PM	75	5	0	11	3	0	0	133	0	227
04:15 PM	77	8	0	7	1	0	5	131	0	229
04:30 PM	78	5	0	14	5	0	1	174	0	277
04:45 PM	64	6	0	10	3	0	3	199	1	286
Total	294	24	0	42	12	0	9	637	1	1019
05:00 PM	71	9	0	9	1	1	5	175	0	271
05:15 PM	71	6	0	4	2	0	4	205	0	292
05:30 PM	69	6	0	8	1	0	5	207	2	298
05:45 PM	55	11	0	6	10	0	4	169	0	255
Total	266	32	0	27	14	1	18	756	2	1116
Grand Total	1049	85	0	129	61	2	46	2195	4	3571
Apprch %	92.5	7.5	0	67.2	31.8	1	2	97.8	0.2	
Total %	29.4	2.4	0	3.6	1.7	0.1	1.3	61.5	0.1	

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	64	6	0	70	**10**	**3**	0	**13**	3	199	1	203	286
05:00 PM	**71**	**9**	0	**80**	9	1	**1**	11	**5**	175	0	180	271
05:15 PM	71	6	0	77	4	2	0	6	4	205	0	209	292
05:30 PM	69	6	0	75	8	1	0	9	5	**207**	**2**	**214**	**298**
Total Volume	275	27	0	302	31	7	1	39	17	786	3	806	1147
% App. Total	91.1	8.9	0		79.5	17.9	2.6		2.1	97.5	0.4		
PHF	.968	.750	.000	.944	.775	.583	.250	.750	.850	.949	.375	.942	.962

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706BB
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Trucks & Buses

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	3	0	0	1	0	0	0	0	0	4
02:15 PM	2	1	0	0	0	0	2	0	0	5
02:30 PM	1	0	0	0	1	0	0	3	0	5
02:45 PM	5	0	0	0	0	0	0	8	0	13
Total	11	1	0	1	1	0	2	11	0	27
03:00 PM	0	0	0	0	0	0	0	4	0	4
03:15 PM	0	0	0	0	0	0	0	3	0	3
03:30 PM	0	0	0	0	1	0	0	7	0	8
03:45 PM	0	0	0	0	0	0	0	4	0	4
Total	0	0	0	0	1	0	0	18	0	19
04:00 PM	1	0	0	0	0	0	0	1	0	2
04:15 PM	3	0	0	0	0	0	0	3	0	6
04:30 PM	0	0	0	0	1	0	0	1	0	2
04:45 PM	0	0	0	1	0	0	0	1	0	2
Total	4	0	0	1	1	0	0	6	0	12
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1
Grand Total	15	1	0	2	3	0	2	36	0	59
Apprch %	93.8	6.2	0	40	60	0	5.3	94.7	0	
Total %	25.4	1.7	0	3.4	5.1	0	3.4	61	0	

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 02:45 PM													
02:45 PM	**5**	0	0	**5**	0	0	0	0	0	**8**	0	**8**	**13**
03:00 PM	0	0	0	0	0	0	0	0	0	4	0	4	4
03:15 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
03:30 PM	0	0	0	0	0	**1**	0	**1**	0	7	0	7	8
Total Volume	5	0	0	5	0	1	0	1	0	22	0	22	28
% App. Total	100	0	0		0	100	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.250	.000	.250	.000	.688	.000	.688	.538

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706BB
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

Groups Printed- Bikes by Direction

	Wilmington Road (Route 62) From North			Westwood Street From East			Wilmington Road (Route 62) From South			
Start Time	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	Int. Total
02:00 PM	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	1	0	0	1
Total	0	0	0	0	0	0	1	0	0	1
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	1	0	0	0	0	0	1	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1	0	0	2
05:00 PM	0	0	0	0	0	0	0	1	0	1
05:15 PM	0	0	0	0	0	0	0	1	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	2
Grand Total	1	0	0	0	0	0	2	2	0	5
Apprch %	100	0	0	0	0	0	50	50	0	
Total %	20	0	0	0	0	0	40	40	0	

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:30 PM													
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	**1**	0	0	**1**	0	0	0	0	1	0	0	1	**2**
Total Volume	1	0	0	1	0	0	0	0	2	0	0	2	3
% App. Total	100	0	0		0	0	0		100	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.500	.000	.000	.500	.375

Transportation Data Corporation

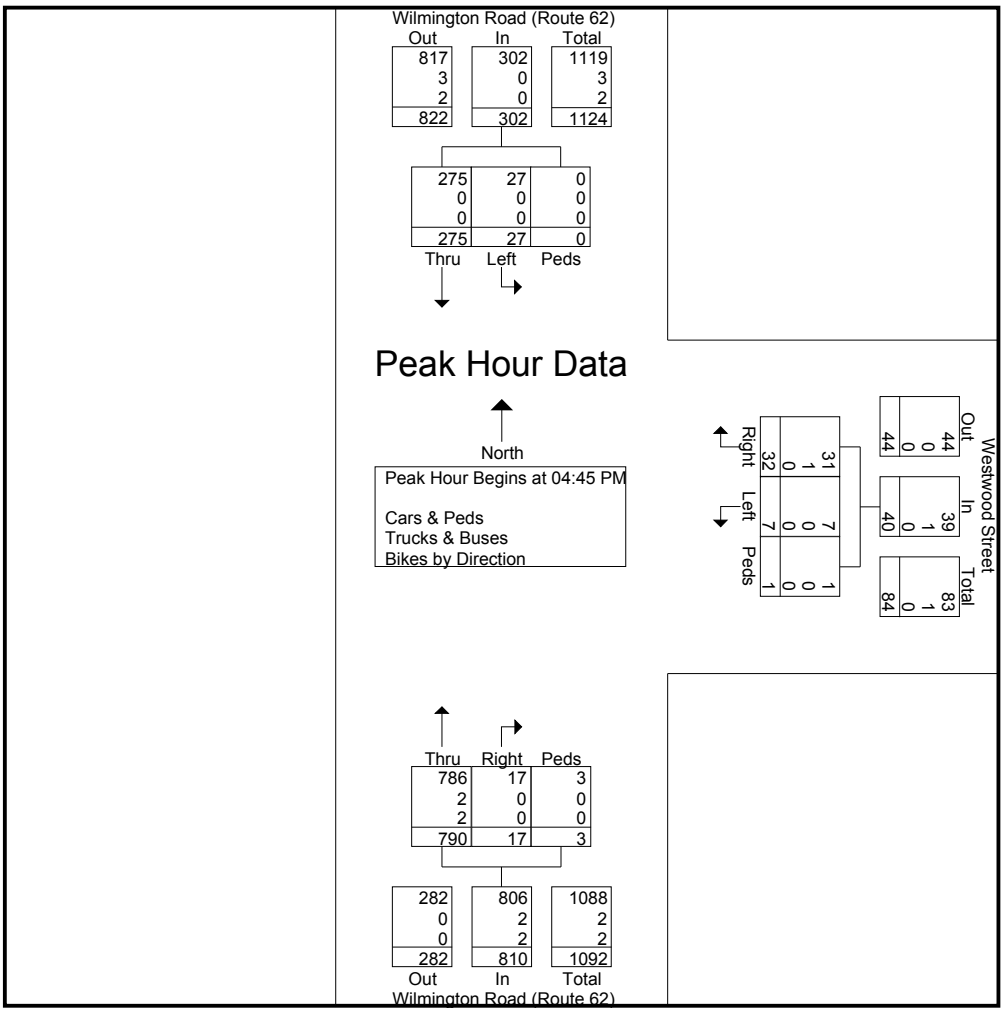
Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Wilmington Road (Route 62)
E: Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

File Name : 05706BB
Site Code : 23052.00
Start Date : 5/9/2023
Page No : 1

	Wilmington Road (Route 62) From North				Westwood Street From East				Wilmington Road (Route 62) From South				
Start Time	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	64	6	0	70	**11**	**3**	0	**14**	3	200	1	204	288
05:00 PM	**71**	**9**	0	**80**	9	1	**1**	11	**5**	176	0	181	272
05:15 PM	71	6	0	77	4	2	0	6	4	206	0	210	293
05:30 PM	69	6	0	75	8	1	0	9	5	**208**	**2**	**215**	**299**
Total Volume	275	27	0	302	32	7	1	40	17	790	3	810	1152
% App. Total	91.1	8.9	0		80	17.5	2.5		2.1	97.5	0.4		
PHF	.968	.750	.000	.944	.727	.583	.250	.714	.850	.950	.375	.942	.963
Cars & Peds	275	27	0	302	31	7	1	39	17	786	3	806	1147
% Cars & Peds	100	100	0	100	96.9	100	100	97.5	100	99.5	100	99.5	99.6
Trucks & Buses	0	0	0	0	1	0	0	1	0	2	0	2	3
% Trucks & Buses	0	0	0	0	3.1	0	0	2.5	0	0.3	0	0.2	0.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	2	0	2	2
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0.3	0	0.2	0.2



Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aclass
Site Code: 23052.00

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/09/23	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
06:00	0	11	1	0	**2**	0	0	0	0	0	0	0	0	14
07:00	1	**75**	**11**	2	0	0	0	0	0	0	0	0	0	**89**
08:00	**3**	45	6	**4**	2	0	0	0	0	0	0	0	0	60
09:00	0	17	7	0	0	0	0	0	0	0	0	0	0	24
10:00	0	16	2	0	1	0	0	0	0	0	0	0	0	19
11:00	0	20	5	0	0	0	0	0	0	0	0	0	0	25
12 PM	0	14	4	2	**2**	0	0	**1**	0	0	0	0	0	23
13:00	0	34	7	0	0	0	0	0	0	0	0	0	0	41
14:00	**2**	35	4	**3**	2	0	0	0	0	0	0	0	0	46
15:00	0	36	7	1	0	0	0	0	0	0	0	0	0	44
16:00	0	49	**14**	0	2	0	0	0	0	0	0	0	0	65
17:00	1	**57**	7	0	1	0	0	0	0	0	0	0	0	**66**
18:00	2	31	4	0	0	0	0	0	0	0	0	0	0	37
19:00	0	19	3	0	0	0	0	0	0	0	0	0	0	22
20:00	2	20	0	0	0	0	0	0	0	0	0	0	0	22
21:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
22:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Day Total	11	497	86	12	14	0	0	1	0	0	0	0	0	621
Percent	1.8%	80.0%	13.8%	1.9%	2.3%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	08:00	06:00									07:00
Vol.	3	75	11	4	2									89
PM Peak	14:00	17:00	16:00	14:00	12:00			12:00						17:00
Vol.	2	57	14	3	2			1						66

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aclass
Site Code: 23052.00

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	8	2	0	1	0	0	**1**	0	0	0	0	0	12
07:00	**1**	**70**	**11**	**1**	0	0	0	0	0	0	0	0	0	**83**
08:00	0	51	8	1	**2**	0	0	0	0	0	0	0	0	62
09:00	0	15	2	0	1	0	0	0	0	0	0	0	0	18
10:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
11:00	1	21	5	0	2	0	0	0	0	0	0	0	0	29
12 PM	2	8	3	0	1	0	0	0	0	0	0	0	0	14
13:00	0	32	8	0	**4**	0	0	0	0	0	0	0	0	44
14:00	**5**	41	4	**2**	1	1	0	0	0	0	0	0	0	54
15:00	2	25	**10**	1	4	0	0	0	0	0	0	0	0	42
16:00	1	**58**	8	0	2	**2**	0	0	0	0	0	0	0	**71**
17:00	0	39	9	0	0	0	0	0	0	0	0	0	0	48
18:00	0	20	4	0	0	0	0	0	0	0	0	0	0	24
19:00	1	22	6	0	2	0	0	0	0	0	0	0	0	31
20:00	0	17	4	0	1	0	0	0	0	0	0	0	0	22
21:00	1	12	0	0	1	0	0	0	0	0	0	0	0	14
22:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Day Total	14	467	88	5	22	3	0	1	0	0	0	0	0	600
Percent	2.3%	77.8%	14.7%	0.8%	3.7%	0.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	07:00	08:00			06:00						07:00
Vol.	1	70	11	1	2			1						83
PM Peak	14:00	16:00	15:00	14:00	13:00	16:00								16:00
Vol.	5	58	10	2	4	2								71
Grand Total	25	964	174	17	36	3	0	2	0	0	0	0	0	1221
Percent	2.0%	79.0%	14.3%	1.4%	2.9%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aclass
Site Code: 23052.00

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/09/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4
06:00	0	7	3	0	3	0	0	0	0	0	0	0	0	13
07:00	**1**	25	13	2	1	0	0	**2**	0	0	0	0	0	44
08:00	0	**52**	**20**	**8**	**4**	0	0	0	0	0	0	0	0	**84**
09:00	0	8	3	0	3	0	0	0	0	0	0	0	0	14
10:00	0	17	12	0	3	0	0	0	0	0	0	0	0	32
11:00	1	21	3	0	2	0	0	0	0	0	0	0	0	27
12 PM	0	14	8	2	2	0	0	0	0	0	0	0	0	26
13:00	0	15	9	0	3	0	0	0	0	0	0	0	0	27
14:00	**3**	**56**	**25**	**5**	**5**	0	0	0	0	0	0	0	0	**94**
15:00	0	32	9	0	2	0	0	**1**	0	0	0	0	0	44
16:00	0	28	14	0	2	0	0	0	0	0	0	0	0	44
17:00	0	35	12	0	5	0	0	0	0	0	0	0	0	52
18:00	0	22	4	0	1	0	0	0	0	0	0	0	0	27
19:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
20:00	1	21	3	0	2	0	0	0	0	0	0	0	0	27
21:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
22:00	0	3	0	0	2	0	0	0	0	0	0	0	0	5
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day Total	6	365	145	17	42	0	0	3	0	0	0	0	0	578
Percent	1.0%	63.1%	25.1%	2.9%	7.3%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	08:00	08:00	08:00	08:00			07:00						08:00
Vol.	1	52	20	8	4			2						84
PM Peak	14:00	14:00	14:00	14:00	14:00			15:00						14:00
Vol.	3	56	25	5	5			1						94

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aclass
Site Code: 23052.00

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
06:00	0	4	3	0	3	0	0	0	0	0	0	0	0	10
07:00	0	25	14	1	2	0	0	0	0	0	0	0	0	42
08:00	0	**57**	**24**	**5**	**4**	0	0	0	0	0	0	0	0	**90**
09:00	0	14	6	1	2	0	0	0	0	0	0	0	0	23
10:00	0	10	4	0	3	0	0	0	0	0	0	0	0	17
11:00	0	18	11	0	2	0	0	0	0	0	0	0	0	31
12 PM	0	11	2	0	3	0	0	0	0	0	0	0	0	16
13:00	1	10	8	1	**7**	0	0	0	0	0	0	0	0	27
14:00	**2**	**64**	**22**	**5**	4	0	0	0	0	0	0	0	0	**97**
15:00	0	22	9	0	6	0	0	0	0	0	0	0	0	37
16:00	2	35	16	0	3	**1**	0	**1**	0	0	0	0	0	58
17:00	0	36	9	0	3	0	0	0	0	0	0	0	0	48
18:00	0	19	9	0	1	0	0	0	0	0	0	0	0	29
19:00	1	17	6	0	2	0	0	0	0	0	0	0	0	26
20:00	0	11	2	0	4	0	0	0	0	0	0	0	0	17
21:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
22:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Day Total	6	368	148	13	50	1	0	1	0	0	0	0	0	587
Percent	1.0%	62.7%	25.2%	2.2%	8.5%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	08:00	08:00									08:00
Vol.		57	24	5	4									90
PM Peak	14:00	14:00	14:00	14:00	13:00	16:00		16:00						14:00
Vol.	2	64	22	5	7	1		1						97
Grand Total	12	733	293	30	92	1	0	4	0	0	0	0	0	1165
Percent	1.0%	62.9%	25.2%	2.6%	7.9%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aspeed
Site Code: 23052.00

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/09/23	0	0	2	0	0	0	0	0	0	0	0	0	0	2	24	24
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24	24
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24	24
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
05:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
06:00	0	1	5	6	1	**1**	0	0	0	0	0	0	0	14	29	36
07:00	1	**10**	**40**	**26**	**12**	0	0	0	0	0	0	0	0	**89**	29	33
08:00	**25**	9	10	14	2	0	0	0	0	0	0	0	0	60	27	29
09:00	1	3	9	10	1	0	0	0	0	0	0	0	0	24	28	29
10:00	0	0	9	6	3	1	0	0	0	0	0	0	0	19	31	35
11:00	2	0	4	12	7	0	0	0	0	0	0	0	0	25	32	34
12 PM	0	1	5	11	5	1	0	0	0	0	0	0	0	23	32	34
13:00	5	**9**	13	11	3	0	0	0	0	0	0	0	0	41	28	31
14:00	**8**	3	10	21	3	1	0	0	0	0	0	0	0	46	29	32
15:00	1	2	8	21	8	**4**	0	0	0	0	0	0	0	44	33	37
16:00	0	2	7	38	**16**	2	0	0	0	0	0	0	0	65	32	34
17:00	2	0	**14**	**40**	10	0	0	0	0	0	0	0	0	**66**	30	33
18:00	1	1	8	23	4	0	0	0	0	0	0	0	0	37	29	32
19:00	1	1	7	7	6	0	0	0	0	0	0	0	0	22	32	34
20:00	0	3	5	11	2	1	0	0	0	0	0	0	0	22	29	34
21:00	1	0	2	5	2	0	0	0	0	0	0	0	0	10	31	33
22:00	0	0	2	1	1	1	0	0	0	0	0	0	0	5	36	38
23:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	33	34
Total	48	45	162	266	88	12	0	0	0	0	0	0	0	621		
Percent	7.7%	7.2%	26.1%	42.8%	14.2%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	07:00	07:00	07:00	07:00	06:00								07:00		
Vol.	25	10	40	26	12	1								89		
PM Peak	14:00	13:00	17:00	17:00	16:00	15:00								17:00		
Vol.	8	9	14	40	16	4								66		

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aspeed
Site Code: 23052.00

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
06:00	0	0	3	7	2	0	0	0	0	0	0	0	0	12	30	33
07:00	**6**	**13**	**18**	**35**	**11**	0	0	0	0	0	0	0	0	**83**	29	33
08:00	6	13	17	18	8	0	0	0	0	0	0	0	0	62	29	33
09:00	0	2	7	8	0	1	0	0	0	0	0	0	0	18	28	35
10:00	0	3	5	6	2	**2**	0	0	0	0	0	0	0	18	33	37
11:00	0	2	5	19	3	0	0	0	0	0	0	0	0	29	29	32
12 PM	1	1	0	9	3	0	0	0	0	0	0	0	0	14	31	33
13:00	2	**5**	16	16	4	1	0	0	0	0	0	0	0	44	29	33
14:00	**12**	3	12	21	6	0	0	0	0	0	0	0	0	54	29	32
15:00	3	3	9	20	6	1	0	0	0	0	0	0	0	42	30	34
16:00	3	1	**25**	**29**	10	**3**	0	0	0	0	0	0	0	**71**	31	34
17:00	0	0	13	24	**11**	0	0	0	0	0	0	0	0	48	31	33
18:00	0	1	8	14	1	0	0	0	0	0	0	0	0	24	29	29
19:00	1	0	16	11	2	1	0	0	0	0	0	0	0	31	29	33
20:00	0	1	3	16	2	0	0	0	0	0	0	0	0	22	29	32
21:00	1	0	2	8	2	1	0	0	0	0	0	0	0	14	32	36
22:00	0	1	0	6	2	0	0	0	0	0	0	0	0	9	31	33
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
Total	35	49	159	271	76	10	0	0	0	0	0	0	0	600		
Percent	5.8%	8.2%	26.5%	45.2%	12.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	07:00	10:00								07:00		
Vol.	6	13	18	35	11	2								83		
PM Peak	14:00	13:00	16:00	16:00	17:00	16:00								16:00		
Vol.	12	5	25	29	11	3								71		
Grand Total	83	94	321	537	164	22	0	0	0	0	0	0	0	1221		
Percent	6.8%	7.7%	26.3%	44.0%	13.4%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	20 MPH
	50th Percentile :	26 MPH
	85th Percentile :	30 MPH
	95th Percentile :	33 MPH
Stats	10 MPH Pace Speed :	21-30 MPH
	Number of Vehicles > 25 MPH :	723
	Percent of Vehicles > 25 MPH :	59.2%
	Mean Speed(Average) :	25 MPH

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aspeed
Site Code: 23052.00

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/09/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	2	2	0	0	0	0	0	0	0	0	4	33	34
06:00	1	1	0	4	2	**5**	0	0	0	0	0	0	0	13	38	39
07:00	**3**	10	10	17	3	1	0	0	0	0	0	0	0	44	29	33
08:00	2	**17**	**23**	**31**	8	2	0	0	0	0	**1**	0	0	**84**	29	34
09:00	0	0	4	7	2	1	0	0	0	0	0	0	0	14	32	36
10:00	0	1	4	13	**13**	0	**1**	0	0	0	0	0	0	32	33	34
11:00	2	1	7	10	6	1	0	0	0	0	0	0	0	27	32	34
12 PM	3	0	5	6	12	0	0	0	0	0	0	0	0	26	33	34
13:00	1	0	8	9	8	1	0	0	0	0	0	0	0	27	33	34
14:00	**8**	**17**	**24**	**34**	10	1	0	0	0	0	0	0	0	**94**	29	33
15:00	0	2	6	23	8	**5**	0	0	0	0	0	0	0	44	34	37
16:00	2	1	10	18	11	2	0	0	0	0	0	0	0	44	32	34
17:00	0	3	10	24	**14**	1	0	0	0	0	0	0	0	52	32	34
18:00	1	1	7	13	4	1	0	0	0	0	0	0	0	27	31	34
19:00	0	0	4	3	0	1	0	0	0	0	0	0	0	8	29	37
20:00	1	2	8	11	5	0	0	0	0	0	0	0	0	27	30	33
21:00	0	1	2	2	1	0	0	0	0	0	0	0	0	6	30	33
22:00	1	0	1	1	2	0	0	0	0	0	0	0	0	5	33	34
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	25	57	133	228	111	22	1	0	0	0	1	0	0	578		
Percent	4.3%	9.9%	23.0%	39.4%	19.2%	3.8%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%			
AM Peak	07:00	08:00	08:00	08:00	10:00	06:00	10:00				08:00			08:00		
Vol.	3	17	23	31	13	5	1				1			84		
PM Peak	14:00	14:00	14:00	14:00	17:00	15:00								14:00		
Vol.	8	17	24	34	14	5								94		

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Aspeed
Site Code: 23052.00

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
05:00	0	0	2	2	1	0	0	0	0	0	0	0	0	5	31	33
06:00	0	0	2	4	2	2	0	0	0	0	0	0	0	10	36	38
07:00	1	7	12	16	5	1	0	0	0	0	0	0	0	42	29	33
08:00	**7**	**18**	**32**	**21**	10	2	0	0	0	0	0	0	0	**90**	29	33
09:00	0	1	6	7	7	1	**1**	0	0	0	0	0	0	23	33	39
10:00	0	0	0	7	8	2	0	0	0	0	0	0	0	17	34	37
11:00	1	1	1	13	**12**	**3**	0	0	0	0	0	0	0	31	34	37
12 PM	0	0	1	8	7	0	0	0	0	0	0	0	0	16	33	34
13:00	1	1	7	12	6	0	0	0	0	0	0	0	0	27	31	33
14:00	**11**	**15**	**27**	**33**	6	**5**	0	0	0	0	0	0	0	**97**	29	35
15:00	0	3	7	17	7	2	**1**	0	0	0	0	0	0	37	33	37
16:00	1	3	4	29	**18**	3	0	0	0	0	0	0	0	58	33	35
17:00	0	5	8	24	9	2	0	0	0	0	0	0	0	48	32	34
18:00	0	2	9	12	5	1	0	0	0	0	0	0	0	29	31	34
19:00	0	1	9	9	7	0	0	0	0	0	0	0	0	26	32	34
20:00	1	0	4	7	4	1	0	0	0	0	0	0	0	17	33	35
21:00	0	0	1	3	2	1	0	0	0	0	0	0	0	7	34	38
22:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4	32	33
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
Total	23	57	134	227	118	26	2	0	0	0	0	0	0	587		
Percent	3.9%	9.7%	22.8%	38.7%	20.1%	4.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	11:00	11:00	09:00							08:00		
Vol.	7	18	32	21	12	3	1							90		
PM Peak	14:00	14:00	14:00	14:00	16:00	14:00	15:00							14:00		
Vol.	11	15	27	33	18	5	1							97		
Grand Total	48	114	267	455	229	48	3	0	0	0	1	0	0	1165		
Percent	4.1%	9.8%	22.9%	39.1%	19.7%	4.1%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%			

	15th Percentile :	20 MPH
	50th Percentile :	26 MPH
	85th Percentile :	32 MPH
	95th Percentile :	34 MPH
Stats	10 MPH Pace Speed :	21-30 MPH
	Number of Vehicles > 25 MPH :	736
	Percent of Vehicles > 25 MPH :	63.2%
	Mean Speed(Average) :	27 MPH

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Avolume
Site Code: 23052.00

Start	09-May-23	NB		SB		Combined		10-Ma	NB		SB		Combined	
Time	Tue	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		1	6	0	7	1	13		0	5	0	6	0	11
12:15		0	8	0	7	0	15		0	4	0	3	0	7
12:30		0	5	0	6	0	11		0	0	0	4	0	4
12:45		1	4	0	6	1	10		0	5	0	3	0	8
01:00		0	5	0	5	0	10		0	4	0	7	0	11
01:15		0	4	0	7	0	11		1	6	0	4	1	10
01:30		1	13	0	6	1	19		0	20	0	8	0	28
01:45		0	19	0	9	0	***28***		0	14	0	8	0	22
02:00		0	22	0	***22***	0	***44***		0	19	0	12	0	***31***
02:15		1	8	0	***42***	1	***50***		0	17	1	***45***	1	***62***
02:30		0	9	0	***16***	0	***25***		1	6	0	***24***	1	***30***
02:45		0	7	0	***14***	0	21		0	12	0	***16***	0	***28***
03:00		0	7	0	18	0	25		0	9	0	***13***	0	22
03:15		0	12	0	8	0	20		0	14	0	10	0	24
03:30		0	12	0	9	0	21		0	11	0	9	0	20
03:45		0	13	0	9	0	22		0	8	0	5	0	13
04:00		0	13	0	7	0	20		0	***19***	0	17	0	36
04:15		1	12	0	9	1	21		0	***19***	0	12	0	31
04:30		0	***24***	0	12	0	36		0	***15***	0	15	0	30
04:45		0	***16***	0	16	0	32		0	***18***	1	14	1	32
05:00		0	***24***	0	12	0	36		0	16	0	15	0	31
05:15		1	***16***	0	7	1	23		0	9	2	10	2	19
05:30		0	16	1	15	1	31		2	18	1	14	3	32
05:45		1	10	3	18	4	28		0	5	2	9	2	14
06:00		3	5	1	8	4	13		1	9	1	9	2	18
06:15		3	8	4	9	7	17		2	1	2	5	4	6
06:30		1	11	3	5	4	16		2	7	3	4	5	11
06:45		7	13	5	5	12	18		7	7	4	11	11	18
07:00		14	7	7	1	21	8		6	9	5	4	11	13
07:15		***12***	5	13	2	***25***	7		***15***	5	9	9	24	14
07:30		***21***	6	6	1	***27***	7		***22***	10	***7***	8	***29***	18
07:45		***42***	4	***18***	4	***60***	8		***40***	7	***21***	5	***61***	12
08:00		***36***	9	***49***	5	***85***	14		***41***	7	***58***	4	***99***	11
08:15		8	2	***13***	2	21	4		8	6	***20***	7	***28***	13
08:30		9	6	***11***	6	20	12		7	4	2	2	9	6
08:45		7	5	11	14	18	19		6	5	10	4	16	9
09:00		7	3	6	3	13	6		7	3	5	2	12	5
09:15		5	3	3	1	8	4		5	3	5	2	10	5
09:30		3	2	0	1	3	3		1	7	7	3	8	10
09:45		9	2	5	1	14	3		5	1	6	0	11	1
10:00		8	0	6	3	14	3		5	7	4	1	9	8
10:15		6	2	4	0	10	2		6	0	5	2	11	2
10:30		2	2	15	2	17	4		3	1	4	1	7	2
10:45		3	1	7	0	10	1		4	1	4	0	8	1
11:00		8	0	6	0	14	0		5	1	9	0	14	1
11:15		5	2	4	0	9	2		5	0	3	1	8	1
11:30		5	0	10	0	15	0		16	0	8	0	24	0
11:45		7	0	7	0	14	0		3	0	11	0	14	0
Total		238	383	218	360	456	743		226	374	220	367	446	741
Day Total		621		578		1199			600		587		1187	
% Total		19.8%	31.9%	18.2%	30.0%				19.0%	31.5%	18.5%	30.9%		
Peak	-	07:15	04:30	07:45	02:00	07:15	01:45	-	07:15	04:00	07:30	02:15	07:30	02:00
Vol.	-	111	80	91	94	197	147	-	118	71	106	98	217	151
P.H.F.		0.661	0.833	0.464	0.560	0.579	0.735		0.720	0.934	0.457	0.544	0.548	0.609

ADT	ADT 1,193	AADT 1,193

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Avolume
Site Code: 23052.00

Start	09-May-23	NB		Hour Totals		SB		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	6			0	7				
12:15		0	8			0	7				
12:30		0	5			0	6				
12:45		1	4	2	23	0	6	0	26	2	49
01:00		0	5			0	5				
01:15		0	4			0	7				
01:30		1	13			0	6				
01:45		0	19	1	41	0	9	0	27	1	68
02:00		0	22			0	22				
02:15		1	8			0	42				
02:30		0	9			0	16				
02:45		0	7	1	46	0	14	0	94	1	140
03:00		0	7			0	18				
03:15		0	12			0	8				
03:30		0	12			0	9				
03:45		0	13	0	44	0	9	0	44	0	88
04:00		0	13			0	7				
04:15		1	12			0	9				
04:30		0	24			0	12				
04:45		0	16	1	65	0	16	0	44	1	109
05:00		0	24			0	12				
05:15		1	16			0	7				
05:30		0	16			1	15				
05:45		1	10	2	66	3	18	4	52	6	118
06:00		3	5			1	8				
06:15		3	8			4	9				
06:30		1	11			3	5				
06:45		7	13	14	37	5	5	13	27	27	64
07:00		14	7			7	1				
07:15		12	5			13	2				
07:30		21	6			6	1				
07:45		42	4	89	22	18	4	44	8	133	30
08:00		36	9			49	5				
08:15		8	2			13	2				
08:30		9	6			11	6				
08:45		7	5	60	22	11	14	84	27	144	49
09:00		7	3			6	3				
09:15		5	3			3	1				
09:30		3	2			0	1				
09:45		9	2	24	10	5	1	14	6	38	16
10:00		8	0			6	3				
10:15		6	2			4	0				
10:30		2	2			15	2				
10:45		3	1	19	5	7	0	32	5	51	10
11:00		8	0			6	0				
11:15		5	2			4	0				
11:30		5	0			10	0				
11:45		7	0	25	2	7	0	27	0	52	2
Total		238	383			218	360			456	743
Combined Total		621				578				1199	
Percentage	0.0%										

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Fox Hill Road
south of Westwood Street
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Avolume
Site Code: 23052.00

Start Time	10-May-23 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	5			0	6				
12:15		0	4			0	3				
12:30		0	0			0	4				
12:45		0	5	0	14	0	3	0	16	0	30
01:00		0	4			0	7				
01:15		1	6			0	4				
01:30		0	20			0	8				
01:45		0	14	1	44	0	8	0	27	1	71
02:00		0	19			0	12				
02:15		0	17			1	45				
02:30		1	6			0	24				
02:45		0	12	1	54	0	16	1	97	2	151
03:00		0	9			0	13				
03:15		0	14			0	10				
03:30		0	11			0	9				
03:45		0	8	0	42	0	5	0	37	0	79
04:00		0	19			0	17				
04:15		0	19			0	12				
04:30		0	15			0	15				
04:45		0	18	0	71	1	14	1	58	1	129
05:00		0	16			0	15				
05:15		0	9			2	10				
05:30		2	18			1	14				
05:45		0	5	2	48	2	9	5	48	7	96
06:00		1	9			1	9				
06:15		2	1			2	5				
06:30		2	7			3	4				
06:45		7	7	12	24	4	11	10	29	22	53
07:00		6	9			5	4				
07:15		15	5			9	9				
07:30		22	10			7	8				
07:45		40	7	83	31	21	5	42	26	125	57
08:00		41	7			58	4				
08:15		8	6			20	7				
08:30		7	4			2	2				
08:45		6	5	62	22	10	4	90	17	152	39
09:00		7	3			5	2				
09:15		5	3			5	2				
09:30		1	7			7	3				
09:45		5	1	18	14	6	0	23	7	41	21
10:00		5	7			4	1				
10:15		6	0			5	2				
10:30		3	1			4	1				
10:45		4	1	18	9	4	0	17	4	35	13
11:00		5	1			9	0				
11:15		5	0			3	1				
11:30		16	0			8	0				
11:45		3	0	29	1	11	0	31	1	60	2
Total		226	374			220	367			446	741
Combined Total		600				587				1187	
Percentage	0.0%										
Total		464	757			438	727			902	1484
Percent		38.0%	62.0%			37.6%	62.4%			37.8%	62.2%
ADT		ADT 1,193		AADT 1,193							

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bclass
Site Code: 23052.00

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/09/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
06:00	0	9	5	0	0	**1**	0	0	0	0	0	0	0	15
07:00	**1**	**69**	**7**	**4**	**2**	0	0	**1**	0	0	0	0	0	**84**
08:00	0	53	6	0	0	0	0	0	0	0	0	0	0	59
09:00	0	11	5	0	1	0	0	0	0	0	0	0	0	17
10:00	0	19	5	0	1	0	0	0	0	0	0	0	0	25
11:00	0	15	3	1	1	0	0	0	0	0	0	0	0	20
12 PM	**1**	10	3	0	**2**	**1**	0	0	0	0	0	0	0	17
13:00	0	26	5	0	1	0	0	0	0	0	0	0	0	32
14:00	0	18	6	**5**	0	0	0	0	0	0	0	0	0	29
15:00	0	15	6	0	0	0	0	0	0	0	0	0	0	21
16:00	1	**36**	5	0	2	0	0	0	0	0	0	0	0	**44**
17:00	0	26	**7**	0	1	0	0	0	0	0	0	0	0	34
18:00	0	28	2	0	0	0	0	0	0	0	0	0	0	30
19:00	1	8	0	0	1	0	0	0	0	0	0	0	0	10
20:00	1	13	2	0	2	0	0	0	0	0	0	0	0	18
21:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
22:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Day Total	5	364	72	10	16	2	0	1	0	0	0	0	0	470
Percent	1.1%	77.4%	15.3%	2.1%	3.4%	0.4%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00	07:00	07:00	06:00		07:00						07:00
Vol.	1	69	7	4	2	1		1						84
PM Peak	12:00	16:00	17:00	14:00	12:00	12:00								16:00
Vol.	1	36	7	5	2	1								44

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bclass
Site Code: 23052.00

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
06:00	0	5	5	0	0	0	0	0	0	0	0	0	0	10
07:00	0	**61**	**11**	2	**2**	0	0	0	0	0	0	0	0	**76**
08:00	**1**	48	7	**3**	2	**1**	0	0	0	0	0	0	0	62
09:00	0	12	4	0	1	0	0	0	0	0	0	0	0	17
10:00	0	13	4	0	0	0	0	0	0	0	0	0	0	17
11:00	1	16	3	0	1	0	0	0	0	0	0	0	0	21
12 PM	0	10	3	0	1	0	0	0	0	0	0	0	0	14
13:00	**2**	24	3	2	**4**	0	0	0	0	0	0	0	0	35
14:00	2	22	9	**6**	0	0	0	0	0	0	0	0	0	39
15:00	0	20	9	0	0	0	0	0	0	0	0	0	0	29
16:00	0	32	**10**	0	1	**1**	0	0	0	0	0	0	0	**44**
17:00	0	**34**	6	0	0	0	0	0	0	0	0	0	0	40
18:00	0	20	6	0	0	0	0	0	0	0	0	0	0	26
19:00	2	16	3	0	1	0	0	0	0	0	0	0	0	22
20:00	0	11	3	0	1	0	0	0	0	0	0	0	0	15
21:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Day Total	8	361	88	13	14	2	0	0	0	0	0	0	0	486
Percent	1.6%	74.3%	18.1%	2.7%	2.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	08:00	07:00	08:00								07:00
Vol.	1	61	11	3	2	1								76
PM Peak	13:00	17:00	16:00	14:00	13:00	16:00								16:00
Vol.	2	34	10	6	4	1								44
Grand Total	13	725	160	23	30	4	0	1	0	0	0	0	0	956
Percent	1.4%	75.8%	16.7%	2.4%	3.1%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bclass
Site Code: 23052.00

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/09/23	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
06:00	0	7	1	0	**3**	**1**	0	0	0	0	0	0	0	12
07:00	0	23	3	0	1	0	0	0	0	0	0	0	0	27
08:00	0	**31**	**11**	**1**	3	0	0	0	0	0	0	0	0	**46**
09:00	0	10	8	1	0	0	0	0	0	0	0	0	0	19
10:00	0	12	3	0	2	0	0	0	0	0	0	0	0	17
11:00	0	14	5	0	1	0	0	0	0	0	0	0	0	20
12 PM	1	15	7	0	3	**1**	0	0	0	0	0	0	0	27
13:00	0	11	2	0	1	0	0	0	0	0	0	0	0	14
14:00	0	33	**18**	**3**	3	0	0	0	0	0	0	0	0	57
15:00	0	33	6	1	3	0	0	0	0	0	0	0	0	43
16:00	0	46	12	1	**7**	0	0	0	0	0	0	0	0	**66**
17:00	0	**47**	8	0	2	0	0	0	0	0	0	0	0	57
18:00	**3**	23	3	0	1	0	0	0	0	0	0	0	0	30
19:00	1	20	6	0	1	0	0	0	0	0	0	0	0	28
20:00	1	21	4	0	0	0	0	0	0	0	0	0	0	26
21:00	0	6	4	0	2	0	0	0	0	0	0	0	0	12
22:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Day Total	6	362	102	7	36	2	0	0	0	0	0	0	0	515
Percent	1.2%	70.3%	19.8%	1.4%	7.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	08:00	08:00	06:00	06:00								08:00
Vol.		31	11	1	3	1								46
PM Peak	18:00	17:00	14:00	14:00	16:00	12:00								16:00
Vol.	3	47	18	3	7	1								66

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bclass
Site Code: 23052.00

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	1	5	0	0	**4**	0	0	0	0	0	0	0	0	10
07:00	0	17	7	0	0	0	0	0	0	0	0	0	0	24
08:00	0	**24**	**16**	**1**	4	0	0	0	0	0	0	0	0	**45**
09:00	0	10	2	0	2	0	0	0	0	0	0	0	0	14
10:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12
11:00	**2**	18	6	0	2	**1**	0	0	0	0	0	0	0	29
12 PM	**1**	7	2	0	2	0	0	0	0	0	0	0	0	12
13:00	0	12	5	0	2	0	0	0	0	0	0	0	0	19
14:00	1	**46**	**16**	**3**	4	0	0	0	0	0	0	0	0	**70**
15:00	1	33	8	1	7	0	0	0	0	0	0	0	0	50
16:00	0	38	12	0	**8**	**2**	0	0	0	0	0	0	0	60
17:00	0	36	10	0	2	0	0	0	0	0	0	0	0	48
18:00	0	16	6	0	1	0	0	0	0	0	0	0	0	23
19:00	0	16	9	0	3	0	0	0	0	0	0	0	0	28
20:00	0	15	4	0	2	0	0	0	0	0	0	0	0	21
21:00	0	10	1	0	1	0	0	0	0	0	0	0	0	12
22:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Day Total	6	325	107	5	44	3	0	0	0	0	0	0	0	490
Percent	1.2%	66.3%	21.8%	1.0%	9.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	08:00	08:00	06:00	11:00								08:00
Vol.	2	24	16	1	4	1								45
PM Peak	12:00	14:00	14:00	14:00	16:00	16:00								14:00
Vol.	1	46	16	3	8	2								70
Grand Total	12	687	209	12	80	5	0	0	0	0	0	0	0	1005
Percent	1.2%	68.4%	20.8%	1.2%	8.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bspeed
Site Code: 23052.00

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/09/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	2	2	1	1	0	0	0	0	0	0	0	6	35	38
06:00	0	0	1	8	4	**2**	0	0	0	0	0	0	0	15	34	38
07:00	**5**	10	**21**	**28**	**19**	1	0	0	0	0	0	0	0	**84**	31	34
08:00	5	**12**	11	20	10	1	0	0	0	0	0	0	0	59	31	34
09:00	0	0	4	8	5	0	0	0	0	0	0	0	0	17	32	34
10:00	0	2	2	15	6	0	0	0	0	0	0	0	0	25	31	33
11:00	0	3	7	7	2	1	0	0	0	0	0	0	0	20	30	35
12 PM	2	1	2	4	8	0	0	0	0	0	0	0	0	17	33	34
13:00	3	**3**	**10**	12	4	0	0	0	0	0	0	0	0	32	29	32
14:00	**5**	3	6	9	5	1	0	0	0	0	0	0	0	29	31	34
15:00	0	0	8	6	7	0	0	0	0	0	0	0	0	21	32	34
16:00	1	0	9	**25**	6	**3**	0	0	0	0	0	0	0	**44**	31	36
17:00	0	0	8	15	**10**	1	0	0	0	0	0	0	0	34	32	34
18:00	0	0	4	21	5	0	0	0	0	0	0	0	0	30	30	33
19:00	0	1	3	2	4	0	0	0	0	0	0	0	0	10	33	34
20:00	0	1	4	9	4	0	0	0	0	0	0	0	0	18	31	33
21:00	0	0	0	2	2	0	0	0	0	0	0	0	0	4	33	34
22:00	0	1	2	1	1	0	0	0	0	0	0	0	0	5	31	33
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	21	37	104	194	103	11	0	0	0	0	0	0	0	470		
Percent	4.5%	7.9%	22.1%	41.3%	21.9%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	08:00	07:00	07:00	07:00	06:00								07:00		
Vol.	5	12	21	28	19	2								84		
PM Peak	14:00	13:00	13:00	16:00	17:00	16:00								16:00		
Vol.	5	3	10	25	10	3								44		

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bspeed
Site Code: 23052.00

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
05:00	0	0	2	3	1	0	0	0	0	0	0	0	0	6	30	33
06:00	0	0	2	4	4	0	0	0	0	0	0	0	0	10	33	34
07:00	**4**	2	21	**28**	**19**	**2**	0	0	0	0	0	0	0	**76**	32	34
08:00	2	**10**	**23**	21	6	0	0	0	0	0	0	0	0	62	29	32
09:00	0	1	2	8	5	1	0	0	0	0	0	0	0	17	33	35
10:00	0	0	1	10	6	0	0	0	0	0	0	0	0	17	32	34
11:00	0	2	7	8	4	0	0	0	0	0	0	0	0	21	31	33
12 PM	0	2	1	7	4	0	0	0	0	0	0	0	0	14	32	34
13:00	4	**4**	**15**	10	2	0	0	0	0	0	0	0	0	35	28	30
14:00	**15**	3	8	9	3	1	0	0	0	0	0	0	0	39	28	33
15:00	0	0	7	14	6	**2**	0	0	0	0	0	0	0	29	33	36
16:00	0	0	6	**24**	**12**	2	0	0	0	0	0	0	0	**44**	33	34
17:00	0	2	15	20	3	0	0	0	0	0	0	0	0	40	29	31
18:00	0	0	14	9	3	0	0	0	0	0	0	0	0	26	29	32
19:00	1	0	7	10	2	1	0	**1**	0	0	0	0	0	22	31	39
20:00	0	0	5	9	1	0	0	0	0	0	0	0	0	15	29	31
21:00	0	0	2	2	2	0	0	0	0	0	0	0	0	6	32	34
22:00	0	0	2	2	0	0	0	0	0	0	0	0	0	4	28	29
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
Total	26	26	140	201	83	9	0	1	0	0	0	0	0	486		
Percent	5.3%	5.3%	28.8%	41.4%	17.1%	1.9%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	08:00	08:00	07:00	07:00	07:00								07:00		
Vol.	4	10	23	28	19	2								76		
PM Peak	14:00	13:00	13:00	16:00	16:00	15:00		19:00						16:00		
Vol.	15	4	15	24	12	2		1						44		
Grand Total	47	63	244	395	186	20	0	1	0	0	0	0	0	956		
Percent	4.9%	6.6%	25.5%	41.3%	19.5%	2.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	20 MPH
50th Percentile :	26 MPH
85th Percentile :	31 MPH
95th Percentile :	34 MPH

Stats

10 MPH Pace Speed :	21-30 MPH
Number of Vehicles > 25 MPH :	602
Percent of Vehicles > 25 MPH :	63.0%
Mean Speed(Average) :	26 MPH

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bspeed
Site Code: 23052.00

Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/09/23	0	0	1	1	0	0	0	0	0	0	0	0	0	2	28	29
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24	24
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	33	34
06:00	0	0	3	7	1	1	0	0	0	0	0	0	0	12	30	36
07:00	0	1	5	15	5	1	0	0	0	0	0	0	0	27	31	34
08:00	0	**2**	**24**	**19**	1	0	0	0	0	0	0	0	0	**46**	28	29
09:00	0	1	2	10	4	**2**	0	0	0	0	0	0	0	19	33	37
10:00	0	0	3	9	4	1	0	0	0	0	0	0	0	17	33	35
11:00	0	0	1	10	**7**	2	0	0	0	0	0	0	0	20	34	37
12 PM	0	0	6	10	10	1	0	0	0	0	0	0	0	27	33	34
13:00	0	1	2	6	3	2	0	0	0	0	0	0	0	14	34	38
14:00	0	**3**	**12**	26	15	1	0	0	0	0	0	0	0	57	32	34
15:00	0	1	3	22	13	**4**	0	0	0	0	0	0	0	43	34	37
16:00	0	0	7	35	**24**	0	0	0	0	0	0	0	0	**66**	32	34
17:00	0	1	7	**36**	13	0	0	0	0	0	0	0	0	57	31	33
18:00	0	0	2	13	10	2	**2**	**1**	0	0	0	0	0	30	36	43
19:00	**2**	1	6	13	6	0	0	0	0	0	0	0	0	28	31	33
20:00	0	2	4	14	4	2	0	0	0	0	0	0	0	26	32	36
21:00	0	0	1	6	5	0	0	0	0	0	0	0	0	12	33	34
22:00	0	0	1	1	2	1	0	0	0	0	0	0	0	5	36	38
23:00	0	0	0	1	0	1	0	0	0	0	0	0	0	2	38	39
Total	2	13	91	256	129	21	2	1	0	0	0	0	0	515		
Percent	0.4%	2.5%	17.7%	49.7%	25.0%	4.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		08:00	08:00	08:00	11:00	09:00								08:00		
Vol.		2	24	19	7	2								46		
PM Peak	19:00	14:00	14:00	17:00	16:00	15:00	18:00	18:00						16:00		
Vol.	2	3	12	36	24	4	2	1						66		

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bspeed
Site Code: 23052.00

Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
05/10/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
06:00	0	0	4	6	0	0	0	0	0	0	0	0	0	10	28	29
07:00	0	**2**	4	9	9	0	0	0	0	0	0	0	0	24	32	34
08:00	0	1	**20**	**18**	6	0	0	0	0	0	0	0	0	**45**	29	33
09:00	0	0	2	8	4	0	0	0	0	0	0	0	0	14	32	34
10:00	**2**	0	1	5	4	0	0	0	0	0	0	0	0	12	32	34
11:00	1	2	4	12	**10**	0	0	0	0	0	0	0	0	29	32	34
12 PM	1	1	2	6	2	0	0	0	0	0	0	0	0	12	30	33
13:00	0	0	4	5	7	**3**	0	0	0	0	0	0	0	19	35	38
14:00	**3**	**3**	**19**	**32**	10	3	0	0	0	0	0	0	0	**70**	31	34
15:00	1	1	14	20	13	1	0	0	0	0	0	0	0	50	32	34
16:00	0	2	11	23	**21**	3	0	0	0	0	0	0	0	60	33	34
17:00	0	0	8	25	14	1	0	0	0	0	0	0	0	48	32	34
18:00	0	2	4	13	4	0	0	0	0	0	0	0	0	23	30	33
19:00	0	0	3	19	5	1	0	0	0	0	0	0	0	28	31	34
20:00	0	0	5	11	5	0	0	0	0	0	0	0	0	21	31	33
21:00	0	0	2	7	3	0	0	0	0	0	0	0	0	12	32	34
22:00	0	0	1	3	4	1	0	0	0	0	0	0	0	9	34	37
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
Total	8	14	108	226	121	13	0	0	0	0	0	0	0	490		
Percent	1.6%	2.9%	22.0%	46.1%	24.7%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	07:00	08:00	08:00	11:00									08:00		
Vol.	2	2	20	18	10									45		
PM Peak	14:00	14:00	14:00	14:00	16:00	13:00								14:00		
Vol.	3	3	19	32	21	3								70		
Grand Total	10	27	199	482	250	34	2	1	0	0	0	0	0	1005		
Percent	1.0%	2.7%	19.8%	48.0%	24.9%	3.4%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	22 MPH
	50th Percentile :	27 MPH
	85th Percentile :	32 MPH
	95th Percentile :	34 MPH
Stats	10 MPH Pace Speed :	26-35 MPH
	Number of Vehicles > 25 MPH :	769
	Percent of Vehicles > 25 MPH :	76.5%
	Mean Speed(Average) :	28 MPH

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bvolume
Site Code: 23052.00

Start	09-May-23	EB		WB		Combined		10-Ma	EB		WB		Combined	
Time	Tue	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Wed	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	2	1	7	1	9		0	5	0	4	0	9
12:15		0	5	0	8	0	13		0	3	0	4	0	7
12:30		0	5	0	7	0	12		0	5	0	0	0	5
12:45		0	5	1	5	1	10		0	1	0	4	0	5
01:00		0	4	0	4	0	8		0	5	0	4	0	9
01:15		0	7	0	2	0	9		0	5	1	4	1	9
01:30		0	9	0	3	0	12		0	***13***	0	7	0	20
01:45		0	12	1	5	1	17		0	***12***	0	4	0	16
02:00		0	10	0	8	0	18		0	***14***	0	3	0	17
02:15		0	10	1	19	1	29		1	***11***	0	***33***	1	***44***
02:30		0	4	0	21	0	25		0	4	0	***19***	0	***23***
02:45		0	5	0	9	0	14		0	10	0	***15***	0	***25***
03:00		0	8	0	11	0	19		0	8	0	***12***	0	***20***
03:15		0	2	0	15	0	17		0	7	0	17	0	24
03:30		0	6	0	8	0	14		0	8	0	16	0	24
03:45		0	5	0	9	0	14		0	6	0	5	0	11
04:00		0	7	0	16	0	23		0	12	0	17	0	29
04:15		0	***10***	0	***11***	0	***21***		0	10	0	17	0	27
04:30		0	***11***	1	***21***	1	***32***		0	12	0	11	0	23
04:45		0	***16***	0	***18***	0	***34***		1	10	0	15	1	25
05:00		0	***10***	0	***19***	0	***29***		0	15	0	15	0	30
05:15		0	4	1	11	1	15		2	6	0	9	2	15
05:30		2	10	0	11	2	21		1	12	2	14	3	26
05:45		4	10	1	16	5	26		3	7	0	10	3	17
06:00		1	8	3	7	4	15		1	6	1	8	2	14
06:15		4	7	3	8	7	15		2	7	3	1	5	8
06:30		4	8	2	11	6	19		3	3	1	9	4	12
06:45		6	7	4	4	10	11		4	10	5	5	9	15
07:00		10	1	8	9	18	10		8	5	3	8	11	13
07:15		***17***	2	4	10	***21***	12		10	4	8	3	18	7
07:30		***21***	4	6	6	***27***	10		***20***	7	***7***	11	***27***	18
07:45		***36***	3	***9***	3	***45***	6		***38***	6	***6***	6	***44***	12
08:00		***29***	5	***29***	8	***58***	13		***31***	3	***27***	7	***58***	10
08:15		9	4	***7***	2	16	6		***16***	6	***9***	4	***25***	10
08:30		13	5	***7***	6	20	11		3	2	6	5	9	7
08:45		8	4	3	10	11	14		12	4	3	5	15	9
09:00		7	1	6	5	13	6		4	2	6	3	10	5
09:15		2	1	2	3	4	4		3	2	5	3	8	5
09:30		4	1	6	2	10	3		6	2	0	4	6	6
09:45		4	1	5	2	9	3		4	0	3	2	7	2
10:00		3	3	5	0	8	3		5	1	3	7	8	8
10:15		5	0	4	2	9	2		5	2	5	0	10	2
10:30		9	2	4	1	13	3		3	1	1	1	4	2
10:45		8	0	4	2	12	2		4	0	3	1	7	1
11:00		4	0	7	0	11	0		7	0	7	1	14	1
11:15		2	0	6	2	8	2		4	1	3	0	7	1
11:30		8	0	3	0	11	0		6	0	15	0	21	0
11:45		6	0	4	0	10	0		4	0	4	0	8	0
Total		226	244	148	367	374	611		211	275	137	353	348	628
Day Total		470		515		985			486		490		976	
% Total		22.9%	24.8%	15.0%	37.3%				21.6%	28.2%	14.0%	36.2%		
Peak	-	07:15	04:15	07:45	04:15	07:15	04:15	-	07:30	01:30	07:30	02:15	07:30	02:15
Vol.	-	103	47	52	69	151	116	-	105	50	49	79	154	112
P.H.F.		0.715	0.734	0.448	0.821	0.651	0.853		0.691	0.893	0.454	0.598	0.664	0.636

ADT	ADT 980	AADT 980

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bvolume
Site Code: 23052.00

Start Time	09-May-23 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	2			1	7				
12:15		0	5			0	8				
12:30		0	5			0	7				
12:45		0	5	0	17	1	5	2	27	2	44
01:00		0	4			0	4				
01:15		0	7			0	2				
01:30		0	9			0	3				
01:45		0	12	0	32	1	5	1	14	1	46
02:00		0	10			0	8				
02:15		0	10			1	19				
02:30		0	4			0	21				
02:45		0	5	0	29	0	9	1	57	1	86
03:00		0	8			0	11				
03:15		0	2			0	15				
03:30		0	6			0	8				
03:45		0	5	0	21	0	9	0	43	0	64
04:00		0	7			0	16				
04:15		0	10			0	11				
04:30		0	11			1	21				
04:45		0	16	0	44	0	18	1	66	1	110
05:00		0	10			0	19				
05:15		0	4			1	11				
05:30		2	10			0	11				
05:45		4	10	6	34	1	16	2	57	8	91
06:00		1	8			3	7				
06:15		4	7			3	8				
06:30		4	8			2	11				
06:45		6	7	15	30	4	4	12	30	27	60
07:00		10	1			8	9				
07:15		17	2			4	10				
07:30		21	4			6	6				
07:45		36	3	84	10	9	3	27	28	111	38
08:00		29	5			29	8				
08:15		9	4			7	2				
08:30		13	5			7	6				
08:45		8	4	59	18	3	10	46	26	105	44
09:00		7	1			6	5				
09:15		2	1			2	3				
09:30		4	1			6	2				
09:45		4	1	17	4	5	2	19	12	36	16
10:00		3	3			5	0				
10:15		5	0			4	2				
10:30		9	2			4	1				
10:45		8	0	25	5	4	2	17	5	42	10
11:00		4	0			7	0				
11:15		2	0			6	2				
11:30		8	0			3	0				
11:45		6	0	20	0	4	0	20	2	40	2
Total		226	244			148	367			374	611
Combined Total		470				515				985	
Percentage	0.0%										

Transportation Data Corporation

Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Westwood Street
west of Fox Hill Road
City, State: Burlington, MA
Client: Pare/T. Thomson

05706Bvolume
Site Code: 23052.00

Start Time	10-May-23 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		0	5			0	4				
12:15		0	3			0	4				
12:30		0	5			0	0				
12:45		0	1	0	14	0	4	0	12	0	26
01:00		0	5			0	4				
01:15		0	5			1	4				
01:30		0	13			0	7				
01:45		0	12	0	35	0	4	1	19	1	54
02:00		0	14			0	3				
02:15		1	11			0	33				
02:30		0	4			0	19				
02:45		0	10	1	39	0	15	0	70	1	109
03:00		0	8			0	12				
03:15		0	7			0	17				
03:30		0	8			0	16				
03:45		0	6	0	29	0	5	0	50	0	79
04:00		0	12			0	17				
04:15		0	10			0	17				
04:30		0	12			0	11				
04:45		1	10	1	44	0	15	0	60	1	104
05:00		0	15			0	15				
05:15		2	6			0	9				
05:30		1	12			2	14				
05:45		3	7	6	40	0	10	2	48	8	88
06:00		1	6			1	8				
06:15		2	7			3	1				
06:30		3	3			1	9				
06:45		4	10	10	26	5	5	10	23	20	49
07:00		8	5			3	8				
07:15		10	4			8	3				
07:30		20	7			7	11				
07:45		38	6	76	22	6	6	24	28	100	50
08:00		31	3			27	7				
08:15		16	6			9	4				
08:30		3	2			6	5				
08:45		12	4	62	15	3	5	45	21	107	36
09:00		4	2			6	3				
09:15		3	2			5	3				
09:30		6	2			0	4				
09:45		4	0	17	6	3	2	14	12	31	18
10:00		5	1			3	7				
10:15		5	2			5	0				
10:30		3	1			1	1				
10:45		4	0	17	4	3	1	12	9	29	13
11:00		7	0			7	1				
11:15		4	1			3	0				
11:30		6	0			15	0				
11:45		4	0	21	1	4	0	29	1	50	2
Total		211	275			137	353			348	628
Combined Total		486				490				976	
Percentage	0.0%										
Total		437	519			285	720			722	1239
Percent		45.7%	54.3%			28.4%	71.6%			36.8%	63.2%
ADT		ADT 980		AADT 980							

ATTACHMENT B: CAPACITY ANALYSIS RESULTS

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	30	235	39	53	557
Future Vol, veh/h	29	30	235	39	53	557
Conflicting Peds, #/hr	2	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	51	51	84	84	84	84
Heavy Vehicles, %	0	3	1	5	0	1
Mvmt Flow	57	59	280	46	63	663

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1094	303	0	0	326	0
Stage 1	303	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Critical Hdwy	6.4	6.23	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	-	-	2.2	-
Pot Cap-1 Maneuver	239	734	-	-	1245	-
Stage 1	754	-	-	-	-	-
Stage 2	450	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	219	734	-	-	1245	-
Mov Cap-2 Maneuver	219	-	-	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	340	1245	-
HCM Lane V/C Ratio	-	-	0.34	0.051	-
HCM Control Delay (s)	-	-	21	8	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.5	0.2	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	85	21	66	38	11	103
Future Vol, veh/h	85	21	66	38	11	103
Conflicting Peds, #/hr	0	45	45	0	25	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	29	29	55	55
Heavy Vehicles, %	4	0	8	0	0	4
Mvmt Flow	137	34	228	131	20	187

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	216	0	811	201
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	612	-
Critical Hdwy	-	-	4.18	-	6.4	6.24
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.272	-	3.5	3.336
Pot Cap-1 Maneuver	-	-	1319	-	352	835
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	545	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1262	-	265	798
Mov Cap-2 Maneuver	-	-	-	-	265	-
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	428	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.4	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	668	-	-	1262	-
HCM Lane V/C Ratio	0.31	-	-	0.18	-
HCM Control Delay (s)	12.8	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0.7	-

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	32	349	13	18	232
Future Vol, veh/h	30	32	349	13	18	232
Conflicting Peds, #/hr	1	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	73	73	95	95
Heavy Vehicles, %	3	3	3	15	6	5
Mvmt Flow	34	36	478	18	19	244

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	771	488	0	0	497	0
Stage 1	488	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Critical Hdwy	6.43	6.23	-	-	4.16	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	-	-	2.254	-
Pot Cap-1 Maneuver	367	578	-	-	1047	-
Stage 1	615	-	-	-	-	-
Stage 2	763	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	359	577	-	-	1046	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	614	-	-	-	-	-
Stage 2	746	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	446	1046	-
HCM Lane V/C Ratio	-	-	0.158	0.018	-
HCM Control Delay (s)	-	-	14.6	8.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	16	72	48	40	18
Future Vol, veh/h	22	16	72	48	40	18
Conflicting Peds, #/hr	0	45	45	0	4	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	48	48	53	53
Heavy Vehicles, %	4	0	3	17	0	5
Mvmt Flow	44	32	150	100	75	34

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	121	0	509	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	404	-
Critical Hdwy	-	-	4.13	-	6.4	6.25
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.227	-	3.5	3.345
Pot Cap-1 Maneuver	-	-	1460	-	528	941
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	679	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1397	-	446	901
Mov Cap-2 Maneuver	-	-	-	-	446	-
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	600	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.7	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	529	-	-	1397	-
HCM Lane V/C Ratio	0.207	-	-	0.107	-
HCM Control Delay (s)	13.6	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.4	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	32	790	17	27	275
Future Vol, veh/h	7	32	790	17	27	275
Conflicting Peds, #/hr	3	0	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	74	94	94	94	94
Heavy Vehicles, %	0	3	0	0	0	0
Mvmt Flow	10	43	840	18	29	293

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1204	850	0	0	859	0
Stage 1	850	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.4	6.23	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	-	-	2.2	-
Pot Cap-1 Maneuver	205	359	-	-	791	-
Stage 1	422	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	195	359	-	-	790	-
Mov Cap-2 Maneuver	195	-	-	-	-	-
Stage 1	422	-	-	-	-	-
Stage 2	681	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.9	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	311	790	-
HCM Lane V/C Ratio	-	-	0.171	0.036	-
HCM Control Delay (s)	-	-	18.9	9.7	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	5.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	11	29	22	17	43	31
Future Vol, veh/h	11	29	22	17	43	31
Conflicting Peds, #/hr	0	7	7	0	14	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	69	69	75	75
Heavy Vehicles, %	0	0	0	0	2	0
Mvmt Flow	13	35	32	25	57	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	55	0	141	43
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	103	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1563	-	852	1033
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	921	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1553	-	818	1021
Mov Cap-2 Maneuver	-	-	-	-	818	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.2	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	892	-	-	1553	-
HCM Lane V/C Ratio	0.111	-	-	0.021	-
HCM Control Delay (s)	9.5	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

WETLAND DELINEATION REPORT

Fox Hill Elementary School

Burlington, Massachusetts

Prepared for:

DiNisco Design
99 Chauncy Street, Suite 901
Boston, MA 02111

Prepared by

Horsley Witten Group
Sustainable Environmental Solutions
horsleywitten.com

June 2023

Wetland Delineation Report
Fox Hill Elementary School
Burlington, Massachusetts

Contents

1.0 Introduction 1
2.0 Site Description 1
3.0 Delineated Wetland Resource Areas 1
3.1 Bordering Vegetated Wetland 2
3.2 Vernal Pools 6
4.0 Evaluated Wetland Resource Areas 7
4.1 Bordering Land Subject to Flooding 7
4.2 Isolated Land Subject to Flooding 7
4.3 Other Protected Resource Areas 8
5.0 Summary 8
6.0 References 9

Attachments

ATTACHMENT A – LOCUS MAPS

Figure 1 – USGS Topography
Figure 2 – Proximity to Off-Site Resource Areas
Figure 3 – Environmental Resources
Figure 4 – Soils
Figure 5 – FEMA Flood Zones
Figure 6 – FEMA FIRMette

ATTACHMENT B – WETLAND DETERMINATION FORMS

1.0 Introduction

This report details the results of Horsley Witten Group's (HW's) desktop review and on-site survey of the Fox Hill Elementary School grounds (Assessor Map 9, Lot 47), located at 252 Fox Hill Road in Burlington, Massachusetts. HW identified and delineated jurisdictional resources, as defined under the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131 § 40), its regulations (310 CMR 10.00), the Town of Burlington Wetland Bylaw (Town of Burlington, General Bylaws, Article XIV), and its regulations.

2.0 Site Description

The Fox Hill Elementary School is situated on approximately 37.5 acres of land located at the ends of two roads, Fox Hill Road and Westwood Street. It abuts the Sawmill Brook Conservation Area to the southeast and undeveloped lands in the Town of Wilmington to the north. The school is otherwise surrounded by residential neighborhoods.

The survey area consists of approximately 24-acres within the town-owned parcel. Portions of the parcel that were excluded from the survey include the southeasternmost region, beyond the extent of a Massachusetts Department of Environmental Protection (MassDEP) mapped wetland, and the northwesternmost region, adjacent to both sides of Westwood Street. Two stone walls intersect perpendicularly and mark the southeastern survey area boundary, excluding approximately 9-acres of the parcel which border the Sawmill Brook Conservation Area. Approximately 3.5-acres exist within the excluded northwestern section of the parcel. Maps depicting the extent of the field survey area in reference to United States Geological Survey (USGS) topography and its proximity to off-site resource areas are provided in **Attachment A,** Figures 1 and 2.

Within the survey area the original school building constructed in 1967 and modular classrooms added in 2005 encompass a combined footprint of approximately 1.5-acres. Additional impervious areas within the parcel include the adjacent parking lot north of the school, segments of Westwood Street and Fox Hill Road that enable access to the school from the west and southwest, the paved path around the school perimeter, and paved courts to the east of the school. Compacted playground areas and a baseball diamond are also located east of the original school building. The remainder of the survey area consists of maintained grass fields and unmaintained forested area along the parcel's boundary, with larger forested areas to the northwest and southeast.

3.0 Delineated Wetland Resource Areas

On February 22 and March 28, 2023, HW wetlands staff delineated resource areas within the bounds of the survey area. Prior to the initial site visit, HW conducted a desktop review of available source data from MassGIS to gather relevant information pertaining to wetland resources within or in the vicinity of the site. The results of HW's field and desktop reviews and Natural Resource Conservation Service (NRCS) soils data within the survey area are provided in **Attachment A**, Figures 3 and 4.

To determine the boundaries of resource areas, HW followed procedures consistent with the 2022 MassDEP manual entitled "*Massachusetts Handbook for Delineation of Bordering*

Vegetated Wetlands" as well as the Massachusetts Wetland Protection Act Regulations for wetland resource area identification, delineation, and field data collection.

Descriptions of each delineated wetland resource area are provided below.

3.1 Bordering Vegetated Wetland

Bordering Vegetated Wetlands (BVWs) are defined under Massachusetts Wetlands Protection Act (WPA) Regulations at 310 CMR 10.55(2)(a) as "*freshwater wetlands that border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants."*

"The boundary of Bordering Vegetated Wetland is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist" [310 CMR 10.55 (2)(c)].

The WPA also protects a 100 foot buffer zone extending from the boundaries of BVW. Additionally, the Burlington Wetland Regulations (BWR) protect a continuous strip of no less than 20 feet of undisturbed buffer zone adjacent to all wetland resource areas subject to protection as specified in Section 3.1(a-p). The BWR also requires a building set-back for these resource areas of 50 feet for commercial properties.

HW identified four areas of BVW within the survey area. Each is described in more detail in the following subsections. United States Army Corps of Engineers (USACE) Northcentral and Northeast Region Wetland Determination Data Forms completed within each BVW, and its associated upland habitat are provided in **Attachment B**.

Wetland 1 is located in the southeastern corner of the site between the school building and the Sawmill Brook Conservation Area and is located almost entirely within the existing forested area. This wetland surrounds a certified vernal pool (CVP 6569) as described further below., (Photo 1). Wetland 1 extends southeast beyond the survey area where it crosses the stone wall marking the southeastern survey boundary. HW demarcated Wetland 1 with pink flagging marked as "HW" and numbered with flag series 1-20 and 101-119. Flags 20 and 101 are located nearest to the stone wall where the wetland extends off site. Flags 1 and 119 connect to each other at the BVW's northwestern boundary, adjacent to the maintained grass field.

Photo 1. Wetland 1 located southeast of the school building, also surrounds CVP 6569.

Dominant tree species within Wetland 1 include red maple (*Acer rubrum*), gray birch (*Betula populifolia)*, green ash (*Fraxinus pennsylvanica*), and swamp white oak (*Quercus bicolor*). The shrub/sapling layer primarily consists of glossy buckthorn (*Frangula alnus*), highbush blueberry (*Vaccinium corymbosum*), sweet pepperbush (*Clethra alnifolia*), maleberry (*Lyonia ligustrina*), and occasional swamp azalea (*Rhododendron viscosum*), with sapling white pine (*Pinus strobus*), and saplings of the other tree species present. The herbaceous layer had not emerged yet at the time of the site visit, but residual cinnamon fern (*Osmundastrum cinnamomeum*) fronds were observed throughout this BVW.

Soils underlying Wetland 1 are classified by the NRCS as extremely stony, moderately well drained, Scituate fine sandy loam, with 3-8 percent slopes. These soils are designated as hydrologic soil group (HSG) D, indicating that they have a very slow infiltration rate.

Wetland 2 is primarily located within the Town of Wilmington where it borders the survey area to the northeast. MassGIS depicts a MassDEP hydrologic connection between Wetland 2 and palustrine forested wetlands in Wilmington, which contribute to the watershed of Mill Brook north of the survey area. A finger of this wetland extends onto the survey area in Burlington near the play areas east of the school. It is demarcated with pink flagging marked as “HW-W2” and numbered from 100-118. Flags 100 and 118 mark the northeastern most extent of the delineated portion of the BVW in Wilmington (Photo 2).

Photo 2. Wetland 2 – located north and east of the playground/field areas. The majority of this wetland is within the Town of Wilmington.

Photo 3. Red-osier dogwood patch within Wetland 2.

The Town of Wilmington does not have a wetlands bylaw. However, Wilmington Conservation Commission policies note that the Commission seeks to maintain a 15 foot strip of continuous undisturbed vegetative cover extending from wetland resource areas, a 50 foot setback from the edge of BVW for new structures. Because the delineated portion of Wetland 2 that is within Wilmington exists at the edge of the municipal boundary, the buffer zones exist primarily in Burlington.

Dominant tree and sapling species observed within Wetland 2 include red maple, bitternut hickory (*Carya cordiformis*), black birch (*Betula lenta*), and yellow birch (*Betula alleghaniensis*). Poison ivy (*Toxicodendron radicans*) and common greenbrier (*Smilax rotundifolia*) vines are prevalent. A large patch of red-osier dogwood (*Cornus alba*), is present within the finger of this wetland that extends into the survey area in Burlington (Photo 3). In Burlington, this wetland overlies soils described as Udorthents-Urban land complex, which are moderately to excessively well drained soils that have been disturbed by anthropogenic activity. In Wilmington, the majority of the delineated portion of this wetland extends outside of the NRCS classified Udorthents and into well drained Montauk fine sandy loam, with 8-15 percent slopes. NRCS rates these soils as non-hydric and classifies them as HSG C, which are characterized as having moderately high runoff potential when thoroughly wet.

Wetland 3 exists northwest of Wetland 2, north of the school parking lot (Photo 4). A maintained grass area separates the parking lot from the forested area of the property with the exception of one forested strip that reaches the edge of the paved area. Here, a culvert drains from the parking lot into a narrow stormwater drainage channel that connects to Wetland 3 (Photos 5 and 6).

Photo 4. Wetland 3 – located north of the school parking lot.

The stormwater drainage channel was demarcated with blue flagging labeled "SW-" and numbered from 100-103, where Flag 100 connects to the culvert and flag 103 connects to Wetland 3. It should be noted that this drainage channel is not a jurisdictional wetland area. Wetland 3 is demarcated with pink flagging labeled as "HW-W3" and numbered from 100-108. Flags 100 and 108 mark the northernmost extents of the delineated portion of this wetland, which extends further north outside of the survey area. Flag 108 is located at the municipal boundary between the Towns of Burlington and Wilmington.

Photo 5. Culvert draining to stormwater channel leading to Wetland 3 (view facing south toward school parking lot).

Photo 6. Stormwater drainage channel leading from culvert in Photo 6 (view facing northeast from parking lot outfall culvert).

The vegetative community within Wetland 3 is primarily composed of red maple, yellow birch, white pine, and American elm (*Ulmus americana*). Shrubs present include red osier dogwood and glossy buckthorn. Soils underlying the delineated portion of this wetland are split between the previously described Urthodents closer to the parking lot and Montauk fine sandy loam to the north.

Wetland 4 is located at the southwest corner of the Westwood Street and Fox Hill Road intersection (Photo 7). It extends outside of the survey area to the west and is demarcated with pink flagging labeled as “HW-W4” and numbered from 100-111. Flag 100 is adjacent to Westwood Street and marks the westernmost extent of the delineated portion of this BVW. Flag 111 is located at the southern parcel boundary where it abuts the residential property of 251 Fox Hill Road.

Photo 7. Wetland 4 – located at the southwest corner of the Westwood Street and Fox Hill Road intersection

Dominant tree species within Wetland 4 include red maple, black birch, and gray birch. White pines were prevalent in the shrub/sapling and herbaceous layers. Soft rush (*Juncus effusus*) was also identified within the herbaceous layer. The delineated portion of this wetland is split between previously described Montauk fine sandy loam to the east, though with lesser slopes of 0-8 percent, and Scituate fine sandy loam, 3-8 percent slopes, to the west. Scituate fine sandy loam is classified as non-hydric, HSG D, and moderately well drained by NRCS.

3.2 Vernal Pools

Certified Vernal Pools (CVPs) are defined under Massachusetts WPA Regulations at 310 CMR 10.57(2)(a)5 as "*those that have been certified as such by the Massachusetts Division of Fisheries and Wildlife, where said Division has forwarded maps and other information needed to identify the location of such habitat to the Conservation Commission and DEP prior to the filing of each Notice of Intent or Abbreviated Notice of Intent regarding that portion.*"

The WPA specifies that "*vernal pool habitat means confined basin depressions which, at least in most years, hold water for a minimum of two continuous months during the spring and/or summer, and which are free of adult fish populations, as well as the area within 100 feet of the mean annual boundaries of such depressions, to the extent that such habitat is within an Area Subject to Protection under M.G.L.c. 131, § 40 as specified in 310 CMR 10.02(1)*" (310 CMR 10.04).

The BWR may protect vernal pools regardless of whether they have been certified by the Massachusetts Division of Fisheries and Wildlife (DFW) with the presumption that all temporary ponds, as defined under BWR Section 21.6, are presumed to be potentially functioning vernal pools. In addition to DFW certification, temporary ponds may be recognized under the BWR as vernal pools by evidence presented to the Commission at a public hearing introduced by public comment or by the Commission itself. Further, the BWR expands upon the WPA definition of vernal pool habitat by including the area within 100 feet of the boundary of the vernal pool itself, marked by the annual high-water line, regardless of whether it is contained within an Area Subject to Protection under the WPA as specified in 310 CMR 10.02(1).

In addition, BWR also applies a 100 foot buffer zone of protection beyond the vernal pool habitat, therefore including the 200-foot zone extending from the annual high-water line of vernal pools as a jurisdictional area. Additional protections allotted by the BWR include the 20-foot undisturbed buffer zone and a 50-foot building set-back for commercial properties.

HW reviewed MassGIS layers for Natural Heritage Endangered Species Program (NHESP) CVPs, the division within DFW responsible for vernal pool certification. One CVP (No. 6569) is mapped by MassGIS within the MassDEP wetland near the southeastern boundary of the survey area, located within the confines of **Wetland 1**. A MassGIS Potential Vernal Pool (PVP) (No. 4157) overlaps this CVP, apparently referencing the same resource area. No other CVPs or PVPs are mapped within 1,500 feet (0.3 miles) of the survey area and no other wetland areas observed within the survey area were found to have vernal pool characteristics or to meet the BWR criteria for a temporary pond during HWs delineation.

Photo 8. CVP – within forested area southeast of original school building

CVP 6569 is located just interior to the BVW boundary within Wetland 1, its annual high water mark never extending more than approximately 50 feet downgradient of the BVW boundary. HW demarcated the boundaries of CVP 6569 with blue flagging tape marked as "VP" and numbered from 100-134 (Photo 8).

4.0 Evaluated Wetland Resource Areas

HW completed a desktop review of the survey area to determine if additional WPA or local regulations were applicable. The results of HW's desktop evaluation are provided in the following subsections. The Environmental Resources map provided in **Attachment A,** Figure 3 includes the resource areas referenced below, as applicable.

4.1 Bordering Land Subject to Flooding

Bordering Land Subject to Flooding (BLSF) is defined at 310 CMR 10.57(2)(a) as: "*an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland*."

"*The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm. Said boundary shall be that determined by reference to the most recently available flood profile data prepared for the community within which the work is proposed under the National Flood Insurance Program (NFIP, currently administered by the Federal Emergency Management Agency, successor to the U.S. Department of Housing and Urban Development)"* [310 CMR 10.57(2)(a)(3)]. The BWR adopts the WPA definition of BLSF, but also applies a 100 foot buffer zone to its boundary.

The current Federal Emergency Management Agency Flood Insurance Rate Map (FEMA FIRM) for Middlesex County (Community Panel 25017C0289E, effective on June 4, 2010), shows that the portion of the survey area which overlaps the extent of the CVP and much of Wetland 1 is classified as Zone X: *Area of Minimal Flood Hazard*. No flood hazard areas subject to flooding by the 1% annual chance of flood are within 1,000 feet (0.2 miles) of the survey area. The 1% annual chance flood is also referred to as the 100-year flood and is consistent with BLSF in this area. A map of the FEMA Flood Zones and a copy of the FEMA FIRMette map are provided in **Attachment A,** Figures 5 and 6.

4.2 Isolated Land Subject to Flooding

Isolated Land Subject to Flooding (ILSF) is defined at 310 CMR 10.57(b)1. As: "*an isolated depression or closed basin without an inlet or an outlet. It is an area which at least once a year confines standing water to a volume of at least ¼ acre-feet and to an average depth of at least six inches."* The BWR adopts the WPA definition of ILSF, but also applies a 100 foot buffer zone to its boundary.

Field observations of the FEMA classified Zone X isolated area described in the previous subsection indicated that that this area meets the criteria to be considered ILSF. This area overlaps with Wetland 1 and the CVP contained within it.

4.3 Other Protected Resource Areas

HW reviewed MassGIS data to determine if other protected areas associated with wetlands were present within the survey area. Data layers reviewed included:

- NHESP Priority Habitats of Rare Species;
- NHESP Estimated Habitats of Rare Wildlife; and
- Outstanding Resource Waters (ORWs).

MassGIS data indicates that none of the above protected areas are within the survey area or within close proximity to survey area. The nearest NHESP Priority Habitat (PH 1590) exists more than one mile south of the survey area and the nearest NHESP Estimated Habitat of Rare Species (EH 1129) is more than two miles northeast of the survey area. ORWs include Areas of Critical Environmental Concern, Wildlife Refuges, Scenic/Protected Rivers, Public Water Supply Watersheds, and other protected coastal areas that would not apply to this inland site. The ORW closest to the survey area is associated with the Public Water Supply Watershed of the Mill Pond Reservoir Intake Point and is approximately 0.9 miles southeast of the survey area.

The BWR regulates both intermittent and perennial streams as Riverfront Areas (RFA) and identifies all regulatory streams on the map “Regulatory Streams of Burlington” provided in Appendix A of the BWR. HW reviewed this map and confirmed that no jurisdictional streams are within or near the survey area and determined that the closest regulatory stream is more than 900 feet (0.17 miles) to the south.

5.0 Summary

HW’s investigation of wetland resources within and near the above specified, approximately 24-acre section of the Fox Hill Elementary School grounds identified the presence of four BVWs, one CVP, and ILSF within the survey area. These resources were delineated in the field and/or are shown on the attached Environmental Resources map provided in Figure 3 of **Attachment A**. Additional site details are depicted in the Existing Conditions Plan prepared by Hancock Associates**.** HW’s supplemental desktop evaluation of the site confirmed that no other protected wetland resources are present within the survey area or within close proximity to it.

6.0 References

Burlington Wetland Protection Bylaw. 2013. Burlington Bylaw Article XIV Section 10. Accessed February 2023 via https://www.burlington.org/DocumentCenter/View/219/Wetlands-Bylaw-PDF.

Burlington Wetland Regulations. 2015. Accessed February 2023 via https://www.burlington.org/DocumentCenter/View/220/Wetlands-Bylaw-Regulations-PDF.

Federal Emergency Management Agency (FEMA) Flood Map Service Center. Accessed February 2023 via https://msc.fema.gov/portal/home.

Jackson, S.D., et. al., 2022. *Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands, Second Edition*. Massachusetts Department of Environmental Protection. Bureau of Water Resources. Accessed February 2023 via https://www.mass.gov/doc/massachusetts-handbook-for-delineation-of-bordering-vegetated-wetlands/download.

Massachusetts Office of Geographic and Environmental Information (MassGIS). Accessed April 2023 via http://www.mass.gov/mgis/.

Massachusetts Wetlands Protection Act (WPA). Massachusetts Department of Environmental Protection. 2017. Accessed February 2023 via https://www.mass.gov/doc/310-cmr-1000-the-wetlands-protection-act/download.

Natural Resources Conservation Service Web Soil Survey. Accessed February 2023 via https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

Wilmington Conservation Commission Policies. 1999. Accessed February 2023 via https://www.wilmingtonma.gov/sites/g/files/vyhlif5221/f/uploads/commission_policies.pdf.

ATTACHMENT A

Locus Maps:

Figure 1 – USGS Topography

Figure 2 – Proximity to Off-Site Resource Areas

Figure 3 – Environmental Resources

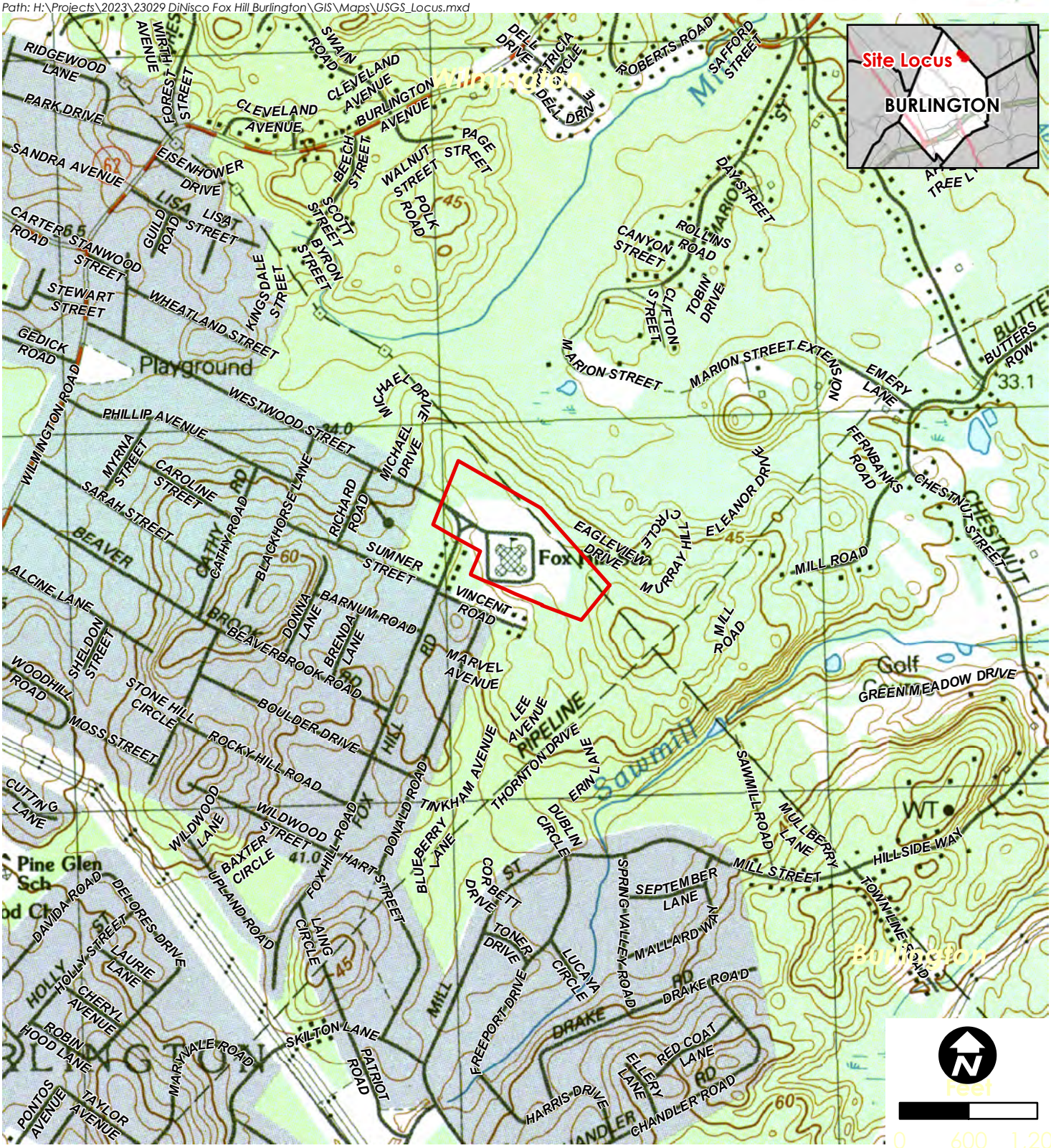
Figure 4 – NRCS Soils

Figure 5 – FEMA Flood Zones

Figure 6 -- FEMA FIRMette

Horsley Witten Group
Sustainable Environmental Solutions

Path: H:\Projects\2023\23029 DiNisco Fox Hill Burlington\GIS\Maps\USGS_Locus.mxd



Date: 6/21/2023
Data Sources: Bureau of Geographic Information (MassGIS), ESRI

This map is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

Survey Area

Fox Hill Elementary
Burlington, MA

Figure 1
USGS Locus.

Horsley Witten Group
Sustainable Environmental Solutions

Path: H:\Projects\2023\23029 DiNisco Fox Hill Burlington\GIS\Maps\Constraints.mxd

Date: 4/14/2023
Data Sources: Bureau of Geographic Information (MassGIS), ESRI, Field Survey conducted by Horsley Witten Scientists.
This map is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

- Survey Area
- Town Parcels
- Municipal Boundary
- NHESP Certified Vernal Pools
- Potential Vernal Pools

DEP Wetlands

- Marsh/Bog
- Wooded marsh
- Open Water
- USGS Streams 25k

- NHESP Priority Habitats of Rare Species*
- NHESP Estimated Habitats of Rare Wildlife*

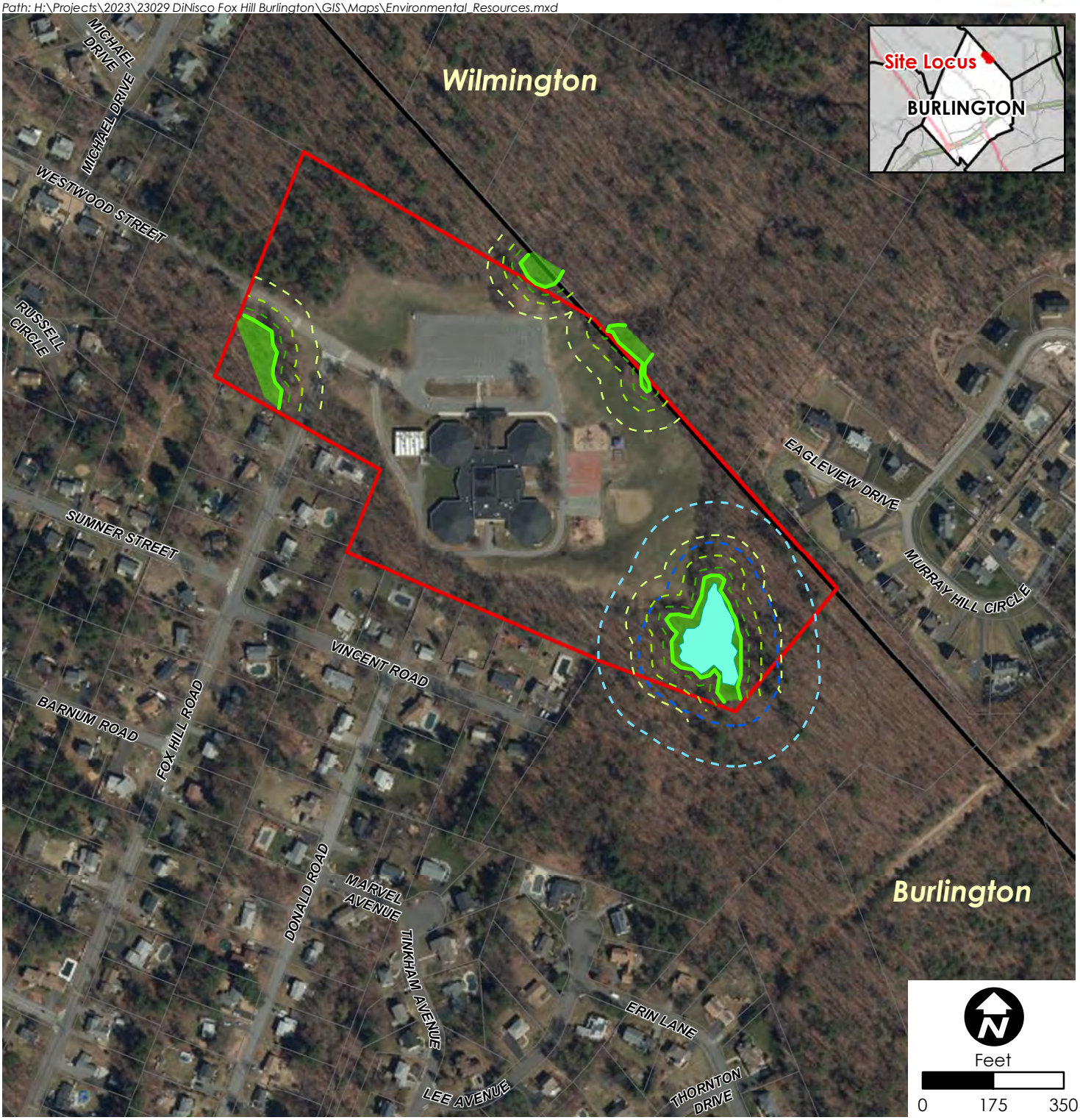
*not present in map extent

Fox Hill Elementary
Burlington, MA

Figure 2
Proximity to Off-Site Resource Areas

Horsley Witten Group
Sustainable Environmental Solutions

Path: H:\Projects\2023\23029 DiNisco Fox Hill Burlington\GIS\Maps\Environmental_Resources.mxd



Date: 2/22/23 and 3/28/2023
Data Sources: Bureau of Geographic Information (MassGIS), ESRI, Field Survey conducted by Horsley Witten Scientists.
This map is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

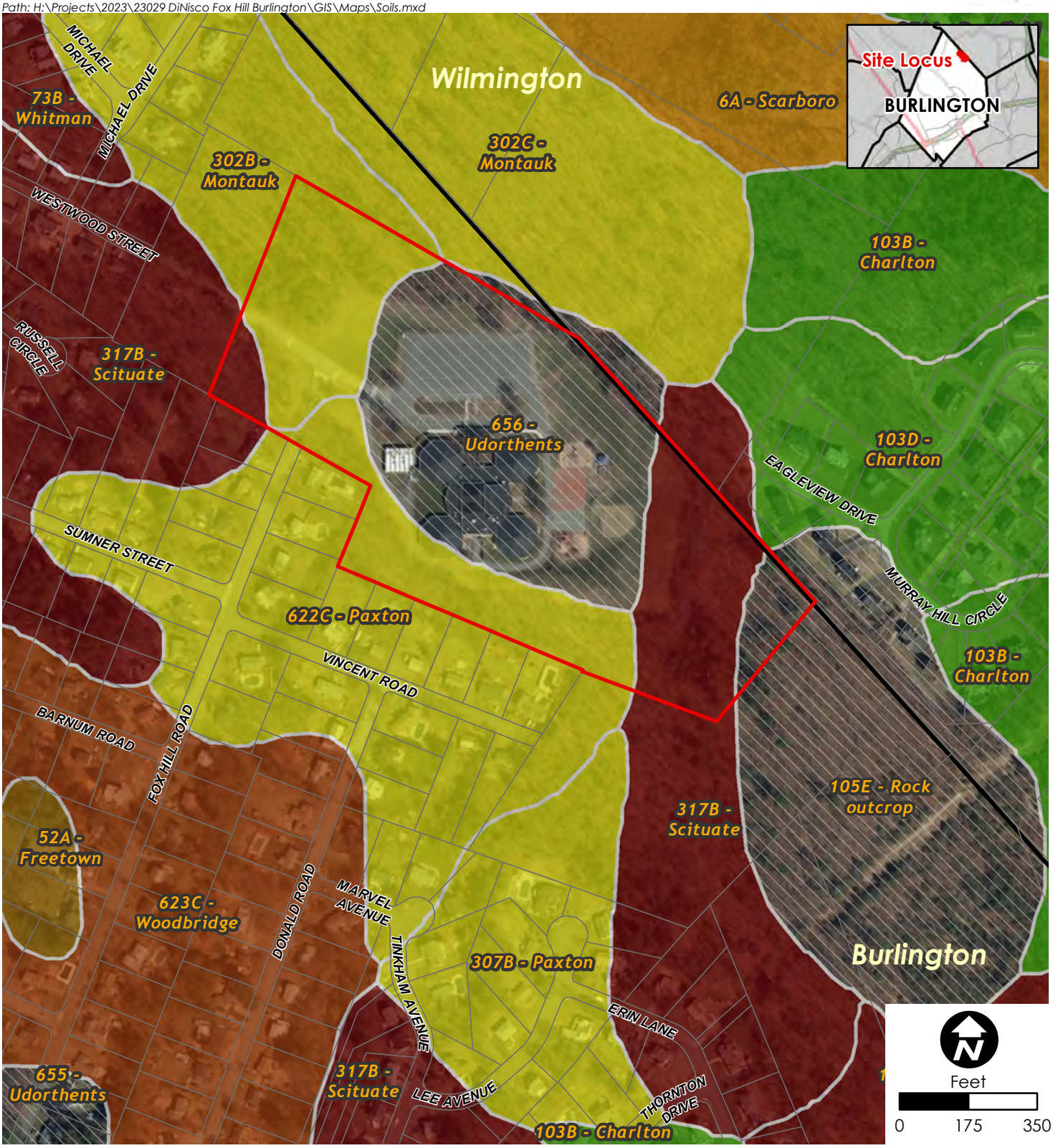
- Survey Area
- Parcels
- Municipal Boundary
- Vernal Pool
- 100-Foot Buffer
- 200-Foot Buffer
- Vegetated Wetlands
- 20 Foot Undisturbed Buffer
- 50 Foot No Build Buffer
- 100 Foot Buffer

Fox Hill Elementary
Burlington, MA

Figure 3
Environmental Resources

Horsley Witten Group
Sustainable Environmental Solutions

Path: H:\Projects\2023\23029 DiNisco Fox Hill Burlington\GIS\Maps\Soils.mxd



Date: 6/21/2023
Data Sources: Bureau of Geographic Information (MassGIS), ESRI

This map is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

Survey Area
Parcels
Municipal Boundary

Hydrologic Soil Group

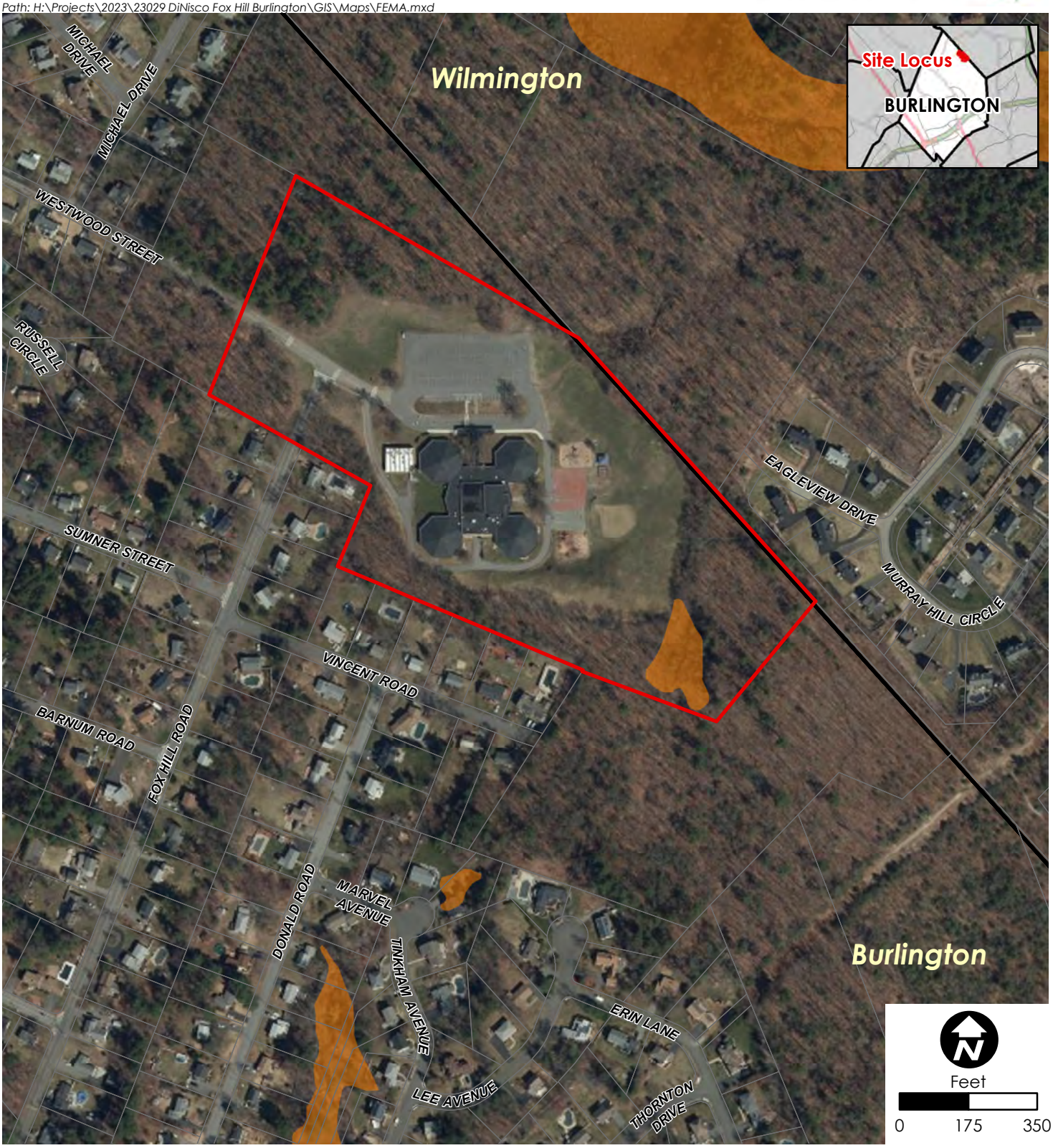
Null HSG
A
C
A/D
B/D
C/D
D

Fox Hill Elementary
Burlington, MA

Figure 4
NRCS SSURGO-Certified Soils.

Horsley Witten Group
Sustainable Environmental Solutions

Path: H:\Projects\2023\23029 DiNisco Fox Hill Burlington\GIS\Maps\FEMA.mxd



Date: 6/21/2023
Data Sources: Bureau of Geographic Information (MassGIS), ESRI

This map is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

Survey Area
Parcels
Municipal Boundary

Flood Zone Designations

X: 0.2% Annual Chance of Flooding

Fox Hill Elementary
Burlington, MA

Figure 5
FEMA National Flood Hazard Layer.

National Flood Hazard Layer FIRMette

FEMA

71°11'39"W 42°31'59"N

71°11'2"W 42°31'32"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/8/2023 at 3:58 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Figure 6

ATTACHMENT B

Wetland Determination Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/28/23

Applicant/Owner: Town of Burlington State: MA Sampling Point: W1-2, Wetland

Investigator(s): Jamie McCarthy Section, Township, Range: Local relief

Landform (hillside, terrace, etc.): _____ (concave, convex, none): concave Slope (%): 3-8

Subregion (LRR or MLRA): LRR R Lat: 42.52852 Long: -71.18685 Datum: WGS84

Soil Map Unit Name: Scituate fine sandy loam, non-hydric NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** **Yes** X **No** _____
Hydric Soil Present?	Yes X	No _____	If yes, optional Wetland Site ID: W3
Wetland Hydrology Present?	Yes X	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 1
Water Table Present?	Yes X	No _____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W1-2, Wetland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	40	Yes	FAC
2. *Quercus bicolor*	15	Yes	FACW
3. *Betula populifolia*	5	No	FAC
4. *Fraxinus pennsylvanica*	5	No	FACW
5.			
6.			
7.			
	65	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Pinus strobus*	5	Yes	FACU
2. *Frangula alnus*	5	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	

Herb Stratum (Plot size: C=5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	50	x 3 =	150
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	75 (A)		210 (B)

Prevalence Index = B/A = 2.80

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W1-2, Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/1	100					Mucky Peat	
4-8	2.5YR 4/2	95	7.5YR 4/6	5			Mucky Sand	
8-18	10YR 5/1	95					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/28/2023

Applicant/Owner: Town of Burlington State: MA Sampling Point: W1-4, Upland

Investigator(s): Jamie McCarthy Section, Township, Range: _____

Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): none Slope (%): 3-8

Subregion (LRR or MLRA): LRR R Lat: 42.52871 Long: -71.18705 Datum: WGS84

Soil Map Unit Name: Scituate fine sandy loam, non-hydric NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- ____ Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W1-4, Upland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus*	25	Yes	FACU
2. *Acer rubrum*	15	Yes	FAC
3.			
4.			
5.			
6.			
7.			
	40	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Pinus strobus*	15	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	15	=Total Cover	

Herb Stratum (Plot size: C=5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	55 (A)		205 (B)

Prevalence Index = B/A = 3.73

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W1-4, Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/1	100					Peat	
1-3	10YR 2/2	100					Sandy	
3-18	2.5YR 5/3	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/13/2023

Applicant/Owner: Town of Burlington State: MA Sampling Point: ~~W2-117~~, Wetland

Investigator(s): Jamie McCarthy Section, Township, Range:

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): concave Slope (%): 8-15

Subregion (LRR or MLRA): LRR R Lat: 42.53070 Long: -71.18773 Datum: WGS84

Soil Map Unit Name: Montauk fine sandy loam, non-hydric NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W2

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 8
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 5

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W2-117, Wetland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	25	Yes	FAC
2. *Carya cordiformis*	15	Yes	FAC
3. *Betula lenta*	10	No	FACU
4. *Betula alleghaniensis*	8	No	FAC
5.			
6.			
7.			
	58	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Betula lenta*	5	Yes	FACU
2. *Cornus alba*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	

Herb Stratum (Plot size: C=5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1. *Toxicodendron radicans*	5	Yes	FAC
2. *Smilax rotundifolia*	10	Yes	FAC
3.			
4.			
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	63	x 3 =	189
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	93 (A)		279 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W2-117, Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Mucky Sand	
6-18	10YR 3/2	100					Sandy	
18-20	10YR 4/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/13/2023

Applicant/Owner: Town of Burlington State: MA Sampling Point: ~~W2-117~~, Upland

Investigator(s): Jamie McCarthy Section, Township, Range: _____

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): concave Slope (%): 8-15

Subregion (LRR or MLRA): LRR R Lat: 42.53045 Long: -71.18792 Datum: WGS84

Soil Map Unit Name: Montauk fine sandy loam, non-hydric NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- ____ Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W2-117, Upland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus velutina*	30	Yes	UPL
2. *Acer rubrum*	15	Yes	FAC
3. *Pinus strobus*	15	Yes	FACU
4.			
5.			
6.			
7.			
	60	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Hamamelis virginiana*	15	Yes	FACU
2. *Pinus strobus*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	

Herb Stratum (Plot size: C=5')			
1. *Pinus strobus*	3	Yes	FACU
2. *Dendrolycopodium dendroideum*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	8	=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1. *Toxicodendron radicans*	3	No	
2.			
3.			
4.			
	3	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 14.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	43	x 4 =	172
UPL species	30	x 5 =	150
Column Totals:	88 (A)		367 (B)

Prevalence Index = B/A = 4.17

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W2-117, Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					Peat	
3-6	10YR 3/4	100					Sandy	
6-18	10YR 4/6	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/28/23

Applicant/Owner: Town of Burlington State: MA Sampling Point: ~~W3-100~~, Wetland

Investigator(s): Jamie McCarthy Section, Township, Range: _____

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): concave Slope (%): 8-15

Subregion (LRR or MLRA): LRR R Lat: 42.53077 Long: -71.18830 Datum: WGS84

Soil Map Unit Name: Montauk fine sandy loam, non-hydric NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W3

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): <1
Water Table Present?	Yes X	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W3-100, Wetland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	45	Yes	FAC
2. *Betula alleghaniensis*	5	No	FAC
3. *Pinus strobus*	10	No	FACU
4. *Ulmus americana*	10	No	FACW
5.			
6.			
7.			
	70	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Pinus strobus*	5	Yes	FACU
2. *Cornus alba*	10	Yes	FACW
3. *Frangula alnus*	5	Yes	FAC
4.			
5.			
6.			
7.			
	20	=Total Cover	

Herb Stratum (Plot size: C=5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	50	x 3 =	150
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	85 (A)		250 (B)

Prevalence Index = B/A = 2.94

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W3-100, Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100					Mucky Sand	
10-13	10YR 4/2	98	7.5YR 4/6	2			Sandy	
13-20	7.5YR 2.5/2	95	7.5YR 4/6	5			Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/28/2023

Applicant/Owner: Town of Burlington State: MA Sampling Point: W3-100, Upland

Investigator(s): Jamie McCarthy Section, Township, Range: _____

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): concave Slope (%): 8-15

Subregion (LRR or MLRA): LRR R Lat: 42.53097 Long: -71.18850 Datum: WGS84

Soil Map Unit Name: Montauk fine sandy loam, non-hydric NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- ____ Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W3-100, Upland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	10	No	FAC
2. *Pinus strobus*	25	Yes	FACU
3. *Quercus velutina*	35	Yes	UPL
4. *Quercus rubra*	10	No	FACU
5.			
6.			
7.			
	80	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Pinus strobus*	15	Yes	FACU
2. *Hamamelis virginiana*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	

Herb Stratum (Plot size: C=5')			
1. *Pinus strobus*	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	10	=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1. *Toxicodendron radicans*	2	No	FAC
2.			
3.			
4.			
	2	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	12	x 3 =	36
FACU species	65	x 4 =	260
UPL species	35	x 5 =	175
Column Totals:	112 (A)		471 (B)

Prevalence Index = B/A = 4.21

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W3-100, Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					Peat	
3-7	10YR 3/4	100					Sandy	
7-18	10yr 4/6	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/28/23

Applicant/Owner: Town of Burlington State: MA Sampling Point: ~~W4-105~~, Wetland

Investigator(s): Jamie McCarthy Section, Township, Range: _____

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): Concave Slope (%): 0-8

Subregion (LRR or MLRA): LRR R Lat: 42.53046 Long: -71.19122 Datum: WGS84

Soil Map Unit Name: Montauk fine sandy loam, non-hydric NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: W4

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- X Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 6
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 2

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W4-105, Wetland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	35	Yes	FAC
2. *Betula lenta*	5	No	FACU
3. *Betula populifolia*	10	Yes	FAC
4.			
5.			
6.			
7.			
	50	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Pinus strobus*	10	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	

Herb Stratum (Plot size: C=5')			
1. *Pinus strobus*	3	Yes	FACU
2. *Juncus effusus*	5	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	8	=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	45	x 3 =	135
FACU species	18	x 4 =	72
UPL species	0	x 5 =	0
Column Totals:	68 (A)		212 (B)

Prevalence Index = B/A = 3.12

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W4-105, Wetland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					Mucky Sand	
3-7	10yr 5/2	100					Sandy	
7-18	10YR 3/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- X Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Fox Hill City/County: Burlington/Middlesex Sampling Date: 3/28/2023

Applicant/Owner: Town of Burlington State: MA Sampling Point: W4-105, Upland

Investigator(s): Jamie McCarthy Section, Township, Range: _____

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): Concave Slope (%): 0-8

Subregion (LRR or MLRA): LRR R Lat: 42.53021 Long: -71.19088 Datum: WGS84

Soil Map Unit Name: Montauk fine sandy loam, non-hydric NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ____ Surface Water (A1)
- ____ High Water Table (A2)
- ____ Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- ____ Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- ____ Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- ____ Geomorphic Position (D2)
- ____ Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: W4-105, Upland

Tree Stratum (Plot size: C=30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus*	25	Yes	FACU
2. *Quercus rubra*	25	Yes	FACU
3. *Quercus alba*	20	Yes	FACU
4. *Betula lenta*	5	No	FACU
5.			
6.			
7.			
	75	=Total Cover	

Sapling/Shrub Stratum (Plot size: C=15')			
1. *Pinus strobus*	15	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	15	=Total Cover	

Herb Stratum (Plot size: C=5')			
1. *Pinus strobus*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	5	=Total Cover	

Woody Vine Stratum (Plot size: C=30')			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	95	x 4 =	380
UPL species	0	x 5 =	0
Column Totals:	95 (A)		380 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: W4-105, Upland

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					Peat	
3-7	7.5YR 3/4	100					Sandy	
7-18	10YR 3/4	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to reflect the NRCS Field Indicators of Hydric Soils version 7.0 March 2013 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)

For

Fox Hill Elementary School
252 Fox Hill Road
Burlington, Massachusetts 01803

Prepared for:

DiNisco Design, Inc.
99 Chauncy Street
Boston, Massachusetts 02111

Prepared by:

Environmental & Construction Management Services, Inc.
288 Grove Street #391
Braintree, Massachusetts 02184
(617) 338-2121

April 21, 2023

ECMS Project No. 1009.077

This report has been prepared for the exclusive use of DiNisco Design, Inc. Environmental & Construction Management Services, Inc. acknowledges that DiNisco Design, Inc. may rely on this report. Photocopying of this document by parties other than those designated by DiNisco Design, Inc. or use of this document for purposes other than intended, is prohibited without the prior written consent of Environmental & Construction Management Services, Inc.

Environmental & Construction Management Services, Inc.

Environmental & Construction Management Services, Inc.

288 Grove Street #391
Braintree, Massachusetts 02184

Phone: (617) 338-2121
www.ecmsinc.com

April 21, 2023

Mr. Neil Harrigan, AIA
DiNisco Design, Inc.
99 Chauncy Street
Boston, Massachusetts 02111

Re: Phase I Environmental Site Assessment (ESA)
Fox Hill Elementary School
Burlington, Massachusetts 01803
***ECMS* Project No. 1009.077**

Dear Mr. Harrigan:

*Environmental & Construction Management Services, Inc. (ECMS) i*s pleased to submit this Phase I Environmental Site Assessment report for the above referenced property (the site). The primary purpose of this assessment was to identify recognized environmental conditions ("RECs") in connection with the subject property. Recognized environmental conditions are defined as the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or material threat of a release into structures on the property or into the ground, groundwater, or surface water of the property. It does not include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

In conducting this assessment, *ECMS* followed the E1527-13 American Society for Testing and Materials (ASTM) document entitled "Standard Practices for Environmental Site Assessments: Phase I Environmental Site Assessment Process" for commercial real estate. To the best of our knowledge, this Phase I Environmental Site Assessment report is true and accurate.

Please do not hesitate to contact us at your convenience, should you have any questions or comments regarding this report or our recommendations. It has been a pleasure working with you on this project.

Sincerely,

*For **Environmental & Construction Management Services, Inc.** by*

Kevin J. Kavanaugh, L.S.P., CHMM
Principal Environmental Engineer

Attachment

TABLE OF CONTENTS

SECTION **PAGE**

CERTIFICATION OF RESULTS CR-1

EXECUTIVE SUMMARY ES-1

1.0 PURPOSE AND SCOPE 1

1.1 Purpose 1
1.2 Scope of Work 2
1.3 Special Terms and Conditions 3
1.4 Limitations and Exceptions of Assessment 3
1.5 User Reliance 3
1.6 Qualifications of Environmental Personnel 3

2.0 PROPERTY DESCRIPTION 3

2.1 Location and Legal Description of the Site 3
2.2 Site and Vicinity Characteristics 4
2.3 Descriptions of Structures, Road, Other Improvements on the Site 4
2.4 Environmental Liens 4
2.5 Current Uses of the Site 5
2.6 Current Uses of the Surrounding Property 5
2.7 Past Uses of the Site and Surrounding Property 5
2.8 Sensitive Receptors 5
2.9 Previous Environmental Reports 6

3.0 RECORDS REVIEW 6

3.1 U.S. Environmental Protection Agency (EPA) 8
3.2 RCRA Handlers 8
3.3 Massachusetts Department of Environmental Protection (MassDEP)/Tribal 9
3.4 Leaking Underground Storage Tanks (LUSTs) 9
3.5 Leaking Above Ground Storage Tanks (LASTs) 9
3.6 Solid Waste Facilities/Landfills 9
3.7 Spill Locations 10
3.8 Emergency Response Notification System 10
3.9 Massachusetts Fire Marshall/Department of Public Safety, Registered Underground Storage Tanks (RUST) List 10
3.10 Historical Automotive Repair or Gasoline Service Stations 10
3.11 Brownfields 10
3.12 Municipal and Local Authorities 10
3.13 Tier 1 Vapor Encroachment Screening 14
3.14 Unmapped Sites 15

TABLE OF CONTENTS, continued

SECTION **PAGE**

4.0 INFORMATION FROM SITE RECONNAISSANCE 16

4.1 Hazardous Materials Storage and Disposal 16
4.2 Solid Waste Disposal 16
4.3 Storage Tanks 17
4.4 Polychlorinated Biphenyls (PCBs) 17
4.5 Electromagnetic Fields (EMFs) 17
4.6 Groundwater Wells 17
4.7 Landfills, Pits, Sumps 17
4.8 Dry Cleaning Operations 18
4.9 Chlorofluorocarbons as Coolants (CFCs) 18
4.10 Hydrology and Geology of the Site Vicinity 18

5.0 ADDITIONAL ENVIRONMENTAL CONSIDERATIONS 19

5.1 Radon Sampling 19
5.2 Lead-Based Paint (LBP) 20
5.3 Asbestos-Containing Materials (ACMs) 20
5.4 Flood Plain Management 20
5.5 Coastal Barrier Resources 20
5.6 Coastal Zone Management 20
5.7 Sole Source Aquifers 20
5.8 Airport Clear Zones 21
5.9 Regulatory Compliance 21
5.10 Off-Site Soil Disposal Sampling Requirements 21

6.0 CONCLUSIONS AND RECOMMENDATIONS 22

ATTACHMENTS

IN-TEXT TABLES

Table 1 Summary of Federal and State Environmental Sources

FIGURES

Figure 1 Site Locus Map
Figure 2 Lot Location Plan
Figure 3 Aerial Photograph Site Location Plan
Figure 4 Priority Habitats of Rare Species Plan
Figure 5 Estimated Habitats of Rare Wildlife and Certified Vernal Pools
Figure 6 MassDEP Priority Resource (21E) Map

TABLE OF CONTENTS, continued

FIGURES, continued

Figure 7 Wetlands Plan
Figure 8 National Flood Hazard Layer Firmette

APPENDICES

Appendix A Information/Research Sources & Historical Documentation
Appendix B Qualifications/Limitations
Appendix C Qualifications of the Environmental Professionals
Appendix D Assessor Property Record Card
Appendix E Site Photographs
Appendix F Environmental Data Resources, Inc. (EDR) Radius Map Report with GeoCheck dated March 31, 2023
Appendix G Environmental Data Resources, Inc. (EDR) Vapor Encroachment Report dated April 18, 2023
Appendix H ASTM 1527-13 User Questionnaire

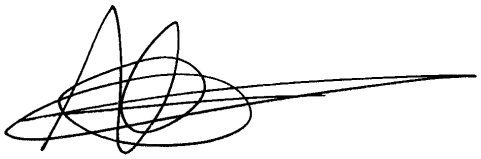
CERTIFICATION OF RESULTS

The assessment was conducted on behalf of and for the exclusive use of *DiNisco Design, Inc.* and all its successors and assigns, solely for use in an environmental evaluation of the Site. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party, in whole or in part, other than *DiNisco Design, Inc.* and all its successors and assigns, without the prior written consent of *Environmental & Construction Management Services, Inc. (ECMS).*

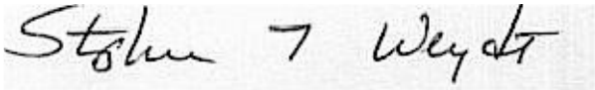
ECMS professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This warranty is in lieu of all other warranties either expressed or implied. *ECMS* is not responsible for the independent conclusions, opinions or recommendations made by others based on the records review, site inspection, field exploration, and laboratory test data presented in this report.

Respectfully submitted this 21st day of April 2023.

For ***Environmental & Construction Management Services, Inc.*** *by*



Kevin J. Kavanaugh, L.S.P., CHMM
Principal Environmental Engineer



Stephen T. Weydt
Principal Environmental Scientist

EXECUTIVE SUMMARY

Environmental & Construction Management Services, Inc. (ECMS) has performed a Phase I Environmental Site Assessment (ESA) for the Fox Hill Elementary School at 252 Fox Hill Road in Burlington, Middlesex County, Massachusetts 01803 and identified by the Town of Burlington Assessor Office as Parcel Number 9-47-0 (herein after referred to as the Site). This assessment was performed to evaluate the likelihood of a release and/or threat of release of oil and/or hazardous materials at the Site pursuant to the Massachusetts General Law, Chapter 21E (MGL Chapter 21E) and the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000.

The site assessment work described in this report was conducted for *DiNisco Design, Inc.* between March 28 and April 21, 2023 in accordance with *ECMS'* proposal number EC23-008 dated February15, 2023.

The purpose of the investigation was to determine the potential for "environmental contamination" (e.g., petroleum products and/or hazardous materials) to exist on the Site, and the potential for such materials to migrate (or have migrated) onto the Site from nearby activities or adjacent properties. The investigation included inspection of the Site and the exterior of adjacent properties, interviews with Site staff and regulatory officials, review of appropriate Federal, State, and local historical and environmental records.

ECMS has performed this environmental assessment in conformance with the scope and limitations of the ASTM Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process Document E-1527-013 and All Appropriate Inquiry (AAI) Final Rule (effective as of November 1, 2006).

ECMS has performed this environmental assessment for the Fox Hill Elementary School at 252 Fox Hill Road in Burlington, Massachusetts. Any exceptions to or deletions from, this practice are described in Section 1.3 entitled *Limitations and Exceptions of Assessment.*

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

- *ECMS* <u>did not</u> identify a *REC* during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- *ECMS* did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- *ECMS* did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by *ECMS*, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Two underground storage tanks (USTs) were removed from the Site including one (1) 500-gallon capacity diesel fuel oil UST removed on April 23, 1997 and one (1) 8,000-gallon capacity fuel oil UST removed on July 19, 1999. Based on a review of closure documents provided by the Burlington Health Department (BHD), no residual impacts to soil remained in tank graves and no impacts to groundwater were noted during the UST removals. Based on the lack of impacts to soil or groundwater at the Site, the former USTs do not represent a REC or Vapor Encroachment Condition (VEC) for the Site.

- Based on the age of the Site building (1967) and records provided by the BHD, ACM identified at the Site includes boiler gasket material, blue and gray transite siding, 12-inch by 12-inch floor tile and mastic, wall plaster in the cafeteria, gray tank insulation, breaching insulation, and fitting insulation in the boiler room.

- Due to the age of the Site building, there is a potential that LBP are present. Overall, painted surfaces were observed in good condition.

Conclusions, Opinions and Recommendations

ECMS has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 for the Fox Hill Elementary School at 252 Fox Hill Road in Burlington, Middlesex County, Massachusetts (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of RECs in connection with the subject property; however, environmental issues in connection with the subject property were identified. Based on the conclusions of this assessment, *ECMS* recommends the following:

- *ECMS* recommends an Operations and Maintenance (O&M) Program be implemented in order to safely manage suspect LBP located at the subject property.

- *ECMS* recommends continued maintenance and inspections of ACM present in the Site building in accordance with the O&M Plan and AHERA regulations. If renovation and/or demolition are to occur at the site, *ECMS* recommends a comprehensive asbestos assessment be performed in accordance with the requirements of 310 CMR 7.15 and 454 CMR 28.

- If off-site disposal of soil is necessary, samples should be analyzed in accordance with the receiving facility's testing requirements. The number of analyses is typically dictated by the total weight or volume of the material to be disposed of, generally one sample for every 500 cubic yards is required. To date, no soil samples have been collected by *ECMS* in an effort to precharacterize site soil and are representative of the anticipated quantity to be excavated. Soil samples should be collected as necessary.

  The minimum laboratory analysis of soil samples suspected of being contaminated shall be as follows in accordance with MassDEP Policy# COMM 97-001, Reuse and Disposal of Contaminated Soil at Massachusetts Landfills:

  - VOCs by EPA Method 8260
  - SVOCs (polyaromatic hydrocarbons fraction only) by EPA Method 8270
  - Total Organic Halogen (TOX) by EPA Method 9020B
  - Total RCRA-8 Metals by EPA Method 6010
  - PCBs by EPA Method 8082

  Additional laboratory analysis required by soil disposal or recycling facilities may also include:

  - flashpoint/ignitability
  - corrosivity
  - reactive cyanide and sulfate
  - Toxicity Characteristic Leaching Procedure (TCLP)
  - Asbestos (if suspect materials are observed)

1.0 INTRODUCTION

1.1 Purpose

This report provides the results of a Phase I Environmental Site Assessment (ESA) performed for the Fox Hill Elementary School located at 252 Fox Hill Road in Burlington, Massachusetts (herein after referred to as the Site). This assessment was performed to evaluate evidence of oil and/or hazardous materials that exist on, or have existed on, the Site and or that may have migrated onto the Site.

In conducting this assessment, *ECMS* followed the E1527-13 American Society for Testing and Materials (ASTM) document entitled "Standard Practices for Environmental Site Assessments: Phase I Environmental Site Assessment Process" for commercial real estate, as well as the All Appropriate Inquires (AAI) Final Rule of November 1, 2006. Any exceptions to, or deletions from, this practice are described in Section 1.4.

The primary purpose of this assessment was to identify *recognized environmental conditions (REC)* in connection with the subject property. ASTM defines *recognized environmental conditions* as the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or material threat of a release into structures on the property or into the ground, groundwater, or surface water of the property. The purpose of this practice is to define good commercial and customary practice for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601) and petroleum products. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or *bonafide* prospective purchaser limitations on CERCLA liability. The practice constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C.

The practice constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C. 9601(35)(B).

As part of the AAI Final Rule, Phase I ESAs must be conducted by or under the supervision of a qualified environmental professional. The AAI Final Rule defines an environmental professional as someone who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases on, at, in, or to a property, sufficient to meet the objectives and performance factors of the rule. We declare that, to the best of our professional

knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312. We have specific qualifications based on education, training and experience to assess the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

1.2 Scope of Work

In accordance with the above referenced agreement, *ECMS'* Scope of Work for this Phase I Environmental Site Assessment included the following:

- Site inspection and interviews of knowledgeable key site personnel to document the current and past land use and operations from building types and uses; the location and status of underground and aboveground storage tanks, visual evidence of subsurface or surface contamination, such as areas of visibly distressed vegetation and soil staining; types, quantities, and locations of oil or hazardous materials, including polychlorinated biphenyls (PCBs); and wastes generated, stored or disposed of on or from the Site.

- Review of all available current and historical records to establish the history of the Site and nearby properties for approximately the past 100 years using available federal, state, municipal, private and insurance rate maps; aerial photographs, lists of previous owners or operators or city atlases. A review of title records was not included as part of this investigation.

- Research of technical information concerning the local geologic and hydrologic conditions to determine the likely impact of any actual or potential release on the Site or from neighboring properties and nearby potential environmental receptors such as drinking water supplies, surface water bodies, catch basins and/or detention ponds.

- Review of files held by federal, state and local environmental regulatory agencies for records of past disposal practices; accidental releases, regulatory compliance history, fires, explosions, or other accidents, the status of any current operating or discharge permits; and status of any existing storage tanks.

- Prepare written report for the Site to include site location plan, and pertinent maps, discussions of the Site location and description, site and vicinity history, inspection results, geology and hydrology, and a summary of the environmental regulatory files reviewed.

1.3 Special Terms and Conditions

The site assessment work described in this report was conducted for *DiNisco Design, Inc.* between March 28 and April 18, 2023 in accordance with *ECMS'* proposal number EC23-008 dated February 15, 2023.

1.4 Limitations and Exceptions of Assessment

The investigation was based on information sources cited in Appendix A, which included Federal, State and local regulatory agencies and Site contacts; observations of the Site and readily observable portions of adjacent properties from public right-of-ways; review of an electronic database search report; review of Local Agency database information; and a review of available historical records. Qualifications/Limitations to this report are presented in Appendix B.

1.5 User Reliance

This report has been prepared for, and can be relied upon by *DiNisco Design, Inc.* Reliance or photocopying of this document by parties other than those designated above or use of this document for purposes other than intended, is prohibited without the prior written consent of *ECMS*.

1.6 Qualifications of Environmental Personnel

In accordance with the requirements of ASTM Standard E1527-13, resumes detailing the relevant experience and qualifications of the Environmental Professionals performing this Phase I Environmental Site Assessment. Resumes are included in Appendix C entitled Qualifications of Environmental Professionals.

2.0 PROPERTY DESCRIPTION

2.1 Location and Legal Description of the Site

The Site is occupied by the Fox Hill Elementary School located at 252 Fox Hill Road in Burlington, Middlesex County, Massachusetts 01803. The Site location is shown on Figure 1 includes both a Site Locus Plan (a section of the USGS Salem Quadrangle) and a Street Location Map of the Site.

The Site is depicted on the 7.5 x 15-minute U.S.G.S. topographic quadrangle for Wilmington, Massachusetts. The Universal Transverse Mercator (UTM) coordinates of the Site within zone 19 are approximately 4,710,625 meters north latitude and 320,257 meters east longitude or 42° 31' 44.58'' north latitude and 71° 11' 18.45'' west longitude and is at an approximate elevation of 173 feet above mean sea level (amsl).

According to the Town of Burlington Assessor's Office, the Site is identified as Assessor Parcel ID 9-47-0 and consists of 37.9 acres of land improved with one 57,347 square foot building occupied by Fox Hill Elementary School. Other improvements include a 5,632 square foot modular addition for extra classroom space, paved drive and parking areas, playground areas and a baseball field.

For a copy of the Town of Burlington Property Record Card refer to Appendix D of this report.

2.2 Site and Vicinity Characteristics

The Site is currently developed with one irregular shaped building in the central portion of the Site with play areas and an athletic field to the east of the building. A parking area is located to the north of the building. The Site property is located within a residential area.

Residential dwellings and undeveloped wooded land abut the Site to the north, south and east; and residential dwellings abut the Site to the west.

The Site and surrounding properties are shown on Figure 2, Lot Location Plan attached to this report.

None of these surrounding properties are likely to pose a potential recognized environmental concern to the Site.

2.3 Descriptions of Structures, Roads, Other Improvements on the Site

The Site is currently developed with one irregular shaped building occupied by the Fox Hill Elementary School in the central portion of the Site with a playground and athletic field to the east of the building. In addition to the current structure, the Site is improved with a 5,632 square foot modular addition for extra classroom space and a parking area to the north of the building.

Photographs taken during the *ECMS* Site reconnaissance on April 12, 2023 are included as Appendix E.

2.4 Environmental Liens

ECMS did not conduct a review of title records for the Site, therefore, it is not known if there are environmental liens at the Site. However, according to the Environmental Data Resources, Inc. (EDR) database search report dated March 31, 2023, the Site is not currently listed by the Massachusetts Department of Environmental Protection (MassDEP) as a Disposal Site with a Class A-3, Class A-4, Class B-2, or Class B-3 Response Action Outcome (RAO) Statement or a Permanent Solution with Conditions in accordance with the Massachusetts

Contingency Plan (MCP) 310 CMR 40.1000. Therefore, there are no Activity & Use Limitations (AUL's) currently in force at the site.

2.5 Current Uses of the Site

The Site is currently used for school and recreational purposes. The current use of the Site for school and recreational purposes is not an environmental concern.

2.6 Current Uses of Surrounding Properties

The current uses of surrounding properties are residential. None of the uses appear to be an environmental concern to the Site.

2.7 Past Uses of the Site and Vicinity

Historical information was obtained from a review of the following references:

- Town of Burlington Assessor Office for current property record cards;
- Town of Burlington Building Department records;
- Historical Topographical Maps for 1888, 1893, 1915, 1918, 1943, 1944, 1947, 1950, 1965, 1977, 1979, 1987, 1912, 2015 and 2018;
- Historical Aerial Photographs for 1938, 1963, 1965, 1978, 1980, 1986, 1995, 2010, 2014 and 2018; and
- City Directories for 1968, 1970, 1975, 1984, 1989, 1992, 1995, 2000, 2005, 2010, 2014, 2017 and 2020.

According to historical records reviewed, the subject property was vacant, undeveloped land as early as 1888; and developed with the current school building in 1967. The modular classroom situated west of the building was added in 2006. The historical and current use of the Site as a school is not expected to represent a significant environmental concern.

According to historical records reviewed, the Site area appears to have been mostly undeveloped as early as 1888 through 1938 with residential development to the southwest by 1965 with an increase in residential development to the southwest beginning by 1963. The historical and current use of the nearby properties for residential use is not expected to represent a significant environmental concern to the Site.

2.8 Sensitive Receptors

The Site is located in a residential section of Burlington. The Site is considered an *institution,* as defined at 310 CMR 40.0006. There are no other institutions, as defined at 310 CNR 40.0006 to be "any publicly or privately-owned hospital, health care facility, orphanage, nursing home, convalescent home, educational facility, or

correctional facility, where such facility in whole or in part provides overnight housing" within 500 feet of the Site.

The nearest non-culverted surface water body is an unnamed pond and Mill Brook located approximately 770 feet north-northeast of the Site. The Site is classified as a Protected Open Space Area. Wetlands are located in the southern portion of the Site within the boundary of a vernal pool. Estimated habitats of rare wetlands wildlife were not identified within 500 feet of the Site. No other Protected Open Space areas are located within 500 feet of the Site.

The Site is not located within an area classified as an aquifer or non-potential aquifer, a Zone II, well head protection areas, public or private water supplies or Interim Wellhead Protection Area (IWPA).

Refer to Figure 4 for a Map of Priority Habitats of Rare Species, Figure 5 for a Map of Estimated Habitats of Rare Wildlife and Certified Vernal Pools and Figure 6 for a Map of 21E Priority Resources Map.

There are wetlands located on and within a 500-foot radius from the Site. For the location of identified wetlands on the Site refer to Figure 7, Wetlands Map.

Potential human receptors at the Site under the current use include Site workers, construction and utility workers, students, and trespassers.

2.9 Previous Environmental Reports

No previous environmental reports were provided to *ECMS* for review.

3.0 RECORDS REVIEW

ECMS utilized the results of an on-line computer environmental database search of facilities in the vicinity listed by agencies for various reasons. Table 1 presents the databases reviewed and the number of properties identified within the specified search distance with respect to the Site. The search distances specified by the ASTM were the minimum distances used during our search. The EDR Radius Map report with GeoCheck dated March 31, 2023 is contained in Appendix F.

TABLE I FEDERAL AND STATE ENVIRONMENTAL SOURCES							
Standard Environmental Sources	**Search Distance**	**Number of Sites**	**Location with Respect to the Site (miles)**				
			Site	**< 1/8**	**1/8 – 1/4**	**1/4 - 1/2**	**1/2 - 1**
NPL Sites List	1.0 mile	0	No	0	0	0	1
NPL Delisted Sites List	1.0 mile	0	No	0	0	0	0
CERCLIS List	0.5 mile	0	No	0	0	0	NR
NFRAP	0.5 mile	5	No	0	0	5	NR
RCRA TSD List	0.5 mile	0	No	0	0	0	NR
RCRA Generators List (LQG)	0.25 mile	0	No	0	0	NR	NR
RCRA Generators List (SQG)	0.25 mile	0	No	0	0	NR	NR
RCRA Generators List (VSQG)	0.25 mile	0	No	0	0	NR	NR
RCRA Cor Act	1.0 mile	0	No	0	0	0	0
Federal IC/EC	0.5 mile	0	No	0	0	0	NR
ERNS List	Site	0	No	NR	NR	NR	NR
Tribal Lands	1.0 mile	0	No	0	0	0	0
MassDEP/Tribal Sites List (CERCLA equiv.)	1.0 mile	8	No	0	0	1	7
MassDEP/Tribal LUST List	0.5 mile	5	No	0	0	5	NR
MassDEP/Tribal LAST List	0.5 mile	4	No	0	1	3	NR
MassDEP Spills List	Site	0	No	NR	NR	NR	NR
MassDEP/Tribal Landfill/Solid Waste Disposal Sites List (active & inactive)	0.5 mile	0	No	0	0	0	NR
MassDEP/Tribal Registered UST List	0.25 mile	0	No	0	0	NR	NR
MassDEP/Tribal Registered AST List	0.25 mile	0	No	0	0	NR	NR
MassDEP/Tribal IC	0.50 mile	0	No	0	0	0	NR
MassDEP/Tribal Brownfields	0.5 mile	0	No	0	0	0	NR
MassDEP Asbestos	Site	4	**Yes**	NR	NR	NR	NR
NR = Not Reported							

3.1 U.S. Environmental Protection Agency (EPA)

CERCLIS and NPL

The EPA tracks sites to be investigated or that are currently being investigated for the threatened or actual release of hazardous substances to the environment. This system is under the jurisdiction of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, also known as Superfund. The CERCLA Information System (CERCLIS) database indicates if a site has been or is being considered for designation on the National Priorities List (NPL). The NPL is the list of abandoned and/or uncontrolled hazardous waste sites identified for priority action under Superfund. To be placed on the NPL, a property must exceed a hazard ranking evaluation, pose a significant threat to health and the environment, and require remedial action. The EPA also tracks the NPL sites that have been delisted from the NPL where no further response is appropriate.

The Site is not listed as either a current or delisted NPL facility or CERCLIS facility. There are no CERCLIS listed properties located within one mile of the Site. There is one NPL facility located within one mile of the Site. The closest NPL listed property is identified as Olin Chemical at 51 Eames Street in Wilmington, Massachusetts, approximately 3,108 feet east of the Site. Olin Chemical manufactured chemicals in 1953 until the facility closed in 1986. Historical wastewater disposal practices were discovered in unlined pits and ponds in the central portion of this facility as well as a man-made excavation on-site. Initial remedial activities included an acid treatment and neutralization system with the installation of new lined lagoons. Subsequent subsurface assessments discovered contamination of soil and groundwater including nearby drinking water wells and wetland areas with a plume of ammonia, chloride, sodium, sulfate, chromium and N-nitrosodimethylamine (NDMA). The edge of the groundwater plume has been delineated and is located over 3,000 feet east of the Site. Based on the distance of known impacts to groundwater this NPL facility not likely to pose an environmental concern to the Site.

NFRAP (No Further Remedial Action Plan)

The EPA maintains a database of archived CERCLA sites where assessment has been completed and a determination has been made that the location is not judged to be a potential NPL property.

The Site is not listed on the NFRAP. There are no NFRAP listed properties located within one-half mile of the Site.

3.2 Resource Conservation and Recovery Act (RCRA) Handlers

The RCRA TSD list includes any operation that transports, stores or disposes of hazardous waste and which must obtain a hazardous waste identification number or

transporter permit. *ECMS* review of the RCRIS Transporters database indicated that the Site was not listed as a RCRA TSD of hazardous waste and there are no RCRA TSD listed facilities located within one-half mile of the Site.

The RCRA COR ACT is a database maintained for management and inventory of RCRA generators, transporters, treaters, storers and disposers of hazardous materials. *ECMS* review of the RCRA COR ACT database indicated that the Site was not listed as a RCRA COR ACT facility and there are no RCRA COR ACT listed facilities located within one-mile of the Site.

The RCRA Generators list includes any operation that generates hazardous waste and which much obtain a hazardous waste generator identification number. The Site is not listed as a RCRA Generator and there are no RCRA Generators located within ¼-mile of the Site.

3.3 Massachusetts Department of Environmental Protection (MassDEP)/Tribal Lands SHWS

The MassDEP/Tribal Sites list or equivalent CERCLIS [state hazardous waste sites (SHWS)] contains the names of facilities and/or locations within the state of Massachusetts, which have reported releases of contaminants from petroleum storage systems. This report is maintained by the MassDEP. The Site does not appear on the MassDEP Sites List.

The database identified eight MassDEP Sites listings within a one-mile radius of the subject Site. The closest SHWS is located greater than 1,500 feet from the Site. Based on the distances from the Site, these eight SHWS sites are not expected to represent a significant environmental concern for the Site.

3.4 MassDEP Leaking Underground Storage Tank List (LUST)

The MassDEP maintains this database of releases of oil or hazardous materials from USTs. The Site does not appear on the LUST List and there are no MassDEP LUST sites within a one-half mile radius of the Site.

3.5 MassDEP Leaking Aboveground Storage Tank List (LAST)

The MassDEP maintains this database of releases of oil or hazardous materials from ASTs. The Site does not appear on the LAST List and there are no MassDEP LAST sites within a one-half mile radius of the Site.

3.6 State/Tribal Solid Waste Landfills

The Site does not appear on the Solid Waste Landfill list. There were no properties listed on the Solid Waste Landfill list within a one-half mile radius of the Site.

3.7 Spill Locations

The Site does not appear on the MassDEP Spills list.

No other spills of oil and/or hazardous materials are documented in MassDEP records within a one-quarter mile radius of the Site.

3.8 Emergency Response Notification System (ERNS)

The EPA Emergency Response Notification System (ERNS) list is a list of hazardous material spills. The Site does not appear on the ERNS list.

3.9 State of Massachusetts/Tribal Registered Underground Storage Tanks (RUST) List

This database, maintained by the State of Massachusetts Department of Fire Services, registers locations with either USTs or aboveground storage tanks (ASTs). The Site does not appear on the RUST list. There are no other sites within a 0.25-mile radius of the Site identified on the RUST or the RAST list.

3.10 Historical Automotive Repair or Gasoline Service Stations

According to EDR records there is no historical automobile service station on the Site or within a 1/8-mile radius of the Site.

3.11 Brownfields

The Site is not listed as a Brownfield location. According to the EDR database report, there are no Brownfield listed properties within a one-half mile radius of the Site.

3.12 Municipal and Local Authorities

Information related to environmental responses at the Site was requested from Town of Burlington municipal offices.

<u>Burlington Fire Prevention Department</u>

As of the date of this report, ECMS has not received a response from the Burlington Fire Prevention Office. Refer to information received from the Burlington Health Department pertaining to the use, storage or release of oil or hazardous materials at the Site discussed below.

Burlington Clerk's Office

The Burlington Clerk's Office did not have information pertaining to the use, storage or release of oil or hazardous materials at the Site.

Burlington Health Department

The Burlington Health Department (BHD) Office provided the following information pertaining to the use, storage or release of oil or hazardous materials at the Site.

- The BHD provided *ECMS* with copies of asbestos related documents including a copy of a Commonwealth of Massachusetts Asbestos Notification Form for the removal of five square feet of boiler related asbestos containing materials (ACM) coating in August 1995; copies of Six Month Reinspection Hazard Assessment Summary Sheets dated December 1995, June and December 1996 and June 1997; and a copy of Asbestos Hazard Emergency Response Act (AHERA) Three Year Reinspection Reports prepared by Recon Environmental Corporation dated May 15, 1995 and Levine-Fricke-Recon dated September 14, 1998. ACM identified by LFR included boiler gasket material, blue and gray transite siding, 12-inch by 12-inch floor tile and mastic, wall plaster in the cafeteria, gray tank insulation, breaching insulation, and fitting insulation in the boiler room. Refer to Section 5.3 for further discussion pertaining to ACM at the Site.

- The BHD provided *ECMS* with copies of Material Safety Data Sheets for all cleaning and art and classroom supplies used and stored on-site in accordance with the Right to Know legislation.

- According to a memorandum to Richard Benowitz, Principal of Fox Hill Elementary School from Todd H. Dresser, CHMM, TURP dated December 1, 2003, a sample of the drinking water at a fountain was collected for laboratory analysis for lead and copper on October 27, 2003. According to Mr. Dresser, lead and copper were detected in the sample collected on October 27, 2003 at concentrations of 20 parts per billion (ppb) and 110 ppb, respectively. The concentration of lead exceeded the applicable maximum contaminant level of 5 ppb. A second sample was collected from the fountain after being flushed for five minutes. According to Mr. Dresser, lead and copper were detected at concentrations of 4 ppb and less than 50 ppb, respectively. Based on these analytical data, Mr. Dresser recommended that all drinking water fountains within the school be flushed daily for five minutes prior to students' arrival. Additionally, Mr. Dresser indicated that all drinking water fountains be sampled to determine if elevated lead was present at all drinking water fountains.

- According to an email to Mr. Todd Dresser and Mr. Brian Lockard from Mr. Alex Pancic of Clean Soils Environmental, Ltd. dated August 7, 2000 indicated that the Site was formerly serviced by an on-site septic system that was scheduled to be decommissioned on August 15, 2000.

- Copies of Town of Burlington Hazardous Materials Registration Form dated September 20, 1993 listing the storage of oil in an 8,000-gallon UST installed on December 3, 1967 and located adjacent to the south exterior side of the Site building and 200-gallons of oil in a 200-gallon AST installed in October 17, 1987 and located adjacent to the west exterior side of the Site building. A second Hazardous Materials Registration Form is undated and indicates the storage of duplicating fluid for use in the office and protection clear spray and clear acrylic spray for use during art classes as well as the 8,000-gallon UST. Refer to discussions below for removal of USTs at the Site.

- According to BHD records, two (2) one-gallon plastic containers of waste oil were discovered in a trash barrel in the Site parking lot on January 8, 1990. One of the containers was open and the contents were released onto the pavement in the parking lot. Remedial activities included the application of absorbent material.

- According to BHD records, eight quart-sized containers of oil were discovered dumped on the access road behind Fox Hill Road on December 14, 1993. Two (2) of the containers were observed to be ruptured releasing contents to pavement and soil in this area. Remedial activities included the application of absorbent material and removal of approximately 0.5 cubic yards of visibly stained soil for off-site transport and disposal.

- According to BHD records, a release of approximately five- to seven-gallons of heating oil was reported as a result of overfilling of an oil tank near the loading dock on February 29, 1996. Remedial activities included the application of absorbent material and removal of visibly stained soil for off-site transport and disposal.

- On April 23, 1997, the Burlington Fire Prevention Bureau issued a permit for the removal of a 500-gallon capacity UST. *ECMS* reviewed a copy of an Underground Storage Tank Removal and Limited Removal Action report prepared by *Gulf of Main Research Center, Inc. (GMRC)* dated August 18, 1997. According to *GMRC's* report, one 500-gallon No. 2 fuel oil UST was removed from the Site on April 23, 1997. Based on interviews and historical records, it is believed that this UST contained diesel fuel and was associated with an emergency generator. The UST was located adjacent to the west exterior side of the Site building. *GMRC* reported that no holes were observed in the UST once removed and no significant soil staining was observed in surrounding subsurface with the exception of slight staining in the vicinity of the fill pipe.

No sheens were observed on visible groundwater in the UST grave. Approximately 8.78 tons of the impacted soil was stockpiled and later transported off-site for disposal. Four (4) confirmatory soil samples were collected for laboratory analysis for total petroleum hydrocarbons (TPHs). Soil samples identified as SS 101 through SS 104 were collected from the sidewalls of the excavation. *GMRC* did not collect soil samples from the bottom of the excavation since the UST formerly sat on a concrete pad. According to *GMRC's* report, TPHs were not detected in the three soil samples collected from within the UST grave at concentrations exceeding applicable laboratory reporting limits. *GMRC* concluded that UST removal and soil disposal was conducted under a Limited Removal Action and that site conditions did not trigger a notification requirement to the MassDEP.

- *ECMS* reviewed a copy of an Underground Storage Tank Closure Assessment prepared by *Clean Soils Environmental Ltd. (CSE)* dated August 10, 1999. According to *CSE's* report, one (1) 8,000-gallon fuel oil UST installed in approximately 1966 was removed from the Site on July 19, 1999. The UST was formerly located in the vicinity of the loading dock on the southern exterior side of the Site building. During removal of the UST, *CSE* collected soil samples for field screening of total volatile organic compounds (TVOCs) using a photoionization detector (PID). According to *CSE's* report, TVOC results ranged from 0.4 to 26.5 parts per million per volume (ppmv). Upon removal, *CSE* reported that no holes were observed in the UST and no significant soil staining was observed in surrounding subsurface with the exception of slight staining in the vicinity of the fill pipe. This soil was excavated for off-site transport for proper disposal. Of note, *CSE* indicated that the feed and return lines for the UST were not removed due to a concern for undermining the foundation of the building. In addition, *CSE* indicated that no sheens were observed on visible groundwater in the UST grave. Three (3) confirmatory soil samples were collected for laboratory analysis for extractable petroleum hydrocarbons (EPHs). Soil samples identified as BOT2, SW6 and FP2 were collected from the bottom and sidewalls of the excavation and from within the vicinity of the fill pipe, respectively. According to *CSE's* report, EPHs were not detected in the three soil samples collected from within the UST grave or below the former fill pipe at concentrations exceeding applicable laboratory reporting limits. Based on field observations and laboratory analytical data, *CSE* concluded that no evidence of a release from the former UST was identified.

Based on remedial activities conducted to address spills at the Site, the spill incidents appear to be de minimis in nature and are not expected to represent a significant environmental concern to the Site. Additionally, based on the removal of the former USTs combined with analytical data, the former USTs at the Site are not expected to represent an environmental concern to the Site.

Burlington Conservation Commission

The Burlington Conservation Commission Office did not have information pertaining to the use, storage or release of oil or hazardous materials at the Site.

Burlington Building Department

According to Burlington Building Department (BBD) records, the Site building was constructed in 1967. The Burlington Building Department Office did not have information pertaining to the use, storage or release of oil or hazardous materials at the subject property with the exception of a depiction of a buried diesel oil storage tank on a Site Plan showing utilities dated September 17, 1965. Other documents indicated that asbestos removal was conducted in 1989. Refer to the BHD summary above and Section 5.3 for additional discussion pertaining to ACM.

3.13 Tier 1 Vapor Encroachment Screening

ECMS performed a Tier 1 Vapor Encroachment Screening in compliance with ASTM E 2600-10 "ASTM Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions" as amended. The purpose of the Tier 1 Vapor Encroachment Screening is to conduct an initial screen to determine if a Vapor Encroachment Condition (VEC) exists in connection with the Site. A VEC is defined as the presence or likely presence of chemical of concern vapors in the subsurface of the Site caused by the release of vapors from contaminated soil or groundwater either on or near the Site.

ECMS reviewed standard environmental record sources to identify if there are known or suspected sources of contamination within the area of concern. According to ASTM E 2600-10, the area of concern is defined by the approximate minimum search distance which is based upon the chemical of concern (i.e., petroleum hydrocarbons vs. non-petroleum hydrocarbons) and the location of a known or suspected source of contamination with respect to the Site.

According to ASTM E 2600-10 8.2.1 "The area of concern is one third of a mile around the Site, unless the use of a shorter distance is appropriate". In addition, according to ASTM E 2600-10 8.3.1, "The approximate minimum search distance may be expanded or reduced in the up-gradient, down-gradient, and/or cross-gradient directions by the environmental professional conducting the Vapor Encroachment Screening based upon experience in the local area." Given that there were no properties of concern for vapor release to the Site nearby, the minimum search distances were not expanded or reduced. Unless otherwise stated, groundwater flow/gradient is approximated based on surface topography.

Based on a review of the EDR regulatory database report, the Site is not identified with any spills or releases. Two (2) USTs were removed from the Site including one

(1) 500-gallon capacity No. 2 fuel oil UST removed on April 23, 1997 and one (1) 8,000-gallon capacity fuel oil UST removed on July 19, 1999. Based on a review of closure documents provided by the BHD, no residual impacts to soil remained in tank graves and no impacts to groundwater were noted during the UST removals. Based the lack of impacts to soil or groundwater at the Site, there does not exist a potential environmental concern with respect to a VEC for the Site.

ECMS was not provided information from the user, current landowner or key site manager regarding specialized knowledge or experience or commonly known or reasonably ascertainable information within the local community about the Site that is material to the assessment of a VEC in connection with the Site.

According to the EDR database report, one property was identified with a documented release at a location nearby and potentially upgradient from the Site. Based on remedial activities, lack of documented impact to soil or groundwater and regulatory oversight and closure, this release is not expected to represent a recognized environmental condition or VEC in connection with the Site.

Refer to Appendix G, Environmental Data Resources, Inc. (EDR) Vapor Encroachment Screen Report dated April 18, 2023.

3.14 Unmapped Sites

There are three non-geocoded (unmapped or orphaned sites) facilities listed in the Environmental Data Resources report. When possible, the properties within 500 feet of the Site were located during *ECMS'* Site reconnaissance. One identifiable unmapped facility representing conditions indicative of releases of oil and/or hazardous substances or potential releases of oil and/or hazardous substances near the Site was identified during this investigation.

Sumner Street @ Fox Hill Road at Sumner Street is listed as an Unmapped Site and is identified as a SHWS site. ECMS reviewed a Permanent Solution Statement report prepared by *Jewel Environmental Corporation (JEC)* dated April 2020. According to *JEC's* report, the MassDEP was notified on February 13, 2020 of a release of approximately 40 gallons of hydraulic oil from a ruptured hydraulic line on a trash pickup truck. The MassDEP subsequently issued the Release Tracking Number 3-0036136 to the release. According to *JEC's* report, the hydraulic oil impacted road surfaces along Sumner Street and Fox Hill Road and due to rain also impacted nearby catch basins along Sumner Street. Remedial activities included the application of absorbent materials along impacted roadway pavement and the skimming of oil from catch basins using a vacuum truck. Following the remedial activities, impacted areas were inspected and found to be clean with no sign of cracks or holes or other conduits to the subsurface. Based on the remedial activities and lack of impact to subsurface media, *JEC* concluded that site conditions met requirements of regulatory closure under a Permanent Solution. Based on a site plan

prepared by *JEC*, the closest extent of impact to roadway surfaces was approximately 447 feet southwest of the Site. Based on remedial activities, distance from the Site, lack of impact to groundwater and regulatory oversight and closure, RTN 3-0036136 is not expected to represent a significant environmental concern for the Site.

No other identifiable unmapped facilities representing conditions indicative of releases of oil and/or hazardous substances or potential releases of oil and/or hazardous substances on, at, in or to the Site were identified during this investigation.

4.0 INFORMATION FROM THE SITE RECONNAISSANCE

Ms. Cheryl A. Cambria, Environmental Professional for *ECMS,* visited the Site on April 12, 2023. Mr. Kevin Baker, maintenance personnel for the Site, accompanied Ms. Cambria during the Site visit. Mr. Baker is considered to be a "Knowledgeable Person". The reconnaissance was conducted to observe any condition indicative of the release or threat of a release of oil or hazardous substances on, at, in or to the Site. Refer to Appendix E for Photographs taken on April 12, 2023.

The ASTM 1527-13 User Questionnaire was provided to Mr. Bob Cunha, Director of Operations for Burlington Public Schools and person most familiar with this property. As of the date of this report, the User Questionnaire has not been returned to *ECMS*. A copy of this ASTM 1527-13 User Questionnaire is attached as Appendix H of this report.

Information gained in the interview if known and pertinent was included in the following sections of the report. The reconnaissance was conducted to observe any evidence of the release or threat of a release of oil or hazardous materials. Observations made during the Site visit are summarized below.

4.1 Hazardous Materials Storage and Disposal

Small quantities of building maintenance supplies were observed during the site reconnaissance on April 12, 2023. These materials appeared to be properly labeled and stored with no spills or releases observed. Based on the nature of use, overall small quantities observed, these materials are not expected to represent a significant environmental concern to the Site.

4.2 Solid Waste Disposal

No areas that were apparently filled or graded by non-natural causes suggesting trash or other solid waste disposal.

Republic Services picks up solid waste from a commercial dumpster located on the southern exterior side of the Site building.

4.3 Storage Tanks

According to the EDR report database there are no current underground storage tanks (USTs) located on the Site. No obvious visual evidence (vent pipes, fill pipes of USTs) was observed on April 12, 2023.

4.4 Polychlorinated Biphenyls (PCBs)

PCBs were commonly used as insulating and cooling fluids in electrical equipment, including transformers, ballasts and capacitors as well as in hydraulic fluids such as elevator equipment. The Site building is not equipped with hydraulic passenger elevator(s).

One pad-mounted transformer was observed on the Site. The transformer is labeled as non-PCB containing. No staining or leakage was observed in the vicinity of the transformer. NStar Electric maintains ownership and operational responsibility for the transformer. Based on the good condition of the equipment and non-PCB labeling, the transformer is not expected to represent a significant environmental concern.

Fluorescent light fixtures were observed in the Site building. The lighting fixtures appeared to be in good condition. All ballasts should be inspected and disposed of in accordance with federal, state, and regional requirements.

Based upon field observations, the age of the improvements on-Site, and information obtained, the potential for on-Site PCB contamination resulting from leaks or spills of electrical or hydraulic equipment utilizing PCB-containing fluids appears minimal.

4.5 Electromagnetic Fields (EMFs)

There are no overhead high voltage transmission lines, microwave towers, or antennas located on the subject Site.

4.6 Groundwater Wells

ECMS did not observe groundwater monitoring wells at the time of the Site reconnaissance on April 12, 2023.

4.7 Landfills, Pits, Sumps

The Underground Injection Control (UIC) program protects drinking water by regulating discharges to the ground via injection wells such as dry wells, septic systems tied to industrial processes, and other subsurface leaching systems. Pursuant to UIC regulations (310 CMR 27.00), where the potential exists for pollutants to enter an injection well (e.g. by means of a floor drain) and the presence of the pollutants causes

or may cause a violation of any Massachusetts Drinking Water Regulation or adversely affects or may adversely affect public health, the use of the well is prohibited. With the exception of discharges authorized under the Department's Ground Water Discharge Permit program, the Department considers this prohibition to include the use of any injection well at facilities which have in the past or currently use, store, or otherwise manage hazardous materials and/or wastes as defined in 310 CMR 30.000 and 310 CMR 40.0000. This Notice is not applicable to any facility where the floor drain is connected to a Municipal Sewer System. ECMS did observe one floor drains in the kitchen area in the Site building. According to Mr. Baker, the Site building is connected to the Town of Burlington sanitary sewer system.

ECMS personnel did not observe any additional evidence of landfills, pits, or sumps at the Site.

4.8 Dry Cleaning Operations

No evidence of current or historical dry-cleaning operations at the Site was identified during this assessment.

4.9 Chlorofluorocarbons as Coolants (CFCs)

The cooler located in the kitchen area is serviced by a Freon-fueled compressor. This unit does not appear to contain R-22 Freon. Should any refrigerant waste ever be identified as CFC-containing and need to be disposed of it should be handled properly by licensed subcontracted personnel.

4.10 Hydrology and Geology of the Site Vicinity

The nearest non-culverted surface water body, an unnamed pond and tributary to the Mill Brook, is located approximately 770 feet north-northeast of the Site.

The Site is situated in within the Seaboard Lowland section of the New England physiographic province of the State of Massachusetts. Based on a review of the Bedrock Geologic Map of Massachusetts (Zen, 1983), the uppermost geologic formation underlying the soils at the Site is a Silurian or Ordovician age Andover Granite consisting of light- to medium-gray, foliated, medium- to coarse-grained muscovite-biotite granite.

The Site topography slopes from the southwest toward the north-northeast. The majority of the lot is unpaved, with grassy areas with wooded areas in the southeastern portion and with a vernal pool and associated with wetlands located in the southeastern portion.

Information specific to the Site regarding the depth to groundwater and direction of groundwater flow was not available for the Site. However, according to topographic

interpretation and on-Site water features, depth to groundwater is anticipated between 10 to 20 feet below ground surface and flow is inferred to the north-northeast.

According to information obtained from the United States Department of Agriculture National Resources Conservation Service Web Soil Survey, soil at the Site is mapped as a mixture of Charlton-Hollis-Rock Outcrop complex, Rock Outcrop-Hollis complex, Montauk fine sandy loam, Paxton fine sandy loam, Scituate fine sandy loam, Paxton-Urban land complex and Udorthents-Urban land complex. The Charlton-Hollis-Rock Outcrop complex consists of well drained, fine sandy loam overlying sandy loam and gravelly sandy loam with slopes ranging from 15 to 25 percent. The Rock Outcrop-Hollis complex consists of well drained fine sandy loam overlying weathered bedrock. The Montauk complex consists of well drained moderately decomposed plant material overlying fine sandy loam, sandy loam and gravelly loamy sand with slopes ranging from zero to 15 percent. The Paxton complex consists of well drained moderately decomposed plant material overlying fine sandy loam and gravelly fine sandy loam with slopes ranging from zero to eight percent. The Scituate complex consists of well drained fine sandy loam overlying loamy fine sand and gravelly loamy sand with slopes ranging from three to eight percent. The Paxton-Urban land complex consists of well drained fine sandy loam overlying gravelly fine sandy loam with slopes ranging from three to 15 percent. The Udorthents-Urban land complex consists of excavated and filled land.

5.0 ADDITIONAL ENVIRONMENTAL CONSIDERATIONS

Section 12 of the ASTM Standard E 1527 discusses "Non-Scope Considerations" outside the scope of "appropriate inquiry" as defined by their ESA standard practice. That is, certain environmental issues or considerations may be present on-Site that may lead to contamination of the property or nearby properties but are not included in the CERCLA definition of hazardous substances nor otherwise present CERCLA liability.

Therefore, as a part of our assessment, *ECMS* addressed several additional issues beyond the scope of the ASTM "Standard Practice" as requested by our client. These additional issues included the following sections.

5.1 Radon

Radon is a colorless, odorless gas produced by the radioactive decay of uranium. The most common sources of radon are igneous and metamorphic rocks, containing uranium (e.g., pitchblende), granite, shale and phosphate, as well as soils/sediments derived from such "parent materials." Radon may also be found in soils contaminated with certain industrial wastes (e.g., uranium or phosphate mine tailings) or in earth-derived building products that contain such industrial wastes (bricks or concrete-containing phosphate slag).

Based upon information provided by the United States Environmental Protection Agency (USEPA), the predicted average indoor radon screening level in Middlesex County is greater than 4.0 Pico Curies per liter (pCi/L). The USEPA Action Level is 4.0 pCi/L for radon and Middlesex County has 26% of Sites with greater than 4.0 pCi/L. Site specific testing for radon would be necessary to determine that actual level at the Site.

Since there is no residential use on the property, radon was not deemed an environmental concern and was not tested.

5.2 Lead-Based Paint (LBP)

Based on the age of the Site building (1967), there is a potential that LBP is present. Painted surfaces appeared to be in good condition. Actual material samples would be required in order to determine if LBP is present.

5.3 Asbestos Containing Materials (ACMs)

Based on the age of the Site building (1967) and records provided by the BHD, ACM identified at the Site includes boiler gasket material, blue and gray transite siding, 12-inch by 12-inch floor tile and mastic, wall plaster in the cafeteria, gray tank insulation, breaching insulation, and fitting insulation in the boiler room.

5.4 Floodplain Management

According to the Flood Insurance Rate Map for the Site, Community Panel Numbers 25017C0289E and 25017C0293E dated June 4, 2010, the majority of the Site is located in Zone X, an area of minimal food hazard. One area on the southern portion of the Site (shown on CPN 25017C0293E) in the area classified as a vernal pond is located in Zone X, Other Flood Areas or an area of 0.2 percent Annual Chance Flood Hazard, Areas of 1 percent annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. Refer to Figure 8 for a copy of the National Flood Hazard Layer Firmette.

5.5 Coastal Barrier Resources

The Site is not located within an area considered to be a Coastal Barrier Resource.

5.6 Coastal Zone Management

The Site is not located within an area designated as a Coastal Zone.

5.7 Sole Source Aquifers

The Site is not located within an area classified as a Sole Source Aquifer.

5.8 Airport Clear Zones

The Site is not located within an Airport Clear Zone.

5.9 Regulatory Compliance

ECMS performed a cursory compliance review of site operations for potential areas of noncompliance. Based upon a review of available records and current site operations, *ECMS* did not identify required environmental permits and/or violations. It should be noted that the cursory review conducted is not intended to be a compliance audit or compliance statement.

5.10 Off-site Soil Disposal Sampling Requirements

If off-site disposal of soil is necessary, samples should be analyzed in accordance with the receiving facility's testing requirements. The number of analyses is typically dictated by the total weight or volume of the material to be disposed of, generally one sample for every 500 cubic yards is required. To date, no soil samples have been collected by *ECMS* in an effort to precharacterize site soil and are representative of the anticipated quantity to be excavated. Soil samples should be collected as necessary.

The minimum laboratory analysis of soil samples suspected of being contaminated shall be as follows in accordance with MassDEP Policy# COMM 97-001, Reuse and Disposal of Contaminated Soil at Massachusetts Landfills:

VOCs by EPA Method 8260
SVOCs (polyaromatic hydrocarbons fraction only) by EPA Method 8270
Total Organic Halogen (TOX) by EPA Method 9020B
Total RCRA-8 Metals by EPA Method 6010
PCBs by EPA Method 8082

Additional laboratory analysis required by soil disposal or recycling facilities may also include:

flashpoint/ignitability
corrosivity
reactive cyanide and sulfate
Toxicity Characteristic Leaching Procedure (TCLP)
Asbestos (if suspect materials are observed)

6.0 CONCLUSIONS AND RECOMMENDATIONS

ECMS has performed this environmental assessment in conformance with the scope and limitations of the ASTM Standard Practice for Environmental Site Assessment: Phase I Environmental Site Assessment Process Document E-1527-13. The ASTM Phase I Site Assessment Standard (ASTM E1527-13) has been updated to the requirements of EPA's All Appropriate Inquiry (AAI) Final Rule (effective as of November 1, 2006). *ECMS* has performed this environmental assessment for the Fox Hill Elementary School at 252 Fox Hill Road in Burlington, Massachusetts. Any exceptions to or deletions from this practice are described in Section 1.3 entitled *Limitations and Exceptions of Assessment.* This assessment has revealed the following:

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

- *ECMS* did not identify a *REC* during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- *ECMS* did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- *ECMS* did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by *ECMS*, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Two underground storage tanks (USTs) were removed from the Site including one (1) 500-gallon capacity diesel fuel UST removed on April 23, 1997 and one (1) 8,000-gallon capacity fuel oil UST removed on July 19, 1999. Based on a review of closure documents provided by the Burlington Health Department (BHD), no residual

impacts to soil remained in tank graves and no impacts to groundwater were noted during the UST removals. Based on the lack of impacts to soil or groundwater at the Site, the former USTs do not represent a REC or VEC for the Site.

- Based on the age of the Site building (1967) and records provided by the BHD, ACM identified at the Site includes boiler gasket material, blue and gray transite siding, 12-inch by 12-inch floor tile and mastic, wall plaster in the cafeteria, gray tank insulation, breaching insulation, and fitting insulation in the boiler room.

- Due to the age of the Site building, there is a potential that LBP are present. Overall, painted surfaces were observed in good condition.

Conclusions, Opinions and Recommendations

ECMS has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of the Fox Hill Elementary School at 252 Fox Hill Road in Burlington, Middlesex County, Burlington, Massachusetts (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of RECs in connection with the subject property; however, environmental issues in connection with the subject property were identified. Based on the conclusions of this assessment, *ECMS* recommends the following:

- *ECMS* recommends an Operations and Maintenance (O&M) Program be implemented in order to safely manage suspect LBP located at the subject property.

- *ECMS* recommends continued maintenance and inspections of ACM present in the Site building in accordance with the O&M Plan and AHERA regulations. If renovation and/or demolition are to occur at the site, *ECMS* recommends a comprehensive asbestos assessment be performed in accordance with the requirements of 310 CMR 7.15 and 454 CMR 28.

- If off-site disposal of soil is necessary, samples should be analyzed in accordance with the receiving facility's testing requirements. The number of analyses is typically dictated by the total weight or volume of the material to be disposed of, generally one sample for every 500 cubic yards is required. To date, no soil samples have been collected by *ECMS* in an effort to precharacterize site soil and are representative of the anticipated quantity to be excavated. Soil samples should be collected as necessary.

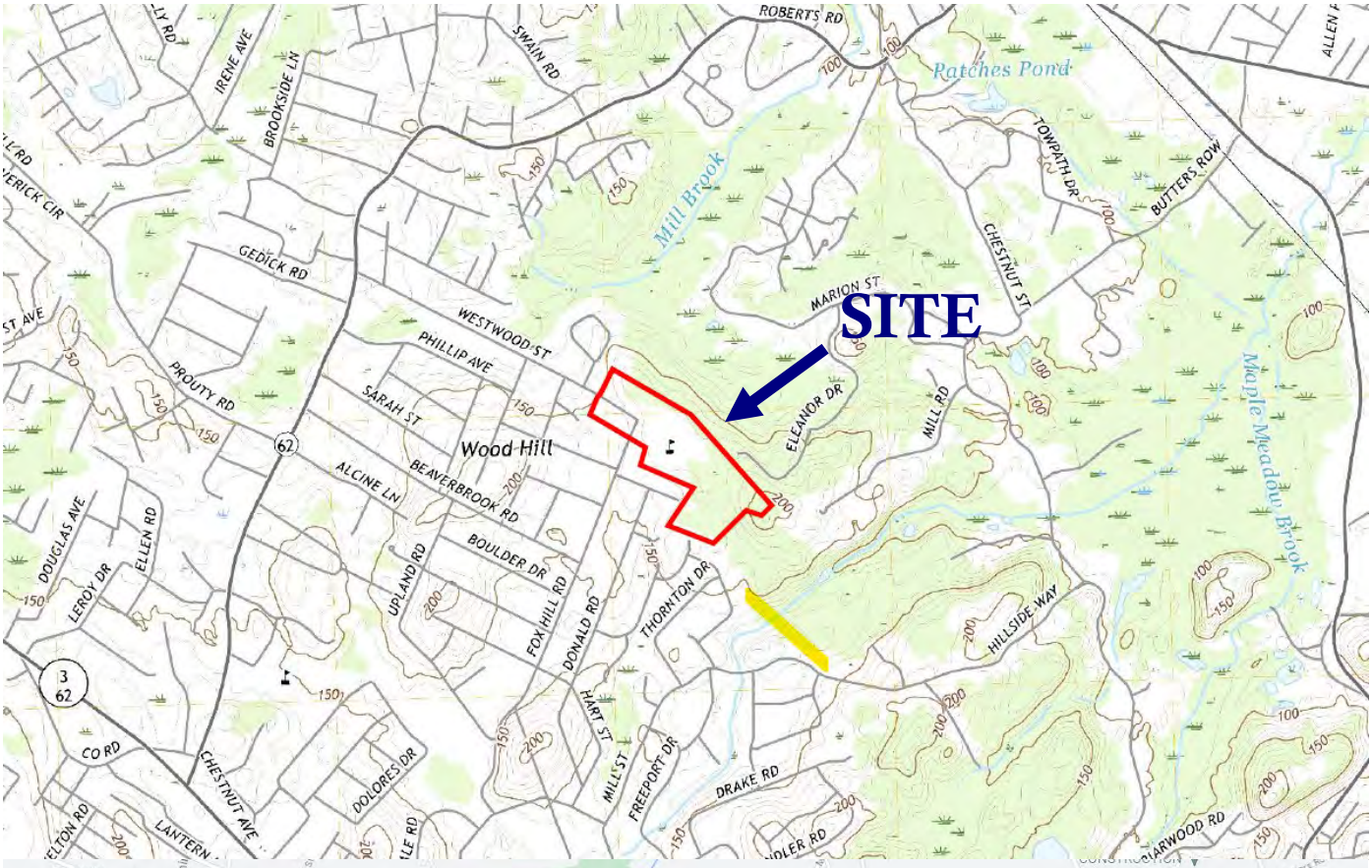
  The minimum laboratory analysis of soil samples suspected of being contaminated shall be as follows in accordance with MassDEP Policy# COMM 97-001, Reuse and Disposal of Contaminated Soil at Massachusetts Landfills:

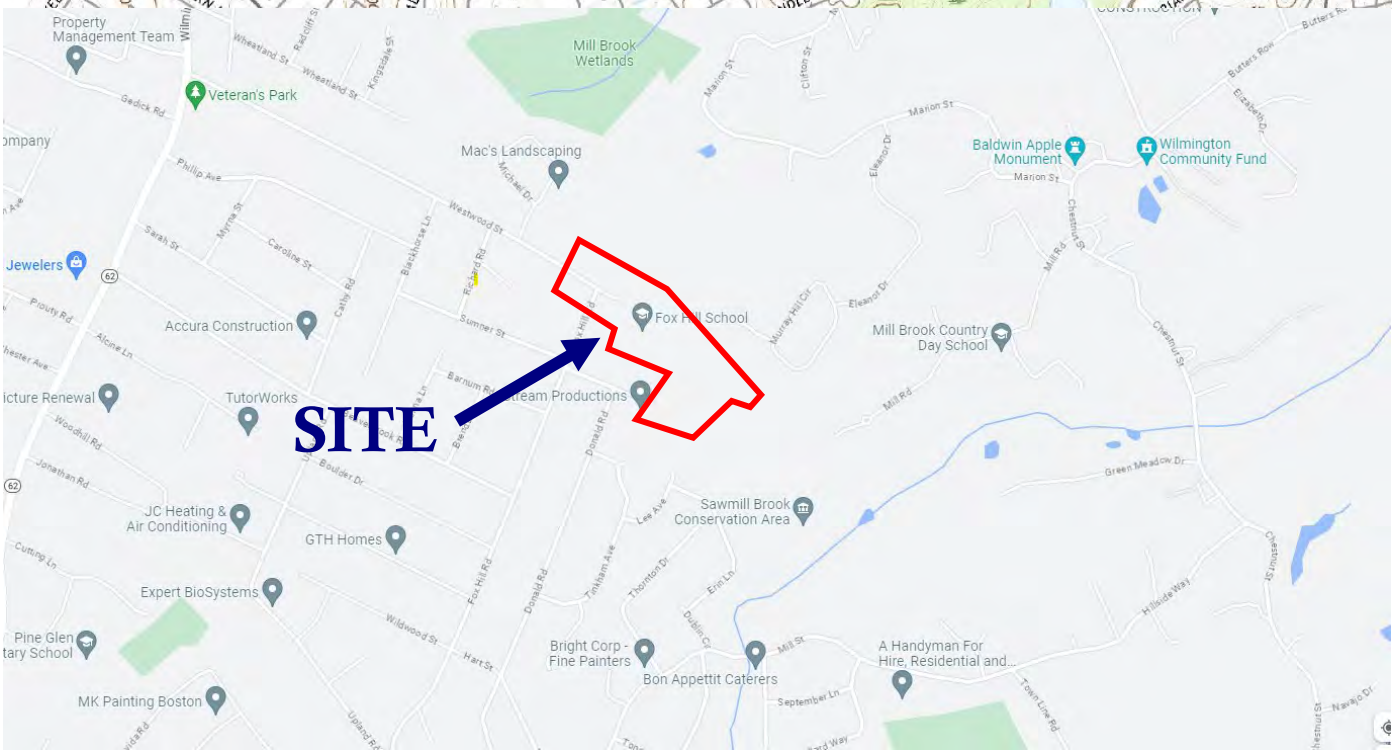
- Volatile VOCs by EPA Method 8260
- SVOCs (polyaromatic hydrocarbons fraction only) by EPA Method 8270
- Total Organic Halogen (TOX) by EPA Method 9020B
- Total RCRA-8 Metals by EPA Method 6010
- PCBs by EPA Method 8082

Additional laboratory analysis required by soil disposal or recycling facilities may also include:

- flashpoint/ignitability
- corrosivity
- reactive cyanide and sulfate
- Toxicity Characteristic Leaching Procedure (TCLP)
- Asbestos (if suspect materials are observed)

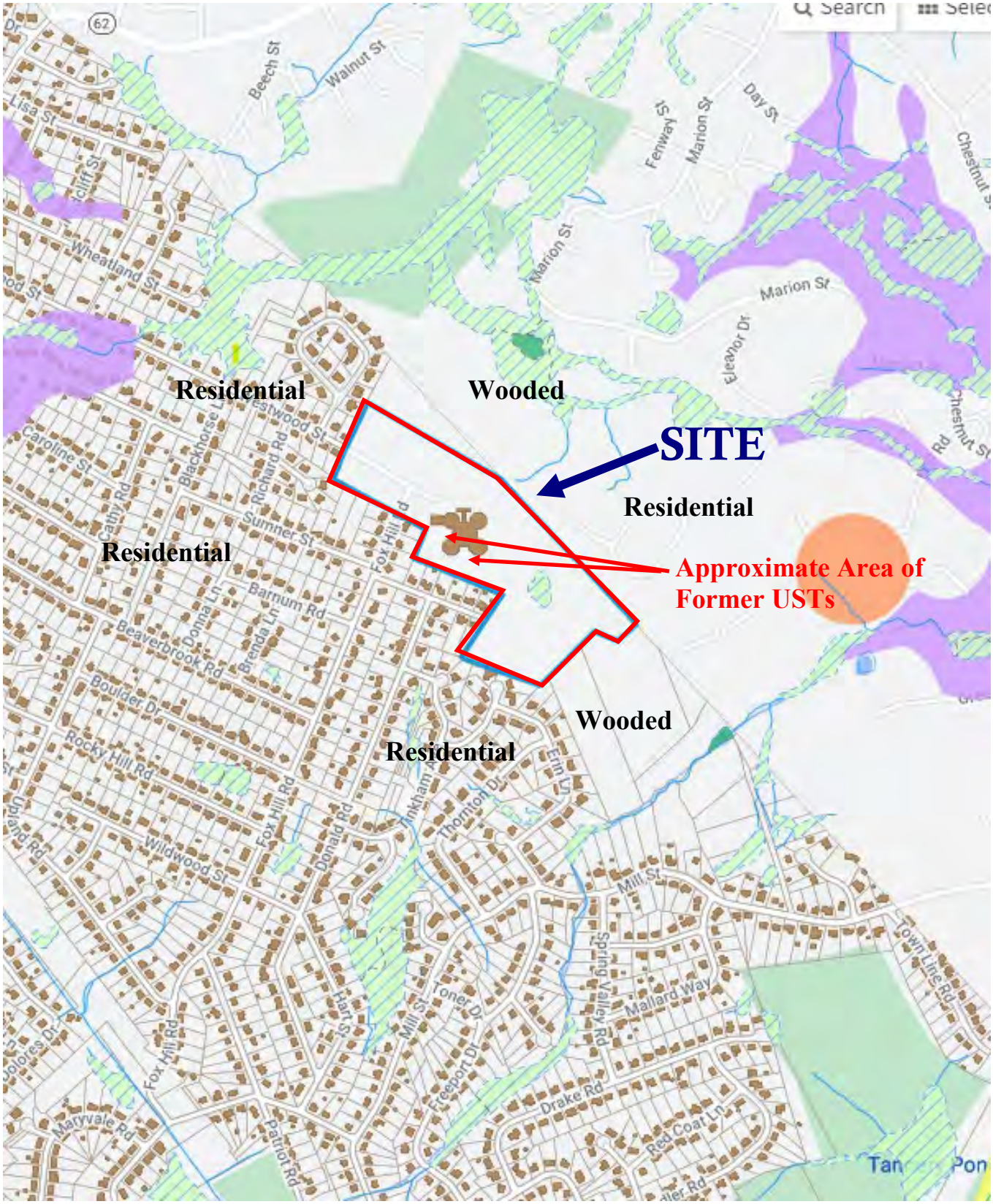
FIGURES





Fox Hill Elementary School **252 Fox Hill Road** **Burlington, Massachusetts** **01803**	**Environmental & Construction Management Services, Inc.**	**Project No.** 1009.077	**Figure 1**
		Site Locus / Street Location Plan	
		Drawn By: CAC	**Date:** 4/18/23

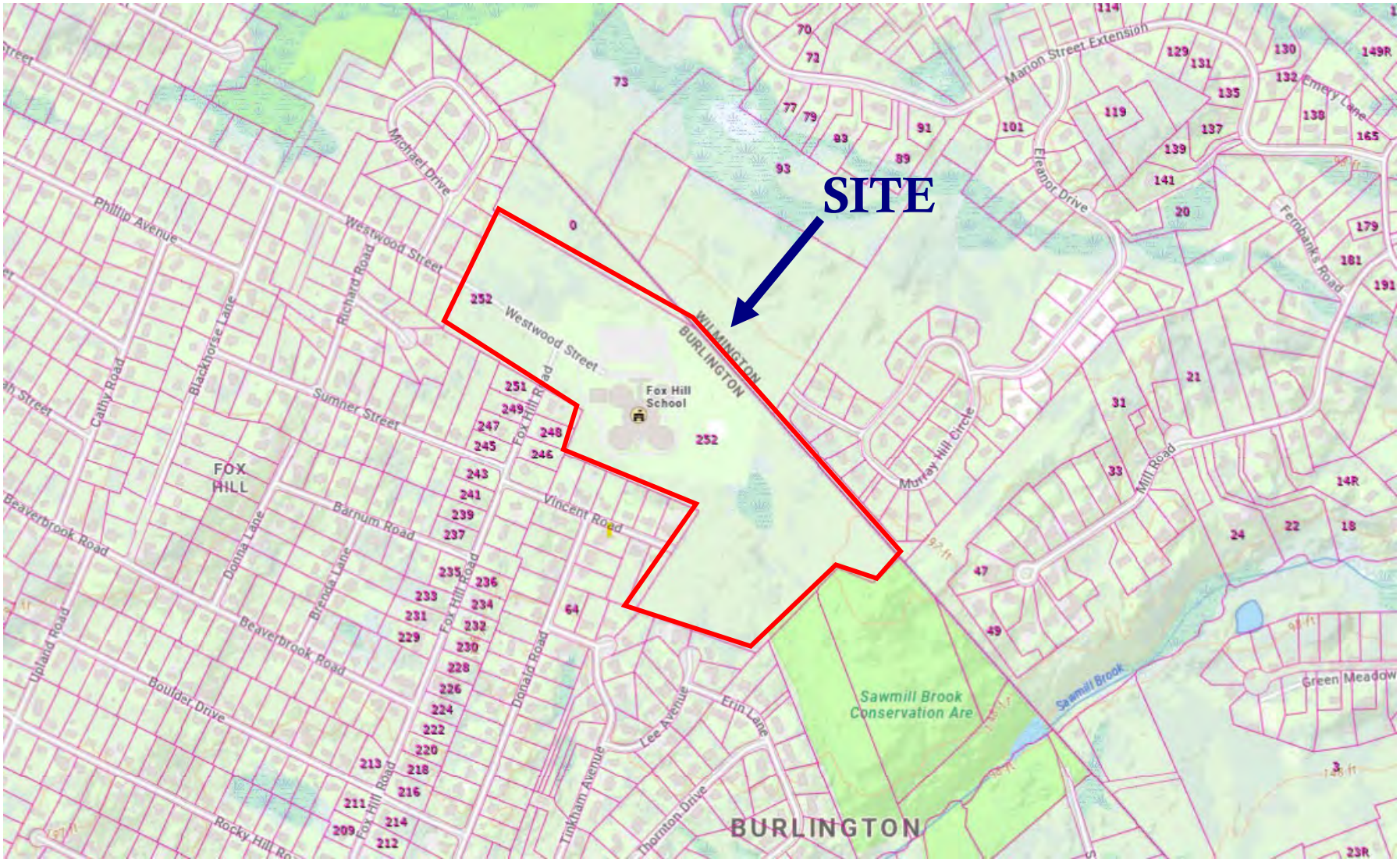
N



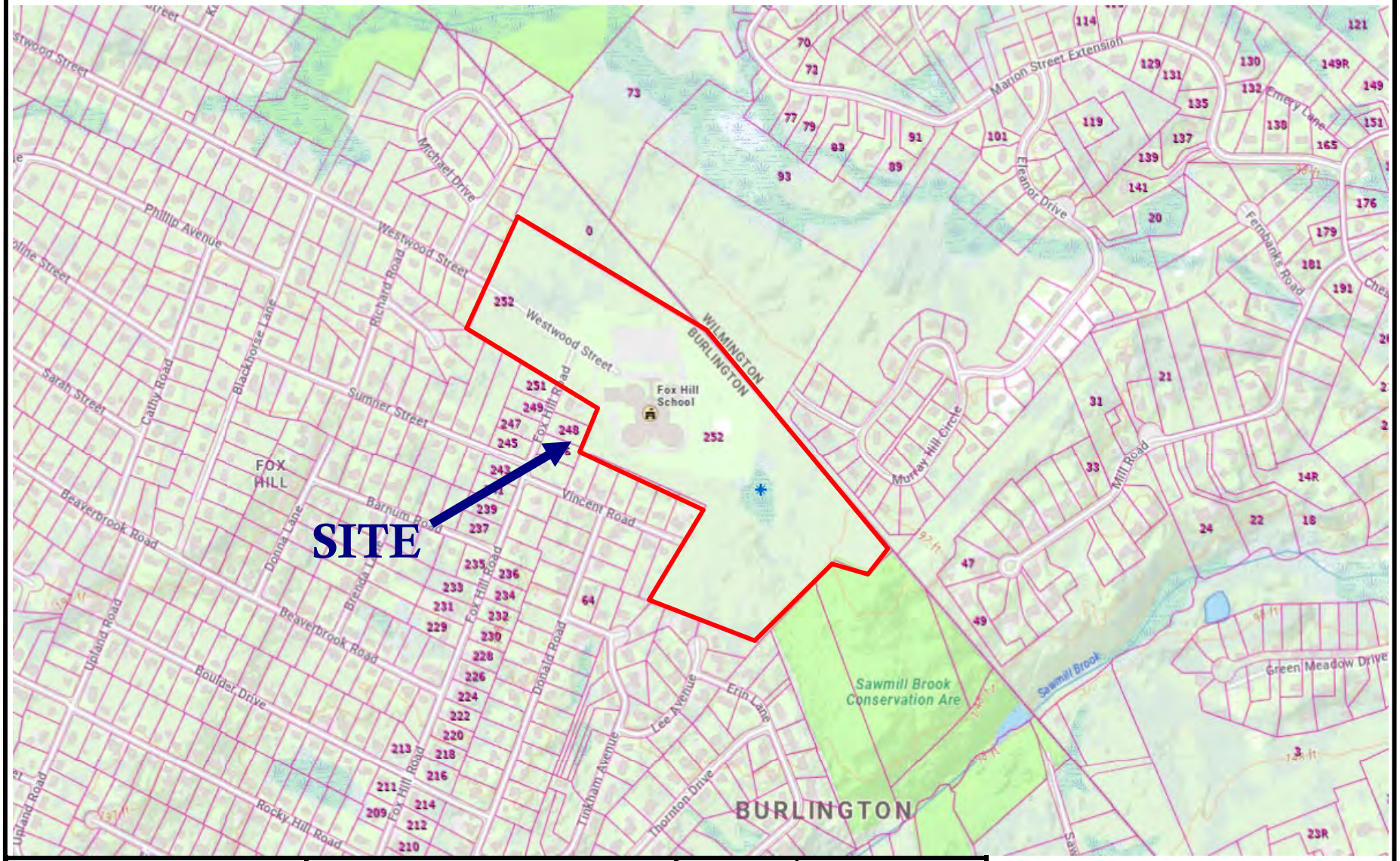
Fox Hill Elementary School **252 Fox Hill Road** **Burlington, Massachusetts** **01803**	**Environmental & Construction Management Services, Inc.**	**Project No.** 1009.077	**Figure 2**
		Lot Location Plan	
		Drawn By: CAC	**Date:** 4/18/23

N

Fox Hill Elementary School **252 Fox Hill Road** **Burlington, Massachusetts** **01803**	**Environmental & Construction Management Services, Inc.**	**Project No.** 1009.077	**Figure 3**	**N**
		Aerial Photograph Site Location Plan		
		Drawn By: CAC	**Date:** 9/20/20	



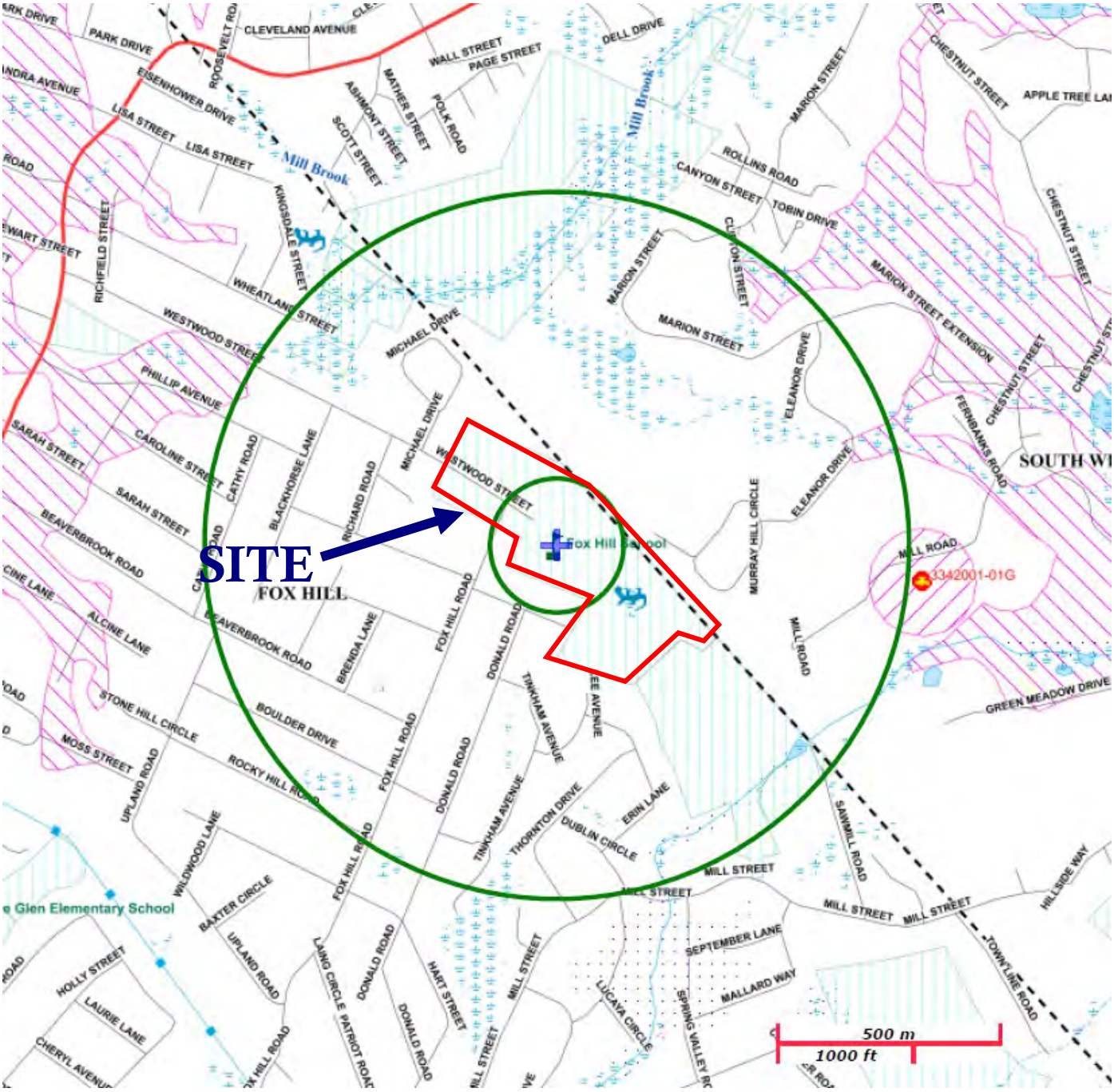
Fox Hill Elementary School **252 Fox Hill Road** **Burlington, Massachusetts** **01803**	**Environmental & Construction Management Services, Inc.**	**Project No.** 1009.077	**Figure 4**
		Priority Habitats of Rare Species Plan	
		Drawn By: CAC	**Date:** 4/18/2023



Fox Hill Elementary School
252 Fox Hill Road
Burlington, Massachusetts
01803

Environmental & Construction Management Services, Inc.

Project No.	Figure 5
1009.077	
Map of Estimated Habitats of Rare Wildlife and Certified Vernal Pools	
Drawn By: CAC	Date: 4/18/2023



Fox Hill Elementary School 252 Fox Hill Road Burlington, Massachusetts 01803	Environmental & Construction Management Services, Inc.	Project No. 1009.077	Figure 6
		Priority Resource Map	
		Drawn By: CAC	Date: 4/18/23

N

William A. Welch, Sr. Elementary School **50 Swampscott Avenue** **Peabody, Massachusetts** **01960**	**Environmental & Construction Management Services, Inc.**	**Project No.** 1318.001	**Figure 6**	**N**
		Wetland Location Map		
		Drawn By: CAC	**Date:** 9/20/20	

Fox Hill Elementary School 252 Fox Hill Road Burlington, Massachusetts 01803	Environmental & Construction Management Services, Inc.	Project No. 1009.077	**Figure 8**	N
		National Flood Hazard Firmette		
		Drawn By: CAC	Date: 4/18/23	

APPENDIX A

INFORMATION/RESEARCH SOURCES & HISTORICAL DOCUMENTATION

RESEARCH/INFORMATION SOURCES

Environmental Data Resources, Inc. (EDR) Radius Report with GeoCheck for Target Property in Burlington, Massachusetts, March 31, 2023.

EDR Certified Sanborn Map Report for Target Property in Burlington, Massachusetts, March 31, 2023.

EDR Certified Topographic Map Report for Target Property in Burlington, Massachusetts, March 31, 2023.

EDR Aerial Photographs for Target Property in Burlington, Massachusetts, March 31, 2023.

EDR Vapor Encroachment report for Target Property in Burlington, Massachusetts, April 18, 2023.

Town of Burlington Assessor's Office on-line database records.

Town of Burlington Health Department on April 12, 2023.

Town of Burlington Fire Department/Fire Prevention records on April 7, 2023, no response.

Town of Burlington Conservation Commission on April 7, 2023, no pertinent files.

Town of Burlington Clerk's Office on April 7, 2023, no pertinent files.

Town of Burlington Building Department on April 12, 2023.

Zen, E-an (1983) Bedrock Geology Map of Massachusetts, compiled by Richard Goldsmith, Nicholas M. Ratcliffe, Peter Robinson, and Rolfe S. Stanley and assisted by Norman L. Hatch, Jr., Andrew F. Shride, Elaine G.A. Weed, and David R. Wones, prepared in cooperation with the Commonwealth of Massachusetts, Department of Public Works, and Joseph A. Sinnott, State Geologist, scale 1:250,000.

SEWAGE DISPOSAL SYSTEM PROFILE
SUMNER
FOX HILL ROAD
INV 148.7'
RUBBER WATERSTOP
EXISTING WATER
EXISTING FIRE HYDRANT
CONNECT TO EXIST. WATER LINE
PROPERTY LINE
CONC THRUST BLOCK
CATCH BASIN
RIM ELEV. 149.0
INV. ELEV. 146.0
FIRE HYDRANT
GATE VALVE & CURB BOX
BURIED DIESEL OIL STORAGE TANK
BURIED FUEL STORAGE TANK- 8320 GAL CAP
BOILER ROOM
TRANSITE
PLUGGED TEE
CONCRETE THRUST BLOCK
MANHOLE
RIM ELEV. 150.0'
INV. ELEV. 150.20'
MANHOLE
RIM ELEV. 150.0
INV. ELEV. 150.5
SIPHON CHAMBER
INLET INV. 148.45'
OUTLET INV. 144.62'
SEPTIC TANK
INLET INV. 148.7'
OUTLET INV. 148.5'
FIRE HYD
GATE VALVE & CURB BOX
PERCOLATION TEST HOLES
DISTRIBUTION BOXES (OUTLETS 143.52)
RIM ELEV.
4" TIGHT JOINT PIPE (TYP)
INV. 144.44' (TYP)
INV. 150.0'
HEADWALL
9" VENT- REFER TO DETAIL
4"Φ HEADERS
DO NOT EXCAVATE AREA BETWEEN BEDS
GROUT
4"Φ STEEL PIPE WELDED JOINT PAINTED
NOTE: MANHOLES ON SEWAGE DISPOSAL INSTALLATION SHALL EXTEND TO FIN GR.
UTILITY

PERMIT FOR OCCUPANCY

Date Feb 24, 1967

Name Town of Burlington

Address 705 Hill Rd

Type of Occupancy Public Schools

2-24-67

I am withholding approval of the steam table until further inspection.

M. Nicholson
Plumbing Inspector.

Permit for Occupancy

Date April 4, 1967

Name Elementary School

Address Fox Hill Rd.

Type of Occupancy School.

Application # 14465 Date SEP 11 1989

Address: Fox Hill Rd

Builder or Owner Fox Hill School

Description remove asbestos Cost $ 185.00

Permit fee N.C.

Lot # ..... on ..... has been approved for sewer installation subject to rules and regulations of the Burlington Board of Health.

9091

Application # ..... Date June 3,1981

Address: Fox Hill Road

Builder or Owner Fox Hill School

Description Reroof Cost $ 172,000

Permit fee N.C.

Lot # ..... on ..... has been approved for sewer installation subject to rules and regulations of the Burlington Board of Health.

VINCENT F. HOWARD
General Agent

Application # 736 Date Feb. 4 1966

Address: Fox Hill Road North end Fox Hill School

Builder or Owner Peter Spinelle

Description elementary school #5 Cost $ 1,178,844.00

Permit fee 1,179.00

Lot # for School on Westwood St. has been approved for septic tank installation, subject to rules and regulations of the Burlington Board of Health.

2-4-66 VINCENT F. HOWARD,
General Agent

252 FOX HILL RD **EP-2016-0822**

GIS #:	1182
Map:	9
Block:	47
Lot:	0
Permit:	Electrical
Category:	Appliance Replacement
Permit #	EP-2016-0822
Project #	JS-2016-001173
Est. Cost:	$4,000.00
Fee Charged:	
Balance Due:	
# of Fixtures:	
Pole #	
Service:	
Amps:	
Volts:	
# of Meters:	
SRE #	

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

ELECTRICAL PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: Shimmel Electric Co Inc ***License:*** Electrical - 28146 ***Expires:***

Owner: TOWN OF BURLINGTON, FOX HILL SCHOOL

Applicant: Shimmel Electric Co Inc

AT: 252 FOX HILL RD

ISSUED ON: 06-Oct-2016 ***AMENDED ON:*** ***EXPIRES ON:***

TO PERFORM THE FOLLOWING WORK:

generator replacement/mechanical room

THIS PERMIT MAY BE REVOKED BY THE TOWN OF BURLINGTON UPON VIOLATION OF ANY OF ITS RULES AND REGULATIONS.

Call Jim McDonough, Wiring Inspector at 781-270-1753 to schedule all required inspections.

Rough OK_____ Above Ceiling _____ Final OK 7/25/17 N-Star _____

Signature: _____

Commonwealth of Massachusetts
Department of Fire Services
BOARD OF FIRE PREVENTION REGULATIONS

Date: _____
(Rev 08/2014)

APPLICATION FOR PERMIT TO PERFORM ELECTRICAL WORK

All work to be performed in accordance with the Massachusetts Electrical Code (MEC), 527 CMR 12.00

TOWN OF BURLINGTON- 25 Center St., Burlington MA 01803 Phone 781-270-1753 Fax 781-238-4667

RECEIVED OCT -6 2016 BURLINGTON BUILDING DEPARTMENT

By this application the undersigned gives notice of his or her intention to perform the electrical work described below.

Location (Street & Number) 1 Fox hill rd Floor/Space No. _____

Owner or Tenant Town of Burlington Telephone No. _____

Owner's Address SAME

Is this permit in conjunction with a building permit? Yes ☐ No ☑ EVERSOURCE Phone No. 888-633-3797

Purpose of Building School Utility Authorization No. _____

Existing Service _____ Amps / Volts Overhead ☐ Undgrd ☑ No. of Meters 1

New Service _____ Amps / Volts Overhead ☐ Undgrd ☐ No. of Meters _____

Number of Feeders and Ampacity _____

Location and Nature of Proposed Electrical Work: Generator replacement, mechanical room

No. of Recessed Luminaires	No. of Ceil.-Susp. (Paddle) Fans	No. of Transformers Total KVA
No. of Luminaire Outlets	No. of Hot Tubs	Generators 45 KVA
No. of Luminaires	Swimming Pool Above grnd. ☐ In-grnd. ☐	No. of Emergency Lighting Battery Units
No. of Receptacle Outlets 1	No. of Oil Burners	FIRE ALARMS No. of Zones
No. of Switches	No. of Gas Burners	No. of Detection and Initiating Devices
No. of Ranges	No. of Air Cond. Total Tons	No. of Alerting Devices
No. of Waste Disposers	Heat Pump Totals: Number Tons KW	No. of Self-Contained Detection/Alerting Devices
No. of Dishwashers	Space/Area Heating KW	Local ☐ Municipal Connection ☐ Other
No. of Dryers	Heating Appliances KW	Security Systems:* No. of Devices or Equivalent
No. of Water Heaters KW	No. of Signs No. of Ballasts	Data Wiring: No. of Devices or Equivalent
No. Hydromassage Bathtubs	No. of Motors Total HP	Telecommunications Wiring: No. of Devices or Equivalent
OTHER:		

ESTIMATED VALUE OF ELECTRICAL WORK: 4000.00 (MUST BE FILLED IN)

Work to start 9-29-16 INSPECTIONS TO BE REQUESTED IN ACCORDANCE WITH MEC RULE 10, AND UPON COMPLETION

INSURANCE COVERAGE: Unless waived by the owner, no permit for the performance of electrical work may issue unless the licensee provides proof of liability insurance including "completed operation" coverage or its substantial equivalent. The undersigned certifies that such coverage is in force, and has exhibited proof of same to the permit issuing office.

MUST PROVIDE CERTIFICATE OF INSURANCE FOR WORKER'S COMP AND LIABILITY INSURANCE

I certify, under the pains and penalties of perjury, that the information on this application is true and complete.

EMAIL: _____

FIRM NAME: Dan LIC. NO.: _____

Licensee: Dan Shimmel Signature: [signature] LIC. NO. 28146

Bus. Tel. No.: _____

ADDRESS: P.O. Box 394 Burlington, MA 01803 Cell Tel. No. 781-985-0906

*Per MGL c147, s57-61, security work requires Department of Public Safety "S" License: LIC. No.: _____

OWNER'S INSURANCE WAIVER: I am aware that the Licensee *does not have* the liability insurance coverage normally required by law. By my signature below, I hereby waive this requirement. I am the (check one) ☐ owner ☐ owner's agent.

Owner/Agent Signature _____ Telephone No. _____

PERMIT FEE: $ n.c.

FEE SCHEDULE BASED ON ESTIMATED VALUE OF WORK $10 PER $1000. NEW CONSTRUCTION $25 MINIMUM INCLUDES NEW TENANT SPACE, LOW VOLTAGE, REINSPECTION. EXISTING BUILDINGS $20 MINIMUM INCLUDES ELECTRICAL BOXES, SERVICE CHANGE, APPLIANCE REPLACEMENTS, SIGNS, and POOLS.

252 FOX HILL RD

39107

GIS#:	1182
Map:	9
Block:	47
Lot:	0
Category:	Commercial Alteration
Permit #	39107
Project #	JS-2017-000652
Est. Cost:	$18,000.00
Fee Charged:	
Balance Due:	
Const. Class:	5B
Use Group:	E
Lot Size(sq. ft.):	1650924
Zoning:	RO
Units Gained:	
Units Lost:	
Occupany Load:	
Dig Safe #:	

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

BUILDING PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: Town of Burlington - Facilities

License: Construction Supervisor - 45251

Owner: TOWN OF BURLINGTON, FOX HILL SCHOOL

Applicant: Town of Burlington - Facilities

AT: 252 FOX HILL RD

Subdivision:

ISSUED ON: 20-Jun-2017 ***AMENDED ON:*** ***EXPIRES ON:***

TO PERFORM THE FOLLOWING WORK:

Install vinyl siding to portable classrooms and replace skirting with louverd vinyl

Electric:	Gas:	Plumbing:	Building:
Underground:	Underground:	Underground:	Excavation:
Service:	Meter:		Footings:
Rough:	Rough:	Rough:	Foundation:
Final:	Final:	Final:	Rough Frame:
Sheet Metal:	Fire:	Health:	Fireplace/Chimney:
Rough:	Oil:		Insulation:
Insulation:	Smoke:		Sheet Metal:
Above Ceiling:	Alarm:		Above Ceiling:
Final:	Sprinklers:		Final:

Call 781-273-7674 for all required inspections the day before the inspection is needed. Persons contracting with unregistered contractors do not have access to the guaranty fund (as set forth in MGL c. 142A).

Signature: **Date**

252 FOX HILL RD FOX HILL ELEMENTARY SCH

GP-2016-0188

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

GAS PERMIT

GIS #:	1182
Map:	9
Block:	47
Lot:	0
Permit:	Gas
Category:	Appliance Replacement
Permit #	GP-2016-0188
Project #	JS-2016-000769
Est. Cost:	
Fee Charged:	$45.00
Balance Due:	$.00
# of Fixtures:	

PERMISSION IS HEREBY GRANTED TO:

Contractor: Brandano P&H

License: Master Plumber - 12306

Expires:

Owner: TOWN OF BURLINGTON, FOX HILL SCHOOL

Applicant: Brandano P&H

AT: 252 FOX HILL RD FOX HILL ELEMENTARY SCHOOL

ISSUED ON: 11-Jul-2016

AMENDED ON:

EXPIRES ON:

ROUGH GAS INSPECTION NOTES

FEE: $

THIS APPLICATION SERVES AS THE PERMIT

Yes ☐ No ☐

THIS PAGE FOR INSPECTOR USE ONLY

PLAN REVIEW NOTES

PERMIT #

TO PERFORM THE FOLLOWING WORK:

install gas boiler

THIS PERMIT MAY BE REVOKED BY THE TOWN OF BURLINGTON UPON VIOLATION OF ANY OF ITS RULES AND REGULATIONS.

Call 781-270-1618 or 781-273-7674 for all required inspections. Rough inspections require the plumber on site w/current edition of 248 CMR The MA Fuel Gas & Plumbing Code.

Underground OK _____ Rough OK _____ Final OK _____

Signature: _____

Fittings:

Floor:	Type:	# of Fittings	Floor:	Type:	# of Fittings

Fee Type:	Receipt No:	Date Paid:	Check No:	Amount:
GAS08	REC-2016-001693	11-Jul-16	7244	$45.00

FINAL INSPECTION NOTES

Town Hall Annex - 25 Center Street, Phone:(781) 273-7674, Fax:(781) 238-4667, Email:building@burlington.org

GeoTMS® 2016, an ACCELA Company

EAJP:eia

#252

MASSACHUSETTS UNIFORM APPLICATION FOR A PERMIT TO PERFORM GAS FITTING WORK

G

TYPE OR PRINT CLEARLY

CITY BURLINGTON MA DATE 6-30-16 PERMIT # 12306

JOBSITE ADDRESS FOX HILL RD OWNER'S NAME FOX HILL ELEMENTARY SCHOOL

OWNER ADDRESS FOX HILL RD BURLINGTON MA TEL 781-270-1741 FAX

OCCUPANCY TYPE COMMERCIAL ☐ EDUCATIONAL ☒ RESIDENTIAL ☐

PLANS SUBMITTED: YES ☐ NO ☒

NEW: ☐ RENOVATION: ☐ REPLACEMENT: ☒

APPLIANCES ↓ FLOORS→	BSM	1	2	3	4	5	6	7	8	9	10	11	12	13	14
BOILER		1													
BOOSTER															
CONVERSION BURNER															
COOK STOVE															
DIRECT VENT HEATER															
DRYER															
FIREPLACE															
FRYOLATOR															
FURNACE															
GENERATOR															
GRILLE															
INFRARED HEATER															
LABORATORY COCKS															
MAKEUP AIR UNIT															
OVEN															
POOL HEATER															
ROOM / SPACE HEATER															
ROOF TOP UNIT															
TEST															
UNIT HEATER															
UNVENTED ROOM HEATER															
WATER HEATER															
OTHER															

PAID JUL 11 2016 72445

INSURANCE COVERAGE

I have a current liability insurance policy or its substantial equivalent which meets the requirements of MGL. Ch. 142 YES ☐ NO ☐

IF YOU CHECKED YES, PLEASE INDICATE THE TYPE OF COVERAGE BY CHECKING THE APPROPRIATE BOX BELOW

LIABILITY INSURANCE POLICY ☒ OTHER TYPE INDEMNITY ☐ BOND ☐

OWNER'S INSURANCE WAIVER: I am aware that the licensee does not have the insurance coverage required by Chapter 142 of the Massachusetts General Laws, and that my signature on this permit application waives this requirement.

CHECK ONE ONLY: OWNER ☐ AGENT ☐

SIGNATURE OF OWNER OR AGENT

I hereby certify that all of the details and information I have submitted or entered regarding this application are true and accurate to the best of my knowledge and that all plumbing work and installations performed under the permit issued for this application will be in compliance with all Pertinent provision of the Massachusetts State Plumbing Code and Chapter 142 of the General Laws.

PLUMBER-GASFITTER NAME MICHAEL J. BRANDANO LICENSE # 12306 SIGNATURE

MP ☒ MGF ☐ JP ☐ JGF ☐ LPGI ☐ CORPORATION ☐ # PARTNERSHIP ☐ # LLC ☐ #

COMPANY NAME BRANDANO PLUMBING & HEATING ADDRESS 65R CLINTON ST

CITY MALDEN STATE MA ZIP 02148 TEL 781-324-7772

FAX 781-324-1415 CELL 781-727-1166 EMAIL BRANDANOPLUMBING@HOTMAIL.COM

252 FOX HILL RD FOX HILL SCHOOL

GP-2016-0099

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

GIS #:	1182
Map:	9
Block:	47
Lot:	0
Permit:	Gas
Category:	New Appliance
Permit #	GP-2016-0099
Project #	JS-2016-000387
Est. Cost:	
Fee Charged:	$45.00
Balance Due:	$.00
# of Fixtures	

GAS PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: Gedick Bros Inc

License: Master Plumber - 12752

Expires:

Owner: TOWN OF BURLINGTON, FOX HILL SCHOOL

Applicant: Gedick Bros Inc

AT: 252 FOX HILL RD FOX HILL SCHOOL

ISSUED ON: 14-Apr-2016

AMENDED ON:

EXPIRES ON:

TO PERFORM THE FOLLOWING WORK:

install gas generator

THIS PERMIT MAY BE REVOKED BY THE TOWN OF BURLINGTON UPON VIOLATION OF ANY OF ITS RULES AND REGULATIONS.

Call 781-270-1618 or 781-273-7674 for all required inspections. Rough inspections require the plumber on site w/current edition of 248 CMR The MA Fuel Gas & Plumbing Code.

Underground OK _____ Rough OK _____ Final OK _____

Signature: _____

Fittings:

Floor:	Type:	# of Fittings	Floor:	Type:	# of Fittings

Fee Type:	Receipt No:	Date Paid:	Check No:	Amount:
GAS08	REC-2016-000921	14-Apr-16	####	$45.00

MASSACHUSETTS UNIFORM APPLICATION FOR A PERMIT TO PERFORM GAS FITTING WORK

G

TYPE OR PRINT CLEARLY

CITY TOWN OF BURLINGTON MA DATE 4/13/16 PERMIT #

JOBSITE ADDRESS Foxhill Rd. (school) OWNER'S NAME TOWN OF BURLINGTON

OWNER ADDRESS TEL FAX

OCCUPANCY TYPE COMMERCIAL EDUCATIONAL ✓ RESIDENTIAL

NEW: RENOVATION: REPLACEMENT: PLANS SUBMITTED: YES NO

APPLIANCES ↓ FLOORS→	BSM	1	2	3	4	5	6	7	8	9	10	11	12	13	14
BOILER															
BOOSTER															
CONVERSION BURNER															
COOK STOVE															
DIRECT VENT HEATER															
DRYER															
FIREPLACE															
FRYOLATOR															
FURNACE															
GENERATOR		1													
GRILLE															
INFRARED HEATER															
LABORATORY COCKS															
MAKEUP AIR UNIT															
OVEN															
POOL HEATER															
ROOM / SPACE HEATER															
ROOF TOP UNIT															
TEST															
UNIT HEATER															
UNVENTED ROOM HEATER															
WATER HEATER															
OTHER															

FEE SCHEDULE
$45 Minimum for 1st three (3) fixtures plus $15 for each add'l fixture/appliance /device
Reinspection Fee: $45

INSURANCE COVERAGE

I have a current liability insurance policy or its substantial equivalent which meets the requirements of MGL. Ch. 142 YES ✓ NO

IF YOU CHECKED YES, PLEASE INDICATE THE TYPE OF COVERAGE BY CHECKING THE APPROPRIATE BOX BELOW

LIABILITY INSURANCE POLICY ✓ OTHER TYPE INDEMNITY BOND

OWNER'S INSURANCE WAIVER: I am aware that the licensee does not have the insurance coverage required by Chapter 142 of the Massachusetts General Laws, and that my signature on this permit application waives this requirement.

CHECK ONE ONLY: OWNER AGENT

SIGNATURE OF OWNER OR AGENT

I hereby certify that all of the details and information I have submitted or entered regarding this application are true and accurate to the best of my knowledge and that all plumbing work and installations performed under the permit issued for this application will be in compliance with all Pertinent provision of the Massachusetts State Plumbing Code and Chapter 142 of the General Laws.

PLUMBER-GASFITTER NAME PAUL GEDECK LICENSE # 12752 SIGNATURE

MP ✓ MGF JP JGF LPGI CORPORATION # 3001 PARTNERSHIP # LLC #

COMPANY NAME: GEDECK BROS ADDRESS PO BOX 356

CITY BURLINGTON STATE MA ZIP 01803 TEL 272-2277

FAX CELL EMAIL

252 FOX HILL RD Fox Hill School, Roof

36592

GIS#:	1182
Map:	9
Block:	47
Lot:	0
Category:	Commercial Alteration
Permit #	36592
Project #	JS-2015-000640
Est. Cost:	$881,200.00
Fee Charged:	
Balance Due:	
Const. Class:	2B
Use Group:	E
Lot Size(sq. ft.):	1650924
Zoning:	RO
Units Gained:	
Units Lost:	
Occupany Load:	
Dig Safe #:	

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

BUILDING PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: Gibson Roofs Inc

License: Construction Supervisor - 66217

Owner: TOWN OF BURLINGTON, FOX HILL SCHOOL

Applicant: Gibson Roofs Inc

AT: 252 FOX HILL RD Fox Hill School, Roof

Subdivision:

ISSUED ON: 23-Jun-2015 ***AMENDED ON:*** ***EXPIRES ON:***

TO PERFORM THE FOLLOWING WORK:

Strip down to deck & reroof with Carlisle EPDM fully adhered roofing system

Electric: Underground: Service: Rough: Final:	Gas: Underground: Meter: Rough: Final:	Plumbing: Underground: Rough: Final:	Building: Excavation: Footings: Foundation: Rough Frame: Fireplace/Chimney: Insulation: Sheet Metal: Above Ceiling: Final:
Sheet Metal: Rough: Insulation: Above Ceiling: Final:	Fire: Oil: Smoke: Alarm: Sprinklers:	Health:	

Call 781-270-1615 for all required inspections the day before the inspection is needed. Persons contracting with unregistered contractors do not have access to the guaranty fund (as set forth in MGL c. 142A).

Signature: Date

GeoTMS® 2015 Des Lauriers Municipal Solutions, Inc.

CONSTRUCTION CONTROL AFFIDAVIT

35444

TOWN OF BURLINGTON

Office of Inspector of Buildings - Town Hall Annex - 25 Center Street
Burlington, Massachusetts 01803
(781) 270-1615 (781) 238-4691 FAX WWW.BURLINGTON.ORG

252

PROJECT LOCATION Fox Hill Road, Burlington, MA 01803 JOB NO. S119414-X

PROJECT NAME Fox Hill Elementary School Partitions Installation

NATURE OF PROJECT Demolish existing offices to create a new classroom. Add 2 new time out rooms.

ARCHITECT AND/OR ENGINEER Knight, Bagge & Anderson, Inc.

ADDRESS 6 Thirteenth Street, Charlestown, MA 02129 TELEPHONE NO. 617-241-2807

In accordance with Section 110 and 116.0 of the Massachusetts State Building Code, I, Kevin J. Buckley, AIA Registration No. 5506 being a registered professional engineer/architect, hereby certify that I have prepared or directly supervised the preparation of all design plans, computations and specifications concerning:

- ☐ ENTIRE PROJECT
- ☒ ARCHITECTURAL
- ☐ STRUCTURAL
- ☐ MECHANICAL
- ☐ FIRE PROTECTION
- ☐ ELECTRICAL
- ☐ OTHER _____

For the above named project and that, to the best of my knowledge, such plans, computations and specifications meet the applicable provisions of the Massachusetts State Building Code, all accepted engineering practices and applicable laws and ordinances for the proposed use and occupancy. I further certify that I shall perform the necessary professional services and be present on the construction site on a regular and periodic basis to determine that the work is proceeding in accordance with the documents approved for the building permit and shall be responsible for the following as specified in Section 116.2.

1. Review of shop drawings, samples and other submittals of the contractor as required by the construction contract documents as submitted for building permit, and approval for conformance to the design concept.

2. Review and approval of the quality control procedures for all code-required controlled materials.

3. Special architectural or engineering professional inspection of critical construction components requiring controlled materials or construction specified in the accepted engineering practice standards listed in Appendix G.

Pursuant to Section 116.2.2, I shall submit periodically, ☐ daily, ☑ weekly, or ☐ other periods (specify) progress reports together with pertinent comments to the Town of Burlington Building Department.

Upon completion of the work, architect, and/or engineers shall submit final affidavits as to the satisfactory completion and readiness of the project for occupancy.

Signature

Subscribed and sworn to before me this 7TH *day of* July, 20 14.

Notary Public

My Commission Expires 7/30/15

REGISTERED ARCHITECT
KEVIN J. BUCKLEY, AIA
No. 5506
CHARLESTOWN, MA
COMMONWEALTH OF MASSACHUSETTS

EAJD:eia

252 FOXHILL ROAD

252 FOX HILL RD

34540

GIS#:	1182
Map:	9
Block:	47
Lot:	0
Category:	Miscellaneous
Permit #	34540
Project #	JS-2013-000935
Est. Cost:	$25,900.00
Fee Charged:	$0.00
Balance Due:	$.00
Const. Class:	5B
Use Group:	U
Lot Size(sq. ft.):	1650924
Zoning:	RO
Units Gained:	
Units Lost:	
Occupany Load:	
Dig Safe #:	

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

BUILDING PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: Childscapes ***License:***

Owner: TOWN OF BURLINGTON, BURLINGTON HIGH SCHOOL

Applicant: Childscapes

AT: 252 FOX HILL RD

Subdivision:

ISSUED ON: 28-Aug-2013 ***AMENDED ON:*** ***EXPIRES ON:***

TO PERFORM THE FOLLOWING WORK:

Construct 21' x 21' Pavillion at playground area

Electric:	Gas:	Plumbing:	Building:
Underground:	Underground:	Underground:	Excavation:
Service:	Meter:		Footings:
Rough:	Rough:	Rough:	Foundation:
Final:	Final:	Final:	Rough Frame:
			Fireplace/Chimney:
			Insulation:
			Sheet Metal:
			Above Ceiling:
			Final:

Sheet Metal:	Fire:	Health:
Rough:	Oil:	
Insulation:	Smoke:	
Above Ceiling:	Alarm:	
Final:	Sprinklers:	

Call 781-273-7674 for all required inspections the day before the inspection is needed. Persons contracting with unregistered contractors do not have access to the guaranty fund (as set forth in MGL c. 142A).

Signature: Date

Town Hall Annex - 25 Center Street, Phone:(781) 270-1615, Fax:(781) 238-4691, Email:building@burlmass.org

GeoTMS® 2013 Des Lauriers Municipal Solutions, Inc.

EAJP:eld

OFFICE USE ONLY: Map 9 Parcel 47 JS 2011 1-46

252 FOX HILL RD

34366

GIS#:	1182
Map:	9
Block:	47
Lot:	0
Category:	Commercial Alteration
Permit #	34366
Project #	JS-2013-000751
Est. Cost:	$139,850.00
Fee Charged:	
Balance Due:	
Const. Class:	2B
Use Group:	E
Lot Size(sq. ft.):	1650924
Zoning:	RO
Units Gained:	
Units Lost:	
Occupany Load:	
Dig Safe #:	

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

BUILDING PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: Casby Bros Inc

License: Construction Supervisor - 22155

Owner: TOWN OF BURLINGTON, FOX HILL SCHOOL

Applicant: Casby Bros Inc

AT: 252 FOX HILL RD

Subdivision:

ISSUED ON: 16-Jul-2013 ***AMENDED ON:*** ***EXPIRES ON:***

TO PERFORM THE FOLLOWING WORK:

Remodel lobby/main office

Electric:	Gas:	Plumbing:	Building:
Underground:	Underground:	Underground:	Excavation:
Service:	Meter:		Footings:
Rough:	Rough:	Rough:	Foundation:
Final:	Final:	Final:	Rough Frame:
Sheet Metal:	**Fire:**	**Health:**	Fireplace/Chimney:
Rough:	Oil:		Insulation:
Insulation:	Smoke:		Sheet Metal:
Above Ceiling:	Alarm:		Above Ceiling:
Final:	Sprinklers:		Final:

Call 781-273-7674 for all required inspections the day before the inspection is needed. Persons contracting with unregistered contractors do not have access to the guaranty fund (as set forth in MGL c. 142A).

Signature: Date

Town Hall Annex - 25 Center Street, Phone:(781) 270-1615, Fax:(781) 238-4691, Email:building@burlmass.org

GeoTMS® 2013 Des Lauriers Municipal Solutions, Inc.

252 FOXHILL ROAD

EAJP:sia

252 FOX HILL RD

PP-2009-0185

COMMONWEALTH OF MASSACHUSETTS
TOWN OF BURLINGTON

GIS #:	1182
Map:	9
Block:	47
Lot:	0
Permit:	Plumbing
Category:	New Appliance
Permit #	PP-2009-0185
Project #	JS-2009-000663
Est. Cost:	$0.00
Fee Charged:	$0.00
Balance Due:	$.00
# of Fixtures:	

PLUMBING PERMIT

PERMISSION IS HEREBY GRANTED TO:

Contractor: Gedick Bros Inc

License: Master Plumber & Gasfitter - 8209

Expires:

Owner: TOWN OF BURLINGTON, FOX HILL SCHOOL

Applicant: Gedick Bros Inc

AT: 252 FOX HILL RD

ISSUED ON: 07-Aug-2009

AMENDED ON:

EXPIRES ON:

TO PERFORM THE FOLLOWING WORK:

Install grease trap

THIS PERMIT MAY BE REVOKED BY THE TOWN OF BURLINGTON UPON VIOLATION OF ANY OF ITS RULES AND REGULATIONS.

Call 781-270-1618 or 781-273-7674 for all required inspections. All rough inspections require the plumber on site w/current edition of 248 CMR the MA Fuel Gas & Plumbing Code.

Underground OK _____ Rough OK _____ Final OK _____

Signature: _____

Fee Type:	Receipt No:	Date Paid:	Check No:	Amount:
PLUM08	REC-2009-001325	04-Aug-09	Waived	$0.00

Town Hall Annex - 25 Center Street, Phone:(781) 270-1615, Fax:(781) 238-4691, Email:building@burlmass.org

GeoTMS® 2009 Des Lauriers Municipal Solutions, Inc.

EAJP:eia

Town of Burlington * Glenn Paparo, Inspector * 781.270.1618 * Fax 781.238.4691

MASSACHUSETTS UNIFORM APPLICATION FOR PERMIT TO DO PLUMBING

BURLINGTON Mass Date 8/4/09

Building Location 252 Fox Hill Rd Owners Name Fox hill

Type of Occupancy School

New ☐ Renovation ☐ Replacement ☑ Plans Subnmitted: Yes ☐ No ☐

P

FEE SCHEDULE
$45 Minimum for 1st three (3) fixtures plus $15 for each add'l fixture/appliance /device
Reinspection Fee: $45

Total No. of Fixtures ___ Total Fee $___	WATER CLOSETS	KITCHEN SINKS	LAVATORIES	BATHTUBS	SHOWER STALLS	DISHWASHERS	DISPOSERS	LAUNDRY TRAYS	WASH. MACH. CONN.	HOT WATER TANKS	TANKLESS	SLOP SINKS	FLOOR DRAINS	GAS TRAPS	URINALS	DRINKING FOUNTAIN	AREA DRAIN	WATER PIPING	ROOF DRAINS	BACKFLOW PREVENTOR	OTHER FIXTURES	Bucco TRAP	2nd Water Meter
SUB-BSMT																							
BASEMENT																							
1ST FLOOR																						1	
2ND FLOOR																							
3RD FLOOR																							
4TH FLOOR																							
5TH FLOOR																							
6TH FLOOR																							
7TH FLOOR																							
8TH FLOOR																							

RECEIVED
AUG 04 2009
BURLINGTON BUILDING DEPARTMENT

Installing Company Name Gedick Bros Inc

Address : P.O Box 356

Business Telephone 781-272-2277 Cell

Check One: Certificate
☑ Corporation 3001
☐ Partnership
☐ Firm/Co.

Name of Licensed Plumber or Gas Fitter Donald Gedick

INSURANCE COVERAGE
I have a currant liability insurance policy or its substantial equivalent which meets the requirements of MGL Ch 142.
Yes ☑ No ☐
If you have checked yes, please indicate the type coverage by checking the appropriate box.

A liability insurance policy ☐ Other type of imdemnity ☐ Bond ☐

OWNERS INSURANCE WAIVE I am aware that the licensee does not have the insurance coverage required by chapter 142 of the Mass. General Laws. and that my signature on this permit application waives this requirement.
Check one: Owner ☐ Agent ☐

Signature of Owner or Owner's Agent

I hereby certify that all of the details and information I have submitted (or entered) in above application are true and accurate to the best of my knowledge and that all plumbing work and installations performed under the permit issued for this application will be in compliance with all pertinant provisions of the Massachusetts State Gas Code and Chapter 142 of the general laws.

Mail to: Plumbing & Gas Inspector
Burlington Building Department
25 Center Street
Burlington, MA 01803

Type of License
☑ Plumber
☑ Gas Fitter
☑ Master
☑ Journeyman

Donald Gedick
Signature of Licensed Plumber or Gas Fitter

License Number 8209

EMAIL ADDRESS:

OWNER'S INSURANCE WAIVER
required by law. By my signature below, I hereby waive this requirement.

PERMIT FEE: $ 0 —

Owner/Agent Signature _____ **Telephone No.** _____

PERMIT NO.

FOR OFFICE USE ONLY

Map 9 Parcel 47 JS-~~2000~~ 1999 1062 PAID ☐ Check # _____ ☐ Cash Date Issued 3/16/00 Permit No. 22350

APPLICATION FOR BUILDING PERMIT

B

TOWN OF BURLINGTON

TOWN HALL ANNEX - 25 CENTER STREET
BURLINGTON, MASSACHUSETTS 01803
Telephone 781-270-1615 Fax 781-270-1608

SUBMIT THIS APPLICATION WITH THREE (3) SETS OF CONSTRUCTION DRAWINGS & PLOT PLAN

RECEIVED
MAR 15 2000
BUILDING DEPT.

ZONING DISTRICT: _____
CONSTRUCTION TYPE: _____
USE GROUP: _____
SQUARE FOOTAGE OF CONSTRUCTION: _____

COST OF CONSTRUCTION: $84,347.00

SEE REVERSE FOR FEE SCHEDULE
BUILDING PERMIT FEE: $ _____
PLAN REVIEW FEE: $ _____
TOTAL PERMIT FEE: $ _____

CONSTRUCTION PROJECT INFORMATION

LOCATION (Street, Space No, Floor) 252 Fox Hill Road

PROPERTY OWNER Town of Burlington **TEL No.** (781)-270-1800
ADDRESS 29 Center Street, Burlington, MA
Street / Suite Or Space / City / State / Zip

☐ Check here if same as owner

NAME OF TENANT Fox Hill School **TEL No.** (781) -270-1791

NEW BUILDING ☐ **ADDITION** ☐ **ALTERATION** ☐ **FOUNDATION** ☐ **DEMOLITION** ☐

BUILDING / ADDITION DIMENSIONS: LENGTH _____ DEPTH _____ HEIGHT _____ LOT AREA: _____ SQ FT

NO. OF STORIES _____ HEIGHT TO HIGHEST PART OF ROOF _____ ROOF TYPE ☐ Flat ☐ Gable ☐ Hip ☐ Mansard ☐ Shed ☐ Other _____

FOUNDATION DEPTH / THICKNESS / TYPE _____

TYPE OF HEAT/FUEL ☐ Hot Water ☐ Warm Air ☐ Steam ☐ Resistance Oil ☐ Gas
TYPE OF SOURCE ☐ Electric ☐ Coal ☐ Other _____

BUILDING SETBACKS FROM PROPERTY LINES: Front _____ Side Right _____ Side Left _____ Rear _____

DESCRIPTION OF WORK

Installation of playground equipment from Landscape Structures, Inc. of Delano, MN. Three individual play structures, covering a 10,000 sq. ft. area.

GENERAL CONTRACTOR INFORMATION

DBA NAME: Town of Burlington Recreation Department Tel No. (781)-270-1695
ADDRESS: 61 Center Street, Burlington, MA 01803
Construction Supervisor's Name: Doug Gillingham LICENSE No.: _____ EXP DATE: _____
Home Improvement Contractor
Name: _____ REG No.: _____ EXP DATE: _____
Address: _____
Workers Compensation Insurance: _____ EXP DATE: _____
MGL C152, S25C(6) Name of Ins. Co. & Policy No.
ARCHITECT / ENGINEER: _____ REG. No. _____ EXP DATE: _____
ADDRESS: _____ Tel. No. _____

I hereby declare that the statements and information on the foregoing are true and accurate, to the best of my knowledge and belief, signed under the pains and penalties of perjury.

Douglas Gillingham 3/15/00
SIGNATURE OF OWNER / AGENT Date

BLDGAPP.DOC Jan 2000

252 FOXHILL ROAD

EAJPrield

The Commonwealth of Massachusetts

PERMIT NO.
EP-1999- 794

TOWN OF BURLINGTON

CERTIFICATE OF OCCUPANCY

Building Permit Number 1103 Certificate Issued — Date / /

Date 8/16/93
Contractor
Applicant P. OBRIEN Address 17 CHURCH LN. BURL Phone 273 3463

Permit to REMODEL & ALTER (Type of Improvement) Use H.C. ACCESSIBLE (Proposed Use) BATHROOM Number of dwelling units

At location FOXHILL (No.) SCHOOL (Street) Zoning District RO

Name of Premise FOXHILL RD.

Subdivision (Name) Assessors Plate # Parcel # Lot Size Sq. Ft.

Building is to be wide by ft. in height and shall conform in

Construction to type nent walls or foundation (Type)

Foundation walls damproofed

Total floor area in square ft. story 2nd story

Owner TOWN OF BURLINGTON Signed by Francis R. Moran, Insp. of Bldg.

Address 29 CENTER ST BURL.

252 Foxhill Rd

NOTICE — BUILDING NOT TO BE OCCUPIED UNTIL THIS CERTIFICATE IS SIGNED BY THE INSP. OF BLDGS.

This copy to be retained in Building [See Reverse Side]

S-T 4080

252 FOXHILL ROAD

DEPARTMENT OF PUBLIC WORKS.

Signat
SEWE
FOUN
H.V.
FIRE
ENERG
ELEVA
ELECT
PLUME
STRUC
SPRIN
ARCHI
PROPO
PROFE
CERTI
STRUC
DISTA
LINE
DISTA
SUBJE
ARCHI
BOARD
BOARD
WETLA
FLOOD
SPECI
SITE
FORMATION

MASSACHUSETTS UNIFORM APPLICATION FOR PERMIT TO DO GASFITTING

(Print or Type)

BURLINGTON, Mass. Date 9-16 19 99 PERMIT NO. GP-1999-266

Building Location Fox Hill School Owner's Name Town of Burlington

Fox Hill Rd #1 Boiler Type of Occupancy

New ☒ Renovation ☒ Replacement ☐ Plans Submitted: Yes ☐ No ☐

G

	RANGES	HEATER RANGES	OVENS	GRILLES	HEATING BOILERS	FURNACES	UNIT HEATERS	WATER HEATERS	DRYERS	GAS GENERATORS	LABORATORY COCKS	CONVERSION BURNERS	ROOF TOP UNITS	VENTED ROOM HTRS.	DIRECT VENT HTRS.	POOL HEATERS	TESTS	OTHER
SUB-BSMT.																		
BASEMENT																		
1ST FLOOR					X							X						
2ND FLOOR																		
3RD FLOOR																		
4TH FLOOR																		
5TH FLOOR					#2 Boiler							#1 Boiler						
6TH FLOOR																		
7TH FLOOR																		
8TH FLOOR																		

Ready for Inspection

Date _____ Will Call _____

FINAL INSPECTIONS ARE MANDATORY

INSPECTIONS

Intials / Date

Rough OK ☐ _____

Final OK ☐ _____

Installing Company Name Performance Heating Co.

Address 4 Dennis Dr.

Burlington, MA 01803

Business Telephone 781 273-5022

Check one: Certificate

☐ Corporation _____

☐ Partnership _____

☐ Firm/Co. _____

Name of Licensed Plumber or Gas Fitter _____

INSURANCE COVERAGE:

I have a current liability insurance policy or its substantial equivalent which meets the requirements of MGL Ch. 142.

Yes ☒ No ☐

If you have checked yes, please indicate the type coverage by checking the appropriate box.

A liability insurance policy ☒ Other type of indemnity ☐ Bond ☐

OWNER'S INSURANCE WAIVER: I am aware that the licensee does not have the insurance coverage required by Chapter 142 of the Mass. General Laws, and that my signature on this permit application waives this requirement.

Signature of Owner or Owner's Agent

Check one: Owner ☒ Agent ☐

I hereby certify that all of the details and information I have submitted (or entered) in above application are true and accurate to the best of my knowledge and that all plumbing work and installations performed under the permit issued for this application will be in compliance with all pertinent provisions of the Massachusetts State Gas Code and Chapter 142 of the General Laws.

FOR OFFICE USE ONLY

FEE SCHEDULE

$25.00 MINIMUM FOR 1st THREE (3) FIXTURES PLUS $5.00 FOR EACH ADDITIONAL FIXTURE / APPLIANCE / DEVICE

TOTAL FIXTURES

TOTAL COST $ N/C

Type of License:
- ☐ Plumber
- ☐ Gasfitter
- ☐ Master
- ☐ Journeyman

Signature of Licensed Plumber or Gas Fitter

License Number 10815

RECEIVED SEP 20 1999 BUILDING DEPT.

EAJP:eld

TOWN OF BURLINGTON APPLICATION FOR BUILDING PERMIT

270-1608

The Commonwealth of Massachusetts

Department of Public Safety

BOARD OF FIRE PREVENTION REGULATIONS 527 CMR 12:00

Permit No 187

Occupancy & Fee Checked (leave blank)

3/90

APPLICATION FOR PERMIT TO PERFORM ELECTRICAL WORK

All work to be performed in accordance with the Massachusetts Electrical Code, 527 CMR 12:00

(PLEASE PRINT IN INK OR TYPE ALL INFORMATION)

Date 4/12/94

City or Town of Burlington

To the Inspector of Wires:

The udersigned applies for a permit to perform the electrical work described below.

Location (Street & Number) Fox Hill Road

RECEIVED APR 28 1994 BUILDING DEPT.

Owner or Tenant Fox Hill School

Owner's Address Fox HILL Road

Is this permit in conjunction with a building permit: Yes [ ] No [X] (Check Appropriate Box)

Purpose of Building school Utility Authorization No.

Existing Service ____ Amps ____/____ Volts Overhead [ ] Undgrnd [ ] No. of Meters

New Service ____ Amps ____/____ Volts Overhead [ ] Undgrnd [ ] No. of Meters

Number of Feeders and Ampacity

Location and Nature of Proposed Electrical Work fluorescent fixtures- ballast and lamp replace

No. of Lighting Outlets	No. of Hot Tubs	No. of Transformers Total KVA
No. of Lighting Fixtures	Swimming Pool Above grnd. [ ] In-grnd [ ]	Generators KVA
No. of Receptacle Outlets	No. of Oil Burners	No. of Emergency Lighting Battery Units
No. of Switch Outlets	No. of Gas Burners	FIRE ALARMS No. of Zones
No. of Ranges	No. of Air Cond. Total tons	No. of Detection and Initiating Devices
No. of Disposals	No. of Heat Pumps Total Tons Total KW	No. of Sounding Devices
No. of Dishwashers	Space/Area Heating KW	No. of Self Contained Detection/Sounding Devices
No. of Dryers	Heating Devices KW	Local [ ] Municipal Connection [ ] Other
No. of Water Heaters KW	No. of Signs No. of Ballasts 728	Low Voltage Wiring
No. Hydro Massage Tubs	No. of Motors Total HP	

OTHER:

COMPLETED

INSURANCE COVERAGE: Pursuant to the requirements of Massachusetts general Laws I have a current Liability Insurance Policy including Completed Operations Coverage or its substantial equivalent. YES [ ] NO [ ] I have submitted valid proof of same to the Office. YES [ ] NO [ ] If you have checked YES, please indicate the type of coverage by checking the appropriate box.

INSURANCE [ ] BOND [ ] OTHER [ ] (Please Specify) ____ (Expiration Date)

Estimated Value of Electrical Work $ 3500.00

Work to Start 4/4/94 Inspection Date Requested: Rough ____ Final ____

Signed under the Penalties of perjury.

FIRM NAME Lighting Retrofit Services/ Kenneth B. Young LIC. NO.

Licensee Kenneth B. Young Jr./LRS Signature Kenneth B. Young Jr. LIC. NO. 14286A

Address 50 New Salem Street, Wakefield, MA 01880 Bus. Tel. No. 617-245-5600 Alt. Tel. No.

OWNER'S INSURANCE WAIVER: I am aware that the Licensee does not have the insurance coverage or its substantial equivalent as required by Massachusetts General Laws, and that my signature on this permit application waives this requirement. Owner Agent (Please check one)

____ Telephone No. ____ PERMIT FEE $ ____

(Signature of Owner or Agent)

x-6565

252 FOXHILL ROAD

MASSACHUSETTS UNIFORM APPLICATION FOR PERMIT TO DO PLUMBING
(Print or Type)

address to file?

310 CMR 10.99

Form 2

RECEIVED
JUL 26 1993
BUILDING DEPT.

RECEIVED
TOWN OF BURLINGTON
93 JUL 23 PM 2:41
TOWN CLERK
BURLINGTON, MA

Commonwealth of Massachusetts

DEP File No. _____ (To be provided by DEP)

City/Town Burlington

Applicant Conservation Dept.

Date Request Filed 7/12/93

Determination of Applicability
Massachusetts Wetlands Protection Act, G.L. c. 131, §40

From The Burlington Conservation Commission Issuing Authority

To Town of Burlington, Conservation (Name of person making request)

Same (Name of property owner)

Address 29 Center Street
Burlington, Ma 01803

Address _____

This determination is issued and delivered as follows:

☐ by hand delivery to person making request on 7/23/93 (date)

☐ by certified mail, return receipt requested on _____ (date)

Pursuant to the authority of G.L. c. 131, §40, the Conservation Commission has considered your request for a Determination of Applicability and its supporting documentation, and has made the following determination (check whichever is applicable):

Location: Street Address Between Fox Hill Elementary School & Sawmill Brook

Lot Number: Map #9, Parcel #47,64,65

1. ☐ The area described below, which includes all/part of the area described in your request, is an Area Subject to Protection Under the Act. Therefore, any removing, filling, dredging or altering of that area requires the filing of a Notice of Intent.

2. ☐ The work described below, which includes all/part of the work described in your request, is within an Area Subject to Protection Under the Act and will remove, fill, dredge or alter that area. Therefore, said work requires the filing of a Notice of Intent.

Effective 11/10/89

252 FOXHILL ROAD

EAJP:eid

MASSACHUSETTS UNIFORM APPLICATION FOR PERMIT TO DO PLUMBING
(Print or Type)

BURLINGTON, Mass. Date 6/10 19 93 Permit # 1 AA

Determination of Applicability: Fox Hill School & Sawmill Brook

3. ☐ The work described below, which includes all/part of the work described in your request, is within the Buffer Zone as defined in the regulations, and will alter an Area Subject to Protection Under the Act. Therefore, said work requires the filing of a Notice of Intent.

This Determination is negative:

1. ☐ The area described in your request is not an Area Subject to Protection Under the Act.

2. ☐ The work described in your request is within an Area Subject to Protection Under the Act, but will not remove, fill, dredge, or alter that area. Therefore, said work does not require the filing of a Notice of Intent.

3. ☐ The work described in your request is within the Buffer Zone, as defined in the regulations, but will not alter an Area Subject to Protection Under the Act. Therefore, said work does not require the filing of a Notice of Intent.

4. ☐ The area described in your request is Subject to Protection Under the Act, but since the work described therein meets the requirements for the following exemption, as specified in the Act and the regulations, no Notice of Intent is required: _____

Issued by Burlington Conservation Commission

Signature(s) Catherine O. LeBlanc
Constance McElwee
Nancy Coley
Cynthia L. Butler

This Determination must be signed by a majority of the Conservation Commission.

On this 22nd day of July 19 93, before me personally appeared Catherine O. LeBlanc, to me known to be the person described in, and who executed, the foregoing instrument, and acknowledged that he/she executed the same as his/her free act and deed.

Anne A. Monahan
Notary Public

11/25/94
My Commission Expires

This Determination does not relieve the applicant from complying with all other applicable federal, state or local statutes, ordinances, by-laws or regulations. This Determination shall be valid for three years from the date of issuance.

The applicant, the owner, any person aggrieved by this Determination, any owner of land abutting the land upon which the proposed work is to be done, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the Department of Environmental Protection to issue a Superseding Determination of Applicability, providing the request is made by certified mail or hand delivery to the Department, with the appropriate filing fee and Fee Transmittal Form as provided in 310 CMR 10.03(7) within ten days from the date of issuance of this Determination. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and the applicant.

252 FOXHILL ROAD

(Print or Type)
BURLINGTON
MASSACHUSETTS UNIFORM APPLICATION FOR PERMIT TO DO PLUMBING
NO FEE

TOWN OF BURLINGTON
BURLINGTON, MASSACHUSETTS 01803
TOWN HALL 270-1600 FAX 270-1608

RECEIVED
TOWN OF BURLINGTON
93 JUL 23 PM 2:42
TOWN CLERK
BURLINGTON, MA

BURLINGTON BY-LAW ARTICLE 22
DETERMINATION OF APPLICABILITY

APPLICANT: Town of Burlington
ADDRESS: 29 Center Street, Burlington MA 01803
LOCATION: Fox Hill School - Sawmill Brook Conservation Area
ASSESSOR'S MAP/PARCEL: Map 9, Parcels 47, 64, & 65
PROPERTY OWNER: Town of Burlington

DATE OF DECISION: July 23, 1993

DECISION

The Burlington Conservation Commission voted to issue a Negative Determination of Applicability with conditions, as noted below, for a proposed footpath that connects two existing trails on land lying between the Fox Hill School and the Sawmill Brook Conservation Area.

1. There shall be no permanent removal of any vegetation in the bordering vegetated wetlands. Shrubs, trees, and herbaceous plants may be pruned to permit for a better foot path. No plants may be excavated or uprooted under this decision.

2. The Conservation Commission finds that the bordering vegetated wetlands will not be altered by a limited pruning of the vegetation sufficient to provide a foot path to connect existing trails on the land.

3. In the event a board walk is needed to improve the trail through the vegetated wetlands a separate application must be filed with the Conservation Commission showing the work and the methods to be used to protect the wetlands.

4. Nothing in this decision is intended to permit any change in grade that will increase flooding. Portions of the trail may fall within bordering land subject to flooding.

5. Pruned material shall be cut into small pieces, spread thinly, and may be left within the general area of the trail work.

6. The work within the bordering vegetated wetlands shall be supervised by the Conservation Administrator or Conservation Commission. Supervision shall be deemed to be regular visits to the site, with a record kept of such visit, and a review of pruning and clearing activities.

252 FOXHILL ROAD

ISSUED BY:
BURLINGTON CONSERVATION COMMISSION:

Joel A Crosby

Constance M Ellman

Catherine O. LeBlanc

Gary Olsen

Cynthia L. Bookhart

On this 22nd day of July, 1993, before me personally appeared Catherine O. LeBlanc, to me known to be the person described in, and who executed, the foregoing instrument, and acknowledge that she/he executed the same as her/his free act and deed.

Anne J. Monaba
Notary Public

11/25/94
My Commission Expires

NOTE: The applicant is advised that the submission of incomplete or inaccurate information, or a failure to comply with the work specified as may be conditioned herein may result in a violation of the Wetlands Protection Act, Massachusetts General Laws Chapter 131, Section 40 and Burlington By-laws Article 22. Enforcement of the laws can include seeking a fine of not more than $25,000 for the violation pursuant to MGL c. 131, s. 40 as well as criminal or non-criminal penalties under the By-law.

This Determination does not relieve the applicant from complying with all other applicable federal, state, or local statutes, ordinances, by-laws or regulations.

Appeals from this permit must be filed in the Superior Court in accordance with the provisions of MGL Chap. 249, Section 4.

Building Location Fox Hill Rd Owner's Name

FEE WAIVED TOWN PROPERTY

52 FOXHILL ROAD

MASSACHUSETTS UNIFORM APPLICATION FOR PERMIT TO DO GASFITTING

(Print or Type)

Burlington, Mass. Date 6-22 19 93 Permit # 87

Building Location Foxhill Rd. Owner's Name Burlington Elementary School

Map: _____ Lot: _____ Zone: _____ Type of Occupancy School

New ☑ Renovation ☐ Replacement ☐ Plans Submitted: Yes ☐ No ☐

G

Fee:

	RANGES	HEATER RANGES	OVENS	GRILLS	HEATING BOILERS	FURNACES	UNIT HEATERS	WATER HEATERS	DRYERS	GAS GENERATORS	LABORATORY COCKS	CONVERSION BURNERS	ROOF TOP UNITS	VENTED ROOM HTRS.	DIRECT VENT HTRS.	POOL HEATERS	TESTS	OTHER	Install propane storage- connect to plumber's line									
SUB-BSMT.																												
BASEMENT																												
1ST FLOOR																			✓									
2ND FLOOR																												
3RD FLOOR																												
4TH FLOOR																												
5TH FLOOR																												
6TH FLOOR																												
7TH FLOOR																												
8TH FLOOR																												

PAID

Installing Company Name Eastern Propane Gas, Inc.

Address 131 Water St., Danvers, MA 01923

Estimate Value of Work: _____

Business Telephone (508) 774-1930

Name of Licensed Plumber or Gas Fitter Robert Daigle

Check one:	Certificate
☑ Corporation	
☐ Partnership	
☐ Firm / Co.	

INSURANCE COVERAGE:
I have a current liability insurance policy or its substantial equivalent which meets the requirements of MGL Ch. 142.
Yes ☑ No ☐
If you have checked yes, please indicate the type coverage by checking the appropriate box.

A liability insurance policy ☑ Other type of indemnity ☐ Bond ☐

OWNER'S INSURANCE WAIVER: I am aware that the licensee does not have the insurance coverage required by Chapter 142 of the Mass. General Laws, and that my signature on this permit application waives this requirement.

Check one: Owner ☐ Agent ☐

Signature of Owner or Owner's Agent

I hereby certify that all of the details and information I have submitted (or entered) in above application are true and accurate to the best of my knowledge and that all plumbing work and installations performed under the permit issued for this application will be in compliance with all pertinent provisions of the Massachusetts State Gas Code and Chapter 142 of the General Laws.

Robert J. Daigle
Signature of Licensed Plumber or Gas Fitter

By _____

Title _____

City / Town _____

APPROVED (OFFICE USE ONLY)

Type of License:
☐ Plumber
☑ Gasfitter
☐ Master
☐ Journeyman

License Number LP 879

RECEIVED
JUN 22 1993
BUILDING DEPT.

TOWN OF BURLINGTON

14465

TOWN OF BURLINGTON

BURLINGTON, MASSACHUSETTS 01803

TOWN HALL 272-6700

AFFIDAVIT

As a result of the provisions of MGL c 40, S54, I acknowledge that as a condition of Building Permit Number _____ all debris resulting from the construction activity governed by this Building Permit shall be disposed of in a properly licensed solid waste disposal facility, as defined by MGL c 111, S 150A.

I certify that I will notify the Building Official by September 30, 1989 (Two months maximum) of the location of the solid waste disposal facility where the debris resulting from the said construction activity shall be disposed of, and I shall submit the appropriate form for attachment to the Building Permit.

8/8/89
Date

Betty Lacharite
Signature of Permit Applicant

(Print or type the following information)

Betty Lacharite
Name of Permit Applicant

Dec-Tam Corporation
Firm Name, if any

10 Lowell Junction Road
Andover, MA
Address

In accordance with the provisions of MGL c 40, S 54, a condition of Building Permit Number _____ is that the debris resulting from this work shall be disposed of in a properly licensed solid waste disposal facility as defined by MGL c 111, S 150A.

The debris will be disposed of in: Meadowfill Corp. (IMS Landfill)

Clarksburg, W. VA
(Location of Facility)

Betty Lachaute
Signature of Permit Applicant

August 8, 1989
Date

DEMOLITION/RENOVATION NOTIFICATION

REGIONAL EPA
JFK BLDG., ROOM 2103
BOSTON, MA 02203
Attn: Ken Tarr (MA)
Phil Cutler (other than MA)

CONTRACTOR: DEC-TAM CORPORATION
10 LOWELL JUNCTION ROAD
ANDOVER, MA 01801
(508) 470-2860

81 Old Windson Road
Bloomfield, CT 06002
(203) 243-1513

14465

CHANGE IN COMPLETION DATE-REFERENCE NOTIFICATION DATED 6/12/89

RENOVATION

Facility Owner:
Name Burlington Public Schools Telephone No. 617-273-1870
Street 123 Cambridge Street
City Burlington, State MA Zip 01803

Address of Project:
Street Fox Hill School
City Burlington State MA Zip 01803

Present Use of Facility school Intended Use (if known)

Description of Facility - Type of Building Masonry Size 60,000 Age 30+

Nature of Asbestos Activity - Removal X ; Enclosure ; Encapsulation

Approximate Amount of Friable Asbestos:
Linear Feet: Square Feet: 56,000

Start date 7/5/89 Completion Date 8/18/89 : X A.M.; P.M.: Weekends

Description of work practices to be followed (to comply with 453 CMR 6.14)
open removal, full set up

Description of decontamination system (s) to be used (to comply with 453 CMR 6.14 (2) (b)
three stage decontamination

Description of handling/disposal methods (to comply with 453 CMR 6.14 (2) (g)
wetting material with amended water and placing in double six mil poly prelabeled bags

Name ,address/location of disposal site (s) IMS Landfill
Clarksburg, WVA

Name, address of transporter (s) if other than asbestos contractor Jeffrey Chemical Co.
789 Woburn Street - Wilmington, MA 01887 EPA ID# MAD 080030356

Named of Asbestos Abatement Project Monitor (if applicable)
Person/Firm (by owner) Certified Engineering & Testing
Address Weymouth, MA

Date 8/10/89

Signed by: Larry Hill
Title: Vice President, Sales

The Commonwealth of Massachusetts
DEPARTMENT OF LABOR AND INDUSTRIES
DIVISION OF INDUSTRIAL SAFETY

14465

NOTIFICATION OF ASBESTOS WORK
(In accordance with the provisions of M.G.L. c. 149, §6-6F and 453 CMR 6.12)
All sections of this form must be completed in order to comply with the notification requirements of 453 CMR 6.12

TEN DAY PRIOR NOTIFICATION IS REQUIRED OF ANY ABATEMENT PROJECT GREATER THAN THREE (3) LINEAR OR SQUARE FEET

DLI FILE NUMBER _____

Contractor performing project Dec-Tam Corporation License # AC00035

Do prevailing rates of wages apply to this project as required under M.G.L c. 149, §26, 27 or 27F? (circle one) YES NO

Address of Project

Building Name (if any) Fox Hill School

Street Address _____

City Burlington , MA Zip 01803 Phone _____

Project type (circle one): DEMOLITION RENOVATION REPAIR OTHER

If "Other" selected, please explain _____

Asbestos Activity: (circle one): ENCAPSULATION ASSOCIATED PROJECT
ENCLOSURE REMOVAL

Indicate amount of: asbestos surface on pipes or ducts _____ LINEAR FEET
OR
asbestos surface on structures other than pipes or ducts to be removed, enclosed or encapsulated 56,000 SQUARE FEET

Start date 7/5/89 am X pm _____ weekends? _____

Completion Date 8/18/89

Project Supervisor Name William Bailey (by owner) Certificate # SF01468

Asbestos Analytical Lab Name Certified Engineering Certificate # _____

Name & Address of disposal site(s) IMS Landfill
Clarksburg, WVA

0049a/1

's asbestos contract written or verbal? written

Contractor's Workers' Compensation Insurer Hartford Insurance

Policy Number 08WZBH0503

Facility Owner Burlington Public Schools

Address 123 Cambridge Street

City Burlington, State MA Zip 01803

Description of work practices to be followed:

open removal, full set up

Description of decontamination system(s) to be used

three stage decontamination

Description of handling/disposal methods to comply with 453 CMR 6.14(2) (g)

Wetting material with amended water and placing in double 6-mil poly bags

Name and address of transporter(s) if other than the asbestos contractor:

Jeffrey Chemical

739 Woburn St., Wilmington, MA 01887

The undersigned hereby states, under the penalties of perjury, that he/she has read and understood the Commonwealth of Massachusetts Regulations for the Removal, Containment or Encapsulation of Asbestos, 453 CMR 6.00, and that the information contained in this notification is true and correct to the best of his/her knowledge and belief.

Date 8/10/89

Signed: Larry Hall

Title: Vice President, Sales

Company: Dec-Tam

CHANGE IN COMPLETION DATE
REFERENCE NOTIFICATION DATED
6/12/89

Please return this form to:

Asbestos Control Technical Services
Department of Labor and Industries
Division of Industrial Safety
100 Cambridge Street, Room 1101
Boston, MA 02202

1049a/2

DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF AIR QUALITY CONTROL

14465 [SEE LAST PAGE FOR OFFICE LOCATIONS]

NOTIFICATION FORM FOR
ASBESTOS REMOVAL AND GENERAL DEMOLITION/RENOVATION

A APPLICABILITY

Demolition/Renovation operations involving asbestos-containing material (ACM) and general Demoli-
in/Renovation operations are regulated by the Department of Environmental Quality Engineering
(EQE), Divison of Air Quality Control, under Regulations 310 CMR 7.00, 7.09 and 7.15. Notification to the
EGIONAL OFFICE of general demolition/renovation operations and demolition/renovation operations
volving ACM is required under 310 CMR 7.09 (2) and 310 CMR 7.15 (1) (b) twenty (20) days prior to any work
nformed. The following information is required pursuant to 310 CMR 7.15.
Copies of "Regulations for the Control of Air Pollution", 310 CMR 6.00 to 8.00 may be purchased from
State Bookstore, State House, Room 116, Boston, Massachusetts, 02133. Telephone number (617)
7-2834. Please Print.

CHANGE IN COMPLETION DATE-REFERENCE NOTIFICATION DATED 6/12/89

B GENERAL PROJECT DESCRIPTION

FACILITY
Name: Fox Hill School Telephone: (617) 273-1870
Street Address: City/Town: Burlington, MA
Size of Facility: In square feet: 60,000
In number of floors: 1
Was the Facility built prior to 19807 yes X no
Current or Prior use of Facility: school
Is the Facility Occupied? Yes X No

FACILITY OWNER
Name: Burlington Public Schools Telephone: (617) 273-1870
Street Address: 123 Cambridge St City/Town Burlington, MA

ON-SITE MANAGER (by owner)
Name: Certified Engineering Telephone: ( )
Street Address: City/Town Weymouth, MA

GENERAL CONTRACTOR
Name: Telephone: ( )
Street Address: City/Town

Does this project involve the removal and/or alteration of any Asbestos Containing Material (ACM) as defined and applied in 310 CMR 7.00 and 7.15? Yes No

IF YES, you must supply in full the information requested in sections C through E below. IF NO, you must supply in full the information in sections D and E.

C ASBESTOS REMOVAL DESCRIPTION

1. ASBESTOS CONTRACTOR
Name: Dec-Tam Corporation Telephone: (617) 470-2860
Street Address: 10 Lowell Jct. Rd. City/Town: Andover
Department of Labor and Industries Certification # AC000035

2. ON-SITE SUPERVISOR
Name: William Bailey
Department of Labor and Industries Certification# SF01468

3. SPECIFIC WORKSITE LOCATION(S) (i.e. Building name, number, wing, Floor, room, tunnel. Is the job indoor or outdoor?) first floor

4. ESTIMATED AMOUNT OF EACH TYPE OF ACM TO BE HANDLED (in linear and/or square feet)
- ____ boiler, breeching, duct, tank surface coatings
- ____ thermal, solid core pipe insulation
- ____ corrugated or layered paper pipe insulation
- ____ insulating cement
- ____ spray-on fireproofing
- ____ trowel/spray coatings
- ____ cloths, woven fabric
- ____ transite board, wall board
- X other - please describe ceiling tile

56,000 TOTAL IN LINEAR FEET
____ TOTAL IN SQUARE FEET

5. DESCRIPTION OF TECHNIQUES USED FOR ESTIMATION measurement

6. ASBESTOS REMOVAL START DATE: 7/5/89 END DATE: 8/18/89
HOURS OF OPERATION: X daytime, ____ evening, ____ night
DAYS OF OPERATION: X Mon.-Fri., ____ Sat.-Sun.
(NOTE: Any changes in these dates must be reported to the appropriate regional office. If a remov is postponed for more than thirty (30) calendar days, separate notification will be required

7. DESCRIPTION OF ASBESTOS REMOVAL PROCEDURES TO BE USED
- X glove bag
- ____ full containment
- ____ encapsulation
- ____ enclosure
- ____ cleanup
- ____ disposal only
- ____ other - please describe

8. TRANSPORTER OF ASBESTOS-CONTAINING WASTE MATERIAL FROM SITE TO TEMPORARY STORAGE SITE (IF NECESSARY) TO FINAL DISPOSAL SITE
Name: Jeffrey Chemical Telephone: (617) 657-7560
Street Address: 789 Woburn St City/Town Wilmington, MA

9. TRANSPORTER OF ASBESTOS CONTAINING WASTE MATERIAL FROM REMOVAL/TEMPORARY STORAGE SITE TO FINAL DISPOSAL SITE
Name: SAME AS ITEM 8
Street Address: Telephone: ( )
City/Town

6/11/89

10. REFUSE TRANSFER STATION FACILITY AND OWNER (IF APPLICABLE)

Name: SAME AS ITEM 8 Telephone: ( )

Street Address: City/Town:

Owner's Name:

(NOTE: Transfer Stations must comply with the Division of Solid Waste Regulations 310 CMR 19.00.)

11. FINAL DISPOSAL SITE

Name: IMS Landfill Telephone: ( )

Street Address: City/Town Clarksburg, WVA

Owner's Name: Barbara Riffle

(NOTE: Disposal of ACM must comply with the Division of Solid Waste Regulations 310 CMR 19.00)

12. FOR EMERGENCY ASBESTOS REMOVAL OPERATIONS, NAME AND TITLE OF DEQE OFFICIAL WHO EVALUATED THE EMERGENCY

Name: Title:

Date of Authorization:

D GENERAL DEMOLITION/RENOVATION DESCRIPTION

1. DEMOLITION/RENOVATION CONTRACTOR

Name: Telephone: ( )

Street Address: City/Town:

2. ON-SITE SUPERVISOR

Name:

3. SPECIFIC WORKSITE LOCATION(S):

4. WAS THE FACILITY SURVEYED FOR THE PRESENCE OF ASBESTOS CONTAINING MATERIAL (ACM)? yes ____ no ____

WHO CONDUCTED THE SURVEY?

Name:

Department of Labor and Industries Certification #:

5. DEMOLITION/RENOVATION START DATE: END DATE

6. DESCRIPTION OF DEMOLITION/RENOVATION PROCEDURES TO BE USED

(NOTE: Demolition/Renovation Operations must comply with 310 CMR 7.09 to control emissions to prevent a condition of air pollution.)

7. FOR EMERGENCY DEMOLITION/RENOVATION OPERATIONS, NAME, TITLE AND AUTHORITY OF STATE OR LOCAL OFFICIAL WHO EVALUATED THE EMERGENCY

Name: Title:

Authority: Date of Authorization:

(GENERAL STATEMENT: If Asbestos-Containing Material is unexpectedly found or damaged during a Demolition/Renovation operation, all responsible parties must comply with 310 CMR 7.00, 7.09, 7.15 and Chapter 21E of the General Laws of the Commonwealth. This would include but would not be limited to filing an asbestos

E PREPARER OF FORM

Name: Dec-Tam Corporation Telephone: (617) 470-2860

Street Address: 10 Lowell Jct. Rd. City/Town: Andover

THIS FORM MUST BE SIGNED BY THE OWNER OR BY THE RESPONSIBLE OPERATOR OF THE PROPOSED PROJECT.

CERTIFICATION: I CERTIFY THAT I HAVE EXAMINED THE ABOVE AND THAT TO THE BEST OF MY KNOWLEDGE IT IS TRUE AND COMPLETE. SIGNATURE SUBJECTS SIGNER TO THE PROVISIONS OF THE GENERAL STATUTES REGARDING FALSE AND MISLEADING STATEMENTS).

Larry Hell (SIGNATURE) — Vice President, Sales (TITLE)

Dec-Tam Corporation (REPRESENTING) — 8/10/89 (DATE)

F REGIONAL OFFICE LOCATIONS

AIR QUALITY SECTION CHIEF
DIVISION OF AIR QUALITY CONTROL
MET BOSTON/NORTHEAST REGION
5 COMMONWEALTH AVENUE
WOBURN, MA 01801

TELEPHONE: (617) 935-2160
OR 727-5194

AIR QUALITY SECTION CHIEF
DIVISION OF AIR QUALITY CONTROL
SOUTHEAST REGION LAKEVILLE HOSPITAL
MAIN STREET
LAKEVILLE, MA 02347

TELEPHONE: (617) 947-1231
OR 727-1440 X680

AIR QUALITY SECTION CHIEF
DIVISION OF AIR QUALITY CONTROL
WESTERN REGION STATE HOUSE - WEST
436 DWIGHT STREET - 4th FLOOR
SPRINGFIELD, MA 01103
MAIL TO: P.O. BOX 2140

TELEPHONE: (413) 785-5327

AIR QUALITY SECTION CHIEF
DIVISION OF AIR QUALITY CONTROL
CENTRAL REGION
75 GROVE STREET
WORCESTER, MA 01605

TELEPHONE: (617) 792-7653

For official use only:
original ____ resubmittal ____
notification incomplete/returned ____
Date ____ cert.mail # ____

Office Use Only	
Permit No.	377
Occupancy & Fee Checked (leave blank)	NC

The Commonwealth of Massachusetts

Department of Public Safety

BOARD OF FIRE PREVENTION REGULATIONS FPR-11, RULE 8 Effective 1/1/78 **PAID**

APPLICATION FOR PERMIT TO PERFORM ELECTRICAL WORK

All work to be performed in accordance with the Massachusetts Electrical Code. FPR-11

Date 7-18 19 89

JUL 19 1989

City/Town of: Burlington

To the Inspector of Wires: The undersigned applies for a permit to perform the electrical work described below.

Location (Street & Number) Fox Hill St Pole No.

Owner or Tenant Fox Hill School

Owner's Address Burlington Public School 123 Cambridge St.

Is this permit in conjunction with a building permit? X Yes No

Purpose of Building Public School

Service Amps 120/208 Volts No. of Meters 1

Existing New Increased from to

Nature of the Proposed Electrical Work Replace 643 - 1x4 2 lamp flourescent fixtures with special E.S.B + Lamps

PROPOSED FIXTURES IN DETAIL (See attached schedule, if necessary)

Location of Room	Light Outlets	Sw.	Plugs	Fixt.	Location of Room	Light Outlets	Sw.	Plugs	Fixt.
Intire Bldg.				643					

OK 8/30/89

No. of Sw. Out.		Heat - Type	
No. of Outlets Lt.	643	Oil	
No. of Rec.		Gas	
No. of Motors	H.P.	Electric - KW Connected Load	
No. of Signs	Trans.	Hot Water - Motors and Size	
Air Cond.		Steam	Motors and Size
Range Name plate rate		Hot Air	Motors and Size
Water Heater Name plate rate		Misc.	
Clothes Dryer Name plate rate			
Total Load			
Size of Main Entrance Sw.			
Size of S. E. Conductors			

Work to Start 7-25-89 Inspection Date Requested 8-25-89 Permit Fee No Charge

Signed under the Penalties of Perjury:

Licensee WALTER B. STOCKWOOD, INC. (Please print) Signature Walter B. Stockwood (Please sign) License No. A-4622

Address P. O. BOX 3007, Woburn, MA 01888 (Street & Number) (City or Town) (Zip Code) Tel. No. 935-8181

Supplemental information on forms furnished by the inspectors of wires shall be mailed or delivered by the applicant within five (5) working days from the date of said application, if required by the inspector of wires.

EAJP:eid

Inspector must be notified when soil, drain pipes, and all connections therewith are placed in position.

Application for Permit to Do Plumbing

BURLINGTON, MASSACHUSETTS March 25, 1934 No. 47

To Plumbing Inspector:

The undersigned hereby applies for a permit to perform plumbing work, according to the following specifications:

1. Location of Building No. Fox Hill School Fox Hill Rd
   Nearest cross Street
2. Name of Owner Address
3. Name of Plumber J. Callahan Address 321 Hale St. Beverly
4. Material of Building New or old?
5. How is the Building Occupied?
6. How many families? Number of Stores?
7. Is the building erected on solid or filled land?
8. How much below the grade of the Street is the cellar bottom?

Location, ownership and detail must be complete and legible
Separate application required for every building.

Nature of the Proposed Plumbing in Detail

Basement

First Story Installing Disposall

Second Story

ADDRESS 321 Hale St. Beverly

SIGN HERE R. St. Pierre

PLUMBERS MUST RECEIVE A PERMIT BEFORE COMMENCING WORK

DEPARTMENT OF HEALTH

JOHN WOODBRIDGE BEAL
H. STORY GRANGER
EDWARD A. J. POSKUS

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

J. WILLIAMS BEAL SONS, GRANGER & POSKUS, ARCHITECTS

185 DEVONSHIRE STREET, BOSTON, MASSACHUSETTS, LIBERTY 2-1879

June 23, 1966

Mr. Paul Johnston
Inspector of Buildings
Town of Burlington
Burlington, Mass.

Re: Elementary School No. 5
Burlington, Massachusetts

Dear Mr. Johnston:

Please find enclosed copies of concrete tests of classroom floor slabs, Units 2, 3 and 4, submitted by Herman G. Protze.

Very truly yours,

Herbert W. Hatch.

Herbert W. Hatch

HWH:emc
Enc.

EAJP:eid

DEPARTMENT OF HEALTH
TOWN OF BURLINGTON
MASSACHUSETTS

252 FOXHILL ROAD
FOXHILL SCHOOL

No. 6

PERMIT TO INSTALL PRIVATE SEWERAGE DISPOSAL SYSTEM

Fee 25.00

Burlington, Feb 2 19 66

Permission is hereby granted to M. Spinelli + Sons - 25 Moulton (Street) Camb, Mass. to install a private sewerage system at Fox Hill Rd Elementary Sch Burlington, Massachusetts. This permit is issued with the provision that the recipient shall comply with the Sewerage Disposal Regulations of the Town of Burlington, the following specifications and that he will notify the Agent of the Board of Health before backfilling.

as per State B. of H. O.K. W. J. Howard
AGENT

SPECIFICATIONS FOR SEWERAGE SYSTEM

A. General

Percolation Time _____ Sq. Ft. Absorption Area _____

Diameter & Grade of House Sewer _____ Depth Below Final Grade _____

B. Primary Treatment Consists of ☐ Septic Tank ☐ Cesspool ☐ Privy Vault

Capacity of Septic Tank _____ gals., Manholes _____ Construction _____

Capacity of Privy Vault _____ cubic ft., Screening _____ Ventilation _____

Diameter of Cesspool _____ ft., Depth Below Inlet Pipe _____ ft.

Number of Cesspools _____ Distance Apart _____ ft., Manholes _____

Distance from Building _____ ft., Property Lines _____ ft.

Distance from Water Lines, Wells, Streams, Drainage Ditches _____ ft.

C. Secondary Treatment Consists of ☐ Distribution Box ☐ Tile Field ☐ Seepage Pit ☐ Leaching Bed

1. Seepage Pit: Diameter _____ ft., Depth Below Inlet Pipe _____ ft.
   Number of Pits _____ Distance Apart _____ ft.
   Distance from Building _____ ft., Property Lines _____ ft.
   Distance from Water Lines, Wells, Streams, etc. _____ ft.

2. Tile Field: Number of Laterals _____ Total Linear Ft. of Pipe _____ ft.
   Depth of Trenches _____ in., Width _____ in. Dist. Apart _____ ft.
   Diameter of Pipe _____ in., Grade of Trenches & Pipe _____ /100 ft.
   Depth of Stone Below Pipe _____ in., Above Pipe _____ in.
   Trenches Covered With _____ paper (salt hay), Type of Pipe _____

3. Leaching Bed: Dimensions of bed _____ ft. x _____ ft., Number of laterals _____
   Depth of Bed _____ ft., Distance Between Laterals _____ ft.

4. Fill Needed: Dimensions _____ ft. x _____ ft., Depth _____ ft.
   Fill to consist of _____ ft., of _____ stone, and _____ ft. of Bank Run Sand & Gravel.

D. Diagram and Plot Plan of System on Reverse Side

E. Approval of System

(Stamp)

1. Inspection Made _____ 19 ____
2. Inspection Made _____ 19 ____
3. Inspection Made _____ 19 ____

_____
AGENT

Form BU-19. 5M-4-64-937749

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC SAFETY
DIVISION OF INSPECTION

1010 Commonwealth Avenue
Boston 15, Mass.

October 8, 1965

CERTIFICATE OF APPROVAL FOR PLANS AND SPECIFICATIONS

I hereby certify that plans and specifications have been deposited with me by J. Williams Beal Sons, Granger & Poskus, 185 Devonshire Street, Boston, Mass

for the erection *of a building on* North End of Fox Hill Street *in the* Town of BURLINGTON

to be known as Elementary School #5 *and designed to be used in whole or in part for* educational purposes

and I hereby certify that said plans and specifications conform to the provisions of Chapter 143 of the General Laws, for a building of its class, relating to egresses, means for preventing spread of fire, and means for extinguishing fire in said building in accordance with conditions on reverse side.

If any change is made in said plans or specifications, or in the use for which the building is designed, the Supervisor of Plans must be notified, and a new certificate obtained therefor

Joseph Yantosca *Supervisor of Plans.*

Approved.

Joseph E. Duffy

Chief of Inspections.

1. This certificate of approval is issued subject to the regulations of this Department.

2. General specifications for preventing the spread of fire which apply to this building shall be carried out as directed by the State Building Inspector.

3. These plans are approved subject to the provisions of all Federal laws, rules and regulations.

4. They are referred to Inspector Pasquale Pizzano of this office 1010 Commonwealth Avenue, Boston 15, Mass., telephone Longwood 6-4500 with whom you will take up all matters pertaining to same.

J. WILLIAMS BEAL SONS, GRANGER & POSKUS
ARCHITECTS
185 DEVONSHIRE STREET
BOSTON

Copy for Mr. Vincent Howard, c/o Board of Health, Town of Burlington

July 12, 1965.

Mr. Herbert D. Nickerson
District Sanitary Engineer
Northeast Department of Public Health
Building No. 4
Tewksbury Hospital
Tewksbury, Massachusetts

Dear Mr. Nickerson: Re: Burlington Elementary School

I am enclosing a topographical plan of land in Burlington that is under consideration for a new elementary school.

On Saturday, July 10th, in the presence of Mr. Vincent Howard, agent for the Board of Health for the Town of Burlington, percolation tests were made and it was established that in Hole #1 the percolation made was one inch in every 8 minutes: in percolation holes #2 and #3 the percolation was one inch in 9 minutes.

In viewing the test holes, the soil conditions are fairly uniform throughout the entire area. The test holes were dug to a depth of 7-1/2 to 9 feet. With the soil being as uniform as it was, Mr. Howard felt that the percolation in any other percolation pits would be about the same.

Prior to making the percolation tests, the percolation holes were saturated for a period of two hours as you had requested.

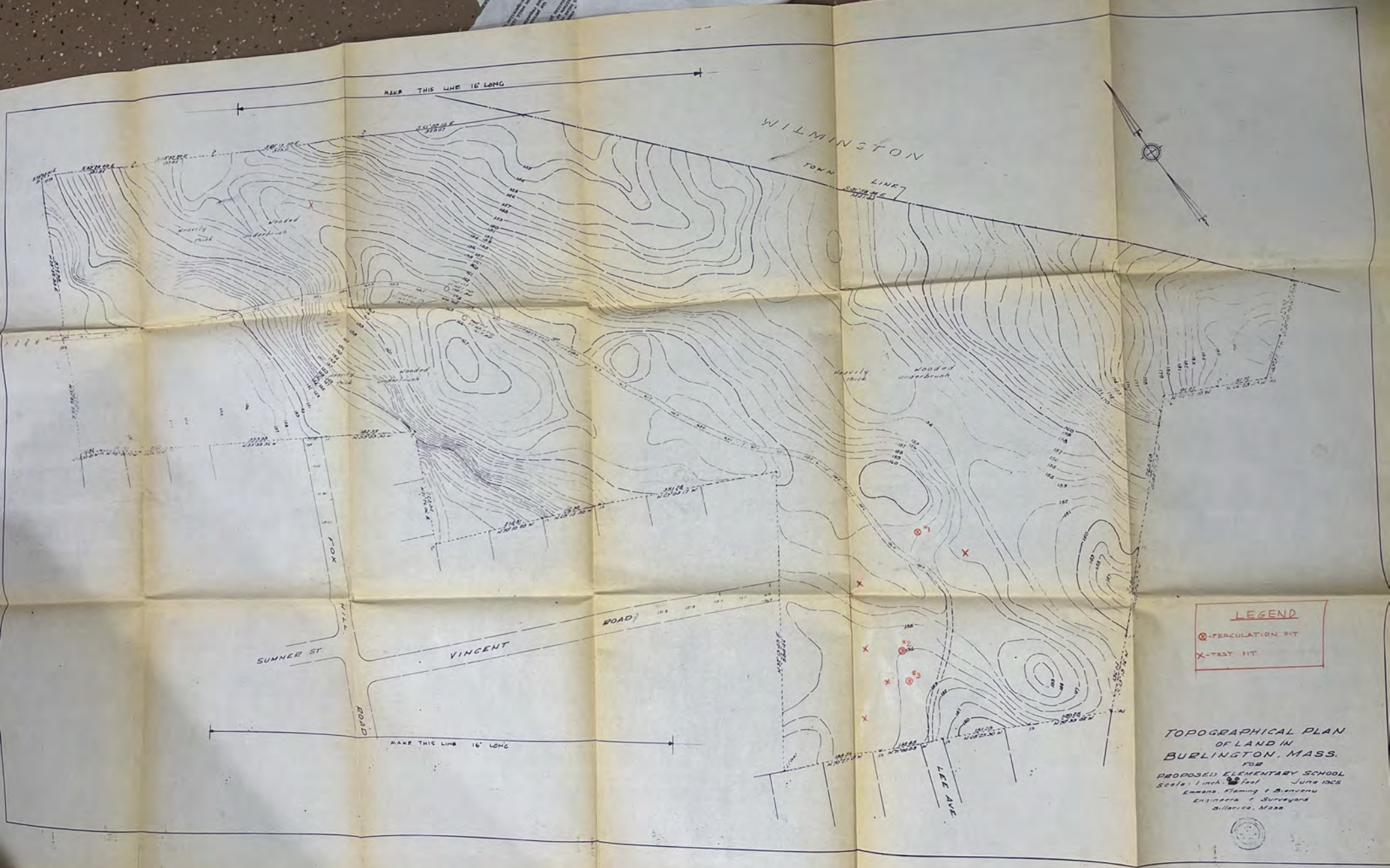
If there is any further information that you would like, please do not hesitate to call me, and thank you for your co-operation upon my visit to your office.

Very truly yours,

J. WILLIAMS BEAL SONS, GRANGER

By _____
Edward A. J.

EAJ:eid


MAKE THIS LINE 16' LONG
WILMINGTON
TOWN LINE
Heavily wooded
Wooded underbrush
Heavily thick
Wooded underbrush
FOX HILL ROAD
SUMNER ST
VINCENT ROAD
LEE AVE.
MAKE THIS LINE 16' LONG
LEGEND
⊗-PERCULATION PIT
X-TEST PIT
TOPOGRAPHICAL PLAN
OF LAND IN
BURLINGTON, MASS.
FOR
PROPOSED ELEMENTARY SCHOOL
Scale: 1 inch = 50 feet
June 1965
Emmons, Fleming & Bienvenu
Engineers & Surveyors
Billerica, Mass.

N

UTILITY PLAN.
SCALE 1" = 60'-0"

LEGEND	
	SANITARY SEWER
	STORM SEWER
	WATER SERVICE
	GATE VALVE
O M.H.	MANHOLE
O C.B.	CATCH BASIN

PROPERTY LINE

NOTE:
ORIGINAL SURVEY & TOPOGRAPHY PREPARED BY
EMMONS, FLEMING, & BIENVENU
ENGINEERS & SURVEYORS
BILLERICA, MASS. JUNE, 1965

SEPT. 8, 1966 LEACHING FIELD DETAILS & DISPOSAL SYSTEM PROFILE REV.

R E V I S I O N S

APPROVED

Mass. Department of Public Health
Division of Sanitary Engineering
Thomas F. McLaughlin
Date
SEP 19 1966

REGISTERED ARCHITECT
EDWARD A. J. POSKUS
No. 1498
BOSTON, MASS.
COMMONWEALTH OF MASSACHUSETTS

J. WILLIAMS BEAL, SONS, GRANGER & POSKUS
ARCHITECTS
185 DEVONSHIRE ST., BOSTON, MASS.

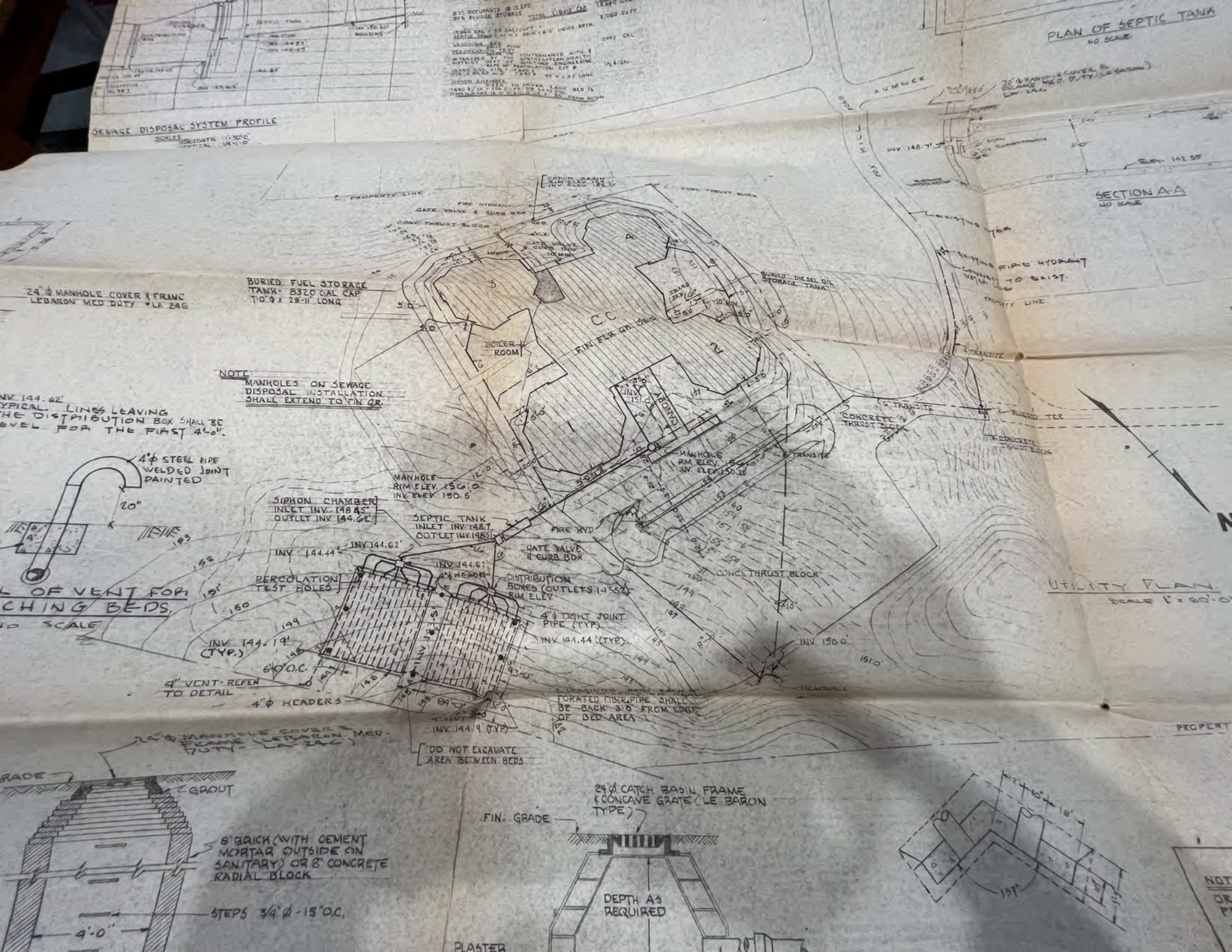
DRAWN HBQ COMM. NO. 818
CHECKED WDT DATE SEPT. 17, 1965

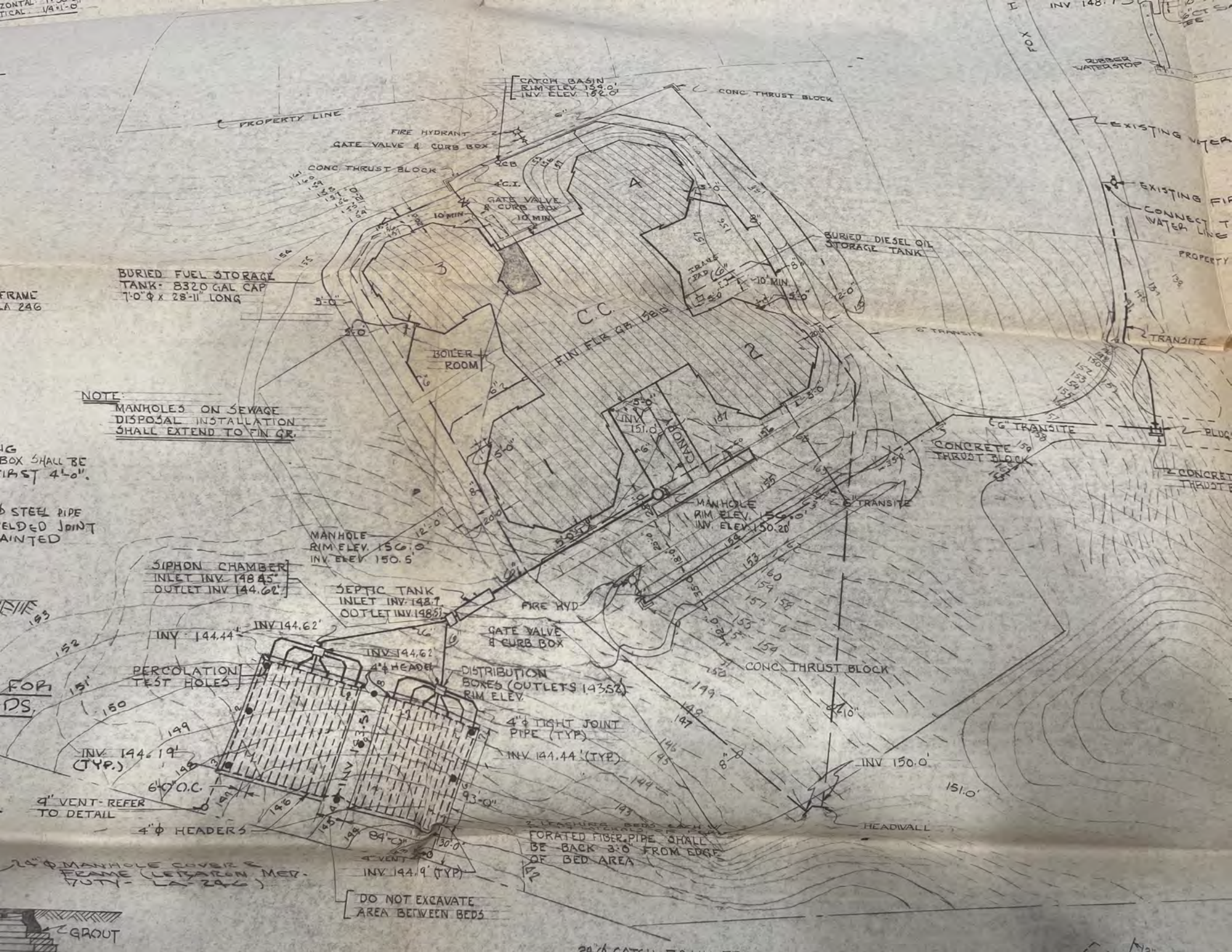
ELEMENTARY SCHOOL NO 5
BURLINGTON, MASSACHUSETTS

SITE PLAN
UTILITIES
SCALE AS NOTED

U-1

SEP 9 1966


SEWAGE DISPOSAL SYSTEM PROFILE
PLAN OF SEPTIC TANK
NO SCALE
SECTION A-A
NO SCALE
UTILITY PLAN
SCALE 1" = 60'-0"
24" Ø MANHOLE COVER & FRAME LEBARON MED DUTY #LA 246
BURIED FUEL STORAGE TANK- 8320 GAL CAP 7'-0" Ø x 28'-11" LONG
BURIED DIESEL OIL STORAGE TANK
BOILER ROOM
C.C.
FIN FLR GR 156
NOTE:
MANHOLES ON SEWAGE DISPOSAL INSTALLATION SHALL EXTEND TO FIN GR.
4" Ø STEEL PIPE WELDED JOINT PAINTED
20"
L OF VENT FOR CHING BEDS
O SCALE
MANHOLE RIM ELEV. 156.0 INV. ELEV. 150.5
SIPHON CHAMBER INLET INV. 148.45 OUTLET INV. 144.62
SEPTIC TANK INLET INV. 148.7 OUTLET INV. 148.51
PERCOLATION TEST HOLES
INV. 144.44
INV. 144.62
INV. 144.62 4" Ø HEADER
DISTRIBUTION BOXES (OUTLETS 143.52) RIM ELEV.
4" Ø TIGHT JOINT PIPE (TYP.)
INV. 144.44 (TYP.)
INV. 144.19' (TYP.)
6'-0" O.C.
4" VENT - REFER TO DETAIL
4" Ø HEADERS
93'-0"
84'-0"
30'-0"
INV. 144.19' (TYP.)
DO NOT EXCAVATE AREA BETWEEN BEDS
PERFORATED FIBER PIPE SHALL BE BACK 3'-0 FROM EDGE OF BED AREA
FIRE HYD
GATE VALVE & CURB BOX
CONC. THRUST BLOCK
INV. 150.0'
HEADWALL
MANHOLE RIM ELEV. 156.0 INV. ELEV. 150.28
CONCRETE THRUST BLOCK
BLOCKED TEE
EXISTING FIRE HYDRANT
CONNECT TO EXIST. WATER LINE
PROPERTY LINE
TRANSITE
SUMNER
JUIN RD
INV. 148.7'
EXISTING WATER
24" Ø MANHOLE COVER & FRAME (LEBARON MED. DUTY - LA 246)
GROUT
8" BRICK (WITH CEMENT MORTAR OUTSIDE ON SANITARY) OR 8" CONCRETE RADIAL BLOCK
STEPS 3/4" Ø - 15" O.C.
4'-0"
24" Ø CATCH BASIN FRAME & CONCAVE GRATE (LE BARON TYPE)
FIN. GRADE
DEPTH AS REQUIRED
PLASTER
12"
10"
18"
137"


CATCH BASIN
RIM ELEV. 154.0'
INV. ELEV. 152.0'
CONC. THRUST BLOCK
PROPERTY LINE
FIRE HYDRANT
GATE VALVE & CURB BOX
CONC. THRUST BLOCK
4" C.I.
GATE VALVE & CURB BOX
10' MIN.
BURIED DIESEL OIL STORAGE TANK
BURIED FUEL STORAGE TANK: 8320 GAL CAP 7'-0" ϕ x 28'-11" LONG
BOILER ROOM
FIN FLR GR. 158.0
CANOPY
INV. 151.0'
NOTE:
MANHOLES ON SEWAGE DISPOSAL INSTALLATION SHALL EXTEND TO FIN GR.
MANHOLE
RIM ELEV. 156.0'
INV. ELEV. 150.5
SIPHON CHAMBER
INLET INV. 148.45'
OUTLET INV. 144.62'
SEPTIC TANK
INLET INV. 148.7'
OUTLET INV. 148.51'
FIRE HYD
GATE VALVE & CURB BOX
INV. 144.44'
INV. 144.62'
INV. 144.62'
4" ϕ HEADER
PERCOLATION TEST HOLES
DISTRIBUTION BOXES (OUTLETS 143.52)
RIM ELEV.
4" ϕ TIGHT JOINT PIPE (TYP)
INV. 144.44' (TYP)
INV. 144.19' (TYP.)
6'-0" O.C.
9" VENT - REFER TO DETAIL
4" ϕ HEADERS
93'-0"
84'-0"
30'-0"
4" VENT
INV. 144.19' (TYP)
24" ϕ MANHOLE COVER & FRAME (LETTARON MFG. CO. - LA-246)
GROUT
DO NOT EXCAVATE AREA BETWEEN BEDS
CONC. THRUST BLOCK
INV. 150.0'
151.0'
HEADWALL
PERFORATED FIBER PIPE SHALL BE BACK 3'-0" FROM EDGE OF BED AREA
6" TRANSITE
CONCRETE THRUST BLOCK
MANHOLE
RIM ELEV. 156.0'
INV. ELEV. 150.20'
6" TRANSITE
EXISTING WATER
EXISTING FIR
CONNECT T WATER LINE
PROPERTY
TRANSITE
PLUG
CONCRET THRUST B
RUBBER WATERSTOP
FOX
INV 148.7

From: John Keeley
To: Cheryl Cambria
Cc: conservation@burlington.org
Subject: Re: Records Inquiry
Date: Friday, April 7, 2023 12:29:34 PM

Hi Cheryl
Conservation has no such records, as the Fox Hill School is not within 100 feet of wetlands.
The Board of Health may have records, though.
John

On Fri, Apr 7, 2023 at 11:17 AM Cheryl Cambria <cherylcambria@gmail.com> wrote:

> Hi,
>
> I am conducting an environmental assessment at Fox Hill Elementary School at 252 Fox Hill Road in Burlington. I am writing to request records pertaining to the use and storage of oil in underground or aboveground storage tanks and/or the spill or release of oil or other hazardous substance at this location.
>
> I will be in the area on Wednesday, April 12 and could stop by your office to view files if more convenient.
>
> Thank you!!
>
> Cheryl A. Cambria
>
> ECMS Associate
>
> 508-942-0366

--
John Keeley, Conservation Administrator
Town of Burlington | Conservation Department | 25 Center Street | Burlington, MA 01803
t 781-270-1655 | www.burlington.org

All email messages and attached content sent from and to this email account are public records unless qualified as an exemption under the Massachusetts Public Records Law.

TOWN OF BURLINGTON

Town Clerk's Office

Amy E. Warfield, Town Clerk, CMC
Linda A. McNeill, Assistant Town Clerk
Janice M. Archer, Senior Clerk

Daniel C. McCormack, CA
Records Manager/Archivist
Julie M. Michutka, Department Assistant

PUBLIC RECORDS REQUEST

Date: April 7, 2023

Information of Requestor

Name:	Cheryl Cambria
Address:	NA
City, State, Zip:	NA
Phone:	508-942-0366

Public Information Requested (Please specify in exact detail)

Both file for 252 Fox Hill Rd. - Fox Hill Elementary School

X **NON-OFFICIAL** (Fee to be determined by record clerk)
_____ **OFFICIAL** (Committee or Board)

FOR OFFICE USE ONLY

Date Information Released:	April 7, 2023
Information Picked Up By:	Emailed to Requestor
Fee Charged:	$0

Signature of Record Clerk: Jennifer Foley

G:\TEMPLATES_FORMS_LABELS\Public Records Request Form.doc

Commonwealth of Massachusetts
Asbestos Notification Form — ANF-001

701921

A Asbestos Abatement Description

1. Facility location:

Fox Hill School — Name
NO # - Fox Hill Road — Address
Burlington — City/Town
01803 — Zip code
(617) 270-1814 — Telephone
boiler room — What is the worksite location? building name, #, wing, floor, room

2. Is the facility occupied? ☒ Yes ☐ No

3. Asbestos Contractor:

Dec-Tam Corporation — Name
10 Lowell Jct. Road — Address
Andover — City/Town
01810 — Zip code
(508) 470-2860 — Telephone
AC000035 — DLI License #
written — Contract type (written/verbal)

4. On-Site Project Supervisor/Foreman:

Charles Brewer — Name
SF09713 — DLI Certification #

5. Project Monitor:

RECON Env. — Name
AA000004 — DLI Certification #

6. Asbestos Analytical Lab:

same as 5 — Name
DLI Certification #

7. Project start date 8/22/95 end date 8/22/95 specific workhours (Mon.-Fri.) 8am - 4pm (Sat. Sun.) _____

8. What type of project is this? (circle one): demolition repair renovation other (explain)

9. Describe the asbestos abatement procedures to be used (circle): glove bag enclosure full containment cleanup encapsulation disposal only other (explain)

10. Is the job being conducted ☒ indoors ☐ outdoors ?

11. Total amount of each type of Asbestos Containing Materials (ACM) to be handled on pipes or ducts (linear ft.) _____ or other surfaces (square ft.) 5 to be removed, enclosed or encapsulated:

linear/square feet

boiler, breaching, duct, tank surface coatings	/ 5	thermal, solid core pipe insulation	/
corrugated or layered paper pipe insulation	/	insulating cement	/
spray-on fireproofing	/	trowel/sprayer coatings	/
cloths, woven fabrics	/	transite board, wall board	/
other (please describe)	/		

12. Describe the decontamination system(s) to be used:

two stage

13. Describe the containerization/disposal methods to comply with 310 CMR 7.15 and 453 CMR 6.14(2)(g):

wetting material with amended water and placing in double 6 mil poly prelabeled bags to be transported to an approved landfill in a sealed, lockable container

14. For Emergency Asbestos Abatement Operations, the DEP and DLI officials who evaluated the emergency:

Name of DEP Official — Title
Date of Authorization — Waiver #
Name of DLI Official — Title
Date of Authorization — Waiver #

15. Do prevailing wage rates apply as per M.G.L. c. 149, § 26, 27, or 27A - F to this project? ☒ Yes ☐ No

INSTRUCTIONS

1. All sections of this form must be completed in order to comply with the Department of Environmental Protection notification requirements of 310 CMR 7.15 (*ten working days prior notification is required of any abatement project*); and the Department of Labor and Industries notification requirements of 453 CMR 6.12 (*ten days prior notification is required of ANY abatement project greater than three linear or square feet*).

2. Submit Original Form To:
Commonwealth of Massachusetts
Asbestos Program
P.O.B. 120087
Boston, MA 02112-0087

3. This form may be used for notifying the U.S. Environmental Protection Agency Region I of asbestos demolition/renovation operations subject to NESHAPS (40 CFR Subpart M).

For Official Use Only
Notification #
Received Date
Reviewer
Formal Approval/Denial
Decision Date

Commonwealth of Massachusetts
Asbestos Notification Form — ANF-001

701921

INSTRUCTIONS

1. All sections of this form must be completed in order to comply with the **Department of Environmental Protection** notification requirements of 310 CMR 7.15 *(ten working days prior notification is required of any abatement project)*; and the **Department of Labor and Industries** notification requirements of 453 CMR 6.12 *(ten days prior notification is required of ANY abatement project greater than three linear or square feet)*.

2. Submit Original Form To:
Commonwealth of Massachusetts
Asbestos Program
P.O.B. 120087
Boston, MA 02112-0007

3. This form may be used for notifying the U.S. Environmental Protection Agency Region I of asbestos demolition/renovation operations subject to NESHAPS (40 CFR Subpart M).

For Official Use Only
Notification #
Received Date
Fee Paid
Form Approved/Denied
Approval Date

A Asbestos Abatement Description

1. Facility location:

Name: Fox Hill School
Address: NO # - Fox Hill Road
City/Town: Burlington
Zip code: 01803
Telephone: (617) 270-1814
What is the worksite location? building name, #, wing, floor, room: boiler room

2. Is the facility occupied? ☒ Yes ☐ No

3. Asbestos Contractor:

Name: Dec-Tam Corporation
Address: 10 Lowell Jct. Road
City/Town: Andover
Zip code: 01810
Telephone: (508) 470-2860
DLI License #: AC000035
Contract Type (written/verbal): written

4. On Site Project Supervisor/Foreman:

Name: Charles Brewer
DLI Certification #: SF09713

5. Project Monitor:

Name: RECON v Env.
DLI Certification #: AA000004

6. Asbestos Analytical Lab:

Name: same as 5
DLI Certification #:

7. Project start date 8/22/95 end date 8/22/95 specific work hours (Mon.-Fri.) 8am - 4pm (Sat. Sun.)

8. What type of project is this? (circle one): demolition **repair** renovation other (explain)

9. Describe the asbestos abatement procedures to be used (circle): glove bag enclosure full containment strip encapsulation disposal only other (explain)

10. Is the job being conducted ☒ indoors ☐ outdoors?

11. Total amount of each type of Asbestos Containing Materials (ACM) to be handled on pipes or ducts (linear ft.) ____ or other surfaces (square ft.) 5 to be removed, enclosed or encapsulated:

linear/square feet

boiler, breaching, duct, tank surface coatings	/ 5	thermal, solid core pipe insulation	/
corrugated or layered paper pipe insulation	/	insulating cement	/
spray-on fireproofing	/	trowel/sprayer sealings	/
cloths, woven fabrics	/	transite board, wall board	/
other (please describe)	/		

12. Describe the decontamination system(s) to be used:
two stage

13. Describe the containerization/disposal methods to comply with 310 CMR 7.15 and 453 CMR 6.14(2)(a):
wetting material with amended water and placing in double 6 mil poly prelabeled bags to be transported to an approved landfill in a sealed, lockable container

14. For Emergency Asbestos Abatement Operations, the DEP and DLI officials who evaluated the emergency:

Name of DEP Official: ____ Title: ____
Date of Authorization: ____ Waiver #: ____
Name of DLI Official: ____ Title: ____
Date of Authorization: ____ Waiver #: ____

15. Do prevailing wage rates apply as per M.G.L. c. 149, § 26, 27, or 27A - F to this project? ☒ Yes ☐ No

TOWN OF BURLINGTON
Board of Health
61 Center Street
Burlington, MA 01803

Main Office Phone: (781) 270-1955 Fax: (781) 273-7687
Sharon Walker Mastenbrook, Director of Public Health – (781) 270-1954
Heidi Porter, Environmental Engineer – (781) 270-1956
Marlene Johnson, Health Agent – (781) 270-1949

Nurse's Office Phone: (781) 270-1957 Fax: (781) 270-1605
Judy Baggs, Supervising Nurse – (781) 238-4688
Dianne Luther, Public Health Nurse – (781) 505-1139
Website: www.burlington.org/clerk/BOH/boh

MEMORANDUM

TO: Planning Board

FROM: Board of Health

DATE: June 29, 2006

RE: Application for Approval of Site Plan Waivers
Fox Hill School, 252 Fox Hill Road
Memorial School, 119 Winn Street

The Board of Health has reviewed the above applications and met with the proponent and understands the proposed work will consist of the following:

- Installation of portable trailers to comprise an average 2,400 square foot temporary classroom area at each location;
- They will have restrooms;
- At Memorial School, utilities will tie into building;
- At Fox Hill School, the sewage connection will be a separate connection to the sewer outlet pipe at the site due to the school's slab on grade construction;
- The buildings will be heated via electric units;
- No food will be served in these classrooms; and
- The classrooms are expected to be on site for up to 3 years.

At its regularly scheduled meeting on June 27, 2006, the Board of Health voted to approve the referenced applications and has no significant comments.

Board of Health Members
Edmund Wall - Chairman · Terry McSweeney - Vice-Chairman · James Dion · Catherine Read, Ph.D., RN · Edward Weiner, Ph.D.

Subject: Fox Hill and Memorial Schools - Site Plan Waivers
From: Heidi Porter <hporter@burlmass.org>
Date: Thu, 29 Jun 2006 17:43:36 -0400
To: Bernie Schipelliti <bschipelliti@burlmass.org>, "Bob Mercier (rmercier@burlmass.org)" <rmercier@burlmass.org>, John Clancy <jclancy@burlmass.org>, "John Keeley (jkeeley@burlmass.org)" <jkeeley@burlmass.org>, Kristin Hoffman <khoffman@burlmass.org>, "Lee Callahan (lcallahan@burlmass.org)" <lcallahan@burlmass.org>, "Mike Hanafin (mhanafin@burlmass.org)" <mhanafin@burlmass.org>, "Pauline Crusco (pcrusco@burlmass.org)" <pcrusco@burlmass.org>, Sharon Walker Mastenbrook <smastenbrook@burlmass.org>, "Tom Hayes (thayes@burlmass.org)" <thayes@burlmass.org>, Tony Fields <afields@burlmass.org>, Jen Gelinas <jgelinas@burlmass.org>

Final Board of Health comments on the referenced proposals are attached.

--
Heidi Porter, MPH Environmental Engineer Town of Burlington Board of Health 61 Center Street Burlington, MA 01803 phone: 781-270-1956 fax: 781-273-7687 email: hporter@burlmass.org

Fox Hill and Memorial Schools - SPW.doc **Content-Type:** application/msword
Content-Encoding: base64

Gmail

252 Fox Hill Road - MEC

Christine Mathis <cmathis@burlington.org> Wed, Jul 30, 2014 at 2:02 PM
To: Marlene Johnson <mjohnson@burlington.org>, Susan Lumenello <slumenello@burlington.org>, Bernie Schipelliti <bschipelliti@bpd.org>, Chief Steve Yetman <syetman@burlington.org>, Don Benjamin <dbenjamin@burlington.org>, Jennifer Gelinas <jgelinas@burlington.org>, Jodie Wennemer Keene <jkeene@burlington.org>, John Clancy <jclancy@burlington.org>, John Keeley <jkeeley@burlington.org>, John Petrin <jpetrin@burlington.org>, John Sanchez <jsanchez@burlington.org>, Josh Morris <jmorris@burlington.org>, Judy Sorensen <jsorensen@burlington.org>, Kristin Kassner <kkassner@burlington.org>, Leslie McLaughlin <lmclaughlin@burlington.org>, Mary Fay <mfay@burlington.org>, Mike Hanafin <mhanafin@burlington.org>, Stephen Hildreth <shildreth@burlington.org>, Tom Hayes <thayes@burlington.org>

Board of Health comments are attached.

Christine Mathis, Environmental Engineer
Burlington Board of Health
61 Center Street
Burlington, MA 01803
Tel: 781-270-1954 Fax: 781-273-7687

Fox Hill Road 252 - MEC.doc
244K

RECEIVED
By Town Clerk's office at 2:03 pm, Aug 11, 2014

TOWN OF BURLINGTON

Planning Department

Paul F. Roth, Member Clerk *John D. Kelly, Chairman* *Barbara L'Heureux, Vice Chairman*
Ernest E. Covino *Paul R. Raymond*
Ann M. Cummings *Joseph A. Impemba*

MEMO TO: **Amy Warfield, Town Clerk**

FROM: **Don Benjamin, Senior Planner**

DATE: **August 11, 2014**

RE: **Decision – Application for Approval of a Minor Engineering Change – 252 Fox Hill Road, Pandolfo Company, Inc, Applicant.**

At their meeting of August 7, 2014 the Planning Board made the following motion, approving the above referenced application:

MOTION – To approve the request of Pandolfo Company Inc, for property located at 252 Fox Hill Road, for a Minor Engineering Change to pave (asphalt) an existing stone dust/gravel drive, as reflected on the Plan entitled, "Site Plan in Burlington, MA, Fox Hill, Fox Hill Road, Burlington, MA," dated June 1, 2006, received in the Planning Department July 11, 2014, prepared by KBA Architects, subject to the following revisions, terms and conditions:

1. All previous conditions of approval granted to this property shall continue to remain in effect, as modified by this decision;

2. The applicant and/or property owner shall comply with all building and fire safety codes, and all recommendations and conditions of the Inspector of Buildings and Fire Department pertaining to such codes.

3. The applicant/property owner shall comply with the following requirements of the Board of Health:

   1. In the event that the proposed activities result in the accumulation of stagnant water or alteration of drainage patterns at the Site or adjacent properties, the proponent shall apply to the Board of Health for a Drainage Permit. As part of the Drainage Permit application, a drainage plan prepared by a professional engineer shall be submitted to ensure stormwater at the site is properly controlled and does not impact neighboring

Joe Pandolfo
Pandolfo Company, Inc.
P.O. Box 1068
Burlington, MA 01803

Town of Burlington
Planning Board
25 Center Street, Burlington MA 01803
Phone: 781-270-1645
http://www.burlington.org/community_development/planning.php

FORM V
APPLICATION FOR A MINOR ENGINEERING CHANGE

To: The Planning Board
Town of Burlington, Massachusetts

Date: JULY 10, 2014

The undersigned hereby respectfully requests, pursuant to Section 3 of the Burlington Planning Board's Rules & Regulations, that the Planning Board approve as a "Minor Engineering Change" the following modifications to the property located at:

Address: 252 FOX HILL ROAD – BURLINGTON, MA 01803

for which there is an approved **Site Plan** on file with the Planning Board which is:

Entitled: "SITE PLAN IN BURLINGTON, MA - FOX HILL SCHOOL, FOX HILL ROAD"

Submitted By: THE BURLINGTON SCHOOL DEPARTMENT

Prepared By: KBA ARCHITECTS – KNIGHT, BAGGE & ANDERSON, INC - BOSTON, MA

Dated JUNE 1, 2016, **and Revised to** NO REVISIONS

Endorsed by the Planning Board on JUNE 15, 2006

Proposed Change(s)

Please list proposed change(s) below. Include a statement supporting the basis for a "Minor Engineering Change". Attach additional pages as needed as well as redlined plans illustrating the proposed change(s). All pages of the plan that are affected must be redlined with proposed change(s).

PLEASE SEE ATTACHED DETAILS LABELED "PROPOSED CHANGES"

FILING INSTRUCTIONS

It is recommended that you call 781-270-1645 prior to filing an application to arrange a submission appointment with the Senior Planner

Upon completion of the application, file the following with the Planning Department:

- Completed original application (ALL PAGES).
- Six folded paper copies of the current approved plan of record, redlined on all affected pages to show proposed change(s), and any other supporting documentation required.
- One set of submittal material and plans must also be in electronic pdf format
- Application Fee (Check or Money Order made payable to The Town of Burlington)

The Planning Department will stamp the application "received", issue a receipt for the fee and assign a meeting date at which time this matter will be scheduled to be discussed by the Planning Board.

Planning Department:
Application & Fee Received By (Stamp/Initial):

Receipt# 77313

Amount: $500.00

Rcv'd By: J. Gelmes

Planning Department
JUL 11 2014
Received

TOWN OF BURLINGTON

Planning Department

Kristin Kassner, Planning Director

Don Benjamin, Senior Planner
Josh Morris, Assistant Planner
Jennifer Gelinas, Principal Clerk

Date: July 14, 2014

To: Board of Health
Conservation
Engineering
Police

From: Jennifer Gelinas
Principal Clerk

RE: 252 Fox Hill Road

Attached please find a Minor Engineering Change plan and Application for the above referenced property. This application seeks to asphalt pave a 12' wide surface in an existing gravel/stone dust access roadway. This matter has been placed on the Planning Board agenda for August 7, 2014 so please forward any comments you have by August 1, 2014.

If you should have any questions, please contact me at 1645. Thank you for your cooperation with this matter

25 CENTER STREET • BURLINGTON, MASSACHUSETTS 01803 • TEL (781) 270-1645
www.burlington.org • *planning@burlington.org*

MINOR ENGINEERING CHANGE - PROPOSED CHANGE

RE: FOX HILL SCHOOL ACCESS ROADWAY

1. On June 15, 2006, the Planning Board approved the installation of temporary portable classrooms with an access roadway.

2. Condition # 6 of the approval stated that the access drive shall not be more than 10-12 feet wide and shall be of a permeable type material such as gravel or stone dust.

3. It was not anticipated at this time that this access roadway would actually become the main driveway used by parents to circle around the building to drop off students and also to be used for all deliveries to the school. (Please see picture # 1.)

4. Along with being a big nuisance to the parents when dropping off their children, this gravel roadway has been a safety concern for a few years now due to pot holes that develop weekly and gravel that washes out onto Westwood Street with cars and trucks tires picking up these stones and tossing them back towards oncoming pedestrian and automobile traffic. (Please see pictures # 2 & # 3.)

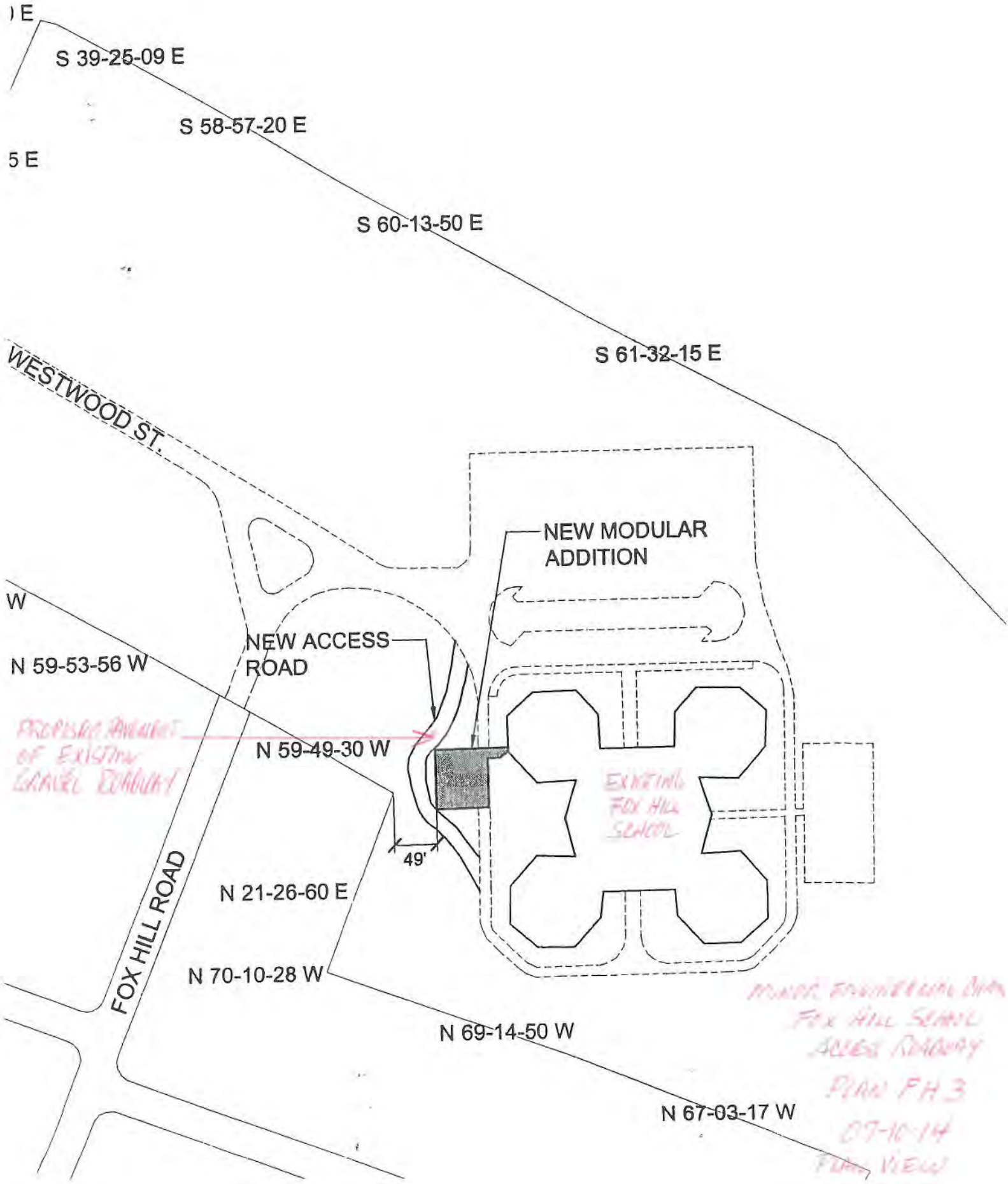
5. The attempted winter maintenance of this roadway is very costly and with all the snow, freezing and thawing that occurs during these months, it becomes an unrealistic task in that any repairs made on Monday are wiped out by the following Friday.

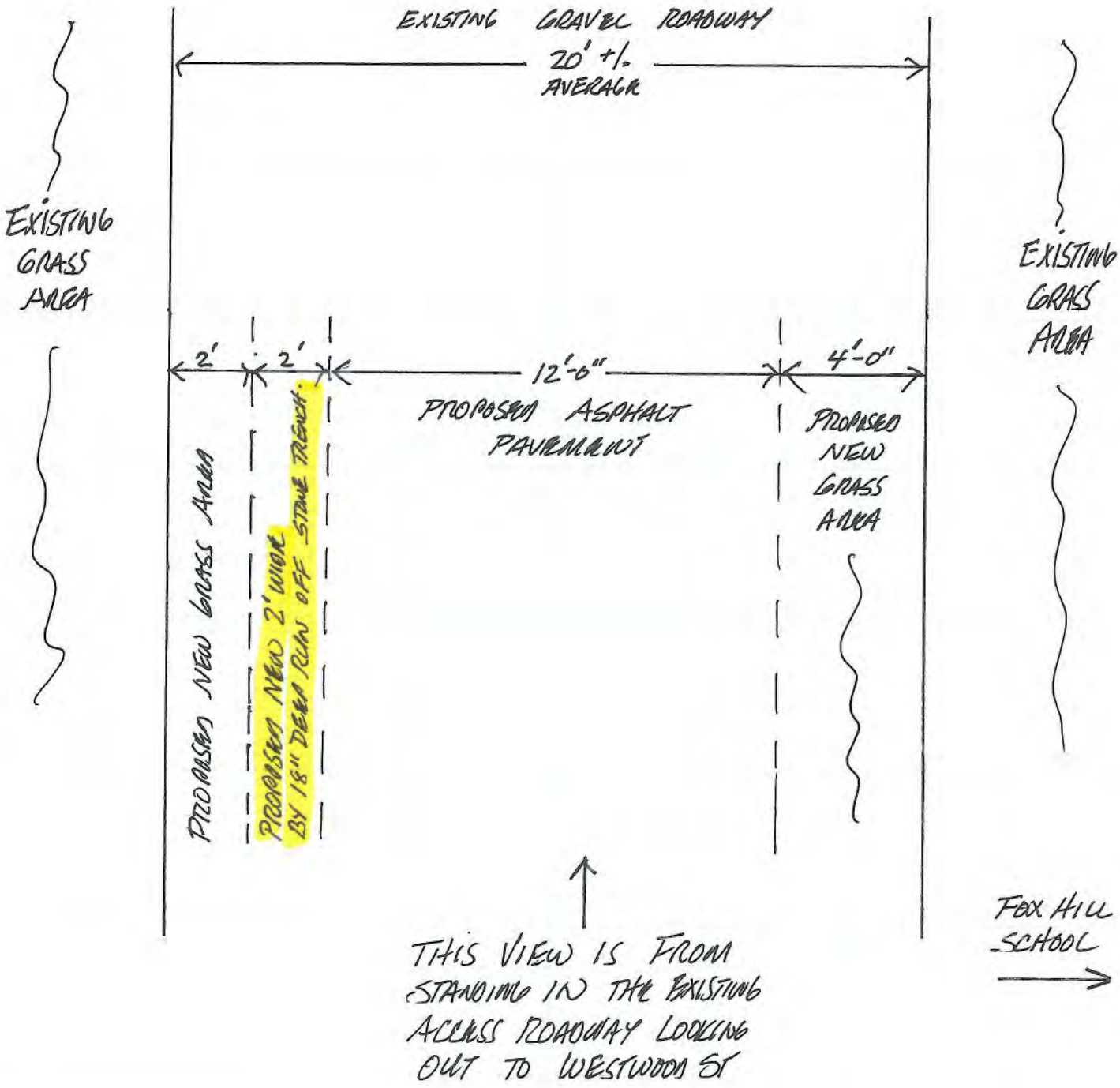
6. Due to all the added gravel put down over the years to fill in the pot holes, the actual width of the roadway is now an average of 20 feet wide. (Please see picture # 4.)

7. Since this roadway is used as a very important access to the safe operation of the Fox Hill School flow of traffic, the gravel surface does not meet the needs of the roadway and because it is so densely packed, it is not a permeable surface, therefore it would be a better choice to asphalt pave a 12' wide surface for this access roadway and restore the grass area as shown on submitted Proposed Plans FH3 & FH4 dated 07-10-14.

Sincerely,

Joe Pandolfo


) E
S 39-25-09 E
S 58-57-20 E
5 E
S 60-13-50 E
S 61-32-15 E
WESTWOOD ST.
NEW MODULAR ADDITION
W
NEW ACCESS ROAD
N 59-53-56 W
PROPOSED ALIGNMENT OF EXISTING GRAVEL ROADWAY
N 59-49-30 W
EXISTING FOX HILL SCHOOL
49'
N 21-26-60 E
FOX HILL ROAD
N 70-10-28 W
N 69-14-50 W
N 67-03-17 W
FOX HILL SCHOOL
ACCESS ROADWAY
PLAN FH 3
07-10-14
PLAN VIEW



THIS VIEW IS FROM STANDING IN THE EXISTING ACCESS ROADWAY LOOKING OUT TO WESTWOOD ST

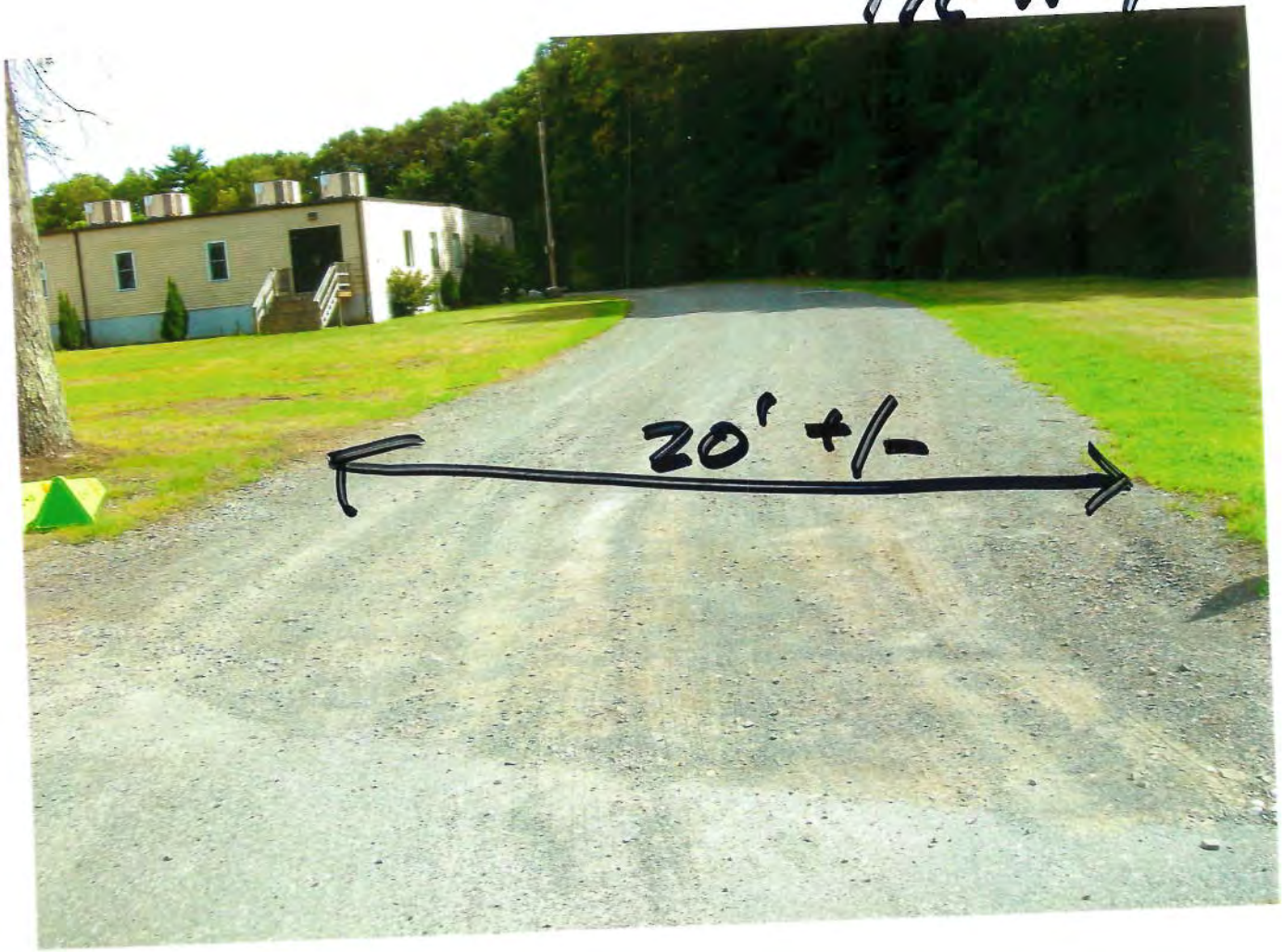
MINOR ENGINEERING CHANGE
FOX HILL SCHOOL
ACCESS ROADWAY
PLAN FH 4
07-10-14
PROPOSED DETAILS

Pic #1
DELIVERIES
&
STUDENT
DROP OFF

PIC #2

PIC #3

MC # 4



TOWN OF BURLINGTON
29 CENTER STREET
BURLINGTON, MASSACHUSETTS 01803

TOWN HALL (781) 270-1600 • FAX (781) 270-1608 • E-MAIL: info@burlmass.org

RECEIVED
2006 JUN 30 PM 3: 00
TOWN CLERK
BURLINGTON, MA

DATE: **June 30, 2006**

TO: **Jane L. Chew, Town Clerk**

FROM: **Kristin E. Hoffman, Assistant Planner**

RE: **Decision - Application for Approval of a Site Plan Waiver – 252 Fox Hill Road, Fox Hill School –Burlington School Department, Applicant**

At its meeting of June 15, 2006, the Planning Board made the following motions:

MOTION – The Planning Board finds that this is a proper request for a site plan waiver, since the plan submitted is an acceptable plan for the purposes of reviewing the proposed installation of temporary portable classrooms at this location.

APPROVED - 6-0-0

MOTION - To approve the Site Plan Waiver application of The Burlington School Department, for property located at 252 Fox Hill Road, to permit the installation of temporary portable classrooms at the existing Fox Hill School, as detailed on a plan entitled "Site plan in Burlington, MA, Fox Hill School, Fox Hill Road" prepared by KBA Architects, dated June 1, 2006, subject to the following terms and conditions:

1. The applicant and/or property owner shall comply with all building and fire safety codes, and all recommendations and conditions of the Inspector of Buildings and Fire Department pertaining to such codes. The fire alarm system shall be reviewed and approved by the Fire Department.

2. Prior to endorsement of the Site Plan by the Planning Board the Site Plan shall be revised to provide the following; a) a detail of the proposed new access road, b) any proposed utilities to service the temporary portable classrooms.

3. The applicant shall design and install a drainage system to infiltrate/mitigate the runoff from the rooftop of the proposed portable classrooms. The design shall be reviewed and approved by the Town Engineer prior to installation.

4. This approval is to permit the installation of temporary portable classrooms. In the event that they are deemed unnecessary and removed from the site the site must be brought back to the original condition or a suitable alternative condition. Any alternative shall be reviewed and approved by the Building Inspector and the Planning Director.

5. The applicant and/or property owner shall use appropriate measures to protect materials and any adjacent drainage structures from erosion and sedimentation during any excavation.

6. The temporary access drive shall be not more than 10-12 feet in width and shall be constructed of gravel, stone dust, or a similar permeable alternative. There shall be no parking along this drive and no parking signs shall be installed to the discretion of the safety officer and the Planning Director.

7. All pavement/asphalt materials removed from the premises shall be properly disposed of and documentation of such disposal shall be submitted to the Board of Health and the Conservation Commission.

8. The applicant and/or property owner comply with the recommendations and conditions of the Order of Conditions issued by the Conservation Commission. In the event that the conditions of the Conservation Commission necessitate any revision to the approved Site Plan, the applicant and/or property owner shall be required to submit a revised plan for Planning Board approval in accordance with the Planning Board's Site Plan Rules and regulations.

9. All handicapped parking shall be properly posted in accordance with the requirements of the Americans with Disabilities Act. All handicapped accessibility improvements shall comply with the Massachusetts Architectural Access Board Rules and Regulations.

10. The applicant and/or property owner shall provide twenty-four (24) hour notice to pertinent Town departments, including the Inspector of Buildings, and the General Development Inspector, prior to commencing any work on the site, which requires inspection or review by Town staff.

11. All improvements shall be constructed in accordance with the Site Plan. No deviations from the Site Plan shall be permitted without prior authorization from the Planning Board. The applicant and property owner are advised that no field modifications may be made without preliminary authorization from the Planning Staff, to determine if any subsequent applications need to be filed for further review and approval of the Planning Board.

252 Fox Hill Road
environmental

Town of Burlington Board of Health

61 Center St., Burlington, MA 01803
781-270-1955 FAX 781-273-7687

To: Richard Benowitz, Principal
Fox Hill School

December 1, 2003

From: Todd H. Dresser, CHMM, TURP
TH Environmental Engineer

Subject: Lead and Copper Analysis Completed at Fox Hill School

On October 27, 2003, the Burlington Department of Public Works collected two water samples from a drinking fountain at the Fox Hill School. These samples were collected for lead and copper analysis. The first sample collected was found to contain 20 parts per billion (ppb) of lead and 110 ppb of copper. The concentration of lead detected exceeds the maximum contaminant level of 5 ppb specified in both the state and federal Safe Drinking Water Acts. The copper concentration was found to be acceptable. The drinking fountain was then flushed for five minutes and re-sampled. The second sample was found to contain 4 ppb of lead and less than 50 ppb of copper. This suggests that flushing may enable you to lower the lead concentration to a safe and acceptable level. This is important because lead is a strong neurotoxin that is readily absorbed by children. I have attached a copy of the sample results for your use.

I recommend that you immediately initiate a program to flush all water fountains at the school for five minutes each morning prior to the students' arrival. This approach will help to ensure that the water provided by the bubblers does not contain elevated lead concentrations. I also recommend that you contact the Water Department to make arrangements to sample each of the bubblers at the school to better assess the lead concentrations present at each bubbler. This task will enable you to determine whether the elevated lead concentration is associated with a singular bubbler or represents a condition affecting the entire school.

Please do not hesitate to contact me if you have any questions or if I can be of assistance.

Attachment.

Cc: Board of Health
Tom Murphy, School Committee – Chairman
Jim Picone, Superintendent of Schools
Craig Robinson, Director of Finance & Facilities
Paula Hayes, School Nurse
Bill Keene, Water Treatment Plant

Town of Burlington Board of Health
61 Center St., Burlington, MA 01803
781-270-1955 FAX 781-273-7687

To: Richard Benowitz, Principal
Fox Hill School

December 1, 2003

From: Todd H. Dresser, CHMM, TURP
Environmental Engineer

Subject: Lead and Copper Analysis Completed at Fox Hill School

On October 27, 2003, the Burlington Department of Public Works collected two water samples from a drinking fountain at the Fox Hill School. These samples were collected for lead and copper analysis. The first sample collected was found to contain 20 parts per billion (ppb) of lead and 110 ppb of copper. The concentration of lead detected exceeds the maximum contaminant level of 5 ppb specified in both the state and federal Safe Drinking Water Acts. The copper concentration was found to be acceptable. The drinking fountain was then flushed for five minutes and re-sampled. The second sample was found to contain 4 ppb of lead and less than 50 ppb of copper. This suggests that flushing may enable you to lower the lead concentration to a safe and acceptable level. This is important because lead is a strong neurotoxin that is readily absorbed by children. I have attached a copy of the sample results for your use.

I recommend that you immediately initiate a program to flush all water fountains at the school for five minutes each morning prior to the students' arrival. This approach will help to ensure that the water provided by the bubblers does not contain elevated lead concentrations. I also recommend that you contact the Water Department to make arrangements to sample each of the bubblers at the school to better assess the lead concentrations present at each bubbler. This task will enable you to determine whether the elevated lead concentration is associated with a singular bubbler or represents a condition affecting the entire school.

Please do not hesitate to contact me if you have any questions or if I can be of assistance.

Attachment.

Cc: Board of Health
Tom Murphy, School Committee – Chairman
Jim Picone, Superintendent of Schools
Craig Robinson, Director of Finance & Facilities
Paula Hayes, School Nurse
Bill Keene, Water Treatment Plant

LCR

For Richard Todd Dresser

DEPARTMENT OF ENVIRONMENTAL PROTECTION
LEAD AND COPPER ANALYSIS REPORT

PWS ID# 3048000 PWS NAME Town of Burlington TOWN Burlington SAMPLE CODE*

NAME OF STATE CERTIFIED LABORATORY RL Analytical Laboratories CERTIFIED LABORATORY ID# MA-R1015

LEAD ANALYSIS METHOD EPA 200.9 LEAD DETECTION LIMIT 0.002 COPPER ANALYSIS METHOD EPA 200.7 COPPER DETECTION LIMIT 0.05

OF SAMPLES REQUIRED* # OF SAMPLES SUBMITTED* 90th PERCENTILE LEAD* 90th PERCENTILE COPPER*

LAB SAMPLE ID	COLLECTION DATE	SAMPLE COLLECTION CODE**	DEP APPROVED SAMPLE SITE**	LEAD RESULT (mg/l)	LEAD ANALYSIS DATE	COPPER RESULT (mg/l)	COPPER ANALYSIS DATE
0310-15591-001	10-27-03		Fox Hill School First Flush	0.020	10/29/03	0.11	10/29/03
0310-15591-002	10-27-03		Fox Hill School Five Minute Flush	0.004	10/29/03	<0.05	10/29/03

SAMPLE CODE	
1	FIRST SAMPLING PERIOD
2	SECOND SAMPLING PERIOD
3	REDUCED - ANNUAL
4	REDUCED - EVERY THREE YEARS
5	LSL REPLACEMENT PROGRAM
6	DEMONSTRATION

PLEASE NOTE THE FOLLOWING:

WATER SUPPLIERS SHOULD MAIL TWO COPIES OF THIS FORM TO THE DEP REGIONAL OFFICE WITHIN 10 DAYS AFTER THE END OF THE REPORTING PERIOD.

* THIS SECTION IS TO BE FILLED OUT BY THE WATER SUPPLIER.

** SEE DEP LEAD & COPPER SAMPLING PLAN FOR APPROVED SAMPLING LOCATIONS.

DEC 1 2003

REMARKS

DEC 1 2003

SIGNATURE OF WATER SUPPLIER or LABORATORY DIRECTOR DATE 11-12-03

PAGE 1 OF 1

clarice lead_lcr3 (10-31-03)

DRESSER, TODD

To: CHAUDHURI, SYAMAL; KEENE, BILL

Cc: Cathy Read (E-mail 2); Ed Weiner (E-mail)

Subject: elevated lead level at Fox Hill School

Bill, 12/1/03

I just reviewed the lead and copper analysis prepared for the Fox Hill School. I noted the elevated lead level detected in a bubbler. It appears that flushing will help alleviate this problem. I was wondering if it would be possible for you to sample all the fountains at the school to determine if any of the other fountains are affected? Also, do you have any plans to sample the other schools?

Todd H. Dresser, CHMM, TURP
Environmental Engineer
Burlington Board of Health
29 Center Street
Burlington, MA 01803
781-270-1956
781-273-7687 (fax)
tdresser@burlmass.org

Fox Hill School
Air Quality Observations
2/14/2003

Room	Date	Time	Temperature °F	Humidity %RH	Dew Point °F	CO ppm	CO2 ppm	Occupants	Unit Vent Operation	Observations
Room #2	14-Feb-03	8:03:16	68.6	8.2	5.8	1	415	0	Yes	Books on top
Room #5	14-Feb-03	8:07:41	71.0	8.3	7.8	1.1	429	0	yes	Blocked by Computer equip.
Room #7	14-Feb-03	8:07:54	69.8	8.3	6.6	1.2	524	0	yes	Clear
Room # 9	14-Feb-03	8:15:26	69.0	9.1	8.3	1.4	563	0	No	Clear
Room #11	14-Feb-03	8:16:05	70.1	8.2	6.8	1.4	546	0	yes	Blocked
Room #13	14-Feb-03	8:16:53	70.5	7.6	5.7	1.2	484	0	yes	Clear
Room #15	14-Feb-03	8:20:28	72.1	6.5	5.1	1.2	453	0	yes	Clear
Room #18	14-Feb-03	8:10:05	71.1	6.4	5	1.1	466	0	no	Clear
Room #21	14-Feb-03	8:10:52	70.1	8.2	6.8	1.4	521	0	Yes	Clear
Room #23	14-Feb-03	8:12:23	71.6	8.3	8.2	1.4	573	0	yes	Blocked by Books
Room #26	14-Feb-03	8:12:16	70.0	8.1	6.6	1.4	535	0	yes	Clear
Room #28	14-Feb-03	8:13:45	72.3	8.2	7.1	1.6	566	0	yes	Clear
Office Area	14-Feb-03	8:21:55	71.2	10.6	13.3	1.3	750	6	no	Clear
Café	14-Feb-03	8:22:50	70.8	9.8	11.3	1.6	694	3	yes	NA
Outside Base	14-Feb-03	8:27:50	25.1	9.9	-21	0	405	NA	NA	NA
Statistical Average			73.6	8.6	6.1	1.3	542.2			

OCT - 8 2009

LOCKARD, BRIAN

From: alex@cleansoils.com
To: TODD DRESSER; BRIAN LOCKARD
Subject: Septic System closure
Date: Monday, August 07, 2000 4:44PM

<<File Attachment: FILE0001.HTM>>
Dear Todd and Brian,

Below is the procedure, as it stands, for closing the Fox Hill and Marshall Simonds School septic systems. Please look them over and give me any comments you may have.

The use of sand is proposed at both schools' septic tanks because sand is discussed in the regulations, and sand is six times cheaper than concrete slurry. It should be noted however, that even if water doesn't infiltrate through the sand some settling may occur over time and some voids may be created if sand is just poured into an excavation.

To minimize the settling we have proposed to remove only the portion of the top of the tanks to allow the tanks to be filled with sand. Slurry will be added up to the level of the top of the tank, and the steel manhole will be placed over the hole to provide some support. The fill up to grade will be compacted with the excavator.

The way to ensure no voids and no settling is to completely remove the top of the tank and compact the sand in flights using a compactor before the slurry is added. This of course is more expensive and I know that the Town does not have a large budget for this project.

We want to conduct this closure under Board of Health approval, in a cost effective way. We also do not want to be responsible for settling that may occur at the site in the future.

-Alexander Pancic
Clean Soils Environmental, Ltd.

Procedure for Fox Hill School Septic System Closure

1.. The Town of Burlington will pump out all liquids currently present in the septic tank (stormwater).
2.. Maxymillian, under CSE oversight, will break open the top of the septic tank in the vicinity of the two manholes.
3.. The remaining two manholes covering the leach field distribution valves will also be removed. 4.. The excavator will be used to attempt to rupture the bottom of the septic tank
5.. The septic tank will be filled to 2-3 feet of the top of the tank with sand.
6.. The remaining depth to the former top of the tank will be filled

with concrete slurry
7.. The manholes will be placed on top of the slurry and the remaining excavation filled to approximately 1 foot of grade with clean bank gravel.
8.. The excavation will be brought to grade with loam.
Procedure for Marshall Simonds Septic System

1.. The Town of Burlington will coordinate the removal of septic sludge and wastewater from the septic tank. The septic water may be pumped (recirculated) back into the tank to loosen recalcitrant sludge that has settled to the bottom. CSE will oversee the pump out and document the final condition of the tank.
2.. Maxymillian, under CSE oversight, will break open the top of the septic tank in the vicinity of the two manholes.
3.. The remaining two manholes covering the leach field distribution valves will also be removed. 4.. The two concrete leach-field distribution boxes will also be removed.
5.. The septic tank will be filled to 2-3 feet of the top of the tank with sand.
6.. The remaining depth to the former top of the tank will be filled with concrete slurry
7.. The manholes will be placed on top of the slurry and the remaining excavation filled to approximately 1 foot of grade with clean bank gravel.
8.. The excavation will be brought to grade with loam.
Only enough of the tops of the tanks will be broken up to allow the tanks to be easily filled with sand. Any debris from the demolition of the manways etc. will be placed in the septic tanks prior to filling with sand.

LOCKARD, BRIAN

From: LOCKARD, BRIAN
To: Alexander Pancic
Subject: Pumping Records
Date: Tuesday, September 05, 2000 1:52PM

Hello Alex,

We did receive the pumping records for the septic tanks at the Fox Hill School and Marshall Simonds Middle School. The records were provided by Doug Gillingham and indicate that these structures were emptied by Bob Griffin & Sons, Inc. If you have any questions please let me know.

Thanks,

Brian Lockard
Burlington Health Agent

LOCKARD, BRIAN

From: LOCKARD, BRIAN
To: RITTENBERG, LARRY
Cc: DRESSER, TODD
Subject: Title 5 Variance
Date: Thursday, July 27, 2000 10:37AM

Hello Larry,

Good news and bad news.

Good News:

I spoke with DEP today and I can file the variance for the Town and they promised to issue an approval within a few days.

Bad News:

DEP will require the removal of the sludge from the tank prior to abandonment. The tank can be abandoned in place with the concrete slurry but they will not allow the sludge to remain. I discussed this issue with Claire Golden of DEP and she indicated that her department always requires the removal of sludge and would not modify this condition. If you either you or Alexander Pancic wishes to discuss this with her she can be reached at the Wilmington office at 781-661-7600.

If you have any questions please let me know.

Brian

LOCKARD, BRIAN

From: alex@cleansoils.com
To: LARRY RITTENBERG; DOUG GILLINGHAM; TODD DRESSER; BRIAN LOCKARD
Subject: Septic system closures
Date: Tuesday, August 15, 2000 9:37AM

<<File Attachment: FILE0001.HTM>>
This is to confirm that the closure of the Fox Hill Septic system closure is schedule for Tuesday August 15, 2000. The septic system will be pumped out starting at 7:30 a.m. and the decommissioning with begin immediately thereafter. The Septage Hauler will then proceed to pump out the Marshall Simonds Middle School septic system. The Marshall Simonds septic system is scheduled to be closed the following day, Wednesday August 16, 2000.

A representative of the Burlington Board of Health is required to be present at both sites to approve the closure. On those days I can be reached on my cell phone (978) 852-9172. If, for some reason I am unavailable, please contact Dan at (978) 852-5985.

Please call me with any questions.

-Alexander Pancic
Clean Soils Environmental, Ltd.

LOCKARD, BRIAN

From: DRESSER, TODD
To: alex@cleansoils.com; BRIAN LOCKARD
Subject: RE: Septic System closure
Date: Tuesday, August 08, 2000 8:19AM

Alex,

Your proposal looks acceptable. You may proceed. Remember that someone from the Board of Health needs to inspect the tank after it has been pumped and prior to filling.

Todd

From: alex@cleansoils.com
To: TODD DRESSER; BRIAN LOCKARD
Subject: Septic System closure
Date: Monday, August 07, 2000 4:44PM

<<File Attachment: FILE0001.HTM>>
Dear Todd and Brian,

Below is the procedure, as it stands, for closing the Fox Hill and Marshall Simonds School septic systems. Please look them over and give me any comments you may have.

The use of sand is proposed at both schools' septic tanks because sand is discussed in the regulations, and sand is six times cheaper than concrete slurry. It should be noted however, that even if water doesn't infiltrate through the sand some settling may occur over time and some voids may be created if sand is just poured into an excavation.

To minimize the settling we have proposed to remove only the portion of the top of the tanks to allow the tanks to be filled with sand. Slurry will be added up to the level of the top of the tank, and the steel manhole will be placed over the hole to provide some support. The fill up to grade will be compacted with the excavator.

The way to ensure no voids and no settling is to completely remove the top of the tank and compact the sand in flights using a compactor before the slurry is added. This of course is more expensive and I know that the Town does not have a large budget for this project.

We want to conduct this closure under Board of Health approval, in a cost effective way. We also do not want to be responsible for settling that may occur at the site in the future.

-Alexander Pancic
Clean Soils Environmental, Ltd.

LOCKARD, BRIAN

From: DRESSER, TODD
To: FIELDS, TONY
Cc: VANPRIN@prodigy.net; LOCKARD, BRIAN; MONACO, CHRIS; WEINER, EDWARD
Subject: Fox Hill School Site Plan Waiver
Date: Wednesday, August 18, 1999 10:37AM

Tony,

Brian Lockard and I have reviewed the site plan waiver application submitted for the Fox Hill School. We have prepared the following comments for the consideration and use of the Planning Board.

During the recent removal of an underground storage tank at Fox Hill, we found that the septic system formerly used by the school had not been filled when it was abandoned. This rather large underground holding tank is located next and possibly under the existing play ground equipment at the school. We strongly recommend that this tank be filled and properly abandoned in accordance with the state sanitary code in order to eliminate this safety hazard. We recommend that this be completed as soon as possible.

Due not hesitate to contact us if you have any questions.

Todd

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MP781270922
Manifest Document No.: 25312
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: TOWN OF BURLINGTON, 29 CENTER ST., BURLINGTON, MA. 01830
4. Generator's Phone: 781-270-1922
A. State Manifest Document Number: MA K 725312
B. State Gen. ID: 252 FOX HILL RD. BURLINGTON MA 01830

5. Transporter 1 Company Name: MARYHILLION ROLLOGICS
6. US EPA ID Number: MAD000001867
C. State Trans. ID: MA34407
7. Transporter 2 Company Name:
8. US EPA ID Number:
D. Transporter's Phone: 508-941-6536
E. State Trans. ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: ENVIRONMENTAL COMPLIANCE CORPORATION, 4HR CANON ST., STOUGHTON, MA. 02072
10. US EPA ID Number: MAD062179890
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone: 781-297-3630

	11. US DOT Description (including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	15. Waste No.
a.	WASTE PETROLEUM LIQUID, NA1993, PG-III	001	TT	3010	G	MA93
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above (including physical state and hazard code)
a. (L) *TOXIC WATER
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T 4 6
b.
c.
d.

15. Special Handling Instructions and Additional Information
24 HR EMERGENCY PHONE #: 508-941-6536 ERG-128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: ALAN F. HARVEY (AGENT FOR TOWN OF BURLINGTON)
Signature: A F Harvey
Date: Month Day Year 08 18 99

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jonathan Small
Signature: J Small
Date: Month Day Year 08 18 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: Ann R. Ludwig
Signature: Ann R. Ludwig
Date: Month Day Year 08 18 99

Form Approved OMB No. 2050-0039. Expires 8-30-96
EPA Form 8700-22 (Rev. 9-89) Previous editions are obsolete.

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA K 725312 COPY3: FACILITY MAILS TO GENERATOR

ENVIRONMENTAL COMPLIANCE CORPORATION

CERTIFICATE OF DISPOSAL/RECYCLING

Manifest #: MAK725312

This is to certify that the material received from your facility has been managed at Environmental Compliance Corporation (ECC) or another licensed facility which has been approved by ECC in accordance with all applicable federal, state, and local laws, statutes, and regulations.

Recyclable material has been blended for use in accordance with all applicable federal, state, and local statutes, laws and regulations at ECC, a licensed facility.

All materials consolidated at ECC and subsequently shipped to another licensed facility for treatment and disposal, shall be identified as being generated by ECC.

ECC shall indemnify the generator from any claims as result of damage to any property, contamination of, or adverse effects on the environment, any violation of governmental laws, regulations or orders, caused by treatment and disposal of the material specified on this manifest.

Waste Description	Treatment/Disposal Method	Facility
Combustible Liquids Oils n.o.s. NA 1270 MA 97/98	T-46	ECC 441R Canton St Stoughton, MA 02072

Authorized by: [signature]

Date: 7-15-99

Regional Customer Service 1-800-982-0153

441R Canton Street • Stoughton • MA 02072 • 617-297-3530
106 Main Street • South Portland • ME 04106 • 207-799-7337

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
4. Generator's Phone
A. State Manifest Document Number: MA K 725312
B. State Gen. ID
5. Transporter 1 Company Name
6. US EPA ID Number
C. State Trans. ID
7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone
9. Designated Facility Name and Site Address
10. US EPA ID Number
E. State Trans. ID
F. Transporter's Phone
G. State Facility's ID NOT REQUIRED
H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	15. Waste No.
a.			3010		
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
a. (2)
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Date Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Joseph Smith | Signature | Date Month Day Year: 07 21 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Date Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19

Printed/Typed Name | Signature | Date Month Day Year

Form Approved OMB No. 2050-0039, Expires 9-30-96
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

GENERATOR

MA K725312 COPY 8: GENERATOR RETAINS

COPY 8: GENERATOR RETAINS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MA 781220 1922
Manifest Document No.: 25414
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Town of Burlington, 29 Center Street, Burlington MA. 01830
4. Generator's Phone: 781 270 1922
5. Transporter 1 Company Name: Environmental Technologies
6. US EPA ID Number: MAS000001867
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address: Environmental Compliance Corporation, 441R Canton Street, Stoughton MA. 02072
10. US EPA ID Number: MAD062178930

A. State Manifest Document Number: MA K 725414
B. State Gen. ID: 252 Fox Hill Rd, Burlington MA 01830
C. State Trans. ID: MA 34407
D. Transporter's Phone: 508 949 6536
E. State Trans. ID
F. Transporter's Phone
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone: 781 297 3530

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

	12. Containers No.	Type	13. Total Quantity	Unit Wt./Vol.	14. Waste No.
a. Waste Petroleum Liquid 3, NA1993, PG III	001	TT	2940	G	MA98
b.					
c.					
d.					

GENERATOR

J. Additional Descriptions for Materials Listed Above (for bulk physical state and hazard code)
(1) #4 Fuel Oil + Water

K. Handling Codes for Wastes Listed Above
a. T146

15. Special Handling Instructions and Additional Information
24 Hour Emergency Phone # 508 999 6536 ERG 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Frank Rechlicky (for Environmental) Signature: Date: Month Day Year 07/14/99

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jonathan Small Signature: Date: 07/14/99
18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Date:

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19
Printed/Typed Name: Signature: Date: 7/15/99

Form Approved OMB No. 2050-0039 Expires 9-30-99
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY>3: FACILITY MAILS TO GENERATOR

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA K 725414 COPY>3: FACILITY MAILS TO GENERATOR

ENVIRONMENTAL COMPLIANCE CORPORATION

CERTIFICATE OF DISPOSAL/RECYCLING

Manifest #: MK725414

This is to certify that the material received from your facility has been managed at Environmental Compliance Corporation (ECC) or another licensed facility which has been approved by ECC in accordance with all applicable federal, state, and local laws, statutes, and regulations.

Recyclable material has been blended for use in accordance with all applicable federal, state, and local statutes, laws and regulations at ECC, a licensed facility.

All materials consolidated at ECC and subsequently shipped to another licensed facility for treatment and disposal, shall be identified as being generated by ECC.

ECC shall indemnify the generator from any claims as result of damage to any property, contamination of, or adverse effects on the environment, any violation of governmental laws, regulations, or orders, caused by treatment and disposal of the material specified on this manifest.

Waste Description	Treatment/Disposal Method	Facility
Combustible Liquids Oils n.o.s. NA 1270 MA 97/98	T-46	ECC 441R Canton St. Stoughton, MA 02072

Authorized by: [signature] Date: 7-16-99

Regional Customer Service 1-800-982-0153
441R Canton Street • Stoughton • MA 02072 • 617-297-3530
106 Main Street • South Portland • ME 04106 • 207-799-7337

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MAD 981[illegible]
Manifest Document No.: [illegible]
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Town of Burlington, 29 Center Street, Burlington MA 01803
4. Generator's Phone: [illegible]
A. State Manifest Document Number: MA K 725414
B. State Gen. ID: 252 Fox Hill Road, Burlington MA 01803
5. Transporter 1 Company Name: [illegible]
6. US EPA ID Number: MAS[illegible]
C. State Trans. ID: MA 24407
7. Transporter 2 Company Name:
8. US EPA ID Number:
D. Transporter's Phone: [illegible]
9. Designated Facility Name and Site Address: Environmental Compliance Corporation, 491 R Canton Street, Stoughton MA 02072
10. US EPA ID Number: MAD[illegible]
E. State Trans. ID:
F. Transporter's Phone:
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone: 781 297 3530

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	Waste No.
a. Waste Petroleum Liquid, 3, NA 1993, PG III	001	TT	3740	G	MA 98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.): (1) #4 Fuel Oil + Water
K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information: 24 Hour Emergency Phone # 508 949 6536 ERG # 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] Signature: [illegible] Date: 01/16/19

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] Signature: [illegible] Date: 01/16/19

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Date:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: Signature: Date:

Form Approved OMB No. 2050-0039 Expires 9-30-96
EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

GENERATOR / TRANSPORTER / FACILITY

MA K 725414 COPY>B: GENERATOR RETAINS

COPY>B: GENERATOR RETAINS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MAD 981270192[illegible]
Manifest Document No.: 25313
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Town of Burlington, 29 CENTER STREET, BURLINGTON MA. 01830
4. Generator's Phone: 781 270 1922
A. State Manifest Document Number: MA K 725313
B. State Gen. ID: 252 Fox Hill Road, Burlington MA. 01830
5. Transporter 1 Company Name: Maximillian Technologies
6. US EPA ID Number: MAS000001867
C. State Trans. ID: MA 24407
7. Transporter 2 Company Name:
8. US EPA ID Number:
D. Transporter's Phone: 508 949 6536
9. Designated Facility Name and Site Address: Environmental Compliance Corporation, 491 R Canton Street, Stoughton MA. 02072
10. US EPA ID Number: MAD 062179890
E. State Trans. ID:
F. Transporter's Phone:
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone: 781 297 3530

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	Waste No.
a. Waste Petroleum Liquid, 3, NA 1993, PG III	001	TT	600	G	MA 98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.): (1) #4 Fuel Oil + Water
K. Handling Codes for Wastes Listed Above: a. T14 b. c. d.

15. Special Handling Instructions and Additional Information: 24 Hour Emergency Phone # 508 949 6536 ERG # 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] (Agent for Town of Burlington) Signature: [illegible] Date: 01/16/19

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jonathan Small Signature: [illegible] Date: 01/16/1912

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Date:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: [illegible] Signature: [illegible] Date: 01/16/19

Form Approved OMB No. 2050-0039 Expires 9-30-96
EPA Form 8700-22 (Rev. 9-86) Previous editions are obsolete

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

GENERATOR / TRANSPORTER / FACILITY

MA K 725313 COPY>3: FACILITY MAILS TO GENERATOR

COPY>3: FACILITY MAILS TO GENERATOR

ENVIRONMENTAL COMPLIANCE CORPORATION

CERTIFICATE OF DISPOSAL/RECYCLING

Manifest #: MAK 725313

This is to certify that the material received from your facility has been managed at Environmental Compliance Corporation (ECC) or another licensed facility which has been approved by ECC in accordance with all applicable federal, state, and local laws, statutes, and regulations.

Recyclable material has been blended for use in accordance with all applicable federal, state, and local statutes, laws and regulations at ECC, a licensed facility.

All materials consolidated at ECC and subsequently shipped to another licensed facility for treatment and disposal, shall be identified as being generated by ECC.

ECC shall indemnify the generator from any claims as result of damage to any property, contamination of, or adverse effects on the environment, any violation of governmental laws, regulations, or orders, caused by treatment and disposal of the material specified on this manifest.

Waste Description	Treatment/Disposal Method	Facility
Combustible Liquids Oils n.o.s. NA 1270 MA 97/98	T46	ECC 441R Canton St. Stoughton, MA 02072

Authorized by: [signature] Date: 7/20/99

Regional Customer Service 1-800-982-0153

441R Canton Street • Stoughton • MA 02072 • 617-297-3530
106 Main Street • South Portland • ME 04106 • 207-799-7337

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MAD 981 270 922 — Manifest Document No.: 25 313
2. Page 1 of — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Town of Burlington, 29 Center Street, Burlington MA 01830
4. Generator's Phone: 781 270 1922
5. Transporter 1 Company Name: [illegible] Technologies Inc. — 6. US EPA ID Number: MASD080 [illegible]
7. Transporter 2 Company Name — 8. US EPA ID Number
9. Designated Facility Name and Site Address: Environmental Compliance Corporation, 441R Canton Street, Stoughton MA 02072 — 10. US EPA ID Number: MAD 041 770 890

A. State Manifest Document Number: MA K 725313
B. State Gen. ID: 2358 Fox Hill Road, Burlington MA 01803
C. State Trans. ID: MA 24407
D. Transporter's Phone: 800 949 6506
E. State Trans. ID
F. Transporter's Phone
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone: 781 297 3530

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	WASTE NO.
a. Waste Petroleum Liquid 3, NA 1993, PG III	001	TT	600	G	MA 98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.): a. (L) #4 Fuel Oil + Water; b.; c.; d.

K. Handling Codes for Wastes Listed Above: a.; b.; c.; d.

15. Special Handling Instructions and Additional Information: [illegible]

16. GENERATOR'S CERTIFICATION. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name — Signature — Date (Month Day Year)

17. Transporter 1 Acknowledgement of Receipt of Materials: Printed/Typed Name: [illegible] — Signature — Date: 7/21/1999
18. Transporter 2 Acknowledgement of Receipt of Materials: Printed/Typed Name — Signature — Date

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name — Signature — Date

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

GENERATOR — TRANSPORTER — FACILITY

Form Approved. OMB No. 2050-0039. Expires 9-30-98
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete

COPY>8: GENERATOR RETAINS

MA K725313 COPY>8: GENERATOR RETAINS

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone

5. Transporter 1 Company Name | 6. US EPA ID Number

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address | 10. US EPA ID Number

A. State Manifest Document Number: MA K 725318

B. State Gen. ID

C. State Trans. ID

D. Transporter's Phone

E. State Trans. ID

F. Transporter's Phone

G. State Facility's ID: NOT REQUIRED

H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	Waste No.
a.					
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)

a. c.

b. d.

K. Handling Codes for Wastes Listed Above

a. c.

b. d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION. I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Date: Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19

Printed/Typed Name | Signature | Date: Month Day Year

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA K725318 COPY>8: GENERATOR RETAINS

Form Approved OMB No. 2050-0039, Expires 8-30-96
EPA Form 8700-22 (Rev. 9-91) Previous editions are obsolete

COPY>8: GENERATOR RETAINS

CLEAN SOILS ENVIRONMENTAL LTD

August 10, 1999

COPY

Mr. Larry Rittenberg, Assistant Town Administrator
Town of Burlington
Town Hall
29 Center Street
Burlington, MA 01803

Re: Underground Storage Tank Closure Assessment
Fox Hill Elementary School
252 Fox Hill Road
Burlington, MA 01803
CSE Project # 99019

Dear Mr. Rittenberg:

Clean Soils Environmental, Ltd. (CSE) is pleased to submit this letter report with the results of an Underground Storage Tank (UST) Closure Assessment conducted at the above mentioned location, hereinafter referred to as the "Site."

The purpose of the UST Closure Assessment is to determine if a significant release of oil had impacted the environment (i.e., soil) from a UST area at the Site, which is shown on Figures 1 and 2 in the Appendix.

Oil & Hazardous Waste Assessment & Cleanup Professionals

POST OFFICE BOX 591, IPSWICH, MA 01938
Voice: 978.356.1177 Fax: 978.356.1849 E-mail: info@cleansoils.com Web site: http://www.cleansoils.com

1.0 BACKGROUND

The Site is located at an elementary school. CSE was contacted to observe the removal of one (1) steel, single-walled, 8,000-gallon UST that was used to store fuel oil, and measure for the potential presence of contamination to soil from the UST. According to you, the UST was used to store #4 Fuel Oil. According to Mr. Ronnie Danielson, Senior Custodian at Fox Hill Elementary School, the tank was installed approximately 33 years ago, just prior to the construction of the school building.

2.0 UST REMOVAL

On July 19, 1999, Maxymillian Technologies, Inc. (MAXYMILLIAN) of Webster, MA, removed the UST from the Site. The UST was located on the southern side of the school, approximately 10 feet from the loading dock, as shown on Figure 1.

3.0 SOIL SAMPLE FIELD SCREENING

CSE collected a total of 15 soil samples during the UST removal at the Site. CSE collected 2 soil samples from the vicinity of the feed and return lines on the eastern side of the UST (PIPERUN1 and PIPERUN2). CSE collected 8 samples from various areas of the sidewalls of the excavation (SW1-SW8). CSE collected 2 samples near the UST's fill pipe at varying depths (FP1 and FP2). Two samples were collected from the bottom of the excavations (BOT1 and BOT2), and two soil samples were collected near the vent-pipe of the former UST (VP1 and VP2). Figure 2 in the Appendix shows the soil sample locations in reference to the tank grave at the Site.

The depth that each soil sample was collected is shown on Table 1 in the Appendix. Each soil sample was screened for total organic vapors (TOVs) with a photoionization detector (PID) via jar headspace procedures (procedure enclosed in Appendix). Table 1 shows the headspace screening results, which ranged from 0.4 to 26.5 parts per million by volume (ppmv).

4.0 OBSERVATIONS MADE DURING THE UST REMOVAL

On July 19, 1999, CSE observed and measured the soil around the fill pipe (on top of the UST) for possible contamination due to overfilling or overspilling prior to the UST removal. There was

some petroleum-contaminated soil (PCS) around the fill pipe from approximately 0 – 1 feet below the ground surface. This soil was stained, had a slight petroleum odor, and had a headspace reading of 26.5 ppmv. This PCS was removed by hand (i.e., shovel), placed into 55-gallon drums, and transported from the Site under Manifest.

Soil around the UST was well-sorted sand. Therefore, the sidewalls of the excavation were continuously sloughing into the excavation. This required CSE and Maxymillian to work fast. In other words, it was important to attempt to remove the UST quickly so the sidewalls of the excavation would not cave into the excavation and undermine the slab foundation of the building.

After the UST was removed, CSE observed the soil on the sidewalls and bottom of the tank grave for evidence of contamination. Obvious evidence of contamination (i.e., stained soils and petroleum odors) was not observed in the tank grave. CSE did observe groundwater in the bottom of the former UST grave. The surface of the groundwater did not have a petroleum sheen. CSE observed the UST for any obvious holes, which were not observed. The removed UST system (including fill pipe) did not show evidence of corrosion or a leak. The feed and return lines were not removed. CSE believes that removal of these lines would have undermined the foundation of the building.

5.0 SOIL SAMPLE LABORATORY SCREENING

On July 19, 1999, CSE collected three soil samples from the former UST grave for laboratory analysis. One soil sample (BOT2) was collected from the bottom of the excavation, another was collected from a sidewall (SW6), and the third sample was taken from the vicinity of the fill pipe (FP2). These sample locations are shown on Figure 2 in the Appendix and were chosen based on soil screening results and where CSE would expect to find contamination if present. The three soil samples were analyzed for Extractable Petroleum Hydrocarbons (EPH) by GC/FID.

The samples were collected in pre-cleaned glass jars provided by the laboratory, immediately placed on ice for preservation, and transported by courier to a Massachusetts Certified laboratory for analysis.

6.0 SOIL LABORATORY RESULTS

The laboratory testing results for all three soil samples (i.e., BOT2, FP2, and SWG) were below the laboratory's reporting limit (BRL) for the EPH Ranges and the Target Analytes (e.g., Naphthalene). In other words, the laboratory did not detect significant contamination in any of the three soil samples.

7.0 MANAGEMENT OF TANK REMOVAL WASTE

Prior to removal, Maxymillian pumped approximately 6500 gallons of #4 Fuel Oil from the UST. Maxymillian pumped out 3010 gallons on July 14, 1999, 2940 gallons on July 15, 1999, and 600 gallons on July 19, 1999. This fuel oil was taken from the Site under Manifest to Environmental Compliance Corporation (ECC) in Stoughton, MA. Please see the Appendix for a copy of these manifests.

Also prior to removal, Maxymillian cleaned the tank by hand. Maxymillian estimated that a total of approximately 50 gallons of tank residue (i.e., tank bottom sludge/unused waste oil) was removed from the UST. This residue was placed in one DOT-approved, 55-gallon drum and taken from the Site under Manifest (State Manifest Document Number MAK725318) to ECC. In addition, a small amount of PCS was removed by hand from around the former UST's fill pipe, placed into two 55-gallons drums and taken from the Site under Manifest (State Manifest Document Number MAK725318) to ECC.

The James G. Grant Company of Readville, MA took the removed UST from the Site for recycling. Please see the Appendix for copies of Form FP 292 (permit for removing UST and transportation to tank yard), Form 291 (receipt of UST at disposal facility), and Form FP 290R (Notification for Removal or Closure of In Place Storage Tanks Regulated Under 527 CMR 9.00). CSE has sent Form FP 290R to the Burlington Fire Department for a signature. When CSE receives the Fire Department's Signature, this form will be sent to the UST Compliance Unit in Boston and a copy will be sent to you.

8.0 BACKFILL THE EXCAVATION

Maxymillian backfilled the excavation on the same day of the UST removal with excavated clean soil and imported fill material.

9.0 LIMITATIONS OF THE ASSESSMENT

The feed and return lines from the UST to the heating system were not removed during the UST removal (see Section 4.0 for details). Therefore, CSE did not assess or render an opinion of these areas for the presence of contamination during this assessment.

10.0 CONCLUSION

According to field observations, field screening results, and the laboratory results, there has not been a release of fuel oil from the UST at the Site. Therefore, no further action is required. CSE reserves the right to change this opinion if any additional information is collected from the Site. If you have any questions, please do not hesitate to call.

Sincerely yours,

CLEAN SOILS ENVIRONMENTAL, LTD.

William H. Mitchell, Jr., LSP
President

Daniel A. Warrington
Environmental Engineer

Enclosures:
- Appendix Including the Following:
- Figures 1 and 2 (2 pages)
- Table 1 Headspace Screening Results (1 page)
- Headspace Screening Standard Procedure (1 page)
- Laboratory Results (10 pages)
- Copies of Uniform Hazardous Waste Manifests (4 pages)
- Copy of Form FP-290R (2 pages)
- Copy of Form FP-291 (1 page)
- Copy of Form FP-292 (1 page)

cc: Todd Dresser, Town of Burlington Board of Health

APPENDIX

CLEAN SOILS
ENVIRONMENTAL LTD

FIELD__/OFFICE__NOTES:

Page: 4 of 4

FOX HILL ELEMENTARY

Client: TOWN OF BURLINGTON Date: 7-19-99 Project #: 99019

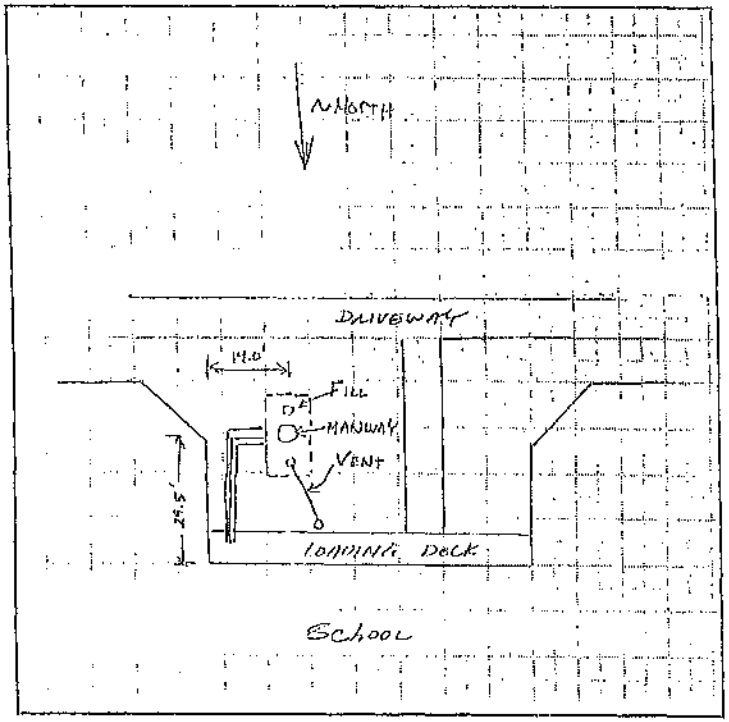
Address: 252 FOX HILL RD

Town: BURLINGTON State: MA Type of Sample: SOIL

Screening Location:

Weather: OVERCAST, 80'S

Comments: LIMITED SITE PLAN



Oil & Hazardous Waste Assessment & Cleanup Professionals

FIGURE 1

POST OFFICE BOX 591, IPSWICH, MA 01938
Voice: 978.356.1177 Fax: 978.356.1849 E-mail: info@cleansoils.com Web site: http://www.cleansoils.com

CLEAN SOILS
ENVIRONMENTAL LTD

FIELD__/OFFICE__ NOTES:

Page: 3 of 4

FOX HILL ELEMENTARY

Client: TOWN OF BURLINGTON Date: 7-19-99 Project #: 99019
Address: 252 FOX HILL RD
Town: BURLINGTON State: MA Type of Sample: SOIL
Screening Location: FORMER TANK GRAVE

Weather: OVERCAST, 80'S
Comments: LIMITED SITE PLAN SHOWN
SOIL SCREENING/SAMPLE LOCATIONS

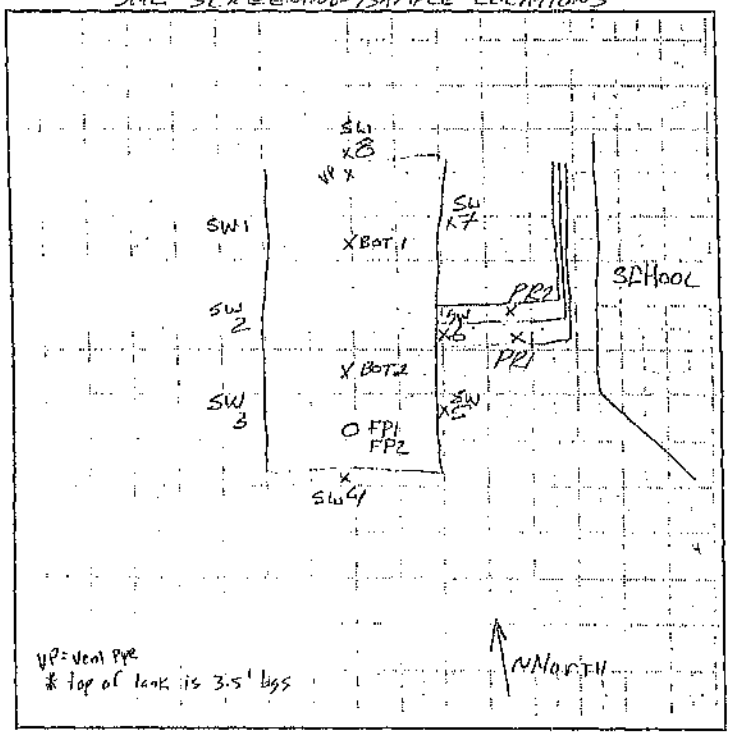


FIGURE 2

Oil & Hazardous Waste Assessment & Cleanup Professionals

POST OFFICE BOX 591, IPSWICH, MA 01938
Voice: 978.356.1177 Fax: 978.356.1849 E-mail: info@cleansoils.com Web site: http://www.cleansoils.com

CLEAN SOILS
ENVIRONMENTAL LTD

Field PID Jar Headspace Analytical Screening

Page 2 of 4

FIELD__/OFFICE__ NOTES:

Project # 99019
Client: Fox Hill Elementary Type of Sample: Soil
Address: 252 Fox Hill Rd Date: 7-14-99
Town: Burlington State: MA Sampler: DAW
Sample Location: FORMER TANK GRAVE
Weather: OVERCAST, 80'S

Sample ID:	DC:	TC:	TT:	Reading	- BG	= Results	
PIPERUN1	3'5"	0805	0815	1.6	0.3	1.3	
PIPERUN2	3'5"	0805	0815	2.2	0.3	1.9	
SW1	9'	0817	0827	1.7	0.5	1.2	
SW2	9'	0820	0830	3.1	0.5	2.6	
SW3	9'	0825	0835	2.4	0.4	2.0	
FP1	6"	0846	0856	26.9	0.4	26.5	* EPH
FP2	2'	0847	0857	3.9	0.4	3.5	
SW5	7'	0928	0948	2.7	0.0	2.7	*
SW6	7'	0935	0945	3.5	0.0	3.5	* EPH
SW7	7'	0934	0944	3.3	0.0	3.3	
VP	3.5'	0950	1000	2.8	0.0	2.8	
SW4	7'	0956	1006	3.0	0.0	3.0	
SW8	5'	1016	1020	1.7	0.0	1.7	
BOT1	11'	1030	1040	0.5	0.0	0.5	
BOT2	11'	1030	1040	0.4	0.0	0.4	* EPH

Calibrated PID to 60.0 ppm

PID Instrument Used: PHOTOVAC MICROTIP HP1000 Photo-Ionizer.
Calibration: _____ Benzene/Isobutylene 100 parts per million.
Response Factor for Benzene to Isobutylene is .60.
Field jar analytical screening procedure was conducted according to DEP Policy WCS-400-89.
Results = parts per million expressed in Total Ionizable chemicals in the air sample with an ionization potential below 10.6 Electron Volts (eV).
ID = Identification, DC = Depth Collected, TC = Time Collected, TT = Time Tested, BG = Background reading of the ambient air.

TABLE 1

Oil & Hazardous Waste Assessment & Cleanup Professionals

POST OFFICE BOX 591, IPSWICH, MA 01938
Voice: 978.356.1177 Fax: 978.356.1849 E-mail: info@cleansoils.com Web site: http://www.cleansoils.com

Headspace Screening Procedures

Clean Soils Environmental, Ltd. (CSE) screened soil samples for Total Organic Vapors (TOVs) with a portable photoionization detector (PID) calibrated with isobutylene to a benzene equivalent. The soil sample screening was performed by filling a pre-cleaned 16 oz. glass mason jar or a dedicated 16 oz. zip lock bag approximately half-full with a soil sample, covering the jar top with two layers of aluminum foil and then tightening the screw cap or using the zip lock to tightly seal the bag. The soil sample was vigorously shaken and then allowed to sit for a minimum of ten minutes at approximately 25°C. The headspace (i.e., air in the top of the container) was then screened by puncturing the aluminum seal or the zip lock bag with the portable PID Photovac MicroTip probe, inserting the probe tip to a distance approximately one-half the headspace depth, drawing a headspace air sample, and recording the highest reading displayed on the PID display.

GROUNDWATER ANALYTICAL

Groundwater Analytical, Inc.
P.O. Box 1200
228 Main Street
Buzzards Bay, MA 02532

Telephone (508) 759-4441
FAX (508) 759-4475

July 27, 1999

Mr. William Mitchell
Clean Soils Environmental
P.O. Box 591
Ipswich, MA 01938

Project: Fox Hill/99019
Lab ID: 27911
Sample: 07-19-99

Dear Bill:

Enclosed are the Extractable Petroleum Hydrocarbons Analyses performed for the above referenced project. This project was processed for Priority One Week turnaround.

This letter authorizes the release of the analytical results, and should be considered a part of this report. This report contains a project narrative indicating project changes and non-conformances, a brief description of the Quality Assurance/Quality Control procedures employed by our laboratory, and a statement of our state certifications.

I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Should you have any questions concerning this report, please do not hesitate to contact me.

Sincerely,

Jonathan R. Sanford
President

JRS/myr
Enclosures

GROUNDWATER ANALYTICAL

Massachusetts DEP EPH Method
Extractable Petroleum Hydrocarbons by GC/FID

Field ID:	PB2	Laboratory ID:	27911-01
Project:	Fox Hill/99019	QC Batch ID:	EP-0710-M
Client:	Clean Soils Environmental	Sampled:	07-19-99
Container:	120 mL Glass	Received:	07-20-99
Preservation:	Cool	Extracted:	07-22-99
Matrix:	Soil	Analyzed:	07-27-99
% Moisture:	7	Dilution Factor:	Aliphatics 1 Aromatics 1

EPH Ranges	Concentration	Units	Reporting Limit
n-C9 to n-C18 Aliphatic Hydrocarbons [1]	BRL	mg/Kg	31
n-C19 to n-C36 Aliphatic Hydrocarbons [1]	BRL	mg/Kg	31
n-C11 to n-C22 Aromatic Hydrocarbons [1,0]	BRL	mg/Kg	31
Unadjusted n-C11 to n-C22 Aromatic Hydrocarbons [1]	BRL	mg/Kg	31

CAS Number	Target Analytes	Concentration	Units	Reporting Limit
91-20-3	Naphthalene	BRL	mg/Kg	0.52
91-57-6	2-Methylnaphthalene	BRL	mg/Kg	0.52
85-01-8	Phenanthrene	BRL	mg/Kg	0.52
83-32-9	Acenaphthene	BRL	mg/Kg	0.52
208-96-8	Acenaphthylene	BRL	mg/Kg	0.52
86-73-7	Fluorene	BRL	mg/Kg	0.52
120-12-7	Anthracene	BRL	mg/Kg	0.52
206-44-0	Fluoranthene	BRL	mg/Kg	0.52
129-00-0	Pyrene	BRL	mg/Kg	0.52
56-55-3	Benzo[a]anthracene	BRL	mg/Kg	0.52
218-01-9	Chrysene	BRL	mg/Kg	0.52
205-99-2	Benzo[b]fluoranthene	BRL	mg/Kg	0.52
207-08-9	Benzo[k]fluoranthene	BRL	mg/Kg	0.52
50-32-8	Benzo[a]pyrene	BRL	mg/Kg	0.52
193-39-5	Indeno[1,2,3-c,d]pyrene	BRL	mg/Kg	0.52
53-70-3	Dibenzo[a,h]anthracene	BRL	mg/Kg	0.52
191-24-2	Benzo[g,h,i]perylene	BRL	mg/Kg	0.52

QC Surrogate Compounds		Recovery	QC Limits
Fractionation:	2-Fluorobiphenyl	90 %	40 - 140 %
	2-Bromonaphthalene	93 %	40 - 140 %
Extraction:	Chloro-octadecane	84 %	40 - 140 %
	ortho-Terphenyl	86 %	40 - 140 %

QA/QC Certification

1. Were all QA/QC procedures required by the method followed? Yes
2. Were all performance/acceptance standards for the required QA/QC procedures achieved? Yes
3. Were any significant modifications made to the method, as specified in Section 11.3.1.1? Yes

Method non-conformances indicated above are detailed below on this data report, or in the accompanying project narrative and project quality control report. Release of this data is authorized by the accompanying signed project cover letter. The accompanying cover letter, project narrative and quality control report are considered part of this data report.

Method References: Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP (1998). Results are calculated on a dry weight basis. Method modified by use of microwave accelerated solvent extraction technique.

Report Notations:
BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample dilution, percent moisture and sample size.
1 Hydrocarbon range data excludes concentrations of any surrogate(s) and/or internal standards eluting in that range.
0 n-C11 to n-C22 Aromatic Hydrocarbons range data excludes the method target analyte concentrations.

GROUNDWATER ANALYTICAL

Massachusetts DEP EPH Method
Extractable Petroleum Hydrocarbons by GC/FID

Field ID:	BOT2	Laboratory ID:	27911-03
Project:	Fox Hill/99019	QC Batch ID:	EP-0710-M
Client:	Clean Soils Environmental	Sampled:	07-19-99
Container:	120 mL Glass	Received:	07-20-99
Preservation:	Cool	Extracted:	07-22-99
Matrix:	Soil	Analyzed:	07-27-99
% Moisture:	10	Dilution Factor:	Aliphatics 1 Aromatics 1

EPH Ranges	Concentration	Units	Reporting Limit
n-C9 to n-C18 Aliphatic Hydrocarbons [1]	BRL	mg/Kg	32
n-C19 to n-C36 Aliphatic Hydrocarbons [1]	BRL	mg/Kg	32
n-C11 to n-C22 Aromatic Hydrocarbons [1,0]	BRL	mg/Kg	32
Unadjusted n-C11 to n-C22 Aromatic Hydrocarbons [1]	BRL	mg/Kg	32

CAS Number	Target Analytes	Concentration	Units	Reporting Limit
91-20-3	Naphthalene	BRL	mg/Kg	0.53
91-57-6	2-Methylnaphthalene	BRL	mg/Kg	0.53
85-01-8	Phenanthrene	BRL	mg/Kg	0.53
83-32-9	Acenaphthene	BRL	mg/Kg	0.53
208-96-8	Acenaphthylene	BRL	mg/Kg	0.53
86-73-7	Fluorene	BRL	mg/Kg	0.53
120-12-7	Anthracene	BRL	mg/Kg	0.53
206-44-0	Fluoranthene	BRL	mg/Kg	0.53
129-00-0	Pyrene	BRL	mg/Kg	0.53
56-55-3	Benzo[a]anthracene	BRL	mg/Kg	0.53
218-01-9	Chrysene	BRL	mg/Kg	0.53
205-99-2	Benzo[b]fluoranthene	BRL	mg/Kg	0.53
207-08-9	Benzo[k]fluoranthene	BRL	mg/Kg	0.53
50-32-8	Benzo[a]pyrene	BRL	mg/Kg	0.53
193-39-5	Indeno[1,2,3-c,d]pyrene	BRL	mg/Kg	0.53
53-70-3	Dibenzo[a,h]anthracene	BRL	mg/Kg	0.53
191-24-2	Benzo[g,h,i]perylene	BRL	mg/Kg	0.53

QC Surrogate Compounds		Recovery	QC Limits
Fractionation:	2-Fluorobiphenyl	87 %	40 - 140 %
	2-Bromonaphthalene	90 %	40 - 140 %
Extraction:	Chloro-octadecane	81 %	40 - 140 %
	ortho-Terphenyl	83 %	40 - 140 %

QA/QC Certification

1. Were all QA/QC procedures required by the method followed? Yes
2. Were all performance/acceptance standards for the required QA/QC procedures achieved? Yes
3. Were any significant modifications made to the method, as specified in Section 11.3.1.1? Yes

Method non-conformances indicated above are detailed below on this data report, or in the accompanying project narrative and project quality control report. Release of this data is authorized by the accompanying signed project cover letter. The accompanying cover letter, project narrative and quality control report are considered part of this data report.

Method References: Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP (1998). Results are calculated on a dry weight basis. Method modified by use of microwave accelerated solvent extraction technique.

Report Notations:
BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample dilution, percent moisture and sample size.
1 Hydrocarbon range data excludes concentrations of any surrogate(s) and/or internal standards eluting in that range.
0 n-C11 to n-C22 Aromatic Hydrocarbons range data excludes the method target analyte concentrations.

GROUNDWATER ANALYTICAL

Project Narrative

Project: Fox Hill/99019
Client: Clean Soils Environmental

Lab ID: 27911
Received: 07-20-99

A. Physical Condition of Sample(s)

This project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged in appropriate containers with the correct preservation.

B. Project Documentation

This project was accompanied by satisfactory Chain of Custody documentation. The sample container label(s) agreed with the Chain of Custody.

C. Analysis of Sample(s)

No analytical anomalies or non-conformances were noted by the laboratory during the processing of these sample(s). All data contained within this report are released without qualification.

GROUNDWATER ANALYTICAL

228 Main Street
Buzzards Bay, MA 02532
Telephone (508) 759-4441
FAX (508) 759-4475

CHAIN-OF-CUSTODY RECORD AND WORK ORDER

No 27093

Project Name: Fox Hill
Project Number: 99019
Sampler Name: Dan Wherington
Project Manager: Bill Mitchell

Firm: Clean Soils Environmental Services
Address: P.O. Box 391
City/State/Zip: Ipswich, MA 01938
Telephone: 978-356-1177

TURNAROUND: ☐ STANDARD (10 Business Days) ☐ PRIORITY (5 Business Days) ☐ RUSH (Rush Surcharges Apply) Please FAX ☒ YES ☐ NO FAX Number: 978-356-1849

BILLING: Purchase Order No.: GNA Reference No.:

INSTRUCTIONS: Use separate line for each container (except rep. samples).

Date	Time	Matrix	Type	Sample Identification	Containers	Preservation	Filtered	Laboratory Number (Lab Use Only)
7/14/99	0900	Soil	Composite	FP-2				
7/14/99	1030	Soil	Composite	SV-6				
7/14/99	1030	Soil	Composite	BOT-2				

ANALYSIS REQUEST

REMARKS / SPECIAL INSTRUCTIONS

DATA QUALITY OBJECTIVES

Regulatory Program

CHAIN-OF-CUSTODY RECORD

Relinquished by Sampler: Date 7/20/99 Time 1100 Received by: [illegible]
Relinquished by: Date Time Received by:
Relinquished by: Date Time Received by: [illegible]
Relinquished by: Date Time Received by: [illegible]
Method of Shipment: ☐ DNA Courier ☐ Express Mail ☐ Federal Express ☐ UPS ☐ Hand ☐

GROUNDWATER ANALYTICAL

Quality Assurance/Quality Control

A. Program Overview

Groundwater Analytical conducts an active Quality Assurance program to ensure the production of high quality, valid data. This program closely follows the guidance provided by *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans*, US EPA QAMS-005/80 (1980), and *Test Methods for Evaluating Solid Waste*, US EPA, SW-846, Update III (1996).

Quality Control protocols include written Standard Operating Procedures (SOPs) developed for each analytical method. SOPs are derived from US EPA methodologies and other established references. Standards are prepared from commercially obtained reference materials of certified purity, and documented for traceability.

Quality Assessment protocols for most organic analyses include a minimum of one laboratory control sample, one method blank, one matrix spike sample, and one sample duplicate for each sample preparation batch. All samples, standards, blanks, laboratory control samples, matrix spikes and sample duplicates are spiked with internal standards and surrogate compounds. All instrument sequences begin with an initial calibration verification standard and a blank; and excepting GC/MS sequences, all sequences close with a continuing calibration standard. GC/MS systems are tuned to appropriate ion abundance criteria daily, or for each 12 hour operating period, whichever is more frequent.

Quality Assessment protocols for most inorganic analyses include a minimum of one laboratory control sample, one method blank, one matrix spike sample, and one sample duplicate for each sample preparation batch. Standard curves are derived from one reagent blank and four concentration levels. Curve validity is verified by standard recoveries within plus or minus ten percent of the curve.

B. Definitions

Batches are used as the basic unit for Quality Assessment. A Batch is defined as twenty or fewer samples of the same matrix which are prepared together for the same analysis, using the same lots of reagents and the same techniques or manipulations, all within the same continuum of time, up to but not exceeding 24 hours.

Laboratory Control Samples are used to assess the accuracy of the analytical method. A Laboratory Control Sample consists of reagent water or sodium sulfate spiked with a group of target analytes representative of the method analytes. Accuracy is defined as the degree of agreement of the measured value with the true or expected value. Percent Recoveries for the Laboratory Control Samples are calculated to assess accuracy.

Method Blanks are used to assess the level of contamination present in the analytical system. Method Blanks consist of reagent water or an aliquot of sodium sulfate. Method Blanks are taken through all the appropriate steps of an analytical method. Sample data reported is not corrected for blank contamination.

Surrogate Compounds are used to assess the effectiveness of an analytical method in dealing with each sample matrix. Surrogate Compounds are organic compounds which are similar to the target analytes of interest in chemical behavior, but which are not normally found in environmental samples. Percent Recoveries are calculated for each Surrogate Compound.

GROUNDWATER ANALYTICAL

Quality Control Report
Laboratory Control Sample

Category: MA DEP EPH Method
QC Batch ID: EP-0719-M
Matrix: Soil
Units: mg/Kg

CAS Number	Analyte	Spiked	Measured	Recovery	QC Limits
111-84-2	*n*-Nonane (C_9)	5.0	2.6	53 %	40 - 140 %
629-59-4	*n*-Tetradecane (C_{14})	5.0	4.0	80 %	40 - 140 %
629-92-5	*n*-Nonadecane (C_{19})	5.0	4.4	88 %	40 - 140 %
112-95-8	*n*-Eicosane (C_{20})	5.0	4.7	95 %	40 - 140 %
630-02-4	*n*-Octacosane (C_{28})	5.0	4.5	90 %	40 - 140 %
91-20-3	Naphthalene	5.0	3.5	69 %	40 - 140 %
83-32-9	Acenaphthene	5.0	4.1	81 %	40 - 140 %
120-12-7	Anthracene	5.0	4.5	90 %	40 - 140 %
129-00-0	Pyrene	5.0	4.6	93 %	40 - 140 %
218-01-9	Chrysene	5.0	5.0	99 %	40 - 140 %

QC Surrogate Compounds		Recovery	QC Limits
Fractionation:	2-Fluorobiphenyl	86 %	40 - 140 %
	2-Bromonaphthalene	86 %	40 - 140 %
Extraction:	Chloro-octadecane	92 %	40 - 140 %
	ortho-Terphenyl	88 %	40 - 140 %

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP (1998).

Report Notations: All calculations performed prior to rounding. Quality Control Limits are defined by the methodology, or alternatively based upon the historical average recovery plus or minus three standard deviation units.

Groundwater Analytical, Inc., P.O. Box 1200, 228 Main Street, Buzzards Bay, MA 02532

GROUNDWATER ANALYTICAL

Quality Control Report
Method Blank

Category: MA DEP EPH Method
QC Batch ID: EP-0710-M
Matrix: Soil

EPH Ranges	Concentration	Units	Reporting Limit
n-C9 to n-C18 Aliphatic Hydrocarbons [†]	BRL	mg/Kg	30
n-C19 to n-C36 Aliphatic Hydrocarbons [†]	BRL	mg/Kg	30
n-C11 to n-C22 Aromatic Hydrocarbons [†◊]	BRL	mg/Kg	30
Unadjusted n-C11 to n-C22 Aromatic Hydrocarbons [†]	BRL	mg/Kg	30

CAS Number	Target Analytes	Concentration	Units	Reporting Limit
91-20-3	Naphthalene	BRL	mg/Kg	0.50
91-57-6	2-Methylnaphthalene	BRL	mg/Kg	0.50
85-01-8	Phenanthrene	BRL	mg/Kg	0.50
83-32-9	Acenaphthene	BRL	mg/Kg	0.50
208-96-8	Acenaphthylene	BRL	mg/Kg	0.50
86-73-7	Fluorene	BRL	mg/Kg	0.50
120-12-7	Anthracene	BRL	mg/Kg	0.50
206-44-0	Fluoranthene	BRL	mg/Kg	0.50
129-00-0	Pyrene	BRL	mg/Kg	0.50
56-55-3	Benzo[a]anthracene	BRL	mg/Kg	0.50
218-01-9	Chrysene	BRL	mg/Kg	0.50
205-99-2	Benzo[b]fluoranthene	BRL	mg/Kg	0.50
207-08-9	Benzo[k]fluoranthene	BRL	mg/Kg	0.50
50-32-8	Benzo[a]pyrene	BRL	mg/Kg	0.50
193-39-5	Indeno[1,2,3-c,d]pyrene	BRL	mg/Kg	0.50
53-70-3	Dibenzo[a,h]anthracene	BRL	mg/Kg	0.50
191-24-2	Benzo[g,h,i]perylene	BRL	mg/Kg	0.50

	QC Surrogate Compounds	Recovery	QC Limits
Fractionation:	2-Fluorobiphenyl	81 %	40 - 140 %
	2-Bromonaphthalene	80 %	40 - 140 %
Extraction:	Chloro-octadecane	80 %	40 - 140 %
	ortho-Terphenyl	86 %	40 - 140 %

Method Reference: Method for the Determination of Extractable Petroleum Hydrocarbons, MA DEP (1998).

Report Notations:

BRL Indicates concentration, if any, is below reporting limit for analyte. Reporting limit is the lowest concentration that can be reliably quantified under routine laboratory operating conditions. Reporting limits are adjusted for sample dilution, percent moisture and sample size.

† Hydrocarbon range data excludes concentrations of any surrogate(s) and/or internal standards eluting in that range.

◊ n-C11 to n-C22 Aromatic Hydrocarbons range data excludes the method target analyte concentrations.

GROUNDWATER ANALYTICAL

Certifications and Approvals

CONNECTICUT, Department of Health Services, PH-0586

Potable Water, Wastewater/Trade Waste, Sewage/Effluent, and Soil

pH, Conductivity, Acidity, Alkalinity, Hardness, Chloride, Fluoride, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, Orthophosphate, Total Dissolved Solids, Cyanide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Total Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Titanium, Vanadium, Zinc, Purgeable Halocarbons, Purgeable Aromatics, Pesticides, PCBs, PCBs in Oil, Ethylene Dibromide, Phenols, Oil and Grease.

MAINE, Department of Human Services, MA103

Drinking Water

Reciprocal certification in accordance with Massachusetts certification for drinking water analytes.

Waste Water

Reciprocal certification in accordance with Massachusetts certification for waste water analytes.

MASSACHUSETTS, Department of Environmental Protection, M-MA-103

Potable Water

Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Thallium, Nitrate-N, Nitrite-N, Fluoride, Sodium, Sulfate, Cyanide, Turbidity, Residual Free Chlorine, Calcium, Total Alkalinity, Total Dissolved Solids, pH, Trihalomethanes, Volatile Organic Compounds, 1,2-Dibromoethane, 1,2-Dibromo-3-chloropropane, Total Coliform, Fecal Coliform, Heterotrophic Plate Count, E-Coli

Non-Potable Water

Aluminum, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Strontium, Thallium, Titanium, Vanadium, Zinc, pH, Specific Conductance, Total Dissolved Solids, Total Hardness, Calcium, Magnesium, Sodium, Potassium, Total Alkalinity, Chloride, Fluoride, Sulfate, Ammonia-N, Nitrate-N, Kjeldahl-N, Orthophosphate, Total Phosphorus, Chemical Oxygen Demand, Biochemical Oxygen Demand, Total Cyanide, Non-Filterable Residue, Total Residual Chlorine, Oil and Grease, Total Phenolics, Volatile Halocarbons, Volatile Aromatics, Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, Polychlorinated Biphenyls (water), Polychlorinated Biphenyls (oil).

MICHIGAN, Department of Environmental Quality

Drinking Water

Trihalomethanes, Regulated and Unregulated Volatile Organic Compounds by EPA Method 524.2; 1,2-Dibromoethane, 1,2-Dibromo-3-chloropropane by EPA Method 504.1

NEW HAMPSHIRE, Department of Environmental Services, 202790

Drinking Water

Metals by Graphite Furnace, Metals by ICP, Mercury, Nitrite-N, Orthophosphate, Residual Free Chlorine, Turbidity, Total Filterable Residue, Calcium Hardness, pH, Alkalinity, Sodium, Sulfate, Total Cyanide, Insecticides, Herbicides, Haloacetals, Trihalomethanes, Volatile Organics, Vinyl Chloride, DBCP, EDB, Nitrate-N.

Wastewater

Metals by Graphite Furnace, Metals by ICP, Mercury, pH, Specific Conductivity, TDS, Total Hardness, Calcium, Magnesium, Sodium, Potassium, Total Alkalinity, Chloride, Fluoride, Sulfate, Ammonia-N, Nitrate-N, Orthophosphate, TKN, Total Phosphorus, COD, BOD, Non Filterable Residue, Oil & Grease, Total Phenolics, Total Residual Chlorine, PCBs in Water, PCBs in Oil, Pesticides, Volatile Organics, Total Cyanide.

RHODE ISLAND, Department of Health, 54

Surface Water, Air, Wastewater, Potable Water, Sewage

Chemistry: Organic and Inorganic

Groundwater Analytical, Inc., P.O. Box 1200, 228 Main Street, Buzzards Bay, MA 02532

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

FILE

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MP781270192 2
Manifest Document No.: 25313
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Town of Burlington, 29 Center Street, Burlington MA 01830
4. Generator's Phone: 781 270 1922
5. Transporter 1 Company Name: Maxymillian Technologies
6. US EPA ID Number: MA5000001867
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address: Environmental Compliance Corporation, 941 R Canton Street, Stoughton MA 02072
10. US EPA ID Number: MAD062179890

A. State Manifest Document Number: MA K 725313
B. State Gen. ID: 252 Fox Hill Road, Burlington MA 01830
C. State Trans. ID: MA 34407
D. Transporter's Phone: 508 949 6536
E. State Trans. ID:
F. Transporter's Phone:
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone: 781 297 7030

11. US DOT Description (including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	Unit Wt./Vol.	14. Waste No.
a. Waste Petroleum Liquid, 3, NA 1993, PG III	001	TT	600	G	MA 98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code): (L) #4 Fuel Oil + Water
K. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information: 24 Hour Emergency Phone # 508 949 6536 ERG # 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK R. GETHERLY (SUPERINTENDENT OF BURLINGTON) Signature: M. Getherly Date: Month 07 Day 16 Year 19

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jonathan Small Signature: [signature] Date: Month 07 Day 16 Year 19

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: Signature: Date: Month Day Year

Form Approved OMB No. 2050-0039. Expires 9-30-94
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA K 725313 COPY6: GENERATOR MAILS TO DESTINATION STATE

COPY6: GENERATOR MAILS TO DESTINATION STATE

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

FILE

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: MP781270192 2
Manifest Document No.: 25414
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Town of Burlington, 29 Center Street, Burlington MA 01830
4. Generator's Phone: 781 270 1922
5. Transporter 1 Company Name: Maxymillian Technologies
6. US EPA ID Number: MA5000001867
7. Transporter 2 Company Name:
8. US EPA ID Number:
9. Designated Facility Name and Site Address: Environmental Compliance Corporation, 941R Canton Street, Stoughton MA 02072
10. US EPA ID Number: MAD062179890

A. State Manifest Document Number: MA K 725414
B. State Gen. ID: 252 Fox Hill Road, Burlington MA 01830
C. State Trans. ID: MA 34407
D. Transporter's Phone: 508 949 6536
E. State Trans. ID:
F. Transporter's Phone:
G. State Facility's ID: NOT REQUIRED
H. Facility's Phone: 781 297 7030

11. US DOT Description (including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	Unit Wt./Vol.	14. Waste No.
a. Waste Petroleum Liquid, 3, NA 1993, PG III	001	TT	2940	G	MA 98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code): (L) #4 Fuel Oil + Water
K. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information: 24 Hour Emergency Phone # 508 949 6536 ERG 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: MARK R. GETHERLY (SUPERINTENDENT OF BURLINGTON) Signature: M. Getherly Date: Month 07 Day 16 Year 19

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Jonathan Small Signature: [signature] Date: Month 07 Day 16 Year 19

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: Signature: Date: Month Day Year

Form Approved OMB No. 2050-0039. Expires 9-30-94
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA K 725414 COPY6: GENERATOR MAILS TO DESTINATION STATE

COPY6: GENERATOR MAILS TO DESTINATION STATE

FILE

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MP7512701922
Manifest Document No. 25312
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
TOWN OF BURLINGTON
29 CENTER ST.
BURLINGTON, MA. 01830

4. Generator's Phone 781-270-1922

A. State Manifest Document Number MA K 725312
B. State Gen. ID
C. State Trans. ID MA34407
D. Transporter's Phone 508-944-6530
E. State Trans. ID
F. Transporter's Phone
G. State Facility's ID NOT REQUIRED
H. Facility's Phone 781-297-3530

5. Transporter 1 Company Name MAXYHILL INV TECHNOLOGIES
6. US EPA ID Number MAS000001867
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
ENVIRONMENTAL COMPLIANCE CORPORATION
441R CANTON ST.
STOUGHTON, MA 02072
10. US EPA ID Number MAD062179870

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)
12. Containers No. Type
13. Total Quantity
14. Unit Wt./Vol.
WASTE Codes

a. WASTE PETROLEUM LIQUID, 3, NA 1993, PG III — 001 TT — 3010 — G — MA99
b.
c.
d.

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)
(D) HYDROCARBON WATER
K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
24 HR EMERGENCY PHONE # 508-944-6530 ERG 128

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name MARK TRETHEWEY (Agent for Town of Burlington) Signature M Trethewey Date Month Day Year 07 03 99

TRANSPORTER
17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name Jonathan Small Signature Date 07 03 99
18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Date

FACILITY
19. Discrepancy Indication Space
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name Signature Date

Form Approved OMB No. 2050-0039, Expires 9-30-98
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY>6: GENERATOR MAILS TO DESTINATION STATE

GENERATOR

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA K 725312 COPY>6: GENERATOR MAILS TO DESTINATION STATE

FILE

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street Boston, Massachusetts 02108

Note, these 3 drums went to ECC, Stoughton, MA

Please print or type. (Form designed for use on elite (12-pitch) typewriter)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. MP7512701922
Manifest Document No. MAK 725318
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
MA [illegible] FACILITY
[illegible] ROAD

4. Generator's Phone [illegible]

A. State Manifest Document Number MA K 725318
B. State Gen. ID
C. State Trans. ID [illegible]
D. Transporter's Phone
E. State Trans. ID
F. Transporter's Phone
G. State Facility's ID NOT REQUIRED
H. Facility's Phone

5. Transporter 1 Company Name [illegible]
6. US EPA ID Number MA[illegible]
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
[illegible]
10. US EPA ID Number [illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)
12. Containers No. Type
13. Total Quantity
14. Unit Wt./Vol.
WASTE Codes

a. MASS REGULATED ONLY SOLIDS — 003 DM — 350 pounds — P. — MA01
b. — 350 pounds
c.
d.

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code)
MASS REGULATED SOLID
K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
24 HOUR EMERGENCY PHONE [illegible]

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name MARK TRETHEWEY (AGENT FOR TOWN OF BURLINGTON) Signature M Trethewey Date Month Day Year 07 03 99

TRANSPORTER
17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name DAVID S. JOHN Signature Date 07 03 99
18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Date

FACILITY
19. Discrepancy Indication Space
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name Signature Date

Form Approved OMB No. 2050-0039, Expires 9-30-98
EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

COPY>6: GENERATOR MAILS TO DESTINATION STATE

GENERATOR

In case of emergency or spill, immediately call the National Response Center (800) 424-8802

MA K 725318 COPY>6: GENERATOR MAILS TO DESTINATION STATE

Commonwealth of Massachusetts - Department of Fire Services
Executive Office of Public Safety - UST Regulatory Compliance Unit

Notification for Removal or Closure of In Place Storage Tanks Regulated Under 527 CMR 9.00

forward completed form, signed by local fire department, to: *Mass. UST Compliance Unit, Dept. of Fire Services, One Ashburton Place - Room 1310, Boston, MA 02108-1618*

(Fire Department retains one copy of FP-290R)

Fire Dept. Use Only

Date Received: _____
Fire Dept. ID# _____
Fire Dept. Sig. _____

This form is to be used for notification for removal of Underground Storage Tanks/ Piping.

If a storage facility has UST's which are to remain in use, an entire amended FP-290 (long form) must be filed.

Note: "Facility street address" must include both a street number and a street name. Post office box numbers are not acceptable, and will cause a registration to be returned. If geographic location of facility is not provided, please indicate distance and direction from closest intersection, e.g., (facility at 199 North Street is located) 400 yards southeast of Commons Road (intersection).

State Use Only

A. Facility Number _____
B. Date Entered _____
C. Clerk's Initials _____
D. Comments _____

I. Ownership of Tank(s)

Owner Name (Corporation, Individual, Public Agency, or Other Entity): Town of Burlington
Street Address: 29 Center Street
City: Burlington State: MA Zip Code: 01803
County: Middlesex
Phone (form as decade Area Code): (781) 270-1600
Owner's Employer Facility ID #: 046 001 104

II. Location of Tank(s)

If known, give the geographic location of tanks by degrees, minutes, and seconds. Example: Lat. 42, 36, 12 N Long. 85, 24, 17W

Latitude _____ Longitude _____

Distance and direction from closest intersection (see note above): Fox Hill School
Facility Name or Company Site Identifier, as applicable: 252 Fox Hill Rd.
Street Address (P.O. Box not acceptable - see note above): Burlington
City: Burlington State: MA Zip Code: 01803
County: Middlesex

III. Tanks/Piping Removed or Filled in Place

Tank Number	Tank No. 1	Tank No. ___	Tank No. ___	Tank No. ___	Tank No. ___
1. Tank/Piping removed or filled in place (mark all that apply)					
A. Substance last stored	#4				
B. Tank capacity gallons	8,000				
C. Estimated date last used (mo./day/yr.)	7/1				
D. Estimated date of removal (mo./day/yr.)	7/19/99				
E. Tank was removed from ground	✓				
F. Tank was not removed from ground					
Tank was filled with inert material					
Describe material used:					
G. Piping was removed from ground					
H. Piping was not removed from ground	✓				
I. Other, please specify					

Number (cont.)	Tank No. 1	Tank No. ___	Tank No. ___	Tank No. ___	Tank No. ___
Tank closed in accordance with 527 CMR 9.00	☑ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
A. Evidence of leak detected	☐ Yes ☑ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
B. Mass. DEP notified	☐ Yes ☑ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
1. Mass. DEP tracking number	N/A				
2. Agency or company performing contamination assessment	Clean Soils Environmental, Ltd.				

I declare under penalty of perjury that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative (Print)	Signature:	Date:
Larry Rittenberg Assistant Town Administrator	Larry Rittenberg	7/30/99

Commonwealth of Massachusetts
Department of Fire Services - Office of the State Fire Marshal
RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS OF APPROVED TANK YARD: JAMES G. GRANT CO., INC. 20 WOLCOTT STREET READVILLE, MA 02137

APPROVED TANK YARD NO. #008 Tank Yard Ledger 502 CMR 3.03 (4) Number: 993742

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this approved tank yard by firm, corporation or partnership MAXYMILLIAN TECH. and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.03 Provisions for Approving Underground Steel Storage Tank dismantling yards. A valid permit was issued by LOCAL Head of Fire Department. FDID# 17 2 0 4 2 to transport this tank to this yard.

Name and signature of approved tank yard owner or owners authorized representative:

SIGNATURE: [illegible] TITLE: Man DATE SIGNED: 7-19-99

This signed receipt of disposal must be returned to the local head of the fire department FDID# 17 2 0 4 2 pursuant to 502 CMR 3.00. EACH TANK MUST HAVE A RECEIPT OF DISPOSAL.

TANK DATA

Gallons: 8,000

Previous Contents: #4

Diameter: _____ Length: _____

Date Received: 7-19-99

Serial # (if available): _____

Tank I.D. # (Form FP-290): _____

TANK REMOVED FROM

Fox Hill Rd (No. and Street)

Burlington (City or Town)

Fire Department Permit # TR 99-210

Owner/Operator to mail revised copy of Notification Form (FP290, or FP290R) to : UST Compliance, Office of the State Fire Marshal, P.O. Box 1025 State Road, Stow, MA 01775.

JUL-29-99 01:28 PM MAXYMILLIAN 508 949 6581 P.02

270-1924

Make application to local Fire Department.
Fire Department retains original application and issues duplicate as Permit.

Commonwealth of Massachusetts
Department of Fire Services – Board of Fire Prevention

APPLICATION and PERMIT

FDID: 17

For storage tank removal and transportation to approved tank disposal yard in accordance with the provisions of M.G.L. Chapter 148, Section 38A, 527 CMR 9.00, application is hereby made by:

Tank Owner

Tank Owner Name (please print): TOWN OF BURLINGTON X _____

Address: 29 CENTER ST. BURLINGTON MA 01803

Removal Contractor

Company Name: MAXYMILLIAN TECHNOLOGIES

Address: 29 TOWN FOREST RD. WEBSTER

Signature (if applying for permit): M. Trotheney

☐ IPCI Certified ☐ Other _____

Contamination Assessment

Co. or Individual: CLEAN SOILS ENVIRONMENTAL

Address: PO BOX 891 IPSWICH MA 01938

Signature (if applying for permit): _____

☐ IPCI Certified ☒ LSP # _____ Other _____

Tank Information

Tank Location: FOX HILL ELEMENTARY SCHOOL, FOX HILL RD. BURLINGTON, MA

Tank Capacity (gallons): 8000 GAL. Substance Last Stored: #4 OIL

Tank Dimensions (diameter x length): 96" X 21'5"

Remarks: _____

Disposal Information

Firm transporting waste: MAXYMILLIAN TECH. State Lic. #: M0320

Hazardous waste manifest#: MAR 725312 U.P.A. #: MA0500001567

Approved tank disposal yard: GRANT & SON Yank yard #: 11

Type of inert gas: CO_2 Tank yard address: READVILLE MA

Approvals

City or Town: Burlington FDID: 17048 Permit#: TR 99-210

Date of issue: _____ Date of expiration: _____

Dig safe approval number: F992901593 (7-15-99 @ 1PM) Dig Safe Toll Free Tel. Number - 800-322-4844

Signature / Title of Officer granting permit: Lloyd Cook Fire Chief

After removal(s) send Form FP-290R signed by Local Fire Dept. to UST Regulatory Compliance Unit, One Ashburton Place, Room 1310, Boston, MA 02108-1618.

JUL-29-99 01:28 PM MAXYMILLIAN 508 949 6581 P.02

Levine·Fricke·Recon
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

ASBESTOS HAZARD
EMERGENCY RESPONSE ACT
(AHERA)
THREE YEAR REINSPECTION
REPORT

FOX HILL ELEMENTARY SCHOOL
BURLINGTON, MASSACHUSETTS

LFR PROJECT NO.:
104-80168

PREPARED FOR:
MR. CRAIG ROBINSON
DIRECTOR OF BUILDING & GROUNDS
BURLINGTON SCHOOL DEPARTMENT
123 CAMBRIDGE STREET
BURLINGTON, MA
01803

DATE ISSUED:
SEMPTEMBER 14, 1998

194 FORBES ROAD, BRAINTREE, MASSACHUSETTS 02184 *phone* (781) 356-7300 *fax* (781) 356-2211
Offices Worldwide.

Project No. 104-80168
Fox Hill Elementary School

The Asbestos Hazard Emergency Response Act (AHERA) reinspection described herein was conducted by the undersigned, of Levine-Fricke-Recon (LFR). LFR's investigation consisted solely of the reinspection activities required by AHERA (40 CFR 763) and as described in LFR's Proposal WI98-027. In addition, the reinspection was subject to the Limitations and Service Constraints provided in Appendix A.

This reinspection report for the Fox Hill Elementary School must be incorporated into the original Management Plan for the school.

Asbestos Reinspection Report Prepared by:

Paul Hoffman
MA Inspector #AI 5,722
MA Management Planner # AP 52749

9/14/98
Date

Asbestos Reinspection Report Reviewed and Approved by:

Michael Capozzi
Project Manager

9/14/98
Date

TABLE OF CONTENTS

Section		Page
1.0	INTRODUCTION	1
2.0	RECORDKEEPING OF THE MANAGEMENT PLAN	2-3
3.0	DOCUMENTATION REVIEW	3
3.1	Designated Person	3
3.2	Yearly Building Occupant Notification	4
3.3	Custodial/Maintenance Personnel Training	4
3.4	Periodic Surveillance	5
3.5	Warning Labels	5
3.6	Three Year Reinspection	5
3.7	Short-Term Worker Notification	6
3.8	Fiber Release Episodes	6
3.9	Response Actions	6
4.0	REINSPECTION FINDINGS & RECOMMENDATIONS	6-7
4.0	Recommendations	7-8
5.0	HAZARD PRIORITY SUMMARY (Updated)	7

Appendix A ..... Limitations and Service Constraints
Appendix B ..... Hazard Assessment Summary Sheets

1.0 INTRODUCTION

Levine-Fricke-Recon (LFR), was retained by the Burlington School Department to reinspect the Fox Hill Elementary School located in Burlington, MA in compliance with the Asbestos Hazard Emergency Response Act (AHERA) of October, 1987. The reinspection was conducted on July 29, 1998 by LFR's representative, Mr. Paul Hoffman, Massachusetts Asbestos Inspector License #AI 51722.

The objective of the reinspection was to maintain the Fox Hill Elementary School's compliance with the AHERA Regulation by visually reinspecting and reassessing the condition of all known or assumed asbestos-containing building materials (ACBM). In accordance with the regulation, LFR also visually inspected and reassessed materials that were previously considered non-friable ACBM and touched the material to determine whether it had become friable since the last inspection or reinspection.

All findings of this reinspection must be incorporated into the original Management Plan document for the School building.

As described in the Reinspection Hazard Assessment Sheets included as appendix B, LFR has identified any changes in quantity or condition of ACBM noted during the reinspection and has included updated recommendations, where appropriate. LFR has also provided an updated Hazard Priority Summary which indicates the priority of Homogeneous Areas and LFR's recommendation for addressing confirmed or assumed asbestos-containing material (ACM).

Under AHERA protocol, certain assessment criteria were used as the basis for recommended response actions. These assessment criteria were as follows: The existence of barriers, abnormal access features, activity in the area, air erosion, potential for fiber release, and existing damage.

Based on the aforementioned assessment criteria, LFR made recommendations for ACBM at the school building. LFR's recommendations generally fall into six categories:

1. Homogeneous Areas which can be maintained under the Provisions of an Operations & Maintenance (O&M) Program;

2. Homogeneous Areas which should be properly removed immediately by a qualified abatement contractor;

3. Homogeneous Areas which should be removed when practical;

4. Homogeneous Areas requiring short-term, short-duration remedial measures (patch & repair) performed either by in-house maintenance personnel who have successfully completed the 16-hour O&M training course or by a qualified abatement contractor depending on the amount of material;

5. Homogeneous Areas requiring enclosure; and

6. Homogeneous Areas requiring encapsulation.

2.0 RECORD KEEPING OF THE MANAGEMENT PLAN

The Local Education Agency's (LEA) responsibilities regarding recordkeeping for the school Asbestos Management Plan are defined as follows:

Each LEA must keep an updated copy of the management plan in its administrative office for each school under its administrative control or direction. This plan must be available, without restriction, to the public, school personnel and their representatives, parents and representatives of the EPA and the State for inspection during normal business hours.

In addition, each school must keep in its administrative office, an updated copy of the management plan for the school, which must be made available for inspection.

Each LEA and school must keep accurate records of relevant events with the management plan. Relevant events include:

* For any response action or preventive measure taken for ACBM: provide a detailed description of the actions and information on sample analysis [see 40 CFR Part 763, section 763.94 (b)].

* For each person required to be trained: provide their name and job title, and documentation regarding their training.

* For each periodic surveillance that is conducted: provide the name of each person performing the surveillance, the date of the surveillance, and any changes in the condition of the materials. Periodic surveillance inspection should be conducted every 6 months.

* For each reinspection: provide the name and accreditation information of the inspector, the date of the reinspection, and any changes noted in the condition of the material.

* For each required cleaning: provide the name of the person performing the cleaning, the date of the cleaning, the locations cleaned, and the methods used.

* For each small-scale and short-duration operation and maintenance activity: provide the name and signature of the person performing the activity, the activity start and completion dates, the precise locations and a description of the activity and any preventive measures taken. If ACBM is removed, provide the name and location of the storage or disposal site.

* For maintenance activities other than small-scale and short-duration activities: provide the name and signature of the person performing the activity; their State of accreditation and, if applicable, the accreditation number of each person doing the activity; the activity start and completion dates; the precise locations; and if ACBM is removed, the name and location of the storage or disposal site.

* For each fiber release episode: provide the date and location of the release, the method of repair, the preventative or response actions taken, the name of each person

performing the work, and if ACBM is removed, the name and location of the storage or disposal site.

Proper documentation allows for the accurate representation of the location of and the amounts of asbestos-containing materials within the school building.

3.0 DOCUMENTATION REVIEW

LFR performed a review of the original Asbestos Management Plan and all accompanying documentation pertaining to employee training, patch and repair work performed under the O&M Program, and asbestos abatement operations that have taken place since the implementation of the O&M Program. This documentation review is summarized as follows:

3.1 Designated Person

Name:	Mr. Craig Robinson
Title:	Director of Buildings & Grounds
Address:	123 Cambridge Street Burlington, MA 02184
Telephone Number:	(781) 270-1800
Training:	Institute for Environmental Education, Inc. IEE 80 Cummings Park Woburn, Ma

The AHERA regulation 763.84[g](1) states that "the general LEA shall designate a person to ensure that requirements under this section are properly implemented". Section 763.84[g](2) further states that "the LEA shall ensure that the designated person receives adequate training to perform duties assigned under this section".

The AHERA regulation section 763.84 outlines the general LEA responsibilities and are defined as follows:

Ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance (O&M), are carried out in accordance with Subpart E of the regulation.

Ensure that all custodial and maintenance employees are properly trained as required by the Subpart E and other applicable Federal and/or State regulations (e.g. the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable Massachusetts Department of Labor and Workforce Development regulations. Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.

Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.

Ensure that warning labels are posted in accordance with section 763.95.

Ensure that Management Plans are available for inspection and notification of such availability has been provided as specified in the Management Plan under section 763.93 (g).

Designate a person to ensure that requirements of the AHERA regulation are properly implemented and that the designated person receives adequate training to perform duties assigned.

Consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under the Subpart.

3.2 Yearly Building Occupant Notification

"The designated person must ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress", as per the AHERA regulation section 763.84(c).

LFR did observe documentation of yearly notification to building occupants.

3.3 Custodial/Maintenance Personnel Training

LFR recommends that the Fox Hill Elementary School ensure that all maintenance personnel assigned to the school system have or will receive, at a minimum, the two (2) hour asbestos-awareness training, as required by the AHERA regulation. Two-Hour Awareness training programs have not been completed for maintenance personnel at the school system. LFR confirmed this through visually inspecting copies of certifications.

As per the AHERA regulation section 763.92 (a), "The LEA shall ensure, prior to the implementation of the O&M provisions of the Management Plan, that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in a building that contains ACBM receive awareness training of at least 2 hours, whether or not they are required to work with ACBM. New custodial and maintenance employees shall be trained within 60 days after commencement of employment."

3.4 Periodic Surveillance

LFR did review documentation regarding periodic surveillance at the school. LFR recommends in the future the school use the periodic surveillance sheets which are provided following each Hazard Assessment Summary Sheets provided as Appendix B.

"At least once every 6 months after a management plan is in effect, each local education agency shall conduct periodic surveillance in each building that it leases, owns, or otherwise uses as a school building that contains ACBM or is assumed to contain ACBM", as per the AHERA regulation section 763.92 (b) (1).

As per the AHERA regulation section 763.94[d], "for each time that periodic surveillance under section 763.92[b] is performed, the local education agency shall record the name of each person performing the surveillance, the date of the surveillance and any changes in the conditions of the materials".

3.5 Warning Labels

As per the AHERA regulation section 763.95[a], "the LEA shall attach a warning label immediately adjacent to any friable and non-friable ACBM and suspected ACBM assumed to be ACM located in routine maintenance areas (such as boiler rooms) at each school building". LFR did observe the presence of warning labels at the school.

3.6 Three Year Reinspection

"At least once every 3 years after a Management Plan is in effect, each local education agency (LEA) shall conduct a reinspection of all friable and non-friable known or assumed ACBM in each school building that they lease, own, or otherwise use as a school building", as per the AHERA regulation section 763.85 (b) (1).

LFR reviewed the previous reinspection reports for this facility.

3.7 Short-Term Worker Notification

The AHERA regulation section 763.84 (d) requires that the LEA shall, "ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.

LFR did not observe any records in regards to the notification of short-term workers but was informed all sub-contractors are informed of the presence of all ACBM in areas they will be working.

3.8 Fiber Release Episodes

Upon review of the Management Plan documents, LFR did not observe any documentation regarding fiber release episodes.

"For each fiber release episode under 763.91 (f), the LEA shall provide the date and location of the episode, the method of repair, preventive measures or response action taken, the name of each person performing the work, and if ACBM is removed, the name and location of storage or disposal site of the ACM", as per the AHERA regulation section 763.94 (h)

3.9 Response Actions

LFR did review documentation regarding response actions, which have been performed since the performance of the last three year reinspection. This information is listed below:

Project Date:	8/22/95
Abatement Contractor:	DEC-TAM 10 Lowell Street Andover, MA
Project Monitoring:	Recon Environmental Services
Waste Hauler:	Job Roll-Off Chelsea, MA
Waste Disposal Site:	Kelly Run Sanitation Elizabeth, PA
Summary of Scope of Work:	Removal of 5 linear feet of boiler breaching insulation and removal of aproximately400 square feet of floor tile from the hall outside pod #1 & 3

4.0 REINSPECTION FINDINGS & RECOMMENDATIONS

All material inspected that are listed in the previous 3-year reinspection report remain in very good condition and no physical damage was identified during the inspection. The current condition of all materials reinspected at the school building can be seen on the Hazard Assessment Summary Sheets provided in Appendix B. All materials are evaluated for current condition, changes from previously noted condition and an assessment is made to determine the recommended response for each material. Provided in the next section is a Hazard Priority Summary which ranks the materials in the order of the recommended responses provided for each material. The updated Hazard Priority Summary included as section 5.0 should become the main Hazard Priority List for the LEA.

4.1 Recommendations

LFR recommends that any damaged asbestos-containing/suspect asbestos-containing materials which are to remain, be repaired, at a minimum.

All remaining asbestos-containing/suspect asbestos-containing Homogeneous Areas must be maintained under the provisions of an O&M Program as long as they remain in the school building.

The Fox Hill Elementary School's designated person must be notified of all scheduled renovations or demolitions that are to occur. Notification to the designated person allows for any possible disturbance of asbestos-containing materials to be prevented and for the proper handling of ACM at the School.

As required by the AHERA regulations, the Fox Hill Elementary School plan administrator should notify workers, building occupants or their legal guardians of all actions pertaining to asbestos materials at the school building(s).

If materials are discovered that have not been listed in this reinspection report or the initial Asbestos Management Plan, LFR recommends that they be treated as asbestos-containing until sampling can be performed to determine asbestos content.

5.0 HAZARD PRIORITY SUMMARY

The Hazard Priority Summary list ranks the Homogenous Areas which contain asbestos according to their potential for fiber release.

Factors which may influence decisions as to when areas are to be repaired or abated apart from an area's potential for fiber release might include scheduled renovations, appropriate funding, or the availability of unoccupied areas (such as during vacation periods).

The Hazard Priority Summary list follows:

HOMOGENEOUS AREA	RECOMMENDED RESPONSE ACTION
T-01	O&M PROGRAM
M-01	O&M PROGRAM
T-02	O&M PROGRAM
T-03	O&M PROGRAM
T-04	O&M PROGRAM
M-02	O&M PROGRAM
M-03	O&M PROGRAM
S-01	O&M PROGRAM

HAZARD ASSESSMENT SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: M-01
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #: AP 51721	NUMBER OF SAMPLES: 0
SQUARE/LINEAGE FOOTAGE: 3 LN. FT	ANALYSIS RESULT: ASSUMED ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS BOILER GASKET MATERIAL
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED IN THE BOILER ROOM

ASSESSMENT CRITERIA – CURRENT CONDITIONS

EXISTENCE OF BARRIERS: YES	ABNORMAL ACCESS FEATURES: YES
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: LOW
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM : LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: LOW

COMMENTS: DUE TO THE MATERIALS LOW FRIABILITY ITS POTENTIAL FOR FIBER RELEASE IS LOW

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW= <1%
PHYSICAL	HIGH=	MODERATE=	LOW= <1%

DAMAGE FACTORS: NORMAL STUDENT/STAFF ACTIVITIES

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
( ) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATIONS AND MAINTENANCE PROGRAM

ABATEMENT COST ESTIMATE – HOMOGENEOUS AREA ID #: M-01
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
3 X $25.00 = $75.00
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
OTHER X $12.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
X $2.50 =
TOTAL REMOVAL COST ESTIMATE = $75.00

HAZARD ASSESSMENT SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: M-02
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #:AP 51721	NUMBER OF SAMPLES:PREVIOUSLEY SAMPLED
SQUARE/LINEAGE FOOTAGE: 5,346 SQ. FT.	ANALYSIS RESULT: 35-45% ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS BLUE AND GRAY TRANSITE SIDING.
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED AROUND THE OUTER WALLS/EXTERIOR OF THE BUILDING

ASSESSMENT CRITERIA - CURRENT CONDITIONS

EXISTENCE OF BARRIERS: NO	ABNORMAL ACCESS FEATURES: NO
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: LOW
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM : LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: LOW

COMMENTS: MAINTENANCE STAFF AND OUTSIDE CONTRACTORS SHOULD BE INFORMED REGULARLY THAT THIS MATERIAL SHOULD NOT BE DISTURBED

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW= <1%
PHYSICAL	HIGH=	MODERATE=	LOW= <1%

DAMAGE FACTORS: NORMAL STUDENT/STAFF ACTIVITIES

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
( ) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATIONS AND MAINTENANCE PROGRAM

ABATEMENT COST ESTIMATE – HOMOGENEOUS AREA ID #: M-02
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
X $25.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
OTHER X $12.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
5,346 SQUARE FEET X $15.00 = $50,190.00
TOTAL REMOVAL COST ESTIMATE = $50,190.00

HAZARD ASSESSMENT SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: M-03
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #: AP 51721	NUMBER OF SAMPLES: 0
SQUARE/LINEAGE FOOTAGE: 49,332 SQUARE FEET	ANALYSIS RESULT: ASSUMED ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS WHITE 12" X 12" FLOOR TILE AND MASTIC IN VARIOUS COLORS
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED IN CLASSROOMS, STORAGE AREAS, CAFETERIA AND HALLWAYS

ASSESSMENT CRITERIA - CURRENT CONDITIONS

EXISTENCE OF BARRIERS: YES	ABNORMAL ACCESS FEATURES: NO
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: LOW
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM : LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: LOW

COMMENTS: DUE TO THE MATERIALS LOW FRIABILITY ITS POTENTIAL FOR FIBER RELEASE IS LOW.

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW= <2%
PHYSICAL	HIGH=	MODERATE=	LOW= <3%

DAMAGE FACTORS: SLIGHT WATER DAMAGE & DETERIORATION FROM AGE AND USE

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
( ) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATION AND MAINTENANCE PROGRAM.

ABATEMENT COST ESTIMATE - HOMOGENEOUS AREA ID #: M-03
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
X $25.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
OTHER X $12.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
48,932 SQUARE FEET X $2.50 = $122,330.00
TOTAL REMOVAL COST ESTIMATE =$122,330.00

HAZARD ASSESSMENT SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: S-01
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #: AP 51721	NUMBER OF SAMPLES: 0
SQUARE/LINEAGE FOOTAGE: 1,500 SQ. FT.	ANALYSIS RESULT: ASSUMED ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS HARD WALL PLASTER
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED IN THE CAFETERIA

ASSESSMENT CRITERIA - CURRENT CONDITIONS

EXISTENCE OF BARRIERS: NO	ABNORMAL ACCESS FEATURES: NO
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: LOW
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM :LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: LOW

COMMENTS: DUE TO THE MATERIALS LOW FRIABILITY ITS POTENTIAL FOR FIBER RELEASE IS LOW.

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW= <1%
PHYSICAL	HIGH=	MODERATE=	LOW= <1%

DAMAGE FACTORS: NORMAL WEAR & TEAR DUE TO STUDENTS/STAFF ACTIVITIES.

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
( ) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATIONS AND MAINTENANCE PROGRAM

ABATEMENT COST ESTIMATE - HOMOGENEOUS AREA ID: #: M-04
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
X $25.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
OTHER X $12.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
1,500 SQ. FT. X $2.50 = $18,000.00
TOTAL REMOVAL COST ESTIMATE = $18,000.00

HAZARD ASSESSMENT SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: T-01
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #: AP 51721	NUMBER OF SAMPLES: 0
SQUARE/LINEAGE FOOTAGE: 10,500 SQ. FT.	ANALYSIS RESULT: ASSUMED ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS GRAY TANK INSULATION
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED IN THE BOILER ROOM

ASSESSMENT CRITERIA – CURRENT CONDITIONS

EXISTENCE OF BARRIERS: NO	ABNORMAL ACCESS FEATURES: YES
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: LOW
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM : LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: MODERATE

COMMENTS: ANY MATERIALS SHOULD BE PATCHED & REPAIRED

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW = <5%
PHYSICAL	HIGH=	MODERATE=	LOW = <5%

DAMAGE FACTORS: WATER LEAKS & MAINTENANCE ACTIVITIES

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
(X) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATIONS AND MAINTENANCE PROGRAM.

ABATEMENT COST ESTIMATE – HOMOGENEOUS AREA ID #: M-05
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
X $25.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
SQ. FT. X $1.50 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
126 SQ. FT. X $25.00 = $3,150.00
TOTAL REMOVAL COST ESTIMATE = $3,150.00

HAZARD ASSESSMENT SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: T-02
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #: AP 51721	NUMBER OF SAMPLES: PREVIOUSLY SAMPLED
SQUARE/LINEAGE FOOTAGE:85 LN.FT.	ANALYSIS RESULT: 1-3% ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS HARD PACKED FITTING INSULATION ON STRAIGHT FIBER-GLASS INSULATED PIPE
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED IN THE BOILER ROOM

ASSESSMENT CRITERIA – CURRENT CONDITIONS

EXISTENCE OF BARRIERS: NO	ABNORMAL ACCESS FEATURES: YES
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: LOW
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM :LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: LOW

COMMENTS: THE MATERIALS SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN O & M PROGRAM.

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW = <1%
PHYSICAL	HIGH=	MODERATE=	LOW = <3%

DAMAGE FACTORS: NORMAL STUDENT/STAFF ACTIVITIES AND WATER LEAKS

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
(X) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATIONS AND MAINTENANCE PROGRAM

ABATEMENT COST ESTIMATE – HOMOGENEOUS AREA ID #: T-02
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
85 LN. FT.X $25.00 = $2,125.00
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
SQ. FT. X $1.50 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
TOTAL REMOVAL COST ESTIMATE = $2,125.00

HAZARD ASSESSMENT
SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: T-03
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #: AP 51721	NUMBER OF SAMPLES: PREVIOUSLY SAMPLED0
SQUARE/LINEAGE FOOTAGE: 24 SQ. FT.	ANALYSIS RESULT: 40-50% ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS BOILER BREACHING INSULATION
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED IN THE BOILER ROOM

ASSESSMENT CRITERIA – CURRENT CONDITIONS

EXISTENCE OF BARRIERS: NO	ABNORMAL ACCESS FEATURES: YES
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: LOW
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM : LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: LOW

COMMENTS: MATERIAL IS IN A REMOTE PART OF THE BUILDING (BOILER ROOM)

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW= <2%
PHYSICAL	HIGH=	MODERATE=	LOW= <4%

DAMAGE FACTORS: MAINTENANCE ACTIVITIES AND WATER LEAKS ARE PROBABLE CAUSES OF DAMAGE

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
( ) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATION AND MAINTENANCE PROGRAM.

ABATEMENT COST ESTIMATE – HOMOGENEOUS AREA ID #: T-03
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
X $25.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
40 SQ. FT. X $25.00 = $1,000.00
TOTAL REMOVAL COST ESTIMATE = $1,000.00

HAZARD ASSESSMENT
SUMMARY SHEET

PROJECT #: 104-80168	HOMOGENEOUS AREA ID #: T-04
SITE NAME: FOX HILL ELEMENTARY SCHOOL	PHOTO ID #:
MANAGEMENT PLANNER ID #: AP 51721	NUMBER OF SAMPLES: 0
SQUARE/LINEAGE FOOTAGE: N/A.	ANALYSIS RESULT: ASSUMED ACBM

AREA DESCRIPTION

HOMOGENEOUS AREA DESCRIPTION: THE MATERIAL IS HARD PACKED FITTING INSULATION
FUNCTIONAL SPACE DESCRIPTION: THE MATERIAL IS LOCATED THROUGHOUT THE BUILDING BEHIND WALLS AND ABOVE SOME CEILINGS

ASSESSMENT CRITERIA – CURRENT CONDITIONS

EXISTENCE OF BARRIERS: YES	ABNORMAL ACCESS FEATURES: YES
AIR EROSION: LOW	MAINTENANCE ACTIVITIES: MODERATE
STUDENT/STAFF ACTIVITIES: LOW	VANDALISM : LOW
OTHER:	POTENTIAL FOR FIBER RELEASE: LOW

COMMENTS: DUE TO THE MATERIALS LOW FRIABILITY ITS POTENTIAL FOR FIBER RELEASE IS LOW.

DAMAGE FACTORS

WATER	HIGH=	MODERATE=	LOW= <1%
PHYSICAL	HIGH=	MODERATE=	LOW= <1%

DAMAGE FACTORS: NORMAL STUDENT/STAFF ACTIVITIES

RECOMMENDED RESPONSE ACTION (OVERALL)

( ) IMMEDIATE REMOVAL
( ) REMOVE WHEN PRACTICAL
( ) PATCH & REPAIR
( ) ENCLOSURE
( ) ENCAPSULATION
(X) OPERATIONS & MAINTENANCE
( ) OTHER

RESPONSE ACTION RATIONALE: THE MATERIAL SHOULD BE MAINTAINED UNDER THE PROVISIONS OF AN OPERATIONS AND MAINTENANCE PROGRAM.

ABATEMENT COST ESTIMATE – HOMOGENEOUS AREA ID #: T-04
(LINEAR FOOTAGE) X (REMOVAL PRICE PER FOOT)
X $25.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
SQ. FT. X $1.00 =
(SQUARE FOOTAGE) X (REMOVAL PRICE PER FOOT)
TOTAL REMOVAL COST ESTIMATE = UNKNOWN

TOWN OF BURLINGTON

BOARD OF HEALTH
61 Center Street
Burlington, Massachusetts 01803
(617) 270-1655 • Fax 270-1605

To: Craig Robinson
Director of Facilities & Grounds

October 16, 1997

From: Todd H. Dresser THD
Environmental Engineer

Subject: Leaking underground storage tank at Foxhill School

I would like to request a copy of the following information related to the leaking underground storage tank discovered at the Foxhill School: the release notification form filed with the Massachusetts Department of Environmental Protection, a copy of all sampling or environmental assessment data generated by this discovery, a copy of the signed bill of lading for the disposal of the contaminated soil, and a copy of the closure form filed with the DEP. I already have the tank disposal records and the manifest for the disposal of the oil removed from this tank.

I would appreciate it if you could forward this information to the Board of Health at your earliest convenience.

Purchase Order

Purchase Order	532
204291430	

ACCOUNT TO BE CHARGED

PURCHASE ORDER

Burlington Public Schools
Burlington, MA 01803-3798

Jodi General Contractors
36 Douglas Avenue
Burlington, MA 01803
Att: Richard J. Bagni 272-4437

Date			Dept.	Mass. Tax Exempt	
10/15/97			Plants	04-600-1104W	
Quantity		Description		Unit Price	Amount
	Removal 500 gallon UST & dispose				3150.00
	Remove contaminted soil & dispose				
	Install new slab for 275 dble wall				
	tank for generator				
	Remove ol 275 gl tank & dispose				
			Total:		3150.00

GULF OF MAINE RESEARCH CENTER INC.
ENVIRONMENTAL CONSULTING SERVICES

204 LAFAYETTE STREET
SALEM, MA 01970
(508) 745-6618
FAX (508) 741-3649

August 18, 1997

Dr. James Picone
Assistant Superintendent for Business & Finance
Burlington Public School Department
123 Cambridge Street
Burlington, MA 01803

RE: Underground Storage Tank Removal
and Limited Removal Action
Fox Hill School, Burlington, MA

Dear Dr. Picone:

Gulf of Maine Research Center, Inc. (GMRC) is pleased to provide this summary report of environmental services at the property referenced above (the "Site").

On April 23, 1997, a 500 gallon underground No. 2 fuel oil storage tank (UST) was removed from the west side of the Fox Hill School (Figure 1) and disposed of by Jodi General Contractors (JGC) of Burlington, MA. During removal of the tank, a small quantity of stained soil was encountered in the vicinity of the fill pipe on the UST. JGC notified the Burlington Fire Department and the Burlington Board of Health that apparent soil contamination had been encountered.

On the same date, Jeffrey Kelly of GMRC supervised the excavation and segregation of suspected contaminated soil. All stained soil was excavated, stockpiled on, and covered with 6 mil polyethylene sheeting. Soil expected to be clean was placed in a separate pile.

Following removal of the stained soil, one soil sample was collected from each of the four tank excavation walls (SS 101 - SS 104). The floor of the tank excavation was formed by

the concrete UST anchor pad. Therefore, a soil sample was not collected from the floor. One representative soil sample, designated SP 101, was collected from the stockpile of suspected clean material and one representative soil sample, designated SP 102 was collected from the suspected contaminated stockpile. Soil samples were kept cold until they were delivered to ESS of Cranston, RI (a Massachusetts Certified Laboratory) for analysis of total petroleum hydrocarbon (TPH) by EPA 8100M. The results of the analyses are presented in Table 1. Full laboratory reports and chain of custody documentation are included in Appendix A.

Table 1.
Petroleum in Soil
Fox Hill School, Burlington, MA
April, 1997

Sample ID	Location	TPH (mg/kg)
SS 101	Tank Pit Wall	<28
SS 102	Tank Pit Wall	<28
SS 103	Tank Pit Wall	<28
SS 104	Tank Pit Wall	<27
SP 101	"Clean" Stockpile	<27
SP 102	"Contaminated" Stockpile	926*

* TPH by EPA 418.1

The data presented in Table 1 indicates that residual petroleum hydrocarbon concentration in soil in the vicinity of the former UST at the Fox Hill School is less than 28 mg/kg. The clean stockpile was returned to the UST excavation. Clean fill from off site was used to backfill the excavation to the existing grade. The contaminated soil stockpile was transported to Bardon Trimount of Salem, MA for recycling into bituminous pavement on August 7, 1997 (Appendix B).

The soil removal has been performed as a "Limited Removal Action" in accordance with 310 CMR 40.0318. Because levels of residual petroleum have been reduced to below 500 mg/kg, reporting to the Massachusetts Department of Environmental Protection (DEP) is not required. Pursuant to 310 CMR 40.0318(7)(6) you must retain this report and supporting documentation for a minimum of five years. GMRC recommends that you retain it indefinitely.

If you have any questions, please contact me or my associate, Jeffrey Kelly. The results of this investigation and Response Action are subject to the Limitations stated in Appendix C.

Sincerely,

Hugh F. Mulligan, Ph.D., LSP
Director

cc: Richard Bagni, Sr.
Jodi General Contractors

APPENDIX A
LABORATORY REPORTS

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS **PROJECT NARRATIVE**

CLIENT: Gulf of Maine Research
CLIENT PROJECT ID: Fox Hill School
ESS PROJECT ID: 971330

Sample Receipt
Six solid samples were received on April 25, 1997 for the analyses specified on the enclosed Chain of Custody Record.

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. These analyses with these noted observations are in conformance to the Quality Assurance Plan.

No unusual observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.

Phyllis Shiller/Ron McCullen
Laboratory Director/QA Manager

5/20/97
Date

195 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 467-6454 Fax (401) 467-2398

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON GC/FID
8100M

Client: Gulf of Maine Research
Client Project ID: Fox Hill School
Client Sample ID: SS 101
Date Sampled: 4/23/97
Date Analyzed: 5/9/97

ESS Project ID: 971330
ESS Sample ID: 971330-01
Date Extracted: 5/7/97
Dilution Factor: 1x

Parameter	Results (mg/Kg dry wt.)	MRL
Total Petroleum Hydrocarbon	ND	28

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 5/20/97

195 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 467-6454 Fax (401) 467-2398

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON GC/FID
8100M

Client: **Gulf of Maine Research**
Client Project ID: **Fox Hill School**
Client Sample ID: **SS 102**
Date Sampled: **4/23/97**
Date Analyzed: **5/9/97**

ESS Project ID: **971330**
ESS Sample ID: **971330-02**
Date Extracted: **5/7/97**
Dilution Factor: **1x**

Parameter	Results (mg/Kg dry wt.)	MRL
Total Petroleum Hydrocarbon	ND	28

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 5/20/97

195 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 467-6454 Fax (401) 467-2398

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON GC/FID
8100M

Client: **Gulf of Maine Research**
Client Project ID: **Fox Hill School**
Client Sample ID: **SS 103**
Date Sampled: **4/23/97**
Date Analyzed: **5/9/97**

ESS Project ID: **971330**
ESS Sample ID: **971330-03**
Date Extracted: **5/7/97**
Dilution Factor: **1x**

Parameter	Results (mg/Kg dry wt.)	MRL
Total Petroleum Hydrocarbon	ND	28

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 5/20/97

195 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 467-6454 Fax (401) 467-2398

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON GC/FID
8100M

Client: Gulf of Maine Research
Client Project ID: Fox Hill School
Client Sample ID: SS 104
Date Sampled: 4/23/97
Date Analyzed: 5/9/97

ESS Project ID: 971330
ESS Sample ID: 971330-04
Date Extracted: 5/7/97
Dilution Factor: 1x

Parameter	Results (mg/Kg dry wt.)	MRL
Total Petroleum Hydrocarbon	ND	27

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 5/20/97 0005

195 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 467-6454 Fax (401) 467-2398

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON GC/FID
8100M

Client: Gulf of Maine Research
Client Project ID: Fox Hill School
Client Sample ID: SP 101
Date Sampled: 4/23/97
Date Analyzed: 5/9/97

ESS Project ID: 971330
ESS Sample ID: 971330-05
Date Extracted: 5/7/97
Dilution Factor: 1x

Parameter	Results (mg/Kg dry wt.)	MRL
Total Petroleum Hydrocarbon	ND	27

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 5/20/97 0006

195 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 467-6454 Fax (401) 467-2398

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client: **Gulf of Maine Research**

Client Project ID: **Fox Hill School**

Client Sample ID: **SP 102**

ESS Project ID: **971330**

ESS Sample ID: **971330-06**

Parameter	Result	Units	MRL	Method
Total Petroleum Hydrocarbon	926	mg/Kg	22	418.1

MRL = Method Reporting Limit

Approved by: _____

Date: 5/20/97

195 Frances Avenue, Cranston, RI 02910-2211

Tel. (401) 467-6454 Fax (401) 467-2398

PERCENT SOLIDS SECTION

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PERCENT SOLIDS

Client: Gulf of Maine Research

Client Project ID: Fox Hill School

ESS Project ID: 971330

Date Sampled: 4/23/97

Date Reported: 5/20/97

ESS Laboratory Sample ID	Client Sample ID	Result (%)
971330-01	SS 101	90
971330-02	SS 102	89
971330-03	SS 103	90
971330-04	SS 104	91
971330-05	SP 101	92
971330-06	SP 102	92

Approved by: _____

Date: 5/21/97

195 Frances Avenue, Cranston, RI 02910-2211

Tel. (401) 467-6454 Fax (401) 467-2398

QUALITY CONTROL SECTION

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON-GC
SURROGATE RECOVERY

Client: Gulf of Maine Research

Client Project ID: Fox Hill School

ESS Project ID: 971330

Sample ID	o-Terphenyl (50-150%)
GC0507B2	75
971330-01	89
971330-02	76
971330-03	81
971330-04	76
971330-05	87

 # Column to be used to flag recovery values with an asterisk when outside of Advisory Limits.

Approved by: _____ Date: 5/21/97

195 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 467-6454 Fax (401) 467-2398

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TOTAL PETROLEUM HYDROCARBON GC/FID
8100M

Client: Gulf of Maine Research
Client Project ID: Fox Hill School
Client Sample ID: Method Blank
Date Sampled: N/A
Date Analyzed: 5/9/97

ESS Project ID: 971330
ESS Sample ID: GC0507B2
Date Extracted: 5/7/97
Dilution Factor: 1x

Parameter	Results (mg/Kg dry wt.)	MRL
Total Petroleum Hydrocarbon	ND	25

N/A = Not Applicable

ND = Not Detected above Method Reporting Limit (MRL)

Approved by: _____ Date: 5/21/97

195 Frances Avenue, Cranston, RI 02910-2211 Tel. (401) 467-6454 Fax (401) 467-2398

ESS LABORATORY CERTIFICATIONS

Rhode Island: RI002

Connecticut: PH-0750

Maine: RI002

Massachusetts: RI002

New Hampshire:
Drinking Water: 242496-F
Wastewater: 242496-B

New Jersey: 78002

New York: 11313
Environmental Analysis/Water: 033976
Solid and Hazardous Waste: 033977

0013

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486

CHAIN OF CUSTODY

Page 1 of 1

Turn Time: X Standard (2 Week) ____ Other ____

ESS-LAB PROJECT ID: 97-330

Co. Name: Gulf of Maine
Project #:
Project Name: Fox Hill School
Contact Person: Jeff Kelly
Address: 204 Lafayette St.
City: Salem State: MA Zip: 01970 Tel: 508-745-1618
Purchase Order #:
Fax #: 508-741-8648

See note

ESS LAB Sample #	Date	Collection Time	COLIF	GRAB	MATRIX	Sample Identification	Number of Containers	Type of Container	Analysis Required: TPH/Oil Black	TPH/12	Pesticides	PH	Sulfide Dissolved	Total Metals						
-01	4/23/97	pm		X	S	SS 101	1	G												
-02				X	S	SS 102	1		X											
-03				X	S	SS 103	1		X											
-04				X	S	SS 104	1		X											
-05				X	S	SS SP101	1		X											
-06				X	S	SP 102	2	V	X											

Container Type: P-Poly C-Glass S-Sterile V-VOA Matrix: DW-Drinking Water S-Solid GW-Ground Water WW-Wastewater

Seals Intact: ____ Yes ____ No
Cooler Temp: ____

Comments: Please provide verbal for TPH for SP 102 prior to holding time expires for 8240 & PCBs. Thanks!
Total & TCLP Metals for Arsenic Cadmium Chromium Mercury FLOW.
All samples to be analyzed for TPHgc. SP 102 may depending on TPH results. be analyzed for additional parameters

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
[illegible]	4/23/97	[illegible]	4/23/97	[illegible]	4/23/97	[illegible]	4/23/97				

1 (White) Lab Copy 2 (Canary) Client Receipt

APPENDIX B
SOIL DISPOSAL DOCUMENTATION

Bardon Trimount, Inc.
1101 Turnpike Street
Stoughton
Massachusetts
02072
Tel: 617 - 344 - 1100
Fax: 617 - 341 - 2440

Bardon Trimount

August 8, 1997

JEFF KELLY
GULF OF MAINE RESEARCH CENTER
204 LAFAYETTE STREET
SALEM, MA 01970

Re: Soil, Fox Hill School
Fox Hill Road
Burlington, MA
Release Tracking #: LRA

The recyclable soil from the above address was received at our facility on August 7, 1997. Attached are the shipper's log of soil receipts which total 8.78 tons along with the Bills of Lading and other receipt documentation.

We will issue a "Certificate of Recycling" upon request after processing.

Thank you for recycling soil at our Salem facility.

Yours truly,

David M. Peter

David M. Peter, Manager
Environmental Services

Massachusetts Department of Environmental Protection **BWSC-012A**
Bureau of Waste Site Cleanup

Release Tracking Number* ___-LRA

BILL OF LADING (pursuant to 310 CMR 40.0030)

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

Release Name (optional): Fox Hill School
Street: Fox Hill Road Location Aid:
City/Town: Burlington, MA Zip Code: 01803-
Date/Period of Generation: 04/23/97 to 04/23/97
Additional Release Tracking Numbers Associated with this Bill of Lading: NONE

Note: If this Bill of Lading is the result of a Limited Removal Action (LRA) taken prior to Notification, a Release Tracking Number is not needed.

B. PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:

Name of Organization: Burlington Public School Department
Name of Contact: James Picone Title: Assistant Superintendent for Business & Finance
Street: 123 Cambridge Street
City/Town: Burlington State: MA Zip Code: 01803-
Telephone: 617-270-1811 Ext.

C. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH BILL OF LADING:
(check one/specify)

- [x] RP Specify (circle one): (Owner) Operator Generator Transporter Other RP:
- [ ] PRP Specify (circle one): Owner Operator Generator Transporter Other PRP:
- [ ] Fiduciary/Secured Lender
- [ ] Agency/Public Utility on a Right of Way
- [ ] Other Person:

If an owner and/or operator is not conducting the response action associated with the Bill of Lading, provide on an attachment the name, contact person, address and telephone number, including any area code and extension, for each, if known.

D. TRANSPORTER/COMMON CARRIER INFORMATION:

Transporter/Common Carrier Name: Jodi General Contractors
Contact Person: Richard Boggi, Sr. Title: General Manager
Street: 36 Douglas Avenue
City/Town: Burlington State: MA Zip Code: 01803-
Telephone: 617-272-4437 Ext.

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

Operator/Facility Name: Barrett Tarmount
Contact Person: David Peter Title:
Street: 30 Danvers Road
City/Town: Salem State: MA Zip Code: 01960-
Telephone: 617-341-5500 Ext.

Type of Facility: (check one)
- [x] Asphalt Batch/Cold Mix
- [ ] Asphalt Batch/Hot Mix
- [ ] Thermal Processing
- [ ] Landfill/Disposal
- [ ] Landfill/Daily Cover
- [ ] Landfill/Structural Fill
- [ ] Incinerator
- [ ] Temporary Storage
- [ ] Other:

Division of Hazardous Waste/Class A Permit #: NE-93-110 Division of Solid Waste Management Permit #: EPA Identification #: MAD001014984

Actual/Anticipated Period of Temporary Storage (specify dates if applicable): __/__/__ to __/__/__

Reason for Temporary Storage (if applicable):

Massachusetts Department of Environmental Protection **BWSC-012A**
Bureau of Waste Site Cleanup

Release Tracking Number ___-LRA

BILL OF LADING (pursuant to 310 CMR 40.0030)

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION (continued):

Temporary Storage Address:
Street:
City/Town: State: Zip Code: -

F. DESCRIPTION OF REMEDIATION WASTE:
(check all that apply)

- [x] Contaminated Media (circle all that apply): (Soil) Groundwater Surface Water Other:
- [ ] Contaminated Debris (circle all that apply): Demolition/Construction Waste Vegetation/Organic Materials Inorganic Absorbant Materials Other.
- [ ] Non-hazardous Uncontainerized Waste (circle all that apply): Non-aqueous Phase Liquid Other:
- [ ] Non-hazardous Containerized Waste (circle all that apply): Tank Bottoms/Sludges Containers Drums Engineered Impoundments Other:

Type of Contamination (circle all that apply): Gasoline Diesel Fuel (#2 Oil) #4 Oil #6 Oil Waste Oil Kerosene Jet Fuel Other:

Estimated Volume of Materials: Cubic Yards: 15 Tons: 22.5 Other:

Contaminant Source (check one/specify): [ ] Transportation Accident [x] Underground Storage Tank [ ] Other:

Response Action Associated with Bill of Lading (circle one): Immediate Response Action Release Abatement Measure Utility-Related Abatement Measure (Limited Removal Action (LRA)) Comprehensive Response Action Other (specify):

Remediation Waste Characterization Support Documentation attached:
✓ [ ] Site History Information [ ] Sampling and Analytical Methods and Procedures [x] Laboratory Data [ ] Field Screening Data

If supporting documentation is not appended, provide an attachment stating the date and in connection with what document such information was previously submitted to DEP.

✓ **G. LICENSED SITE PROFESSIONAL (LSP) OPINION:**

Name of Organization: Gulf of Maine Research Center
LSP Name: Hugh F. Mulligan, Ph.D. Title: Director
Telephone: 508-745-6618 Ext.

I have personally examined and am familiar with the information contained on and submitted with this form. Based on this information, it is my Opinion that the testing and assessment actions undertaken were adequate to characterize the Remediation Waste, in accordance with 310 CMR 40.0030, and that the facility or location can accept remediation wastes with the characteristics described in this submittal. I am aware that significant penalties including, but not limited to, possible fines and imprisonment may result if I knowingly submit information which I know to be false, inaccurate, or materially incomplete.

Signature: Hugh F. Mulligan Seal:
Date: 8/6/97
License Number: 3490

✓ **H. CERTIFICATION OF PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:**

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

Signature: James Picone (agent for Burlington Public Schools) Date: 6/10/97
Name of Person (print): James Picone

Suke

Massachusetts Department of Environmental Protection **BWSC-012B**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
LOG SHEET 1 **OF** 1

Release Tracking Number: [ ]-LRA

I. LOAD INFORMATION:

LOAD 1: Signature of Transporter Representative:

Date of Shipment: 8/7/97 Time of Shipment: 11:00 (circle one) am/pm
Truck/Tractor Registration: FB 527 Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: 8/19/97 Time of Receipt: 12:33 (circle one) am/pm
Load Size (cu. yds./tons): 483348 8.78

LOAD 2: Signature of Transporter Representative:

Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 3: Signature of Transporter Representative:

Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 4: Signature of Transporter Representative:

Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 5: Signature of Transporter Representative:

Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 6: Signature of Transporter Representative:

Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

LOAD 7: Signature of Transporter Representative:

Date of Shipment: __/__/__ Time of Shipment: __:__ (circle one) am/pm
Truck/Tractor Registration: Trailer Registration (if any):

Receiving Facility/Temporary Storage Representative:
Date of Receipt: __/__/__ Time of Receipt: __:__ (circle one) am/pm
Load Size (cu. yds./tons):

J. LOG SHEET VOLUME INFORMATION:

Total Volume This Page (cu.yds./tons):
Total Carried Forward (cu.yds./tons):
Total Carried Forward and This Page (cu.yds./tons):

Revised 10/1/93 *This form is printed on recycled paper* Page 1 of 1

Massachusetts Department of Environmental Protection **BWSC-012C**
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET 1 **OF** 1

Release Tracking Number: [ ]-LRA

K. SUMMARY OF SHIPMENTS:

DATE OF SHIPMENT:	DATE OF RECEIPT:	NUMBER OF LOADS SHIPPED:	DAILY VOLUME SHIPPED (CU. YDS./TONS)
	8/7/97	1	8.78
SUMMARY SHEET TOTAL SHIPPED:		1	8.78
BILL OF LADING TOTAL SHIPPED (only if different):			

Revised 10/1/93 *This form is printed on recycled paper.* Page 1 of 2

Fox Hill School
Burlington, MA

Massachusetts Department of Environmental Protection BWSC-012C
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET

Release Tracking Number: LRA

L. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE LOCATION:

Receiving Facility/Temporary Location Representative (print): DAVID M. PETER Title: Gen. Mng. Env. Serv

Signature: David M. Peter (Gen) Date: 8/8/97

M. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON CONDUCTING RESPONSE ACTION ASSOCIATED WITH THIS BILL OF LADING:

I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

Signature: James Pirone (Agent for Burlington Public Schools) Date: 8/8/97

Name of Person (print): James Pirone

SWAMPSCOTT QUARRY BARDON TRIMOUNT

TICKET INQUIRY

LOCATION: 181 SWAMPSCOTT QUARRY

CUSTOMER / ORDER

CUSTOMER: 8888 CASH SLS/SWAMPSCOTT
ORDER: 4598 37 NON-TAXABLE

08/07/97
1 Load
8.78 TON

TICKET	TIME	ORDER	PRODUCT	HAULER	TRUCK	QTY
483348	12:33	4598	RECY SOIL OIL	FOB TRUCKE	00037	8.78 TON

ESC to exit

1Help 3Search 7Clear

APPENDIX C
LIMITATIONS

LIMITATIONS

1.) The work described in this report was carried out in accordance with the terms and conditions in our contract. The observations described in this report were made under the conditions stated within this report. The conclusions stated in this report are based solely on the visual, historical and/or physical information collected by GMRC. Unless specifically stated in this report, no subsurface excavations were conducted at the Site in conjunction with this site assessment, and no sampling and analysis of ground water or subsurface materials were conducted. The conclusions presented in this report are based solely upon the services described, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.

2.) In preparing this report, GMRC has relied on certain information provided by State and local officials and other referenced parties, and on information contained in the files of federal, state and/or local agencies available to GMRC at the time of the assessment as stated in the report. Although there may have been some degree of duplication in the information provided by these various sources, GMRC did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this investigation.

3.) The purpose of this report was to assess the physical characteristics of the Site with respect to the presence in the environment of hazardous materials or oil, as defined in Massachusetts General Laws Chapter 21E. No specific attempt was made to check compliance of present or past owners or operators of the Site with federal, state or local laws or regulations, environmental or otherwise.

4.) Observations were made of the Site and of structures on the Site as indicated in the report. GMRC renders no opinion as to the presence of hazardous materials or oil in any portion of the Site or structure where access was unavailable or limited. In addition, GMRC renders no opinion as to the presence of hazardous material or oil, or to the presence of indirect evidence relating to hazardous material or oil, where direct observation of the interior walls, floor or ceiling of a structure on the Site was obstructed.

5.) The information contained in this report is based upon visual observations, record examination, and queries of state/local officials. GMRC did not perform testing or analyses to determine the presence or concentration of asbestos, radon, lead, polychlorinated biphenyls (PCBs), or of dust or air quality at the Site unless specifically stated otherwise in the report. Due to time and/or budgetary constraints, the conclusions contained in this report have not been confirmed through any program of subsurface exploration unless specifically stated otherwise in this report.

6.) The conclusions set forth in this report are based on generally accepted technical practices. In performing the services, GMRC shall use that degree of care and skill ordinarily exercised by environmental consultants or engineers performing similar services in the same or similar locality. The standard of care shall be determined solely at the time the services are rendered and not according to standards used at a later date. The services shall be rendered without any other warranty, expressed or implied, including, without limitation the warranty of merchantability and the warrant of fitness for a particular purpose.

7.) Any water level readings made in test pits, test borings, and/or monitoring wells were made at the times and under the conditions stated in this report. However, it must be noted that fluctuations in the groundwater table may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

8.) Variations in the types and concentrations of contaminants and variations in contaminant flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors.

9.) Quantitative laboratory analyses were not performed as part of the investigation unless specifically stated otherwise in this report. The conclusions and recommendations contained in this report are based in part, where stated, upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made by GMRC in this report. Where such analyses have been conducted by an independent Massachusetts Certified laboratory, GMRC has relied upon the data provided. As indicated in this report, some data may be preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary.

10.) The conclusions and recommendations contained in this report are based in part, where stated upon chemical analyses which have been performed for specific constituents during the course of this investigation. However, it should be noted that additional chemical constituents not analyzed during the current or previous investigations may be present in soil and/or ground water at the Site. Conclusions which rely on analytical data obtained at the Site are based on the detection of specific compounds at detected concentrations noted in this report. This information does not preclude the possibility that additional compounds and/or concentrations may be present at the Site.

11.) Additional chemical data or other information concerning this Site or neighboring properties which may become available in the future, should be made available to GMRC for review. GMRC will evaluate such information and, on the basis of this evaluation, the conclusions and recommendations presented in this report may be modified accordingly.

12.) The conclusions and recommendations contained in this report are based in part, where noted, upon data obtained from a limited number of soil and/or water samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

13.) This report is intended for use by the party (parties) identified on the title page and with whom GMRC is under contractual agreement. Any reproduction, distribution, sale or transfer of this report or any part of the report is unauthorized unless prior written consent is granted by GMRC. However, GMRC acknowledges and agrees that the report may be conveyed to the Buyer, Lender, and Title Insurer associated with the proximate sale of the Site by our Client.

GMRC has no present or contemplated interest in the property examined, and neither the employment to conduct this environmental assessment, nor the compensation of this environmental assessment, are contingent upon the outcome of the environmental assessment. Furthermore, GMRC has no personal interest or bias with respect to the subject matter of this investigation.

SIX-MONTH (6) REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

FOX HILL ELEMENTARY

Date: June, 1997 Inspector: Patrick O'Brien

Location of Areas:

1.	Boiler Room	- T-01
2.	Boiler Room	- T-02
3.	Boiler Room	- T-03
4.	Behind walls & ceilings	- T-04
5.	Electrical Room	- T-05
6.	Boiler Room	- M-01
7.	Outside/Inside Building	- M-02
8.	Classrooms, Storage Areas, Offices Cafeteria, Hallways	- M-03
9.	Cafeteria Walls	- S-01

1. Did you perform the last visual inspection in this area ?

___x___ yes _____ no

2. Are you familiar with the locations and prior condition of ACBM in the area which this inspection covers ?

___x___ yes _____ no

3. Have you received training in the purpose of this inspection, the health hazards associated with asbestos exposure, and work practices to protect yourself against exposure to airborne asbestos including use of purifying respirators and the use of the form?

___x___ yes _____ no

If you are not familiar with the locations of ACBM, safe work practices or the use of this form, <u>contact the Office of Building and Grounds and do not continue.</u>

4. Is the proper Notice to Employees Form in place?

___x___ yes _____ no

5. Evaluate the physical condition of ACBM in this area. Evaluate each of the following criteria by checking the appropriate statement.

a. Material Condition

__x_ No Damage
____ Moderate (small area)
____ Severe

TOWN OF BURLINGTON
RECEIVED
JUL 7 1997
BOARD OF HEALTH

REINSPECTION SUMMARY SHEET - FOX HILL ELEMENTARY

Fill out every six months and insert in Appendix of Management Plan

HOMOGENOUS NUMBER	DESCRIPTION OF ACBM	AREA INSPECTED	CHANGE IN CONDITION (IF ANY)
T-01	Hot Water Tank	Boiler Room	No Change
T-02	Pipe Fittings	Boiler Room	No Change
T-03	Boiler Breeching Insulation @ pipe	Boiler Room	No Change
T-04	Elbow fittings insulation	Behind walls &ceilings	N/A
T-05	Emerg. Gener. Exhaust	Electrical Room	No Change
M-01	Boiler Gasket	Inside Boiler doors	No Change
M-02	Transite Siding Panels	Outside/inside Bldg.	No Change
M-03	12" x 12" Floor Tiles	Classrooms, Storage Areas, Offices, Halls Cafeteria	No Change
S-01	Hard Plaster	Cafeteria Walls	No Change

HO Area | Comments

Inspectors Name: Patrick O'Brien

Inspectors Signature: Patrick O'Brien

Date: 6-30-97 LEA:

Burlington Public Schools

123 CAMBRIDGE STREET
BURLINGTON, MA 01803
(617) 270-1814

Craig F. Robinson
Director, Buildings & Grounds

To: Todd Dresser, Environmental Engineer

From: Craig Robinson, Director Buildings & Grounds CFR

Date: May 5, 1997

Re: Manifest

Enclosed please find the Hazardous Waste Manifest for the Fox Hill oil tank removal.

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street
Boston, Massachusetts 02108

FOR IN-STATE WASTE OIL ONLY OR IN-STATE VSQG HW/WO

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. MA0112721437 — Manifest Document No.

2. Page 1 of — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Foxhill School, Westwood St. Burlington, MA 01803

4. Generator's Phone (617) 272-4437

A. State Manifest Document Number: MA K114643

B. State Gen. ID: SAME

5. Transporter 1 Company Name: Bill Murphy Waste Oil, Inc. — 6. US EPA ID Number: MAD000958655

C. State Trans. ID: 32473MA

7. Transporter 2 Company Name — 8. US EPA ID Number

D. Transporter's Phone: 617 933-4928

E. State Trans. ID

9. Designated Facility Name and Site Address: Cyn Oil Corp./1771 Washington St./Stoughton, MA — 10. US EPA ID Number: MAD088233677

F. Transporter's Phone

G. State Facility ID: Not Required

H. Facility's Phone: 617 344-0265

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Petroleum Oil Combustible Liquid NA 1270 PG III (Waste Oil)	1	DT	500	GL	MA98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
a. Waste Oil

K. Handling Codes for Wastes Listed Above
a. S02 b. T50

15. Special Handling Instructions and Additional Information

MA98 - DOT EMERGENCY GUIDE #128 / EMERGENCY PHONE: (617) 933-4928

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Scott A. Dragoulas — Signature: Scott Dragoulas — Date: Month 04 Day 28 Year 90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Bruce Gomery — Signature: Bruce Gomery — Date: Month 04 Day 28 Year 90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Alan Snyder — Signature: Alan Snyder — Date: Month 04 Day 28 Year 90

Form Approved OMB No. 2050-0039
EPA Form 8700-22 (Rev. 9-94) Previous editions are obsolete.

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

GENERATOR — TRANSPORTER — FACILITY

MA K114643 COPY>1: FACILITY MAILS TO GENERATOR

COPY>1: FACILITY MAILS TO GENERATOR

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street
Boston, Massachusetts 02108

FOR IN-STATE WASTE OIL ONLY OR IN-STATE VSQG HW/WO

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. MA0112721437 — Manifest Document No.

2. Page 1 of — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Foxhill School, Westwood St. Burlington, MA

4. Generator's Phone (617) 272-4437

A. State Manifest Document Number: MA K114643

B. State Gen. ID: SAME

5. Transporter 1 Company Name: Bill Murphy Waste Oil, Inc. — 6. US EPA ID Number: MAD000958655

C. State Trans. ID: 32473MA

7. Transporter 2 Company Name — 8. US EPA ID Number

D. Transporter's Phone: 617 933-4928

E. State Trans. ID

9. Designated Facility Name and Site Address: Cyn Oil Corp./1771 Washington St./Stoughton, MA — 10. US EPA ID Number: MAD088233677

F. Transporter's Phone

G. State Facility ID: Not Required

H. Facility's Phone: 617 344-0265

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Petroleum Oil Combustible Liquid NA 1270 PG III (Waste Oil)	1	DT	500	GL	MA98
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard code.)
a. Waste Oil

K. Handling Codes for Wastes Listed Above
a. S02 b. T50

15. Special Handling Instructions and Additional Information

MA98 - DOT EMERGENCY GUIDE #128 / EMERGENCY PHONE: (617) 933-4928

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name — Signature — Date: Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Date: Month Day Year

Form Approved OMB No. 2050-0039
EPA Form 8700-22 (Rev. 9-94) Previous editions are obsolete.

In case of emergency or spill, immediately call the National Response Center (800) 424-8802.

GENERATOR — TRANSPORTER — FACILITY

MA K114643 COPY>4: GENERATOR RETAINS

COPY>4: GENERATOR RETAINS

FORM F.P. 292
(rev. 9/90)

The Commonwealth of Massachusetts
Department of Public Safety
Division of Fire Prevention and Regulation

APPLICATION FOR PERMIT, AND PERMIT, FOR REMOVAL, AND TRANSPORTATION TO APPROVED TANK YARD

FDID# 17048 Permit # FR 97144 Date 4/21/97

Burlington
City, Town or District

APPROVED
Subject to Final Insp.
Burlington Fire Prevention Bureau
By: [illegible]
Date: 4/21/1997

DIG SAFE NUMBER
97150077
start date 4/21/97

Fee Paid: $ N/C

In accordance with the provisions of Chapter 148, Sec. 13A, M.G.L.
527 CMR 9.00 application is hereby made by: Ted General Contractor
Street Address & City or Town: 36 Depot Rd. Billerica, Mass.
Signature of applicant: [illegible]
Applicants name printed: Robert T. Bazzi Sr.
For permission to remove and transport one underground storage tank from
Owner: Fox Hill School Street Address: [illegible]
Firm transporting waste: Maple [illegible] State Lic. #: [illegible]
Hazardous waste manifest #: [illegible] E.P.A. #: [illegible]
Approved tank yard: John Tomarchio & Sons
Tank yard Address: 207 Marston St. Lawrence, MA
Type of inert gas: N/A Vol. tank #
Tank capacity: 2000 Gal. Last stored: [illegible]
Date of issue: 4/23/ Date of return: [illegible]
Signature/Title of petroleum manufacturer: [illegible]

KEEP ORIGINAL AS APPLICATION ISSUE DUPLICATE AS PERMIT

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK
NAME AND ADDRESS OF APPROVED TANK YARD: JOHN C. TOMARCHIO & SONS, 207 MARSTON ST., LAWRENCE, MASS. 01841
APPROVED TANK YARD NO. 009
Tank Yard Ledger 502 CMR 3.03(4) Number: 97 00 3 35

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by firm, corporation or partnership Ted General Cont. and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank dismantling yards. A valid permit was issued by LOCAL Head of Fire Department FDID# B1 7048 to transport this tank to this yard.
Name and official title of approved tank yard owner or owners authorized representative:

SIGNATURE [illegible] TITLE CEO DATE SIGNED 4-23-97

This signed receipt of disposal must be returned to the local head of the fire department FDID# 17048 pursuant to 502 CMR 3.00. EACH TANK MUST HAVE A RECEIPT OF DISPOSAL

FORM F.P. 291 (rev. 11/95) (OVER) MASSACHUSETTS STATE FIRE MARSHAL'S OFFICE

Tank Data:

Gallons 500

Previous Contents # 2 fuel

Diameter 48" Length 5'5"

Date Received 4-23-97

Serial # (if available) _____

Tank I.D. # (Form FP-290) ___

Tank Removed From:

Fox Hill Rd. Fox Hill School
(No. and Street)

Burlington
(City or Town)

Fire Dept. Permit # _____

Owner/Operator to mail revised copy of Notification Form(FP-290, or Fp-290R) to: UST Compliance, Office of the State Fire Marshal, 1010 Commonwealth Avenue, Boston, Ma. 02215.

JOHN C. TOMBARELLO & SONS, Inc.
307 MARSTON STREET • LAWRENCE, MASS. 01841
TEL. (508) 682-3326 • (508) 682-3227 • FAX (508) 686-4484
BUYERS AND PROCESSORS OF FERROUS AND NON-FERROUS METALS
PRECIOUS METALS AND ELECTRONIC SCRAP
WE ALSO SELL NEW AND USED STRUCTURAL STEEL

SOLD TO Town General Court DATE 4-23-97

BOUGHT FROM

ADDRESS

QUANT.	ARTICLES	RATE	PRICE
	Tank Removal		
	Tank # 470025 (500 Gal)	02	70
	Fox Hill School		
	Fox Hill Rd		
	Burlington		
	30 Cell 12449		

TOWN OF BURLINGTON
BOARD OF HEALTH
BURLINGTON, MASSACHUSETTS 01803
TOWN HALL 270-1855

Inspection of UST Removal Date April 23 1997 Time 12:00 pm
Name ~~Fox~~ Address Fox Hill Rd
Owner Town of Burlington Tel. No.
Type of Inspection Inspector Todd A Dresser
(*) Remarks and Violations are listed below:

I inspected the removal of a 500 gallon UST from Fox Hill School. Based on visual inspection & odors, Lt Cobett & Dick Bagni (removal contractor) determined that a release had occurred. Overfilling is believed to have been the cause. Stained soil was observed in the excavation. No streams were present in the groundwater present in the excavation. Dick Bagni contacted Gulf of Maine Research for LSP assistance. As an interim measure Dick Bagni stockpiled contaminated soil on polyethylene sheeting. Craig Robinson authorized Dick Bagni to hire Gulf of Maine to supervise remedial effort.

Report Received by:

JOHN C. TOMBARELLO & SONS, Inc.
207 MARSION STREET • LAWRENCE, MASS. 01841
TEL. (508) 682-5276 • (508) 682-5277 • FAX (508) 686-6484
BUYERS AND PROCESSORS OF FERROUS AND NON-FERROUS METALS
PRECIOUS METALS AND ELECTRONIC SCRAP
WE ALSO SELL NEW AND USED STRUCTURAL STEEL

SOLD TO Town Burlington Conn DATE 4-23-97
BOUGHT FROM
ADDRESS

OWN	ARTICLES	DATE	PRICE
	Iron chunk		
	Item #470055 (500 gal)	02	70 00
	from Fox Hill School		
	Fox Hill Rd		
	Burlington		

Tank Data

Gallons 500

Previous Contents # 2 fuel

Diameter 48" Length 5'5"

Date Received 4/23/57

Serial # (if available) -

Tank I.D. # (Form FP-290) -

Tank Removed From:

Fox Hill Rd Fox Hill School
(No. and Street)

Burlington
(City or Town)

Fire Dept. Permit # -

Owner/Operator to mail revised copy of Notification Form(FP-290, or Fp-290R) to: UST Compliance, Office of the State Fire Marshal, 1010 Commonwealth Avenue, Boston, Ma. 02215.

Richard J. Bagni
272-4437

JODI
GENERAL CONTRACTORS

SNOW PLOWING & REMOVAL
TRUCKING • EXCAVATING • SAND • LOAM • WELDING

36 DOUGLAS AVENUE
BURLINGTON, MA 01803

Date 9/20/89
Job Location Fox Hill School
P.O. No. 270-1811

TO: Town of Burlington / Public School Dept.
123 Cambridge St.
Burlington MASS

VEHICLE	DATE	HOURS	DESCRIPTION	RATE	AMOUNT
Small Plow			Remove 500 gallon U.S.T. & Dispose of Accordy To Local & State Fire Code CMR 527.500.		
Large Plow			Remove Contaminated Soil & Dispose at Thermal Barrier plant,		
Dump Truck			Install new slab for 275 Double wall Tank for Generator & Install Tank		
Small Loader			Remove old 275 gallon Tank & Dispose of Properly		
Large Loader					
Backhoe					
Dozer					
Sanding					

COMMENTS:

TOTAL 3150 —

Thank you
Bill J Bagni

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIALS
One Winter Street
Boston, Massachusetts 02108

FOR IN-STATE WASTE OIL ONLY OR IN-STATE VSQG HW/WO

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No. | Manifest Document No. | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Foxhill School, Westwood St. Burlington, Ma

4. Generator's Phone: 617 272 6017

5. Transporter 1 Company Name: Bill Murphy Waste Oil, Inc. | 6. US EPA ID Number: MAD000856656

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address: Cyn Oil Corp./1771 Washington St./Stoughton, MA | 10. US EPA ID Number: MAD988220653

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste No.

a. Petroleum Oil, Combustible Liquid NA 1270 PG III (Waste Oil) | 1 | TM | 1,500 | GL | WA08

b.

c.

d.

J. Additional Descriptions for Materials Listed Above (Include physical state and hazard codes) | K. Handling Codes for Wastes Listed Above

Waste Oil | S01

15. Special Handling Instructions and Additional Information

NA98 – DOT EMERGENCY GUIDE #128 / EMERGENCY PHONE: (617) 933-4928

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator I certify that I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgment of Receipt of Materials | Printed/Typed Name | Signature | Date: Month Day Year

18. Transporter 2 Acknowledgment of Receipt of Materials | Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space | Date: Month Day Year

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. | Printed/Typed Name | Signature | Date: Month Day Year

Form Approved OMB No. 2050-0039
EPA Form 8700-22 (Rev. 9-94) Previous editions are obsolete

GENERATOR RETAINS COPY 4

MA K114643 COPY 4 — GENERATOR RETAINS

FORM F.P. 292
(rev. 9/90)

The Commonwealth of Massachusetts
Department of Public Safety
Division of Fire Prevention and Regulation

APPLICATION FOR PERMIT, AND PERMIT, FOR REMOVAL AND TRANSPORTATION TO APPROVED TANK YARD

FDID# 17048 | Permit # UK 97144 | Date 4/14/97

Burlington
City, Town or District

APPROVED
Subject To Final Insp.
Burlington Fire Prevention Bureau
By: [illegible]
Date: 4/23/97

DIG SAFE NUMBER 97503774
start date 4/18/97

Fee Paid: $ N/C

In accordance with the provisions of Chapter 148, Sec. 13A, M.G.L. 527 CMR 9.00 application is hereby made by: Tech. General Contractor

Street Address & City or Town: 76 Dustin Rd. Billerica, MA

Signature of applicant: [illegible]

Applicants name printed: Robert J. Bazzi Sr.

For permission to remove and transport one underground storage tank from

Owner: Fox Hill School | Street Address: Fox Hill Rd.

Firm transporting waste: Murphy Warehouse | State Lic. #: [illegible]

Hazardous waste manifest #: [illegible] | E.P.A. #: MAD000856656

Approved tank yard: John O'Connell Co. | [illegible]

Tank yard Address: 207 Morton St. Roxbury, MA

Type of inert gas: C/O | Oil tank #: [illegible]

Tank capacity: 2000 | Last stored: [illegible]

Date of issue: 4/23/ | Date of expiration: [illegible]

Signature/Title of Officer [illegible]

[illegible] CERTIFICATE AS PERMIT

RECEIPT OF DISPOSAL OF UNDERGROUND STEEL STORAGE TANK

NAME AND ADDRESS OF APPROVED TANK YARD: JOHN C. TOMARELLI & SONS, 207 MARSTON ST., LAWRENCE, MASS. 01841

APPROVED TANK YARD NO. 009

Tank Yard Ledger 502 CMR 3.03(4) Number: 9 7 0 3 3 5

I certify under penalty of law I have personally examined the underground steel storage tank delivered to this "approved tank yard" by firm, corporation or partnership Jim Grand Cont. and accepted same in conformance with Massachusetts Fire Prevention Regulation 502 CMR 3.00 Provisions for Approving Underground Steel Storage Tank dismantling yards. A valid permit was issued by LOCAL Head of Fire Department FOR: B/ 7 0 4 x to transport this tank to this yard.

Name and official title of approved tank yard owner or owners authorized representative:

SIGNATURE: [illegible] TITLE: CPM DATE SIGNED: 4-23-97

This signed receipt of disposal must be returned to the local head of the fire department FOR: 1 2 0 4 3 pursuant to 502 CMR 3.00. (EACH TANK MUST HAVE A RECEIPT OF DISPOSAL)

FORM F.P. 291 (rev. 11/95) (OVER) MASSACHUSETTS STATE FIRE MARSHAL'S OFFICE

SIX-MONTH (6) REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

FOX HILL ELEMENTARY

Date: December 1996 Inspector: Patrick O'Brien

Location of Areas:

1.	Boiler Room	- T-01
2.	Boiler Room	- T-02
3.	Boiler Room	- T-03
4.	Behind walls & ceilings	- T-04
5.	Electrical Room	- T-05
6.	Boiler Room	- M-01
7.	Outside/Inside Building	- M-02
8.	Classrooms, Storage Areas, Offices Cafeteria, Hallways	- M-03
9.	Cafeteria Walls	- S-01

1. Did you perform the last visual inspection in this area ?

   ___x___ yes ___ no

2. Are you familiar with the locations and prior condition of ACBM in the area which this inspection covers ?

   ___x___ yes ___ no

3. Have you received training in the purpose of this inspection, the health hazards associated with asbestos exposure, and work practices to protect yourself against exposure to airborne asbestos including use of purifying respirators and the use of the form?

   ___x___ yes ___ no

   If you are not familiar with the locations of ACBM, safe work practices or the use of this form, contact the Office of Building and Grounds and do not continue.

4. Is the proper Notice to Employees Form in place?

   ___x___ yes ___ no

5. Evaluate the physical condition of ACBM in this area. Evaluate each of the following criteria by checking the appropriate statement.

   a. Material Condition
      ___x___ No Damage
      ___ Moderate (small area)
      ___ Severe

b. Water Damage
__x__ None
_____ Minor
_____ Moderate/Severe

c. Exposed Surfaced Area
__x__ None
_____ 10% or less
_____ Greater than 10%

d. Accessibility
__x__ Not Accessible
_____ Rarely Accessed
_____ Accessible

e. Activity/Movement
__x__ None/Low
_____ Moderate
__x__ High

f. Air Plenum/Direct Air Stream
_____ Present
__x__ Not Present

g. Friability
__x__ Low
_____ Moderate
_____ High

6. Has the condition of any ACBM within the area of this inspection deteriorated or changed since the last inspection?

____x____ yes _____ no

If yes, describe: Small section on water tank has been repaired.

Location: Extent and Probable Cause:

Boiler Room over water discharge, age, water leakage has been repaired.

7. Is there any damaged ACBM present that was reported previously:

Location: Extent and Probable Cause:

8. Is it possible or probable that unprotected persons may be exposed to asbestos due to the conditions described in items 4 - 7 above?

_____yes ____x____ no

If yes, verbally notify the Asbestos Coordinator (Building and Grounds Office) of the conditions. Check here if you verbally notified someone of the potentially dangerous conditions and give their name and the date and time of notifications:

Name: _____

Date: _____ Time: _____

9. Check the appropriate spaces below (check all that apply):

____✓____ No change in conditions

_____ Conditions have deteriorated

_____ Personnel may have been exposed to asbestos

_____ Repair or removable may be required

_____ Recommend IMMEDIATE investigation

_____ Minor repairs are necessary-

_____ Posting missing

Inspector's Signature: Patrick O'Brien Date: 12-31-96

FOR USE BY ASBESTOS COORDINATOR ONLY:

Received ABCM Condition Form _____
(Date and Time)

ACTION:

_____ None Required

_____ In-House Clean-Up. _____
(Date and Time)

_____ Evacuation of Area

_____ Outside Contractor Clean-Up. Completed _____
(Date and Time)

Contacted: _____

Visited Site: _____

Completed Recommendation: _____

Action Required: _____

REINSPECTION SUMMARY SHEET - FOX HILL ELEMENTARY

Fill out every six months and insert in Appendix of Management Plan

HOMOGENOUS NUMBER	DESCRIPTION OF ACBM	AREA INSPECTED	CHANGE IN CONDITION (IF ANY)
T-01	Hot Water Tank	Boiler Room	No Change
T-02	Pipe Fittings	Boiler Room	No Change
T-03	Boiler Breeching Insulation @ pipe	Boiler Room	No Change
T-04	Elbow fittings insulation	Behind walls &ceilings	N/A
T-05	Emerg. Gener. Exhaust	Electrical Room	No Change
M-01	Boiler Gasket	Inside Boiler doors	No Change
M-02	Transite Siding Panels	Outside/Inside Bldg.	No Change
M-03	12" x 12" Floor Tiles	Classrooms, Storage Areas, Offices, Halls Cafeteria	No Change
S-01	Hard Plaster	Cafeteria Walls	No Change

HO Area | Comments

Inspectors Name: Patrick O'Brien

Inspectors Signature: Patrick O'Brien

Date: 12-31-96 LEA: _____

SIX-MONTH (6) REINSPECTION HAZARD ASSESSMENT SUMMARY SHEET

FOX HILL ELEMENTARY

Date: June 1, 1996 Inspector: Patrick O'Brien

Location of Areas:

1. Boiler Room - T-01
2. Boiler Room - T-02
3. Boiler Room - T-03
4. Behind walls & ceilings - T-04
5. Electrical Room - T-05
6. Boiler Room - M-01
7. Outside/Inside Building - M-02
8. Classrooms, Storage Areas, Offices Cafeteria, Halliways - M-03
9. Cafeteria Walls - S-01

1. Did you perform the last visual inspection in this area ?

   ___X___ yes _____ no

2. Are you familiar with the locations and prior condition of ACBM in the area which this inspection covers ?

   ___X___ yes _____ no

3. Have you received training in the purpose of this inspection, the health hazards associated with asbestos exposure, and work practices to protect yourself against exposure to airborne asbestos including use of purifying respirators and the use of the form?

   ___X___ yes _____ no

   If you are not familiar with the locations of ACBM, safe work practices or the use of this form, contact the Office of Building and Grounds and do not continue.

4. Is the proper Notice to Employees Form in place?

   ___X___ yes _____ no

5. Evaluate the physical condition of ACBM in this area. Evaluate each of the following criteria by checking the appropriate statement.

   a. Material Condition

   ____ No Damage
   __X__ Moderate (small area)
   ____ Severe

b. Water Damage
__X__ None
____ Minor
____ Moderate/Severe

c. Exposed Surfaced Area
__X__ None
____ 10% or less
____ Greater than 10%

d. Accessibility
__X__ Not Accessible
____ Rarely Accessed
____ Accessible

e. Activity/Movement
__X__ None/Low
____ Moderate
____ High

f. Air Plenum/Direct Air Stream
____ Present
__X__ Not Present

g. Friability
__X__ Low
____ Moderate
____ High

6. Has the condition of any ACBM within the area of this inspection deteriorated or changed since the last inspection?

____X____ yes ____ no

If yes, describe: Small section on hot water tank - repairs needed.

Location:	Extent and Probable Cause:
Boiler Room over water discharge.	age, water leakage

7. Is there any damaged ACBM present that was reported previously:-NO-

Location:	Extent and Probable Cause:

8. Is it possible or probable that unprotected persons may be exposed to asbestos due to the conditions described in items 4 - 7 above?

____ yes ____X____ no

If yes, verbally notify the Asbestos Coordinator (Building and Grounds Office) of the conditions. Check here if you verbally notified someone of the potentially dangerous conditions and give their name and the date and time of notifications:

Name: _____

Date: _____ Time: _____

9. Check the appropriate spaces below (check all that apply):

____ No change in conditions

____ Conditions have deteriorated

____ Personnel may have been exposed to asbestos

____X____ Repair or removable may be required

____ Recommend IMMEDIATE investigation

____X____ Minor repairs are necessary

____ Posting missing

Inspector's Signature: Patrick O'Brien Date: 6-14-96

FOR USE BY ASBESTOS COORDINATOR ONLY:

Received ABCM Condition Form William H Kontoul 5/1/96
(Date and Time)

ACTION:

____ None Required

____ In-House Clean-Up. _____
(Date and Time)

____ Evacuation of Area

____ Outside Contractor Clean-Up. Completed _____
(Date and Time)

Contacted: _____

Visited Site: _____

Completed Recommendation: _____

Action Required: _____

Other: _____

REINSPECTION SUMMARY SHEET - FOX HILL ELEMENTARY

Fill out every six months and insert in Appendix of Management Plan

HOMOGENOUS NUMBER	DESCRIPTION OF ACBM	AREA INSPECTED	CHANGE IN CONDITION (IF ANY)
T-01	Hot Water Tank	Boiler Room	CHANGE
T-02	Pipe Fittings	Boiler Room	No Change
T-03	Boiler Breeching Insulation @ pipe	Boiler Room	No Change
T-04	Elbow fittings insulation	Behind walls &ceilings	N/A
T-05	Emerg. Gener. Exhaust	Electrical Room	No Change
M-01	Boiler Gasket	Inside Boiler doors	No Change
M-02	Transite Siding Panels	Outside/Inside Bldg.	No Change
M-03	12" x 12" Floor Tiles	Classrooms, Storage Areas, Offices, Halls Cafeteria	No Change
S-01	Hard Plaster	Cafeteria Walls	No Change

HO Area	Comments
Boiler Room	Small section fell off pipe over water dicharge will repair when school shuts down, pipe cold, small amount of material moved to BHS Hazard Room to be removed from site on June 17.

Inspectors Name: Patrick O'Brien

Inspectors Signature: Patrick O'Brien

Date: 6-14-96 LEA: William H Kautrouk

TOWN OF BURLINGTON
BOARD OF HEALTH
BURLINGTON, MASSACHUSETTS 01803
TOWN HALL 270-1955

Inspection of Oil Release Date Feb 29 1996 Time 1:00 pm

Name Foxhill School Address Foxhill Rd

Owner Town of Burlington Tel. No.

Type of Inspection Emergency Response Inspector Todd H. Dresser

(*) Remarks and Violations are listed below:

I responded to the release of approximately 5-7 gallons of heating oil at Foxhill School. The spill occurred as a result of overfilling an oil storage tank. The spill occurred near the rear loading dock. Most of the oil spilled on the paved parking area. I instructed Bill Kontrouk (School Dept) and Doug Gillingham (Rec. Maintenance) to place sand and speed-dry on the liquid then to collect and containerize in drums the used absorbent. Next all visibly stained soil and asphalt were to be collected and containerized prior to off site disposal.

The spill does not appear to pose a health risk at this time.

Report Received by:

SIX-MONTH (6) REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

FOX HILL ELEMENTARY

Date: December 29, 1995 Inspector: Patrick O'Brien

Location of Areas:

1.	Boiler Room	- T-01
2.	Boiler Room	- T-02
3.	Boiler Room	- T-03
4.	Behind walls & ceilings	- T-04
5.	Electrical Room	- T-05
6.	Boiler Room	- M-01
7.	Outside/Inside Building	- M-02
8.	Classrooms, Storage Areas, Offices Cafeteria, Hallways	- M-03
9.	Cafeteria Walls	- S-01

1. Did you perform the last visual inspection in this area ?

   ___X___ yes _____ no

2. Are you familiar with the locations and prior condition of ACBM in the area which this inspection covers ?

   ___X___ yes _____ no

3. Have you received training in the purpose of this inspection, the health hazards associated with asbestos exposure, and work practices to protect yourself against exposure to airborne asbestos including use of purifying respirators and the use of the form?

   ___X___ yes _____ no

   If you are not familiar with the locations of ACBM, safe work practices or the use of this form, contact the Office of Building and Grounds and do not continue.

4. Is the proper Notice to Employees Form in place?

   ___X___ yes _____ no

5. Evaluate the physical condition of ACBM in this area. Evaluate each of the following criteria by checking the appropriate statement.

   a. Material Condition
      _____ No Damage
      ___X___ Moderate (small area)
      _____ Severe

   b. Water Damage
      _____ None
      ___X___ Minor
      _____ Moderate/Severe

   c. Exposed Surfaced Area
      ___X___ None
      _____ 10% or less
      _____ Greater than 10%

   d. Accessibility
      ___X___ Not Accessible
      _____ Rarely Accessed
      _____ Accessible

   e. Activity/Movement
      ___X___ None/Low
      _____ Moderate
      _____ High

   f. Air Plenum/Direct Air Stream
      _____ Present
      ___X___ Not Present

   g. Friability
      ___X___ Low
      _____ Moderate
      _____ High

6. Has the condition of any ACBM within the area of this inspection deteriorated or changed since the last inspection?

   ___X___ yes _____ no

   If yes, describe:

Location:	Extent and Probable Cause:
Boiler Room/HW Tank	Water Leak

7. Is there any damaged ACBM present that was reported previously:-NO-

Location:	Extent and Probable Cause:

8. Is it possible or probable that unprotected persons may be exposed to asbestos due to the conditions described in items 4 - 7 above?

   _____ yes ___X___ no

If yes, verbally notify the Asbestos Coordinator (Building and Grounds Office) of the conditions. Check here if you verbally notified someone of the potentially dangerous conditions and give their name and the date and time of notifications:

Name: _____

Date: _____ Time: _____

9. Check the appropriate spaces below (check all that apply):

_____ No change in conditions

_____ Conditions have deteriorated

_____ Personnel may have been exposed to asbestos

_____ Repair or removable may be required

_____ Recommend IMMEDIATE investigation

_____ Minor repairs are necessary-*SEE SUMMARY SHEET*

_____ Posting missing

Inspector's Signature: Patrick O'Brien Date: 3-4-96

FOR USE BY ASBESTOS COORDINATOR ONLY:

Received ABCM Condition Form _____
(Date and Time)

ACTION:

_____ None Required

_____ In-House Clean-Up. _____
(Date and Time)

_____ Evacuation of Area

_____ Outside Contractor Clean-Up. Completed _____
(Date and Time)

Contacted: _____

Visited Site: _____

Completed Recommendation: _____

Action Required: _____

Other: _____

REINSPECTION SUMMARY SHEET - FOX HILL ELEMENTARY

Fill out every six months and insert in Appendix of Management Plan

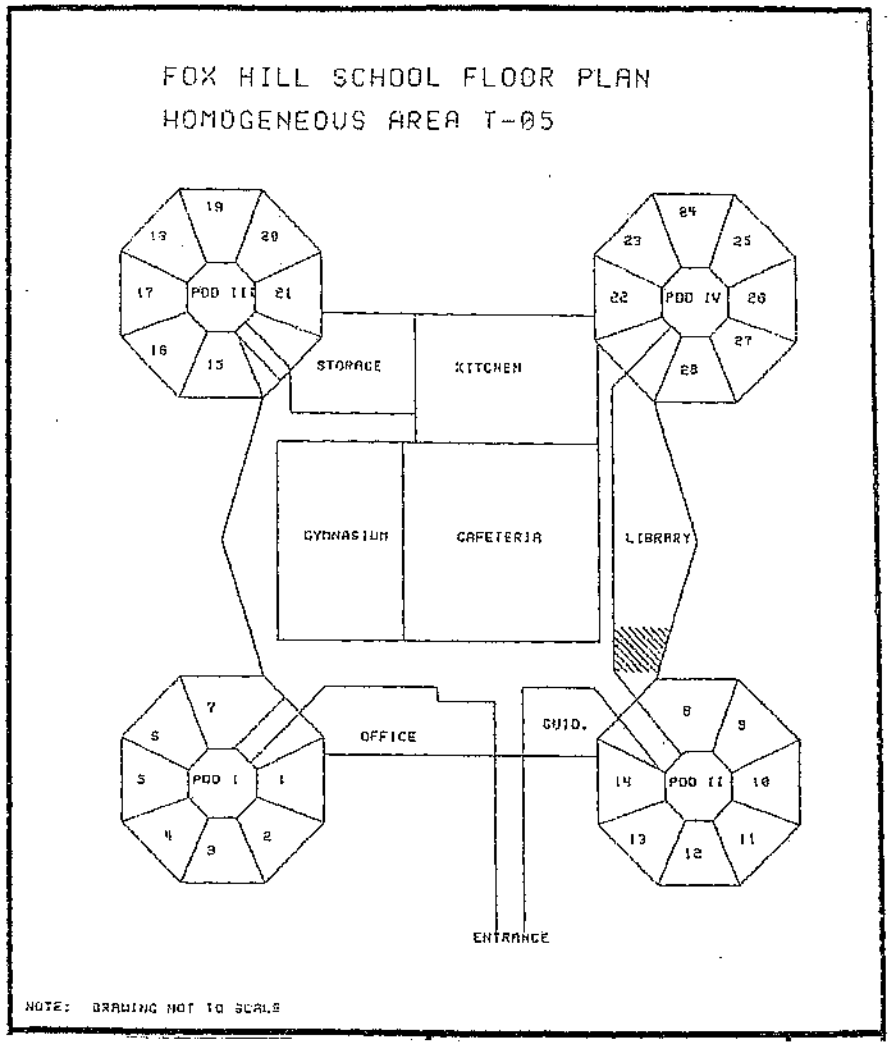
HOMOGENOUS NUMBER	DESCRIPTION OF ACBM	AREA INSPECTED	CHANGE IN CONDITION (IF ANY)
T-01	Hot Water Tank	Boiler Room	*CHANGE*
T-02	Pipe Fittings	Boiler Room	No Change
T-03	Boiler Breeching Insulation @ pipe	Boiler Room	No Change
T-04	Elbow fittings insulation	Behind walls &ceilings	N/A
T-05	Energ. Gener. Exhaust	Electrical Room	No Change
M-01	Boiler Gasket	Inside Boiler doors	No Change
M-02	Transite Siding Panels	Outside/inside Bldg.	No Change
M-03	12" x 12" Floor Tiles	Classrooms, Storage Areas, Offices, Halls Cafeteria	No Change
S-01	Hard Plaster	Cafeteria Walls	No Change

HO Area	Comments
T-01	Water leak caused some of the hot water tank insulation to fall. DECTAM, Andover was called enclosed Asbestos Abatement Document - 8/22/95 8:00A.M. to 4:00 P.M.

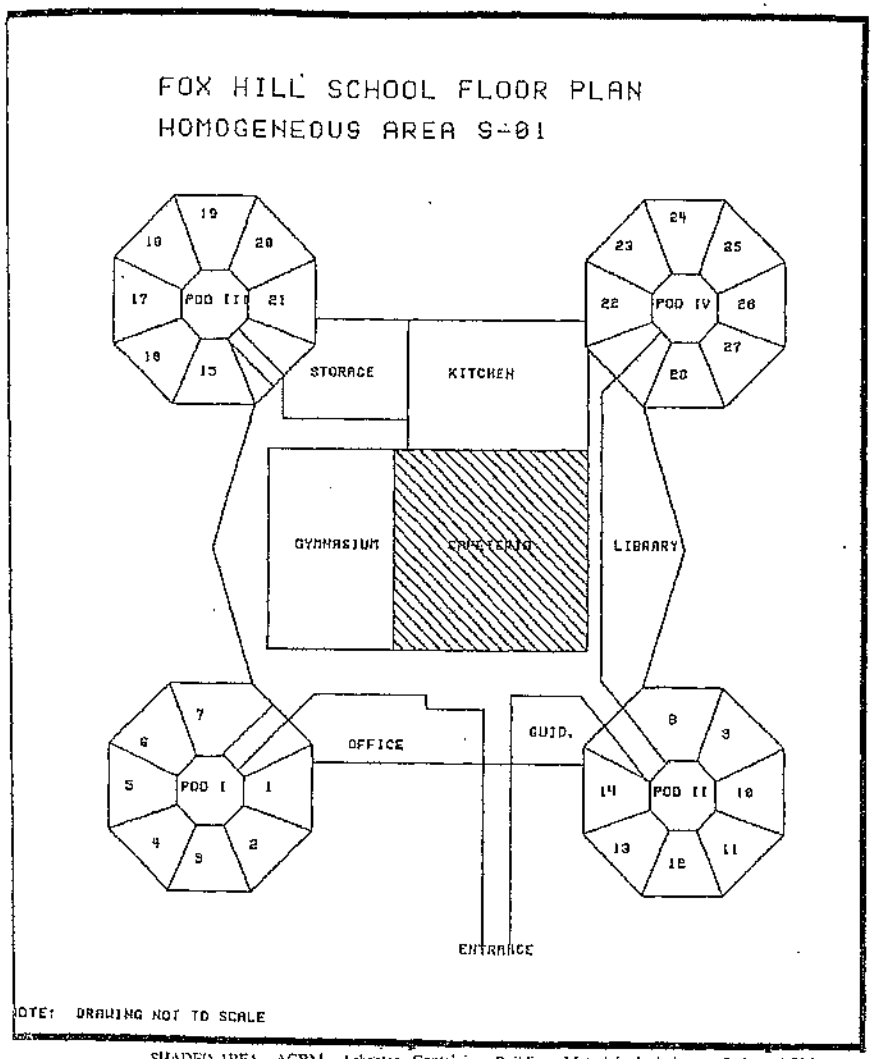
Inspectors Name: Patrick O'Brien

Inspectors Signature: Patrick O'Brien

Date: MARCH 4, 1996 LEA: William H Kautman



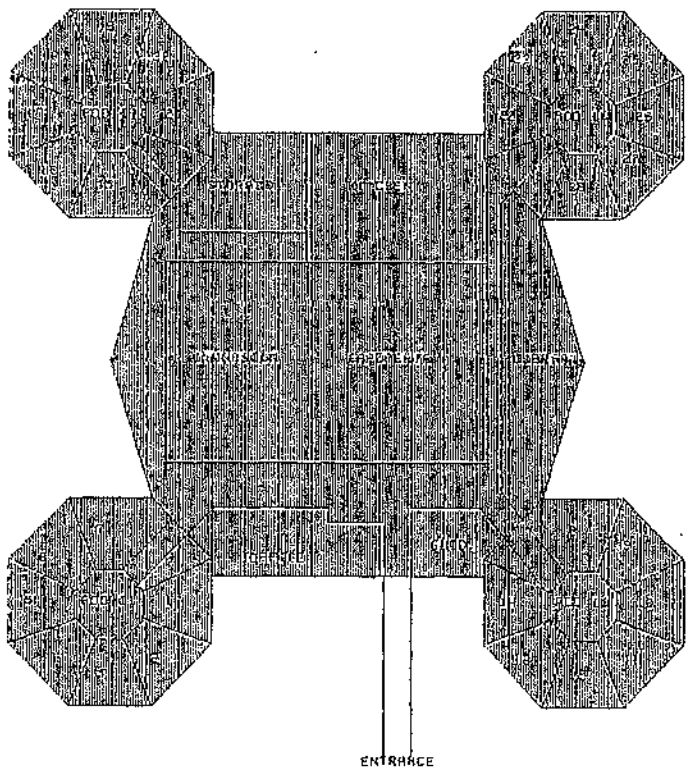
SHADED AREA ACBM- Asbestos Containing Building Material, includes surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of the building.



SHADED AREA ACBM- Asbestos Containing Building Material, includes surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of the building.

FOX HILL SCHOOL FLOOR PLAN

HOMOGENEOUS AREA T-04

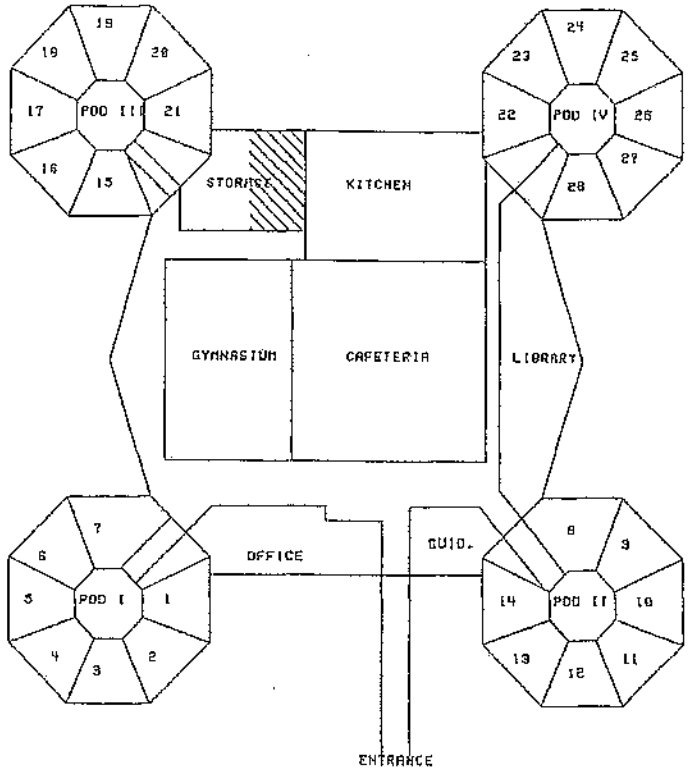


NOTE: DRAWING NOT TO SCALE

SHADED AREA ACBM- Asbestos Containing Building Material, includes surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of the building.

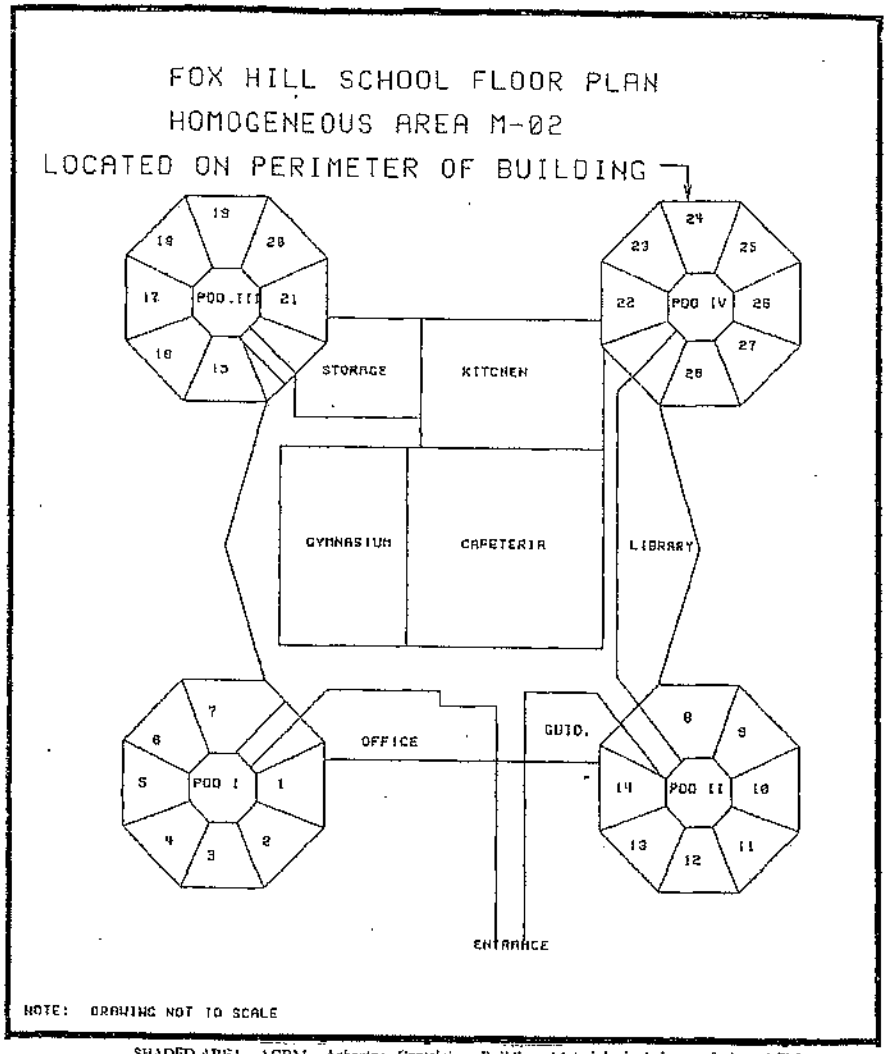
FOX HILL SCHOOL FLOOR PLAN

HOMOGENEOUS AREAS: M-01, T-01, T-02
T-03

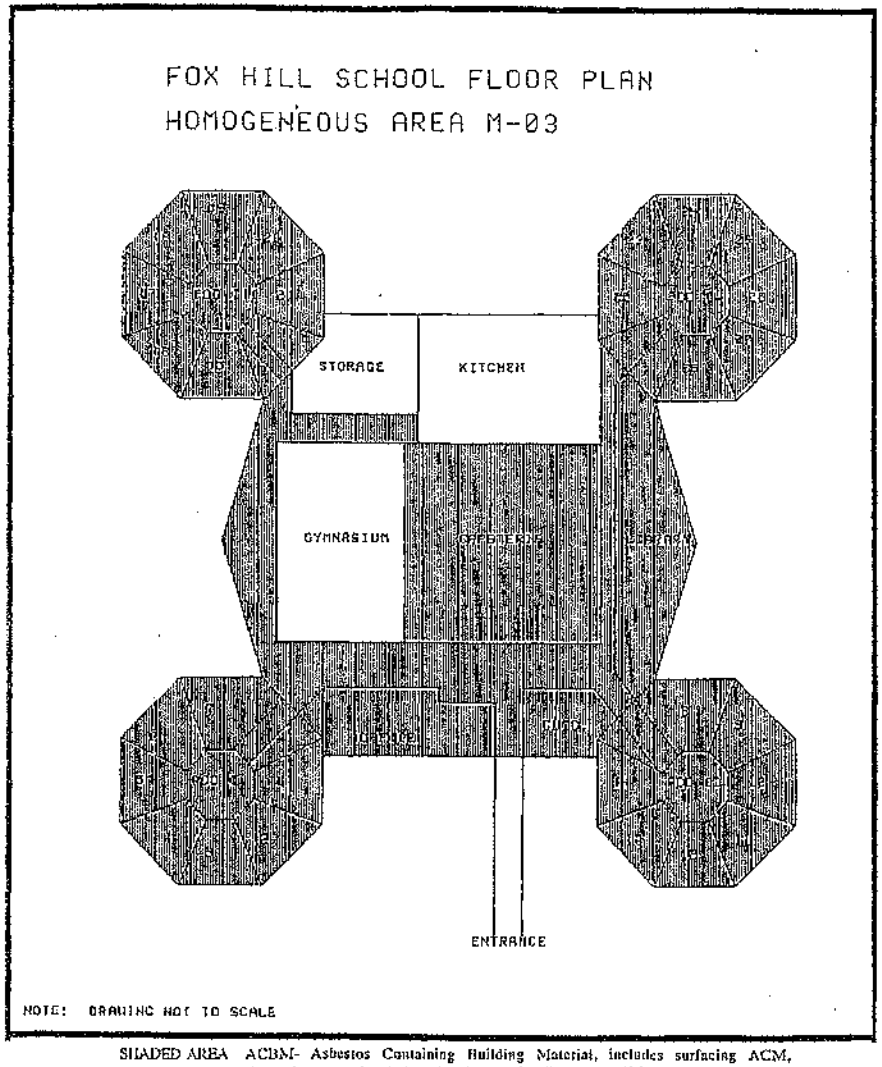


NOTE: DRAWING NOT TO SCALE

SHADED AREA ACBM- Asbestos Containing Building Material, includes surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of the building.



SHADED AREA ACBM- Asbestos Containing Building Material, includes surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of the building.



SHADED AREA ACBM- Asbestos Containing Building Material, includes surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of the building.

SIX-MONTH (6) REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Fill out three (3) sheets for each ACBM area

SCHOOL

FOX HILL ELEMENTARY

Date: _____ page 1 of 3 Time: _____ Inspector: _____

Location of Area: _____

1. Did you perform the last visual inspection in this area ?

   ___X___ yes _____ no

2. Are you familiar with the locations and prior condition of ACBM in the area which this inspection covers ?

   ___X___ yes _____ no

3. Have you received training in the purpose of this inspection, the health hazards associated with asbestos exposure, and work practices to protect yourself against exposure to airborne asbestos including use of purifying respirators and the use of the form?

   ___X___ yes _____ no

   If you are not familiar with the locations of ACBM, safe work practices or the use of this form, contact the Office of Building and Grounds and do not continue.

4. Is the proper Notice to Employees Form in place?

   ___X___ yes _____ no

5. Evaluate the physical condition of ACBM in this area. Evaluate each of the following criteria by checking the appropriate statement.

   a. Material Condition
      __X__ No Damage
      _____ Moderate (small area)
      _____ Severe

   b. Water Damage
      __X__ None
      _____ Minor
      _____ Moderate/Severe

   c. Exposed Surfaced Area
      __X__ None
      _____ 10% or less
      _____ Greater than 10%

   d. Accessibility
      __X__ Not Accessible
      _____ Rarely Accessed
      _____ Accessible

   e. Activity/Movement
      __X__ None/Low
      _____ Moderate
      _____ High

   f. Air Plenum/Direct Air Stream
      _____ Present
      __X__ Not Present

   g. Friability
      __X__ Low
      _____ Moderate
      _____ High

6. Has the condition of any ACBM within the area of this inspection deteriorated since the last inspection?

   _____ yes ___X___ no

   If yes, describe:

   Location: Extent and Probable Cause:

7. Is there any damaged ACBM present that was reported previously:-NO-

   Location: Extent and Probable Cause:

8. Is it possible or probable that unprotected persons may be exposed to asbestos due to the conditions described in items 4 - 7 above?

   _____ yes ___X___ no

   If yes, verbally notify the Asbestos Coordinator (Building and Grounds Office) of the conditions. Check here if you verbally notified someone of the potentially dangerous conditions and give their name and the date and time of notifications:

   Name: _____

Date: _____ Time: _____

9. Check the appropriate spaces below (check all that apply):

____X____ No change in conditions

_____ Conditions have deteriorated

_____ Personnel may have been exposed to asbestos

_____ Repair or removable may be required

_____ Recommend IMMEDIATE investigation

_____ Minor repairs are necessary

_____ Posting missing

Inspector's Signature: _____ Date: _____

FOR USE BY ASBESTOS COORDINATOR ONLY:

Received ABCM Condition Form _____
(Date and Time)

ACTION:

_____ None Required

_____ In-House Clean-Up._____
(Date and Time)

_____ Evacuation of Area

_____ Outside Contractor Clean-Up. Completed _____
(Date and Time)

Contacted: _____

Visited Site: _____

Completed Recommendation: _____

Action Required: _____

Other: _____

Burlington Public Schools

Fox Hill Elementary School
Fox Hill Rd., Burlington, Ma. 01803
(617) 270-1791

Richard J. Benowitz
Principal

TO: All Staff RB

Re: Compliance with the "Right to Know" law

DATE: October 1995

The elementary principals have met twice with Todd Dresser from the Burlington Board of Health regarding how we can ensure that our schools comply with the "Right to Know" legislation which concerns the use and storage of toxic materials within the school building. The following are guidelines that we have agreed to adhere to:

Cleaning supplies

-All cleaning supplies used by teachers in individual classrooms will be in containers typically bought in stores; no large, industrial-sized cleaners will be allowed in classrooms.

-Cleaning supplies, which are typically toxic if ingested, will only be used by the teacher, or responsible adult in the room, and will be stored out of the reach of the children.

Art & Classroom Supplies

-Teachers will ensure that they are providing children with only non-toxic art and classroom supplies, such as paint, markers, glue, and crayons.

-Permanent markers, rubber cement, and any other material not containing the "non-toxic" seal shall be considered "office products" and will only be used by the teacher (or other adult) when the children are not present in the room. This last precaution is because of the fumes from such materials and their effect on small children.

Please make sure that you have inventoried your collection of cleaning and classroom supplies. If you have any materials that the children have been using that do not contain the "non-toxic" seal, please bring them to my attention.

Thank you in advance for your cooperation in this important matter.

POST NEAR DUPLICATING MACHINE

DANGER!

RECEIVED
OCT 3 1 1995
BOARD OF HEALTH

METHANOL (METHYL ALCOHOL CH_3OH)

Duplicating Fluid contains methanol (Methyl Alcohol CH_3OH). Methanol constitutes a serious industrial hazard if workers are not adequately supervised and instructed in proper working and handling techniques. You should fully understand the possible dangers of Methanol when handling this product.

INSURE PROPER VENTILATION

Duplicating machines should always be ventilated to avoid the hazards of explosions or toxicty due to the accumulation of vapors. In order to insure a safe work environment, O.S.H.A. has established a threshold limit value of 200 parts per million (ppm) over an 8 hour period. It is essential that this guideline be followed. YOUR EMPLOYER IS REQUIRED TO COMPLY WITH O.S.H.A. REGULATIONS AND PROVIDE PROPER VENTILATION FOR DUPLICATING MACHINES. Please see your supervisor before use of machine if you have concerns about improper ventilation.

HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE:

Methanol (Methyl Alcohol) is a poisonous, narcotic chemical that can affect the body through inhalation, ingestion, and perhaps prolonged or repeated skin contact. Absorption by inhalation or ingestion is rapid and excretion is much slower than for ethyl alcohol, resulting in delayed effects or compounding of effects by repeated exposure. It is important to be aware that after ingestion or inhalation, initial symptoms may be only that of mild intoxication but may become severe after 12 to 18 hours. Toxic effects are exerted upon the central nervous system, expecially the optic nerve. Ingestion can produce BLINDNESS; 100 - 250 ml (3 - 8 oz.) can be FATAL. Symptoms of overexposure include dizziness, visual impairment, and nausea. Repeated skin contact may cause dermatitis, erythema, scaling, and possibly systemic effects.

SEE BACK FOR EMERGENCY AND FIRST AID PROCEDURES

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: Remove victim to fresh air at once. Restore and/or support breathing as required. Keep victim warm and at rest. Get medical attention as soon as possible. Prevent exposure to Methanol for 7 days.

EYE CONTACT: Wash eyes immediately with running water, lifting the lower and upper lids occasionally. Get medical attention as soon as possible.

SKIN CONTACT: Remove contaminated clothing. Wash affected area with soap and water; apply skin lotions. If skin irritation persists, get medical attention.

REFER TO MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation, and verification. Buyer assumes all risk of use, storage, and handling of the product in compliance with applicable federal, state, and local laws and regulations. SPECTRUM CORPORATION MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION AND DATE HEREIN. Spectrum Corporation will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete, or otherwise misleading.

Spectrum Corporation
Selmer, TN 38375
(901) 645-1937

RISOGRAPH RA MASTER

MATERIAL SAFETY DATA SHEET

SECTION I

Manufacturer's Name : RISO INC.

Emergency Telephone Number : 508-777-7817 Telephone Number For Information : 508-777-7877

Address : 300 Rosewood Drive, Suite 210, Danvers, MA 01923

Date Prepared : June 7, 1994 Signature of Preparer :

TRADE NAME AND SYNONYMS
RISOGRAPH RA MASTER
(S-568, S-568LA)

CHEMICAL NAME AND SYNONYMS
Thermal stencil consists of Japanese tissue laminated with polyester film for duplicator.

SECTION II - Ingredients/Identity Information

Chemical characterization:

(Specific Identity:Common Name(s))	CAS No.	
Polyethylene Terephthalate(film)	25038-59-9	Not classified as hazardous chemical
Hemp(Stencil Paper)	Unknown	
Acryl Resin(Adhesives)	Unknown	
Silicone(Anti-sticking Agent)	Unknown	

SECTION III - Physical / Chemical Characteristics

Boiling Point: Not applicable Specific Gravity(H_2O = 1) : Not applicable

Vapor Pressure(mm Hg): Not applicable Melting Point: Not applicable (of PET > 200℃)

Vapor Density(AIR = 1): Not applicable Evaporation Rate: Not applicable (Butyl Acetate = 1)

Solubility in Water: None pH Value: Not applicable

Appearance and Odor: Web shaped, Colored slight yellow, Nearly odorless

Viscosity: Not applicable

SECTION IV - Fire and Explosion Hazard Data

Flash Point: Not applicable Flamable Limits: LEL Not applicable UEL

Ignition Temperature: Not available

Extinguishing Media: Carbon dioxide, Dry chemical, Foam, Water

TOWN OF BURLINGTON
RECEIVED
OCT 31 1995
BOARD OF HEALTH

RISOGRAPH RA MASTER

Special Fire Fighting Procedures: Master will be flamable as paper.

Hazardous Combustion Products: No information is available.

Unusal Fire and Explosion Hazards: None

SECTION V - Reactivy Data

Stability Unstable ____ Stable _X_ Conditions to Avoid: ____

Incompatibility(Materials to Avoid): Strong oxidizing agents

Hazardous Decomposition or Byproducts: CO on incomplete combustion

Hazardous Polymerization May Occur ____ Will Not Occur _X_ Conditions to Avoid: ____

SECTION VI - Health Hazard Data

Route(s) of Entry: Inhalation? No Skin? Yes Ingestion? No

Health Hazards(Acute and Chronic): As silicone is anti-sticking agent
Acute oral toxicity on rats: No information is available, blieved to be greater than several g/kg.
Skin Irritation : No information is available, but prolonged or frequent contact may cause dermatitis.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure: Unknown

Medical conditions Generally Aggravated by Exposure: Unknown

Emergency and First Aid Procedures: Wash with soap and water.

SECTION VII - Precautions for Safe Handling and Storing

Steps to Be Taken in Case Material is Released or Spoiled: Not applicable

Waste Disposal Method:
Dispose in accordance with State or local law.
Small quantities : Controlled burning
Large quantities : Contact local industrial waste disposal company for disposal.

Precautions to Be Taken in Handling and Storing:
To assure that RISOGRAPH RA MASTER will maintain their quality throughout storage life, do not expose to the sun, nor keep them in a place where temperatures and/or humidity are exceptionally high.

Other Precautions: None

SECTION VIII - Control Measures

Respiratory Protection(Specify Type): Not necessary

Ventilation Local Exhaust: Not normally required. Special: None
Mechanical(General): Not normally required. Other: None

Protective Gloves: Not normally required. Eye Protection: Not normally required.

Other Protective Clothing or Equipment: Not normally required.

Work/Hygenic Practices: None

Personal Protective Equipment: Not normally required.

Footwear: Not normally required.

ACTION - TERMITE

Specimen Label

DowElanco

Dursban* TC

Termiticide Concentrate

Specialty Termiticide

To be applied by or under the direct supervision of commercial applicators responsible for insect control programs

Active Ingredient:
chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2 pyridinyl) phosphorothioate 42.8%
Inert Ingredients 57.2%
Contains 4 pounds of chlorpyrifos per gallon.

EPA Reg. No. 62719-47
EPA Est. 464-MI-1

*Trademark of DowElanco
DowElanco • Indianapolis, IN 46268-1189, U.S.A.

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

WARNING AVISO:

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

May Be Fatal If Swallowed • Excessive Absorption Through Skin May Be Fatal • Causes substantial but temporary eye injury • May cause skin irritation.

Do not get in eyes, on skin or clothing. Wear eye protection. Avoid breathing vapors and spray mist. Handle concentrate in a ventilated area. Wear protective clothing and chemically resistant gloves when handling. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Keep away from food, feedstuffs and water supplies.

First Aid

If swallowed: Call a physician or Poison Control Center immediately. Do not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to an unconscious person.
If on skin: Immediately wash with plenty of soap and water. Get medical attention.
If in eyes: Flush with plenty of water for 15 minutes. Get medical attention.
If inhaled: Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.
Note to physician: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

Environmental Hazards

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

Physical or Chemical Hazards

Combustible. Do not use or store near heat or open flame.

Notice: Read the entire label before using. Use only according to label directions. **Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.**

In case of an emergency endangering health or the environment involving this product, call collect 517-636-4400.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

TOWN OF DURLINGTON
RECEIVED
BOARD OF HEALTH

Dursban* TC

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Do not tank mix this product with products containing dichlorvos (DDVP).

Do not formulate this product into other end-use products.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Storage: Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Avoid storing above 122°F for extended periods of time. Storage below 40°F may result in formation of crystals. If product crystallizes, store at 65-75°F and shake occasionally to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

Container Disposal for Non-Refillable Containers: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and/or crush rinsed, empty container and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

or

Triple rinse (or equivalent). Then dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Container Disposal for Refillable Containers: Replace the dry disconnect cap, if applicable, and seal all openings which have been opened during use. Return the empty container to a collection site designated by DowElanco. If the container has been damaged and cannot be returned according to the recommended procedures, contact DowElanco Customer Service Center at 1-800-258-1470 to obtain proper handling instructions.

Handling Procedures

Wear protective clothing when using or handling this product to help greatly reduce exposure to eyes and skin. As a minimum, eye protection and chemically resistant gloves and footwear, a long-sleeved shirt and long-legged pants or coveralls are recommended. To avoid breathing spray mist during application in confined areas, wear a mask or respirator of a type recommended by NIOSH for filtering spray mists.

General Information

Subterranean Termites

Dursban TC Termiticide Concentrate for soil treatment is used to establish a barrier which is lethal to termites. In order to provide an effective barrier between the wood in the structure and termite colonies in the soil, disperse the chemical emulsion so as to avoid untreated gaps in the barrier.

It is important that the service technician be familiar with current control practices including trenching, rodding, subslab injection and low pressure spray applications. These techniques must be correctly employed to prevent or control infestations by subterranean termite species of *Reticulitermes*, *Zootermopsis*, *Heterotermes* and *Coptotermes*. Choice of appropriate procedures includes consideration of such variable factors as the design of the structure, water table, soil type, soil compaction, grade conditions and the location and type of domestic water supplies. The biology and behavior of the involved termite species are important factors to be known as well as suspected location of the colony and severity of the infestation within the structure to be protected. For advice concerning current control practices for specific local conditions, consult resources in structural pest control.

General Use Precautions

Contamination of public and private water supplies must be avoided by following these minimum precautions:

1. Use anti-backflow equipment or procedures to prevent siphonage of pesticide back into water supplies.
2. Do not treat soil that is water saturated or frozen.
3. Consult Federal, state and local specifications for information regarding approved treatment practices in your area.

Structures that contain wells or cisterns may be treated using the following guidelines:

1. Do not treat soil while it is beneath or within the foundation of a structure that contains a well or cistern. The treated backfill method may be used if the soil is removed and treated outside the foundation.
2. If treatment must be made along exterior foundation walls of structures containing wells or cisterns or other difficult situations such as near walls of cisterns, along fieldstone or rubble walls, along faulty foundation walls, around pipes and utility lines which lead downward from the structure to a well, pond, or other body of water, application may be made in the following manner:

Excavation/Treated Backfill Technique

a. Trench and remove soil to be treated onto heavy plastic sheeting or similar material or into a wheelbarrow.

b. Treat the soil at the rate of 4 gallons of diluted emulsion per 10 linear feet per foot of depth of the trench or 1 gallon of dilution per 1.0 cubic foot (See "Rate Determination Guidelines"). An initial treatment using a 1.0% dilution will provide effective, optimum long term residual control. Mix thoroughly into the soil taking care to contain the liquid and prevent runoff or spillage.

c. After the treated soil has absorbed the diluted emulsion, replace the soil into the trench.

3. Infected and/or damaged wood can be treated using an injection technique such as is described in "Control of Wood Infesting Insects".

All nonessential wood and cellulose containing materials, including scrap wood and form boards, should be removed from around foundation walls, crawl spaces, and porches. This does not include existing structural soil contact wood that has been treated.

Rate Determination Guidelines

Consult the local extension agent or state entomologist for application rate recommendations.

An initial treatment using a 1.0% dilution will provide effective, optimum long term residual control.

A 2.0% dilution may be used to protect utility poles and fence posts.

Table 1 - Dilution Directions

Gallons of Finished Dilution Desired	Dursban TC Needed		
	0.5%	1.0%	2.0%
1	1 1/3 fl oz	2 2/3 fl oz	5 1/3 fl oz
5	6 2/3 fl oz	13 1/3 fl oz	26 2/3 fl oz
10	13 1/3 fl oz	26 2/3 fl oz	53 1/3 fl oz
24	1 qt	1/2 gal	1 gal
48	1/2 gal	1 gal	2 gal
97	1 gal	2 gal	4 gal

Mixing Directions

It is important that the termiticide dilution be uniformly mixed in the spray tank before beginning the treatment. Once mixed, Dursban TC will not settle out in the tank although the initial mixing will be enhanced by agitation, circulation through the treating hose, and the filling process.

1. Fill tank 1/4 to 1/3 full.
2. Start pump to begin by-pass agitation and place end of treating tool in tank to allow circulation through hose.
3. Add appropriate amount of Dursban TC.
4. Add remaining amount of water.
5. Let pump run and allow recirculation through the hose for 2 to 3 minutes.

Application Volume

To ensure thorough and complete coverage in different soil types, it may become necessary to adjust the volume being applied. In situations such as heavy, clay-type soils which will not accept large amounts of water, reduced volumes can be used which will deliver the appropriate concentrations of termiticide in the soil. This would also apply to sensitive areas and/or horizontal applications where less volume may be desirable. Minimum volumes will be specified in the appropriate use directions.

In light textured soils such as sand or gravel which accept larger amounts of water, increased volumes which deliver the appropriate concentration of termiticide in the soil may be used. Maximum volumes will be specified in the appropriate use directions.

Preconstruction Subterranean Termite Treatment

Effective preconstruction treatment for subterranean termite prevention requires the establishment of vertical and/or horizontal chemical barriers between wood in the structure and the termite colonies in the soil. To meet FHA termite proofing requirements, follow the latest edition of the Housing and Urban Development (HUD) Minimum Property Standards. Follow state and local regulations to meet minimum treatment standards for preventive preconstruction treatments.

All holes drilled in construction elements for preconstruction treatments should be securely plugged following the application.

See "Rate Determination Guidelines" and "Table 1" for dilution directions.

1. For horizontal barriers, applications shall be made using a low pressure spray after grading is completed and prior to the pouring of the slab or footing.

   a. For a 1.0% rate, apply 1 gallon of dilution per 10 square feet, or use 2 2/3 fluid ounces of Dursban TC per 10 square feet in sufficient water (no less than 1/2 gallon or more than 2 gallons) to provide thorough and continuous coverage of the area being treated (See "Application Volume").

   If the fill is washed gravel or other coarse material, it is important that a sufficient amount of dilution be used to reach the soil substrate beneath the coarse fill.

   b. If concrete slabs cannot be poured over the soil the same day it has been treated, a vapor barrier should be placed over the treated soil to prevent disturbance of the termiticide barrier.

2. For vertical barriers, apply the 1.0% dilution at a rate of 4 gallons per 10 linear feet per foot of depth. Establish vertical barriers in areas such as around the base of foundations, plumbing lines, backfilled soil against foundation walls and other areas which may warrant more than just a horizontal barrier.

   a. Rodding and/or trenching applications should be made to reach the top of the footing. Rod holes should be spaced to provide a continuous barrier.

   b. Trenches need not be wider than 6 inches. Treat soil with the dilution as it is being replaced in the trench.

   For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 10 2/3 fluid ounces of Dursban TC per 10 linear feet per foot of depth from grade to top of footing in sufficient water (not less than 2 gallons or more than 8 gallons) to ensure complete coverage.

   c. Hollow block foundations or voids of masonry can be treated to make a complete chemical barrier especially if the soil was not treated prior to pouring the footing. Apply the dilution at a rate of 2 gallons per 10 linear feet so that it reaches the top of the footing.

   d. For crawl spaces, establish a vertical barrier on both sides of the foundation and around all piers and areas where underground utilities exit the soil. Do not apply the dilution to the entire surface area intended as the crawl.

3. For plenum type structures which use a sealed underfloor space to circulate heated and/or cooled air throughout the structure, apply the dilution at the rate of 4 gallons per 10 linear feet per foot of depth. Soil adjacent to both sides of foundation walls, supporting piers, plumbing and conduits should be treated by trenching or rodding (where soil conditions permit) to a depth of 6 inches or, if less shallow, to the top of the footing. When conditions will not permit trenching or rodding, surface application adjacent to interior foundation walls may be made but the treated strip shall not exceed a width of 18 inches, horizontally, from the foundation walls, piers or pipes. The surface application should be made at a rate of 1 gallon per 10 square feet as a very coarse spray under low pressure (not to exceed 20 P.S.I. when measured at the treating tool). After soil treatment, a continuous vapor barrier of at least 6 mil polyethylene film or other suitable vapor barrier must be installed on the ground surface over the entire subfloor area and on the inside of the plenum walls, in accordance with the recommended practices for plenum type structures.

Postconstruction Treatments

See "Rate Determination Guidelines" and "Table 1" for dilution directions.

Precaution: Do not apply dilution until location of heat or air conditioning ducts, vents, water and sewer lines and electrical conduits are known and identified. Extreme caution must be taken to avoid contamination of these structural elements and airways.

All holes drilled in construction elements of living areas of home for postconstruction treatment should be securely plugged following application.

1. For slab-on-ground construction applications may be made using techniques such as sub-slab injection, rodding and/or trenching. Injectors should not extend beyond the tops of the footings.

   a. Treat along the outside of the foundation to form a continuous termiticide barrier in the soil.

   For shallow foundations, 1 foot or less, dig a narrow trench approximately 6 inches wide along the outside of the foundation walls. Do not dig below the bottom of the footings. For foundations with exposed footings, dig a trench alongside the footing taking care not to undermine the footing. The dilution should be applied to the trench and mixed with the soil as it is replaced in the trench.

For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet or use 10 2/3 fluid ounces of Dursban TC per 10 linear feet in sufficient water (no less than 2 gallons or more than 8 gallons) to provide thorough and complete coverage of the area being treated (See "Application Volume").

For foundations with footings deeper than 1 foot, apply the dilution at a rate of 4 gallons per 10 linear feet per foot of depth.

b. When treating cracks and expansion joints in the slab, along sidewalks or patios adjacent to the exterior foundation wall or other areas where holes are to be drilled to form a continuous termiticide barrier, the holes should be spaced at intervals up to 24 inches depending on soil type.

Hard, dry soils typically allow good lateral (horizontal) dispersion. However, they may be slow in absorption or downward movement. Care must be taken when injecting through slabs into areas with this type of soil. Low pressures should be considered in this situation. This will help to avoid backsplashing from the injection hole, backflow from cracks and expansion joints, and unwanted emergence of the termiticide dilution from adjacent drill holes. A slow, low pressure application using the proper volume of termiticide dilution will allow the soil to absorb the liquid and provide an adequate vertical barrier. The wider drill hole spacings (18 to 24 inches) can usually be used in this situation. Sand, foam, or gravel backfill materials are commonly found under slab foundations. The type of fill, amount of settling that has occurred, moisture content, etc., will determine drill hole spacing and amount of termiticide dilution to be injected through each hole. Highly absorptive soils or those with large pore spaces (gravel, coarse sand) will afford rapid downward (vertical) movement and limited lateral (horizontal) distribution of the termiticide dilution. In this situation, consider using a lateral dispersion tip on the sub-slab injector and place the drill holes closer together (12 to 18 inches).

For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet.

c. It may be necessary to treat along one side of interior partition walls if there are cracks in the slab, plumbing entry points, existing termite infestations, or other conditions which would make treatment appropriate.

d. To complete the termiticide barrier under slab foundations, it may be necessary to drill and treat near plumbing and electrical entry areas, cracks, or other areas where termites might enter the structure. In this instance, one or more holes should be drilled in the slab as close to the entry point as is practical and termiticide placed in the fill. As a general rule, 3 to 5 gallons of dilution per entry point will usually give adequate coverage, however, the use of directional or lateral dispersion tips or foam delivery systems can give adequate coverage with lower volumes. Location of the drill hole in relation to the entry point, type of soil fill, presence or absence of a vapor barrier, application pressure and other considerations will affect the coverage and volume of termiticide needed to form a complete barrier. Precautions must be taken to avoid drilling into plumbing or electrical conduit.

e. When necessary, drill through the foundation walls from the outside and force the dilution just beneath the slab either along the inside of the foundation or along all the cracks and expansion joints and other critical areas.

f. Bath traps: Exposed soil or soil covered with tar or a similar type sealant beneath and around plumbing and/or drain pipe entry areas may be treated with a 1.0% dilution of Dursban TC.

An access door or inspection vent should be cut and installed, if not already present. After inspection and removal of any wood or cellulose debris, the soil can be treated by rodding or drenching the soil. A one square foot bath trap will usually require about 3 to 5 gallons of dilution for thorough and complete coverage.

2. Hollow block foundations or voids in masonry resting on the footing can be treated to make a continuous chemical barrier in the voids. If the void has direct contact with the soil, it should be treated. Apply at the rate of 2 gallons of dilution per 10 linear feet to reach the top of the footing or soil. It is not necessary to treat the entire vertical surface of the void, rather, apply dilution to the lower part of the void so that it reaches the top of the footing or the soil.

3. For basements, apply at a rate of 4 gallons of dilution per 10 linear feet per foot of depth. Where footings are greater than 1 foot of depth from the grade to the top of the footing, application may be made by trenching and/or rodding at a rate of 4 gallons of dilution per 10 linear feet per foot of depth. Treat outside of foundation walls, and if necessary beneath the basement floor along inside of foundation walls, along cracks in basement floors, along interior load bearing walls, around sewer pipes, conduits and piers.

4. In crawl spaces for a 1.0% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth. Treat both sides of foundation and around all piers and pipes.

a. Rodding and/or trenching applications should be made to reach the top of the footing. Rod holes should be spaced to provide a continuous chemical barrier.

b. Trenches need not be wider than 6 inches nor below the top of the footing. The emulsion should be mixed with the soil as it is replaced in the trench.

For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet per foot of depth or 10 2/3 fluid ounces of Dursban TC per 10 linear feet per foot of depth from grade to top of footing in sufficient water (not less than 2 gallons or more than 8 gallons) to ensure complete coverage.

c. For inaccessible underfloor spaces, treat soil by an alternate method such as drilling and rodding through foundation walls from the outside.

d. When conditions will not permit trenching, i.e. inadequate soil to wood clearance, rocky soil, etc., a surface application may be made adjacent to interior foundation walls, piers, and pipes but the treated strip shall not exceed 18 inches in width. The surface application should be made in a manner that avoids runoff. Use a very coarse spray at a pressure not exceeding 20 P.S.I. when measured at the treating tool. Structures should be ventilated during application and until the treatment is dry.

For a 1.0% rate, apply 4 gallons of dilution per 10 linear feet or 10 2/3 fluid ounces of Dursban TC per 10 linear feet in sufficient water (not less than 2 gallons or more than 8 gallons) to ensure complete coverage (See "Application Volume").

In the presence of unsupported termite tubes, mechanically destroy each tube and apply approximately 1 pint of 1.0% dilution to an area of no more than 18 inches in diameter where the tubes emerged from the soil.

5. In plenum type structures, which use a sealed underfloor space to circulate heated and/or cooled air within the structure, apply the 1.0% dilution at the rate of 4 gallons per 10 linear feet per foot of depth. Soil adjacent to both sides of foundation walls, supporting piers, plumbing and conduits should be treated by trenching or rodding (where soil conditions permit) to a depth of 6 inches or to the top of the footing. When conditions will not permit trenching or rodding, a surface application adjacent to interior foundation walls may be made, but the treated strip shall not exceed a width of 18 inches, horizontally, from the foundation piers or pipes. The surface application should be made at a rate of 1 gallon per 10 square feet as a very coarse spray under low pressure (not to exceed 20 P.S.I. when measured at the treating tool). In order to properly calculate the amount of termiticide dilution needed, use the following guideline: A strip 18 inches wide and 6 feet 6 inches long is equal to 10 square feet. Before treatment, a barrier of at least 6 mil polyethylene film or other suitable vapor barrier must be present on this ground surface over the entire subfloor area in accordance with recommended practices for plenum type structures. Install a new vapor barrier if barrier is absent or deteriorated. The vapor barrier film on the ground and foundation walls must be folded back from the areas to be treated prior to treatment and replaced immediately following treatment. Structures should be ventilated during application and until treatment is dry.

6. Application using foam generating equipment: In situations where conventional application methods have not or are not likely, to provide adequate coverage, foam generating equipment or similar machines can be used to provide a continuous barrier. Treatment of filled porches, chimney bases, soil under slabs and treatment of wall voids are examples where foam applications may be useful.

Foam Treatment Recommendations: Refer to label of foaming adjuvant for proper amount of material to add per gallon of Dursban TC dilution.

The following provides the amount of Dursban TC required for a given area and volume range of the preformed termiticide dilution necessary for application of the product.

For a 1% rate, apply 10 2/3 fluid ounces of Dursban TC per 10 linear feet using no less than 2 gallons, or more than 8 gallons, of preformed dilution.

Underground Utility Cable and Conduit

Preventative Treatment for Use Only in Guam, Hawaii, and Other Pacific Islands: Use a 1.0% to 2.0% dilution (See "Rate Determination Guidelines" and "Table 1" for dilution directions). After digging the trench, place approximately 6 inches of backfill or sand at the bottom and apply 2 gallons of the dilution per 10 linear feet. Allow to dry then replace the cable backfill. Cover with an additional 6 inches of backfill or sand and apply another 2 gallons of emulsion per 10 linear feet. Finish filling trench with untreated soil.

Wherever cables emerge from the soil to enter poles, light frames, etc., treat the soil around the cable and pole or frame to establish a continuous 6 inch chemical barrier.

A continuous 6 inch chemical barrier must be established around the cable to insure protection from termite attack.

Utility Poles and Fence Posts

Preventative Treatment: Use a 1.0 to 2.0% dilution (See "Rate Determination Guidelines" and "Table 1" for dilution directions). After pole or post hole has been dug, mix the dilution with the soil as it is being replaced to a depth of approximately 10 inches. Place pole or post on top of this layer. The remaining soil fill and termiticide dilution should be mixed while backfilling the hole. The treated soil zone around the post or pole should be approximately 6 inches wide. Soil for the base layer and backfill of each pole or post should be treated at a rate of 4 gallons of dilution per 10 cubic feet of soil.

Remedial Treatment: To control existing infestations or to prevent infestation of posts and poles already in place, use a 1.0% to 2.0% dilution. The termiticide dilution should be injected into termite galleries or channels in the wood. For maximum protection, injection sites should be at or below grade.

Posts or poles may also be treated by rodding down to the base of the structure. Rod holes should be placed approximately 3 inches away from the pole and about 6 inches apart. Inject approximately 12 fluid ounces of dilution per foot of depth into each rod hole.

It may be appropriate to use one or both treatment techniques depending upon the specific circumstances at the work site e.g. soil type.

Retreatment Statement

Retreatment of subterranean termites may be made any time there is evidence of reinfestation, disruption or loss of the barrier due to construction, excavation, landscaping, etc. Retreatments may be made to vulnerable or reinfested areas in accordance with application techniques described on this label.

Treatments may be made as either a spot or complete treatment. The timing of these retreatments will vary, depending on factors such as termite pressure, soil conditions, etc., which may reduce the effectiveness of the barrier.

Annual retreatments are prohibited unless reinfestation or barrier disruption has occurred.

Control of Wood Infesting Insects

Dosage and Mixing Directions

Dursban TC is recommended for use as an aqueous emulsion containing 0.5% to 1.0% chlorpyrifos. See "Table 1" for dilution directions.

Advisements

When spraying overhead interior living areas of homes, apartment buildings, etc., cover surfaces below the area being sprayed with plastic sheeting or other material.

Contact with treated surfaces should be avoided until spray has dried. Cover or remove exposed foods before treatment. Do not use in structures housing animals which are intended for or which produce products to be used for food purposes. Do not use for above ground control of wood infesting insects in food areas of food handling establishments, restaurants or other areas where food is commercially prepared or processed.

To control wood infesting insects such as powderpost beetles (*Lyctidae*), false powderpost beetles (*Bostrichidae*), deathwatch beetles (*Anobiidae*), old house borers (*Cerambycidae*) and ambrosia beetles (*Scolytidae*) in homes and other structures, treatments may be applied either as coarse sprays or by brushing the product onto targeted surfaces. Use a sufficient amount of spray to cover the area to the point of wetness but avoiding runoff. Use the following guidelines to determine appropriate rates of application:

New Wood, (typically less than 10 years of age) apply approximately 1 gallon of dilution per 150 square feet as a coarse spray.

Old Wood, (typically greater than 10 years of age) apply approximately 1 gallon of dilution per 100 square feet as a coarse spray.

Treatment Directions

For control of carpenter ants in homes and other structures, apply dilution around doors and windows and other places where carpenter ants enter the premises and where they crawl and hide. Also spray into cracks and crevices or through openings or small newly drilled holes into wall voids where these ants or their nests are present. Use a sufficient amount of coarse spray to cover the area to the point of wetness but avoiding runoff.

For control of termites (localized areas of infested wood in structures), apply dilution to voids and channels in damaged wood and in spaces between members of a structure and between wood and foundations where termite infestation is likely to occur. Application may be made to inaccessible areas by drilling, and then injecting the emulsion. Use a sufficient amount of spray to cover the area to the point of wetness but avoiding runoff. Treatment of localized areas is intended to kill workers and winged reproductive forms of termites in the treated areas and to prevent infestations for a temporary period. This type of application is not intended to be a substitute for soil treatment or mechanical alteration to control subterranean termites.

Pest Control on Outside Surfaces and Around Buildings

To control ants, bees, carpenter ants, clover mites, cockroaches, crickets, earwigs, hornets, millipedes, scorpions, spiders, ticks, wasps and yellowjackets.

Outside surfaces: Apply Dursban TC termiticide as a residual spray to outside surfaces of buildings including porches, window frames, eaves, patios, garages, refuse dumps and other areas where pests congregate or have been observed. Treatment may be repeated as needed to maintain effectiveness.

Perimeter sprays: To help prevent infestation of buildings, treat a band of soil and vegetation 6 to 10 feet wide around and adjacent to the building. Also, treat the building foundation to a height of 2 to 3 feet where pests are active and may find entrance. For scorpions, treat or remove accumulations of lumber, firewood, and other materials which serve as insect harborage sites.

Dosage and Mixing Instructions: Use Dursban TC mixed as a 0.25% to 0.5% dilution as indicated in the following table:

Gallons of Finished	Dursban TC Required	
Dilution Desired	0.25% Solution	0.5% Solution
1	2/3 fl oz	1 1/3 fl oz
5	3 1/3 fl oz	6 2/3 fl oz
10	6 2/3 fl oz	13 1/3 fl oz
24	16 fl oz	1 qt
48	1 qt	2 qt
97	2 qt	1 gal

Small amounts of solution mixed at 0.5% to 1.0% termiticide rates remaining in the spray tank can be diluted as indicated in the following table and used to treat outside surfaces or perimeter areas:

Concentration of Termiticide Dilution	Amount of Water to Add to Each Gallon of Termiticide Dilution to Provide a 0.25% Spray	Amount of Water to Add to Each Gallon of Termiticide Dilution to Provide a 0.5% Spray
0.5%	1 gallon	none
0.75%	2 gallons	0.5 gallon
1.0%	3 gallons	1 gallon

Warranty Disclaimer

DowElanco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. DOWELANCO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by Buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at DowElanco's election, one of the following:

(1) Refund of purchase price paid by buyer or user for product bought, or

(2) Replacement of amount of product used.

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of DowElanco or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

Copyright© 1994 by DowElanco

LABEL CODE 113-52-003
EPA APPROVAL 04/10/92, 08/15/92, 09/29/92
REPLACES 113-10-017, 123-10-031, 123-10-035

Revisions include:

1) Previously approved supplemental labeling entitled "Postconstruction Application Using Foam Generating Equipment" was added to main label.

2) Previously approved supplemental labeling entitled "Pest Control on Outside Surfaces and Around Buildings" was added to main label.

DOW CHEMICAL U.S.A.*
MIDLAND, MI 48674
EMERGENCY PHONE:
517-636-1400

MATERIAL SAFETY DATA SHEET

PRODUCT CODE 13042
EMPIRE® 20
MICROENCAPSULATED INSECTICIDE
EFFECTIVE DATE: 09/14/89
DATE PRINTED: 09/02/89 MSD:002481

1. INGREDIENTS: (% w/w, unless otherwise noted)

O,O,-Diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate, (chlorpyrifos) CAS# 002921-88-2	20%
Proprietary petroleum solvent	10%
Water and other proprietary ingredients	70%

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: 212°F, 100°C†
VAP. PRESS: 17.5 mmHg @ 20°C†
VAP. DENSITY: <1†
†Data for water

SOL. IN WATER: Disperses in water
SP. GRAVITY: 1.03
APPEARANCE: White suspension
ODOR: Slight solvent odor

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: None
METHOD USED: TCC

FLAMMABLE LIMITS
LFL: None
UFL: None

EXTINGUISHING MEDIA: Water fog, foam, CO_2, dry chemical.

FIRE & EXPLOSION HAZARDS: Does not burn.

FIRE-FIGHTING EQUIPMENT: Wear positive-pressure, self-contained breathing apparatus.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Avoid heating above 50°C for extended periods – loss of active ingredient may result.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Base. Consult manufacturer for specific cases.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, ethyl sulfide, diethyl sulfides, nitrogen oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Sweep up into plastic bags using sweeping compound.

DISPOSAL METHOD: Do not contaminate food, feed, or water by storage or cleaning of equipment. Open burning is prohibited.

Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to applicable federal, state or local procedures. If burial is permitted, bury in isolated, non-crop location away from domestic or ground water supplies. Keep out of domestic or natural water sources, since product may be toxic to aquatic life.

6. HEALTH HAZARD DATA:

EYE: Essentially nonirritating to eyes.

SKIN CONTACT: Prolonged contact is essentially non-irritating to skin.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The LD_{50} for skin absorption in rabbits is >10,000 mg/kg.

INGESTION: Single dose oral toxicity is extremely low. The oral LD_{50} for rats is >25,000 mg/kg. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Vapors are unlikely due to physical properties.

TOWN OF BURLINGTON
RECEIVED
OCT 31 1995
BOARD OF HEALTH

*An Operating Unit Of The Dow Chemical Company

*Indicates a Trademark of The Dow Chemical Company

The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult The Dow Chemical Company For Further Information.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Chlorpyrifos is a cholinesterase inhibitor. Chlorpyrifos produced mild adrenal effects when fed to rats, but only at doses that greatly exceeded any exposures that would be received during use of this product. Excessive exposure to solvent may cause respiratory irritation and central nervous system effects; however, excessive exposure to chlorpyrifos or to solvent is unlikely due to physical state (encapsulated).

CANCER INFORMATION: Chlorpyrifos did not cause cancer in long-term animal studies.

TERATOLOGY (BIRTH DEFECTS): Chlorpyrifos did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

REPRODUCTIVE EFFECTS: In animal studies, chlorpyrifos has been shown not to interfere with reproduction.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Based on a majority of negative data and some equivocal or marginally-positive results, chlorpyrifos is considered to have minimal mutagenic potential.

7. FIRST AID:

EYES: Irrigate immediately with water for at least 5 minutes.

SKIN: Wash off in flowing water or shower.

INGESTION: Induce vomiting if large amounts are ingested. Consult medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: Atropine by intravenous administration is the preferable antidote. Oximes may or may not be therapeutic but it is recommended they not be used in place of atropine. Suggest serum and/or RBC cholinesterase determination. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE(S): Chlorpyrifos: ACGIH TLV and OSHA PEL are 0.2 mg/m^3, skin.

VENTILATION: Control airborne concentrations below the exposure guideline. Good general ventilation should be sufficient for most conditions.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator.

SKIN PROTECTION: For brief contact, no precautions other than clean, body-covering clothing should be needed. Use impervious gloves when prolonged or frequently repeated contact could occur.

EYE PROTECTION: Use safety glasses.

9. ADDITIONAL INFORMATION:

REGULATORY REQUIREMENTS:

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

A delayed health hazard

MSDS STATUS: Revised sections 6, 7 and 8.

*An Operating Unit Of The Dow Chemical Company

®Indicates a Trademark of The Dow Chemical Company

The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult The Dow Chemical Company For Further Information.

Material Safety Data Sheet

DowElanco
DURSBAN* TC
Termiticide Concentrate

TOWN OF BURLINGTON
RECEIVED
OCT 31 1995
BOARD OF HEALTH

Emergency Phone: 517-636-4400
General Phone: 1-800-352-6776

EPA Reg. Number: 62719-47
Effective Date: August 12, 1994
Product Code: 26056
MSDS Number: 001449
DowElanco • Indianapolis, IN 46268

evidence for skin sensitizing properties. Furthermore, the product did not sensitize human subjects when tested at an end-use dilution.

SKIN ABSORPTION: A single prolonged exposure may result in the material being absorbed in harmful amounts. The LD50 for skin absorption in rabbits is 1265 mg/kg (males) and 930 mg/kg (females).

INGESTION: Single dose oral toxicity is moderate. The oral LD50 for male rats is 226 mg/kg. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing amounts larger than that may cause serious injury, even death. If aspirated (liquid enters the lung), may cause lung damage or even death due to chemical pneumonia.

INHALATION: The LC50 for female rats is between 2.6-3.6 mg/l for 4 hours. Excessive exposure may produce organophosphate type cholinesterase inhibition. Excessive exposure to solvent may cause respiratory tract irritation and central nervous system depression. Signs and symptoms of central nervous system depression, in order of increasing exposure, are headache, dizziness, drowsiness, and incoordination.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Excessive exposure may produce organophosphate-type cholinesterase inhibition. Signs and symptoms of excessive exposure to active ingredient may be headache, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions. Active ingredient produced mild adrenal effects when fed to rats, but only at doses that greatly exceeded any exposures that would be received during use of this product. Solvent has been reported to cause liver, kidney, and blood effects at high exposure levels. Xylene, a minor component of this mixture, is reported to have caused hearing loss in laboratory animals upon inhalation of high concentrations; such effects have not been reported in humans.

CANCER INFORMATION: Active ingredient did not cause cancer in long-term animal studies. Xylene was not found to be carcinogenic in a National Toxicology Program bioassay in rats and mice.

TERATOLOGY (BIRTH DEFECTS): Active ingredient did not cause birth defects in laboratory animals. Solvent was toxic to the fetus in laboratory animal tests, but only at doses that were toxic to the mothers. Very high concentrations of solvent (producing severe toxicity to adult animals) induced an increase in cleft palate in mice, which is a common developmental abnormality in mice and is associated with stress to the maternal animals. No malformations were induced at exposures less than those causing severe toxicity to the adult animals.

REPRODUCTIVE EFFECTS: Chlorpyrifos did not interfere with fertility in reproduction studies in laboratory animals. Some evidence of toxicity to the offspring occurred, but only at a dose high enough to produce significant toxicity to the parent animals. In a 3-generation reproduction study on the solvent, the only effects observed were at exposures that produced severe toxicity to the parent animals.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Results of in vitro ('test tube') and animal mutagenicity tests on the aromatic solvent have been negative. Based on a majority of negative data and some equivocal or marginally positive results, active ingredient is considered to have minimal mutagenic potential.

7. FIRST AID:

EYES: Flush eyes with plenty of water for 15 minutes. Get medical attention.

SKIN: Immediately wash skin with plenty of soap and water. Get medical attention. Before washing, remove contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

INGESTION: Call a physician or poison control center immediately. Do not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.

NOTE TO PHYSICIAN: The decision of whether to induce vomiting or not should be made by an attending physician. If lavage is performed, endotracheal and/or esophageal control is suggested. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.
Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.
Supportive care. Treatment based on judgment of the physician in response to reactions of the patient

Material Safety Data Sheet

DowElanco
DURSBAN* TC
Termiticide Concentrate

RECEIVED
OCT 1 1995
BOARD OF HEALTH

Emergency Phone: 517-636-4400
General Phone: 1-800-352-6776

EPA Reg. Number: 62719-47
Effective Date: August 12, 1994
Product Code: 26056
MSDS Number: 001449
DowElanco • Indianapolis, IN 46268

1. INGREDIENTS: (% w/w, unless otherwise noted)

O,O-Diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate, (chlorpyrifos)
CAS# 002921-88-2 .....42.8%

Inert Ingredients: 57.2%
Proprietary emulsifiers
Xylene-range aromatic solvent
CAS# 064742-95-2
Cumene[1] . . . CAS# 000098-82-8
Xylene[1] . . . CAS# 001330-20-7
Ethyltoluene[1] . . . CAS# 025550-14-5
1,2,4-Trimethylbenzene
CAS# 000095-63-6

[1]Components of xylene range aromatic solvent

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: 290°F, 143°C

VAP. PRESS: <10 mmHg @ 25°C

VAP. DENSITY: Not determined

SOL. IN WATER: Emulsifiable

SP. GRAVITY: Approx. 1.12 @ 20C/20°C

APPEARANCE: Yellow liquid.

ODOR: Solvent-type odor.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 122°F, 50°C

METHOD USED: TCC

FLAMMABLE LIMITS:
LFL: 1%
UFL: 6% (xylene range aromatic solvent)

EXTINGUISHING MEDIA: Foam, carbon dioxide, and dry chemical.

FIRE & EXPLOSION HAZARDS: Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Toxic irritating gases may be formed under fire conditions. Rapid decomposition above 320-392°F (160-200°C). Violent rupture of containers due to over-pressurization may occur at temperatures generated during a fire.

FIRE-FIGHTING EQUIPMENT: Use positive-pressure, self-contained breathing apparatus and full protective equipment.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Avoid heating above 50°C (122°F). Chlorpyrifos undergoes exothermic decomposition at approximately 130°C (266°F) which can lead to higher temperatures and violent decomposition if generated heat is not removed. Contains petroleum derivative solvent - will burn.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Under fire conditions, hydrogen chloride, ethyl sulfide, diethyl sulfide and nitrogen oxides can be formed.

HAZARDOUS POLYMERIZATION: Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Absorb spills with an absorbent material such as HAZORB, ZORBALL, or dirt. Thoroughly wash body areas which come into contact with this product. Contain spill to keep out of sewers. For large spills, consult manufacturer.

DISPOSAL METHOD: Do not contaminate food, feed, or water by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the hazardous waste representative at the nearest EPA regional office for guidance.

6. HEALTH HAZARD DATA:

EYE: May cause moderate eye irritation. May cause slight corneal injury. Effects may be slow to heal. Vapors may irritate eyes.

SKIN CONTACT: Short single exposure not likely to cause significant skin irritation. Prolonged or repeated exposure may cause skin irritation. A test in guinea pigs indicated that this product may have weak skin sensitization potential. However, experience in the manufacture and use of this product has not provided

*Trademark of DowElanco

Material Safety Data Sheet

DowElanco
DURSBAN* TC
Termiticide Concentrate

TOWN OF BURLINGTON
RECEIVED
OCT 1 1995
BOARD OF HEALTH

Emergency Phone: 517-636-4400
General Phone: 1-800-352-6776

EPA Reg. Number: 62719-47
Effective Date: August 12, 1994
Product Code: 26056
MSDS Number: 001449
DowElanco • Indianapolis, IN 46268

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE:
Chlorpyrifos: ACGIH TLV and OSHA PEL are 0.2 mg/m3, Skin.
Trimethylbenzene (mesitylene): ACGIH TLV and OSHA PEL are 25 ppm
Aromatic 100 (xylene range aromatic solvent): none established. Supplier recommends a guideline of 50 ppm for the total product which is a mixture of petroleum hydrocarbons.
Cumene[1]: ACGIH TLV and OSHA PEL are 50 ppm, Skin.
Xylene[1]: ACGIH TLV and OSHA PEL are 100ppm TWA, 150ppm STEL.
Ethyltoluene[1] : Dow Industrial Hygiene Guide is 10 ppm.

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

EYE PROTECTION: Use chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator.

9. ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: See label. Keep out of reach of children. Do not swallow. Do not get in eyes or on skin. Avoid breathing mist or vapors. Keep away from heat and open flame. Handle concentrate in ventilated area. Wash thoroughly after handling. Depending on degree of exposure of personnel, consider monitoring blood cholinesterase levels. If in doubt, seek advice from DowElanco. Keep away from food, feedstuffs and domestic water supplies. For health and safety information on end-use dilutions of up to 1% DURSBAN (R) insecticides, see the Health and Safety Fact Sheet, Form No. 311-17-001(2/93), available from DowElanco.

MSDS STATUS: Revised section 7.

REGULATORY INFORMATION:

(Not meant to be all-inclusive—selected regulations represented).

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
1,2,4-TRIMETHYLBENZENE	000095-63-6	5 - 15 %
CUMENE	000098-82-8	1 - 5 %
XYLENE (MIXED ISOMERS)	001330-20-7	1 - 5 %

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
An immediate health hazard
A delayed health hazard
A fire hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA Inventory or are not required to be listed on the TSCA Inventory.

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:
Category .....Rating
Health 2
Flammability 2
Reactivity 1

The Information Herein Is Given In Good Faith,
But No Warranty, Express Or Implied, Is Made.
Consult The DowElanco Company For Further Information.

TOWN OF BURLINGTON
RECEIVED
OCT 1 1995
BOARD OF HEALTH

Whitmire

P/N 19-0517-B

MATERIAL SAFETY DATA SHEET

WHITMIRE RESEARCH LABORATORIES, INC.
3568 TREE COURT INDUSTRIAL BLVD.
ST. LOUIS, MO 63122
EFFECTIVE DATE: JUNE 23, 1992

WHITMIRE
PT® 515 Wasp-Freeze®
Wasp and Hornet Killer

(314) 225-5371 (8:00 a.m. to 5:00 p.m. CST)
(314) 576-0120 AFTER HOURS
EMERGENCY PHONE NUMBER
(800) 424-9300 CHEMTREC

PRESSURIZED LIQUID INSECTICIDE

EPA REG. NO.: 499-362

SECTION 1: HAZARDOUS INGREDIENTS

	ACGIH TLV/TWA	ACGIH STEL	OSHA PEL
Solvents & Propellants: 99.74%			
Isoparaffinic Petroleum Solvent: CAS #64742-48-9	NE	NE	500ppm
Carbon Dioxide: CAS #124-38-9	5000ppm	30000ppm	5000ppm
Phenothrin: 0.120% CAS #26002-80-2 [3-phenoxybenzyl d-cis and trans 2,2-dimethyl-3-(2-methylpropenyl) cyclopropane carboxylate]	NE	NE	NE
D-Trans Allethrin: 0.129% CAS #28057-48-9	5mg/M³	NE	NE

SECTION 2: PHYSICAL DATA

BOILING POINT: NA
SPECIFIC GRAVITY (H_2O = 1): 0.800
VAPOR PRESSURE IN AEROSOL CONTAINER: 100 psig @ 70°F
PERCENT VOLATILE: ~100%

VAPOR DENSITY: NA
EVAPORATION RATE: NA
SOLUBILITY IN WATER: Negligible
APPEARANCE AND ODOR: Pale yellow color with solvent odor.

SECTION 3: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 144°F (TCC) (Aerosol Concentrate)
FLAMMABLE LIMITS: NA
NFPA 30B FLAMMABILITY: Level III Aerosol
EXTINGUISHING MEDIA: CO_2; Dry Chemical; Foam

SPECIAL FIRE FIGHTING PROCEDURES: None required.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Contents under pressure. Exposure to temperatures above 130°F may cause bursting.

SECTION 4: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: NE (not really applicable - for outdoor use only)
ROUTES OF ENTRY:

INHALATION?	SKIN?	INGESTION?
Secondary	Primary	Tertiary

HEALTH HAZARD (ACUTE AND CHRONIC) - SIGNS AND SYMPTOMS OF EXPOSURE:
EYE: May cause eye irritation.
SKIN: Prolonged exposure may cause skin irritation and dermatitis.
INGESTION & INHALATION: Unlikely due to the product being pressurized and producing particles large enough not to be respirable. High concentrations of the isoparaffinic petroleum solvent (greater than 1000ppm) may cause headache and dizziness, are anesthetic, and may have other central nervous system effects. When used according to label directions, this level will not be attained.

CARCINOGENICITY:

NTP?	IARC MONOGRAPH?	OSHA REGULATED?
No	No	No

EMERGENCY AND FIRST AID PROCEDURES:
IF SWALLOWED: Call a physician or poison control center immediately. Gastric lavage is indicated. Do not induce vomiting. Vomiting may cause aspiration pneumonia.
IF INHALED: Remove patient to fresh air. Apply artificial respiration if indicated. Seek medical attention.
IF ON SKIN: Remove contaminated clothing and wash affected skin areas with plenty of soap and water. Seek medical attention if irritation persists.
IF IN EYES: Flush with plenty of water. Seek medical attention if irritation persists.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

SECTION 5: REACTIVITY DATA

STABILITY: Indefinite when used according to label directions.
CONDITIONS TO AVOID: Do not spray into open flame or onto very hot surfaces. Do not store above 130°F.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition in open flame may result in halogen acids and carbon dioxide.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 6: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: If container begins to leak (through puncture, etc.), allow it to discharge completely in well ventilated area, then dispose of in safe place.
EMERGENCY TELEPHONE NUMBER OF CHEMTREC: (800) 424-9300 (for transportation spills)

WASTE DISPOSAL METHOD: Aerosol container is not refillable. Do not attempt to recharge. When container is empty, discard in safe place. Do not puncture or throw into fire.

SECTION 7: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: None required.
VENTILATION: For outdoor use only. LOCAL EXHAUST: NA. MECHANICAL: NA. SPECIAL: NA. OTHER: NA

PROTECTIVE GLOVES: None required.
EYE PROTECTION: None required.
OTHER PROTECTIVE EQUIPMENT: None required.

SECTION 8: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Contains concentrated insecticide under pressure. Do not expose to temperatures above 130°F.

OTHER PRECAUTIONS: For outdoor use only.

SECTION 9: HEALTH RATING INFORMATION (NFPA)

HEALTH - 1 FLAMMABILITY - 1 REACTIVITY - 1

SECTION 10: SARA TITLE III/SECTION 313 SUPPLIER NOTIFICATION

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372:

CAS#	CHEMICAL NAME	% BY WEIGHT

This product contains no Section 313 chemicals.

SECTION 11: DOT SHIPPING INFORMATION

PROPER SHIPPING NAME: Consumer Commodity HAZARD CLASS: ORM-D

NA - Not Applicable
NE - Not Established
PEL - Permissible Exposure Limit
ACL - Acceptable Ceiling Level
MPC - Maximum Peak Concentration
AEL - Acceptable Exposure Limit

PREPARED BY: Michael G. Sarli
Revised: 5/10/94

MATERIAL SAFETY DATA SHEET

29CFR 1910.1200 (OSHA) & STATE RTK

TOWN OF BURLINGTON RECEIVED
BOARD OF HEALTH

PRODUCT NAME: "SHEEN"

TYPE & USE: Solvent/Detergent Floor Treatment Mixture

MANUFACTURER: SAVIN PRODUCTS COMPANY Inc.
214 HIGH ST.
RANDOLPH MA 02368

HAZARD RATING
4 = EXTREME
3 = HIGH
2 = MODERATE
1 = SLIGHT
0 = INSIGNIFICANT

HEALTH 2 | 2 | 0 REACTIVITY | Vapor SPECIFIC HAZARD

EMERGENCY PHONE: 617-961-2744 DATE: 4/20/87 SUPERCEDES: 5/25/86 BY: AS/NER

WARNING STATEMENT	DANGER HARMFUL OR FATAL IF SWALLOWED. COMBUSTIBLE. CONTAINS PETROLEUM DISTILLATE. VAPOR HARMFUL.
HAZARDOUS COMPONENTS MSL	PETROLEUM SOLVENT (Stoddard Solvent,Mineral) CAS #8052-41-3 ca 70% ACGIH/OSHA TLV/PEL 100/100 ppm. STEL 200 ppm. Mfr.Tox.LD_{50} over 5g/kg (orl-rat) PARAFFIN OIL (Mineral Oil) CAS #8012-95-1 ca 20% ACGIH/OSHA TLV/PEL (mist) 5 mg/m³ 8 HR (TWA). LD_{50} 5000+ mg/kg (orl-rat). OTHER COMPONENTS ARE NOT CLASSIFIED HAZARDOUS DUE TO NATURE OR CONCENTRATION.
PHYSICAL DATA	BOILING RANGE: 350-550 °F DENSITY: 0.8 g/ml; 6.7 lb/gal. VAPOR PRESSURE: ca 10 mm Hg 70°F % VOLATILE: 75% VAPOR DENSITY: ca 4X Air EVAP. RATE: Slower Than Water. WATER SOLUBILITY: Not Soluble pH DATA: N/A GENERAL APPEARANCE: Water-White,Clear,Thin Liquid. Mild Petroleum Odor.
FIRE AND EXPLOSION HAZARDS	FLASH POINT: 115°F SETA CC, ASTM D-3274 FLAMM. LIMITS: LEL = 1% UEL = 6% EXTINGUISHING MEDIA: Use Dry Chemical,Foam or Carbon Dioxide. Water May Be Ineffective However Use Water To Keep Involved Containers Cool. Water Spray May Be Used To Disperse Vapors. OSHA/NFPA Fire Classification: II SPECIAL PROCEDURES & UNUSUAL HAZARDS: Use Appropriate NIOSH/MSHA Approved Respirator. Protect eyes & Skin. Vapors Are Heavier Than Air And May Travel To Remote Ignition Sources.
Effects of Overexposure HEALTH HAZARD DATA	EYES: Liquid & High Concentrations Of Vapor Will Cause Eye Irritation. SKIN: Prolonged Contact May Cause Drying Due To Natural Oil Removal. INHALATION: May Cause Nausea,Dizziness,Depression & Anesthetic Effect Above TLV. INGESTION: Nausea,Vomiting. Aspiration Of Liquid May Cause Pneumonitis. CHRONIC DATA: Liver,Kidney,Blood & CNS Diseases May Be Aggravated.
First Aid	EYES: Flush With Running Water,At Least 15 Mins. GET MEDICAL AID. SKIN: Wash With Soap & Water. Remove & Discard Contaminated Clothes,Shoes. INHALATION: Remove Patient To Fresh Air. Use Oxygen If Indicated. INGESTION: DO NOT INDUCE VOMITING WITHOUT MEDICAL ADVICE. GET MEDICAL AID ASAP. If Vomiting Occurs, Place Patients Head Below Knees To Prevent Aspiration. ACGIH/OSHA/NIOSH DATA: See "HAZARDOUS COMPONENTS" Section Above. No Components Are NTP,IARC or OSHA Listed (Carcinogenic).

(Continued on next page) N/D = Not Determined N/A = Not applicable

REACTIVITY DATA	STABILITY: Stable. Will Not Polymerize. CONDITIONS TO AVOID: Protect From Heat,Sparks,Flame & Possible Sources Of Ignition. Keep Containers Tightly Closed When Not In Use. Use Ventilation. MATERIALS TO AVOID: Keep From Strong Oxidizing Agents. Products Of Combustion: Carbon Monoxide & Carbon Dioxide.
SPILL OR LEAK	WARNING: Combustible Material. Eliminate All Ignition Sources. VENTILATE AREA. For Large Spills: Evacuate Area. Wear Appropriate Respiratory & Protective Equipment. Remove Leaking Containers To Open Air. Absorb On Clay Absorbent & Remove Outside For Safe Evaporation. Use Only Non Sparking Tools. VAPOR IS HEAVIER THAN AIR AND CAN TRAVEL TO REMOTE SOURCES OF IGNITION.
WASTE DISPOSAL	COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS All Surfactant Components Are Biodegradeable. The Solvent Is Classed "Oil", Toxic To Aquatic Life. Do Not Discharge To Ponds,Streams Or Waterways (Oil). EPA/HW Classified As Hazardous Waste (Ignitability) 40CFR 261.1. Incineration Or Evaporation Are The Usual Disposal Methods, With EPA Approval. Addition Disposal Information May Be Obtained From EPA At 800-424-9346. DOT Emergency Response Guidebook DOT 5800.3 #27. EPA Regulation 40 CFR 302 Reportable Quantity (RQ) Not Listed
SPECIAL PROTECTION	EYES: Use Splash Goggles Or Face Shield When Eye Contact May Occur. SKIN: BUNA N Rubber Gloves & Apron. Avoid Contact With Contaminated Clothes. INHALATION: Provide General Ventilation Or Explosion Proof Exhaust (60 FPM). OTHER: Use Self Contained Breathing Equipment When TLV is Exceeded. ref: 29CFR 1910.134.
STORAGE AND HANDLING	Store In A Clean,Cool,Ventilated Area,Away From All Sources Of Ignition. Refer To NFPA 30 & OSHA 29CFR 1910.106:"Storage & Handling Flamm.& Comb.Liq." Clean Up Spills At Once. Use Only Electrically Grounded Handling Equipment. Keep Container Tightly Closed When Not In Use. Protect Containers From Damage. Always Wear Protective Equipment. Wash Thoroughly After Handling. KEEP FROM CHILDREN. FOR COMMERCIAL USE ONLY. DO NOT USE IN HOUSEHOLD AREA.

SPECIAL INFORMATION

COMBUSTIBILITY & VAPOR INHALATION SHOULD BE THE PRIME CONCERNS.

Workers Should Not Be Permitted to Handle This Product Without Proper Training And Using Protective Equipment. Training BEFORE Exposure Is MANDATED By 29 CFR (OSHA) & State RTK.

Avoid Prolonged Contact With Skin, Particularly Under Jewelry (Watches & Rings) & From Contaminated Clothing (Cuffs & Shoes).

Containers Of This Product May Be Hazardous When "Emptied" Due To Residue & Vapors, Therefore ALL Hazard Precautions Given In This Data Sheet Must Be Observed.
NEVER Use A Cutting Torch On An Emptied Container.
NEVER USE AIR PRESSURE To Discharge Container Contents.

Mechanical Spraying Of This Product May Increase The Hazards (Fire & Health).

Read Label Directions Carefully. Always Handle So As To Avoid Splashing.

Clothes & Absorbent Used To Apply Or Pick Up This Product Retain The Same Hazards of Fire & Health As The Liquid Product. Take Care With Storage & Disposal.

Safety Cans Are Recommended For Handling Small Amounts Of Product Outside Of Original Container. Ground All Transfer Containers Before Pouring.

THE DATA ON THIS MSDS ARE GENERATED FROM CURRENT PROFESSIONAL PUBLICATIONS, USE EXPERIENCE AND ACTUAL LABORATORY TESTS. THIS PRODUCT IS A MIXTURE AND MSDS FILES ON THE INDIVIDUAL COMPONENTS ARE AVAILABLE ON REQUEST.

Disclaimer of Liability
As the conditions or methods of use are beyond our control, we do not assume any responsibilities and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

TOWN OF BURLINGTON
RECEIVED
BOARD OF HEALTH

Product Name: SUPER GLOSS Product No: 005.00

MATERIAL SAFETY DATA SHEET

Date Prepared: 12-28-89 Supersedes: NEW By: TAA /BI

Company: GAVIN PRODUCTS CO., INC.
214 HIGH STREET
RANDOLPH, MA 02368

Emergency Information:
Information: 1-617-961-2744
Chemtrec: 1-800-424-9300

Section 1: GENERAL INFORMATION

Product
Name: SUPER GLOSS
Class: FLOOR FINISH
Shipping Name: Not Regulated
Hazard Class: N/A
UN/NA #: N/A

NFPA 704 Hazard Rating
4=Severe
3=Serious
2=Moderate
1=Slight
0=Minimal
*=Chronic (see Sec.7 Health Hazard)

Health	(2)
Flammability	(1)
Reactivity	(1)

Precautions: CAUTION: Causes eye irritation and may cause skin irritation with prolonged contact. May be harmful if swallowed. Prolonged exposure may produce headaches, and mucous membrane irritation.

Section 2: HAZARDOUS INGREDIENTS

Ingredient (CAS #)	%Wt	OSHA PEL (ppm or *mg/M3)	ACGIH TLV
1: Diethylene Glycol Monomethyl Ether (111-77-3)	7.0	N/A	N/A
2:			
3:			
4:			
5:			

SECTION 3: ENVIRONMENTAL DATA

SECTION 3A: SARA TITLE III INFORMATION

	EHS RQ (lbs) *1	EHS TPQ (lbs) *2	SEC 313 *3	313 Category *4	311/312 Categories *5
1:	N/A	N/A	N/A	Yes	H-1, P-3
2:					
3:					
4:					
5:					

*1= Reportable Quantity of Extremely Hazardous Substance. Sec. 302.
*2= Threshold Planning Quantity, Extremely Hazardous Substance. Sec. 302.
*3= Toxic Chemical. Sec. 313.
*4= Required by Sec. 313 (40 CFR 372.42) used on Toxic Release Inventory Form.
*5= Hazard Category for SARA Sec. 311/312 Reporting.

Health Hazard:
H-1= Immediate (acute)
H-2= Delayed (chronic)

Physical Hazard:
P-3= Fire
P-4= Sudden Release of Pressure
P-5= Reactive

Section 3B: CERCLA INFORMATION

EPA - Comprehensive Environmental Response, Compensation and Liability Act. Under EPA - CERCLA (Superfund) releases to air, land or water which exceed the reportable quantity must be reported to the National Response Center, @ 1-800-424-8802

The reportable quantity (RQ) for a release of this product is? N/A

Section 3C: RCRA INFORMATION

EPA - RCRA This product, if disposed of as shipped, is not a hazardous waste as specified in 40 CFR 261. Consult state and local officials for proper disposal method.

SECTION 4: PHYSICAL/CHEMICAL DATA

Boiling Point	: 212 F 100 C @1ATM	%Volatile/Volume:	70 %
Vapor Density	: 0.7X Air	Wt/Gallon	: 8.60 lbs./gal.
Pouring Point	: N/A F C	Molecular Weight:	N/A
Specific Gravity	: 1.032 @ 20' C	Vapor Pressure	: 17 mm Hg @ 20'C
Melt/Freeze Point:	(32'F (0'C	Solubility	: Disperses
Evaporation Rate	: approx. H2O	pH(as is):	8.60

Appearance & Odor: Thin, opaque, off-white emulsion with a mild odor.

SECTION 5: FIRE and EXPLOSION DATA

Flash point:) 200 F Test: Tag Closed Cup (ASTM D-56)
Explosive limits: LEL: N/A UEL: N/A

Extinguishing Media: Use water (flood with water), dry chemical, CO2 or "alcohol" foam.

Unusual Fire and Explosion Hazards: Combustion may produce noxious and irritating gases which will require fresh air source in fire fighting.

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

SECTION 6: REACTIVITY DATA

Stability: Stable Hazardous Polymerization: Does not occur.

Incompatibility (Materials to avoid): Strong acids, strong oxidizers, strong alkalis, heat and fire.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide and other toxic gases.

SECTION 7: HEALTH HAZARD (ACUTE/CHRONIC)

Effects of Overexposure:

Carcinogenicity:
NTP: No IARC: No OSHA: No

Eyes: Causes eye irritation.

Skin: May cause skin irritation with prolonged contact.

Inhalation: Prolonged exposure may produce headache and mucous membrane irritation.

Ingestion: May result in nausea and gastric distress.

Chronic Effects and Medical Conditions: None known.

SECTION 8: EMERGENCY and FIRST AID

Eyes: Flush with copious amounts of water until all material is removed. If irritation develops or persists, Get Medical Attention.

Skin: Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

Inhalation: Remove to fresh air. If breathing is difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Ingestion: If swallowed, give several glasses of water but do not induce vomiting. If vomiting does occur, give fluids again. Do not give anything by mouth to an unconscious or convulsing person. Get medical attention.

SECTION 9: PERSONAL PROTECTIVE MEASURES

Eye Protection: Avoid splashing. Wear safety goggles if necessary. Contact lenses must not be worn.

Protective Gloves: Depending on conditions of use, protective gloves may be necessary.

Respiratory Protection: None required under normal handling conditions.

Ventilation: Either local exhaust or general room ventilation is usually required.

Other Protective Equipment: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

SECTION 10: SPECIAL PRECAUTIONS

Handling and Storage: Handle according to good manufacturing and warehousing practices. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Store only in tightly closed, properly vented containers away from heat, sparks, open flame or strong acids.

Spills and Leaks:
Small Spills: Soak up small spills with inert solids. Use suitable disposal container.

Large Spills: Limit access to area. Wear NIOSH/MSHA approved respirator (self-contained breathing apparatus preferred). Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid and solid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water. CAUTION: Floor may become slippery.

Waste Disposal: Incinerate or bury in a licensed facility. Do not discharge into waterways or sewer systems without the proper authority.

Other Precautions: All labeled precautions must be observed when handling, storing, and transporting empty containers due to product residues. Do not reuse this container unless it is professionally cleaned and reconditioned.

Neither this data sheet nor any statement contained herein grants or extends any license, express or implied, in connection with patents issued or pending which may be the property of the manufacturer or others. The information in this data sheet has been assembled by the manufacturer or his agent based on its own studies and on the work of others. Neither the manufacturer nor his agent makes any warranties, express or implied, as to the accuracy, completeness, or adequacy of the information contained herein. Neither the manufacturer nor his agent shall be liable (regardless of fault) to the vendee, the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy, or furnishing of such information.

Material Safety Data Sheet

The information and data contained herein are believed to be correct. However, Viking Mfg. Co. does not warrant either expressly or by implication the accuracy thereof.

Date last revised 6/1/90 Prepared by Walter Zwible SCOTT HERZOG

I. General Information

Chemical Name & Synonyms: METHYL ALCOHOL, METHANOL, WOOD ALCOHOL	Trade Name & Synonyms: DUPLICATING FLUID
Chemical Family: ALCOHOL	Formula: CH_3OH
Proper DOT Shipping Name: METHYL ALCOHOL UN 1230	DOT Hazard Classification: FLAMMABLE LIQUID
Manufacturer: VIKING MFG. CO.	Manufacturer's Phone Number: (508)653-0940
Manufacturer's Address: 68 MIDDLESEX AVE., NATICK, MA. 01760	Chemtrec Phone Number: 1-800-424-9300

II. Ingredients

Principal Hazardous Components	Percent	Threshold Limit Value (units)
METHYL ALCOHOL CAS No. 67-56-1	99+%	200 ppm
ETHYLENE GLYCOL MONOBUTYL ETHER CAS No. 111-76-2	<1%	50 ppm

TOWN OF PLYMOUTH RECEIVED (DEC 1 1 1990) BOARD OF HEALTH

III. Physical Data

Boiling Point (°F): 148°F	Specific Gravity (H_2O = 1): 0.791
Vapor Pressure (mm Hg.): 96 @ 20°C	Percent Volatile By Volume (%): 100%
Vapor Density (Air = 1): 1.11	Evaporation Rate (_____ = 1): butyl acetate=1 <1
Solubility In Water: complete	pH: 8
Appearance & Odor: Clear liquid, slight alcohol odor.	

IV. Fire & Explosion Hazard Data

Flash Point (Test Method): Tag closed cup 52°F	Auto Ignition Temperature: 725°F
Flammable Limits: LEL 6%	UEL 36.5%

Extinguishing Media: Water Spray, Alcohol Foam, CO_2, Dry Chemical, Any Class B Extinguishing Agent

Special Fire Fighting Procedures: Full protective clothing & self contained breathing apparatus should be worn when exposed to vapors or products of combustion.

Unusual Fire & Explosion Hazards: N/A

Bill Kontoul

V. Health Hazard Data

OSHA Permissible Exposure Limit	ACGIH Threshold Limit Value
200 ppm	200 ppm
Carcinogen - NTP Program	Carcinogen - IARC Program
NA	NA

Symptoms of Exposure

weakness, fatigue, dizziness, headaches, nausea, gastrointestinal disturbances & some degree of inebriation.

Medical Conditions Aggravated By Exposure

EFFECTS MAY BE CUMULATIVE

Primary Route(s) of Entry Methanol is harmful by inhalation of the vapor, ingestion of the liquid, or by prolonged or repeated contact of the liquid or vapor with the skin

Emergency First Aid POISON: Call a physician. If swallowed, induce vomiting immediately by giving two glasses of water & sticking finger down throat. IF INHALED, remove to fresh air. If not breathing, give artificial resperation. If breathing is difficult, give oxygen. REMOVE material from eyes, skin & clothing.

VI. Reactivity Data

Stability		Unstable	
	X	Stable	
Incompatability			
Hazardous Polymerization		May Occur	
	X	Will Not Occur	

Conditions To Avoid

Materials To Avoid Material which react with active hydrogen. Anhydrides, sodium, organometallic cmpds. Oxidizing Mat.

Conditions to Avoid Corrosive to lead & aluminum

Hazardous Decomposition Product: Can form carbon monoxide during incomplete combustion.

VII. Environmental Protection Procedures

Spill Response Keep people away. Remove source of ignition. Shut off leak if without risk. Wear self-contained breathing apparatus & full protective clothing to enter spill area. Dike & pump into salvage tank. Use water spray to knock down vapors. Run-off to sewers may create health & explosion hazards; notify fire; health & pollution control authorities.

Waste Disposal Method

Waste should be burned in approved waste disposal incinerators.

VIII. Special Protection Information

Eye Protection
Wear chemical safety glasses

Respiratory Protection (Specific Type)
Self contained breathing apparatus

Other Protection
NA

Skin Protection
Wear impervious gloves & protective cloth

Ventilation Recommended Local exhaust to control exposure levels below airbourne limits.

IX. Special Precautions

Hygienic Practices In Handling & Storage
Store in closed system if possible. Keep away from open flame and heat.

Precautions For Repair & Maintenance Of Contaminated Equipment
NA

Other Precautions DO NOT TAKE INTERNALLY. Wash thoroughly after handling.
DANGER! FLAMMABLE. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED.
CANNOT BE MADE NON_POISONOUS. HARMFUL IF INHALED.

Mr. K,
Thanks for your help!
Alan McRae

TOWN OF BURLINGTON
RECEIVED
OCT 31 1995
BOARD OF HEALTH

Material Safety Data Sheet

SECTION I - IDENTITY

HIGH SPEED SPRAY BUFF #60
Hazardous - NO

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Health	1
Flammability	1
Reactivity	0
Personal Protection	B

4 = Most Hazardous

Telephone Number for Information
508/667-5161
Date Prepared
01/16/91
Prepared By A. Vadasz

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components CAS Reg#	PEL ppm	TWA ppm	STEL	Other Limits	% (opt)
Stoddard Solvent CAS# 8052 - 41-3	.500	100			< 25

*LISTED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SCT.313 OF TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 212F	Specific Gravity(Water=1)	- 0.96
Vapor Pressure (mm Hg)	- 1.8	Melting Point	- N.A.
Vapor Density (air=1)	- 4.5	Evaporation Rate(Butyl Acetate=1)	- 0.06
Viscosity (CPS)	- NA	Decomposition Temperature	- 450F
Auto Ignition Temp.	- NA.	Solubility in Water	-MISCIBLE

pH.- N.A. +/-
Appearance and Odor - LIGHT MILKY LIQUID, SLIGHT SOLVENT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - TCC 160

Flammable Limits
LEL - N.A. UEL - N.A.

Extinguishing media -WATER SPRAY, CARBON DIOXYDE, FOAM, DRY CHEMICAL

Fire Fighting Procedure - COOL CONTAINERS WITH WATER, USE SELF CONTAINED BREATHING APPARATUS. BURNING PRODUCT IS TOXIC.

Fire and Explosion Hazards - CLOSED CONTAINERS MAY BURST WHEN EXPOSED TO EXTREME HEAT. ISOLATE FROM HEAT, SPARKS AND OPEN FLAME.

SECTION V - REACTIVITY DATA

Stability -STABLE
Conditions to Avoid HEAT, SPARKS, OPEN FLAME AND FIRE

Incompatibility - STRONG OXIDIZING AGENTS.
Hazardous Decomposition or Byproduct - THERMAL DECOMPOSITION MAY YIELD CARBON MONOXIDE AND DIOXIDE

Hazardous Polymerization - WILL NOT OCCUR
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - YES Skin - NO Ingestion - YES

Health Hazards-Acute: CAUSES EYE IRRITATION, DRYING OF SKIN, DIZZINESS
CHRONIC: RESPIRATORY TRACT IRRITATION, DERMATITIS
TARGET ORGANS: SKIN, EYES, RESPIRATORY SYSTEM

Carcinogenicity: NO
NTP - N.A. IARC Monographs - N.A. OSHA Regulated - YES

Signs and Symptoms of Exposure - EXCESSIVE INHALATION MAY CAUSE HEADACHE, DIZZINESS

Medical Conditions Aggravated - DERMATITIS
BRONCHO-PULMONARY PROBLEMS

Emergency and First Aid Procedures -EYES&SKIN CONTACT: BLOT WITH TOWEL, FLUSH WITH LARGE QUANTITIES OF WATER. INHALATION: REMOVE TO FRESH AIR. INGESTION: INDUCE VOMITING, GET IMMEDIATE MEDICAL ATTENTION

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO METAL CONTAINER. USE NON-SPARKING TOOLS. USE WATER OR FOAM SPRAY TO LESSEN FIRE HAZARD. USE ABSORBENT FOR SMALL SPILL.

Waste Disposal Method - RECYCLE, INCINERATE, OR USE HAZARDOUS WASTE MANAGEMENT FACILITY FOR DISPOSAL ACCORDING TO STATE AND FEDERAL REGULATIONS.
EPA WASTE NO. D001

Precautions to be Taken in Handling and Storage - COMBUSTIBLE, KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. USE ADEQUATE VENTILATION. AVOID PROLONGED OR REPEATED CONTACT.

Other Precautions - STORE IN SECURE AREA. DISPOSE OF EMPTY CONTAINERS SAFELY KEEP OUT OF REACH OF CHILDREN

SECTION VIII - CONTROL MEASURES

Respiratory Protection - NOT REQUIRED WITH NORMAL USE

Ventilation
Local Exhaust -RECOMMENDED
Mechanical -ASSURE FRESH AIR CIRCULATION
Special -N.A.
Other -EYE WASH AND SAFETY SHOWER

Protective Gloves - REQUIRED: RUBBER, PLASTIC
Eye Protection - REQUIRED: SAFETY GLASSES
Other Protection - APRON OR SHOP COAT RECOMMENDED

Work/Hygienic Practices - DO NOT EAT/DRINK OR SMOKE NEXT TO MATERIAL. WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,5,1 GAL. PLASTIC CONT Report Qty. (Lbs) - NA
OSHA - CLASS II. COMBUSTIBLE LIQUID Labels - NONE
DOT - COMBUSTIBLE LIQUID-EXEMPT PER 49 CFR 173.118A
UN - NOT REGULATED

DOT: COMPOUND, CLEANING, LIQUID, COMBUSTIBLE LIQUID NA1993
UN: NOT REGULATED

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

TOWN OF BURLINGTON
RECEIVED
OCT 1 1995
BOARD OF HEALTH

Material Safety Data Sheet

SECTION I - IDENTITY

#212 PENETR. FLOOR SEALER
Hazardous -YES

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Health	1
Flammability	2
Reactivity	0
Personal Protection	B

4 = Most Hazardous

Telephone Number for Information
508/667-5161
Date Prepared
01/14/91
Prepared By A.Vadasz

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components CAS Reg#	PEL ppm	TWA ppm	STEL	Other Limits	% (opt)
Stoddard Solvent CAS# 8052 - 41 - 3	500	100			< 75

*LISTED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SCT.313 OF TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 320F	Specific Gravity(Water=1)	- 0.87
Vapor Pressure (mm Hg)	- 2.0	Melting Point	- N.A.
Vapor Density (air=1)	- 4.5	Evaporation Rate(Butyl Acetate=1)	- 0.08
Viscosity (CPS)	- NA	Decomposition Temperature	- NA.
Auto Ignition Temp.	- NA	Solubility in Water	-NEGLIGIBLE

pH - N.A. +/-
Appearance and Odor - Clear amber liquid, solvent odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - TCC 140 F Flammable Limits LEL - 0.7 UEL - 6.0

Extinguishing media -CO2, FOAM, DRY CHEMICAL

Fire Fighting Procedure - COOL CONTAINERS WITH WATER, USE SELF-CONTAINED BREATHING APPARATUS, BURNING PRODUCT IS TOXIC

Fire and Explosion Hazards - CLOSED CONTAINERS MAY BURST WHEN EXPOSED TO EXTREME HEAT. ISOLATE FROM HEAT, SPARKS, OPEN FLAME.

SECTION V - REACTIVITY DATA

Stability -STABLE
Conditions to Avoid HEAT, SPARKS, OPEN FLAME

Incompatibility - STRONG OXIDIZING AGENTS.
Hazardous Decomposition or Byproduct - THERMAL DECOMPOSITION MAY YIELD CARBON MONOXIDE

Hazardous Polymerization - WILL NOT OCCUR
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - YES Skin - NO Ingestion - YES

Health Hazards-Acute: CAUSES EYE IRRITATION, DRYING OF SKIN, DIZZINESS
CHRONIC: RESPIRATORY TRACT IRRITATION, DERMATITIS
TARGET ORGANS:. SKIN, EYES, RESPIRATORY SYSTEM

Carcinogenicity: NO
NTP - N.A. IARC Monographs - N.A. OSHA Regulated - YES

Signs and Symptoms of Exposure - IRRITATION AND REDNESS OF SKIN, DIZZINESS

Medical Conditions Aggravated - DERMATITIS
BRONCHO-PULMONARY PROBLEMS

Emergency and First Aid Procedures -EYE&SKIN CONTACT: BLOT WITH TOWEL, FLUSH WITH LARGE QUANTITIES OF WATER. INHALATION: REMOVE TO FRESH AIR. INGESTION: INDUCE VOMITING, GET IMMEDIATE MEDICAL ATTENTION

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO METAL CONTAINER. USE NON-SPARKING TOOLS. USE WATER OR FOAM SPRAY TO LESSEN FIRE HAZARD. USE ABSORBENT FOR SMALL SPILL.

Waste Disposal Method - RECYCLE, INCINERATE, OR USE HAZARDOUS WASTE MANAGEMENT FACILITY FOR DISPOSAL ACCORDING TO STATE AND FEDERAL REGULATIONS. EPA WASTE NO. D001

Precautions to be Taken in Handling and Storage - COMBUSTIBLE, KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. USE ADEQUATE VENTILATION. AVOID PROLONGED OR REPEATED CONTACT.

Other Precautions - STORE IN SECURE AREA. DISPOSE OF EMPTY CONTAINERS SAFELY KEEP OUT OF REACH OF CHILDREN

SECTION VIII - CONTROL MEASURES

Respiratory Protection - USE SELF-CONTAINED BREATHING APPARATUS FOR CONCENTRATIONS ABOVE THRESHOLD LIMIT VALUE.

Ventilation
Local Exhaust -RECOMMENDED
Mechanical -REQUIRED; EXCHANGE EVERY 10 -15 MIN.
Special -BLOW AIR INTO PITS AND DEPRESSIONS
Other -ASSURE FRESH AIR CIRCULATION

Protective Gloves - REQUIRED: RUBBER, PLASTIC
Eye Protection - REQUIRED: SAFETY GLASSES
Other Protection - APRON OR SHOP COAT RECOMMENDED

Work/Hygienic Practices - DO NOT EAT/DRINK OR SMOKE NEXT TO MATERIAL. WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,5,1 GAL. METAL CONT. Report Qty. (Lbs) - NA.
OSHA - CLASS II. COMBUSTIBLE LIQUID Labels - UN-FLAMMABLE LQ
DOT - COMBUSTIBLE LIQUID-EXEMPT PER 49 CFR 173.118A
UN - HAZARDOUS /X/ FLAMMABLE LIQUID-PACKAGING GROUP III

DOT-PAINT, COMBUSTIBLE LIQUID, UN1263
UN- HAZARDOUS /X/ PAINT, 3 UN1263

Vendor assumes no responsiblity for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

TOWN OF ARLINGTON RECEIVED
BOARD OF HEALTH

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915/1916, 1917)

SECTION I

MANUFACTURER'S NAME MANUFACTURED FOR: MASS SANITARY SUPPLY CO.	EMERGENCY TELEPHONE NO. 617-769-4415
ADDRESS (Number, Street, City, State, and ZIP Code) 664 PLEASANT ST. NORWOOD, MA. 02062	
CHEMICAL NAME AND SYNONYMS N/A	TRADE NAME AND SYNONYMS PINK LIQUID HAND SOAP
CHEMICAL FAMILY N/A	FORMULA 4-32

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
NONE		
A mild soap for the washing of hands.		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	211	SPECIFIC GRAVITY (H_2O=1)	1.009
VAPOR PRESSURE (mm Hg.)	n/a	PERCENT, VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)	n/a	EVAPORATION RATE (=1) About 1	
SOLUBILITY IN WATER soluble			
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) Non-Flammable	FLAMMABLE LIMITS Non-Flammable	LEL	UEL
EXTINGUISHING MEDIA Non-Flammable			
SPECIAL FIRE FIGHTING PROCEDURES Exercise caution when fighting any chemical fire. Respiratory protection is essential.			
UNUSUAL FIRE AND EXPLOSION HAZARDS NONE			

(Continued on reverse side)

Form OSHA-20
Rev. May 72

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Non-Volatile.

EFFECTS OF OVEREXPOSURE: Slight eye irritation upon direct contact.

EMERGENCY AND FIRST AID PROCEDURES: EYE: Even though product is not toxic, hazardous, or irritating, good first aid practices should be adhered to. In case of direct eye contact, flush with plent of water for at least 15 minutes. If irritation persists, call a physician.

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	

INCOMPATABILITY (Materials to avoid): Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Unknown

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Flush to Sewer with water

WASTE DISPOSAL METHOD: Disposal of this product should be in adherence with the above described (or similarly approved) disposal procedure. All waste disposal should in accordance with Federal, State, and Local Regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type): None required

VENTILATION	LOCAL EXHAUST	SPECIAL
Normal	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES: None Required

EYE PROTECTION: None Required

OTHER PROTECTIVE EQUIPMENT: None Required

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Normal inside storage

OTHER PRECAUTIONS: Exercise caution when handling and storing chemical substances.

EPO 130-149

Form OSHA-20
Rev. May 72

SECTION V -- Reactivity Data

Stability Unstable
Stable XX

Conditions to Avoid Do not mix with other chemical. Do not pour water into acid.

Incompatability (Materials to Avoid)
Any Chemicals

Hazardous Decomposition or Byproducts
None

Hazardous Polymerization May Occur
Will Not Occur XX

Conditions to Avoid N/A

SECTION VI -- Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

Health Hazards (Acute and Chronic) Corrosive to all body tissues. Inhalation of mist in excessive amount mat cause serious lung damage. Contact with tha eyes may result in total loss of vision. Skin contact-may product severe necrosis. Ingestion may cause severe injur and death. Frequent skin contact with dilute solutions has caused dermatitis.

Carcinogenidity: N/A NTP? IARC MONOGRAPHS? OSHA Regulated?

SIGNS AND SYMPTOMS OF EXPOSURE
Tissue Destruction upon exposure & Dehydration. May cause third degree Burns.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE DETERMINED

EMERGENCY AND FIRST AID PROCEDURES: Eye Contact: Immediately flush with large quantities on water for 15 Minutes. See physician immediately. Skin contact: Flush with large Quantities of water. See Physician immediately. If ingested: Drink large quantities of water. DO NOT INDUCE VOMITING. Note to physician: Treat as a highly corrosive.

SECTION VII -- Precautions for Safe Handling and Use
Steps to Be Taken in Case Material is Released or Spilled
Contaminated area should be throughtly flushed down with large amount of water, A soda ash or lime spread over the area to neutralize residual acidity.
Waste Disposal Method: Store in area where spills or leaks can be contained and disposed of properly. Neutralize with lime or soda ash and flush to nearest drain.
Precautions to Be Taken in Handling and Storing
Store in cool place away from combustible material, avoid contact with skin and eyes.
Other Precautions
DO NOT Store water can get into.

SECTION VIII -- Control Measures
Respiratory Protection (Specify Type)
Ventilation Local Exhaust XX
Mechanical (General)
Special N/A
Protective Gloves
Rubber gloves should be worn
Eye Protection
Safety goggles should be worn
Other Protective Clothing or Equipment
Safety showers, eye baths, face shields, rubber aprons & shoes.
Work/Hygenic Practices
EXTRA precautions should be taken with this product.

Material Safety Data Sheet

HMIS RATING	
Health	2
Flammability	0
Reactivity	2

Conforms to OSHA Hazard Communication Standard 29CFR 1910 1200

The customer receiving this Material Safety Data Sheet is urged to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents, and contractors of the information on this sheet, (2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

IDENTITY (AS USED ON LABEL AND LIST)
SULFURIC ACID DRAIN OPENER

NOTE: Blank Spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

SECTION I

Manufacturer's Name WEPAK CORPORATION	Emergency Telephone Number (704)334-5781
Address (Number, Street, City, State and ZIP CODE) P.O. Box 36803 Charlotte, NC 28236	Telephone Number for Information (704)334-5781 Date Prepared October 27, 1989

SECTION II --Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name

Sulfuric Acid	CAS#7664939	$1mg/m^3$	93%

SECTION III -- Physical/Chemical Characteristics

Boiling Point 529°F	Specific Gravity (H_2O = 1) 1.8354
Vapor Pressure (mm Hg.) .0038mm	Melting Point N/A
Vapor Density (AIR = 1) 3.38	Evaporation Rate (Butyl Acetate = 1) N/A

Solubility in Water
Complete ph Strong Acid

Apperance and Odor
Red liquid; no odor

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) None	Flammable Limits None	LEL	UEL

Extinguishing Media
Dry chemical, Carbon dioxide, and water fog.

Special Fire Fighting Procedures
Do not allow water to enter storage containers as a violent reaction can occur.

Unusual Fire and Explosion Hazards
Acid will not burn, but can start fires with organic materials, nitrates, carbids chlorates, and metallic powders.

Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

TOWN OF BRIGHTON RECEIVED BOARD OF HEALTH

IDENTITY (As Used on Label and List) Pynol

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name Sperlywax Corporation	Emergency Telephone Number
Address (Number, Street, City, State, and ZIP Code) 70 Bishborn Street Brighton, MA 02135	Telephone Number for Information 254-2800 Date Prepared May -- 1986 Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Isopropyl Alcohol, Cas #67-63-0 2- Propanol	400ppm	400ppm		6
Quaternary Ammonium Compound Cas # 139-07-1, 139-08-2, 122-18-9, 107-41-5, 7732-18-5.	None established			4

Section III — Physical/Chemical Characteristics

Boiling Point	212 F	Specific Gravity (H_2O = 1)	1.01
Vapor Pressure (mm Hg)	Water	Melting Point	
Vapor Density (AIR = 1)	Water	Evaporation Rate (Butyl Acetate = 1)	Water

Solubility in Water
Complete

Appearance and Odor
Brown colored solution; mild odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) None	Flammable Limits N/A	LEL	UEL

Extinguishing Media
N/A

Special Fire Fighting Procedures
N/A

Unusual Fire and Explosion Hazards
N/A

(Reproduce locally) OSHA 174, Sept. 1985

Stability			Conditions to Avoid
	Stable	X	N/A

Incompatibility (Materials to Avoid)
Strong oxidizers

Hazardous Decomposition or Byproducts
N/A

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur		

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? No Skin? No Ingestion? No

Health Hazards (Acute and Chronic)
N/A

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure Eye and skin irritant.

Medical Conditions
Generally Aggravated by Exposure N/A

Emergency and First Aid Procedures
Eyes: Flush with large amounts of water, seek medical assistance. Skin: Wash well with soap and water. If ingested - DO NOT INDUCE VOMITI SEEK IMMEDIATE MEDICAL ATTENTION

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Flush with water, mop up and hold for dispos

Waste Disposal Method
Any method in accordance with applicable laws.

Precautions to Be Taken in Handling and Storing
Keep container closed when not in use. Avoid contact with eyes. Do not store at elevated temperatures for extended periods of time.

Other Precautions
Gloves and eye protection is recommended.

Section VIII — Control Measures

Respiratory Protection (Specify Type)
Use in well ventilated areas.

Ventilation	Local Exhaust	Special
	As to keep concentrations below TLV	
	Mechanical (General)	Other

Protective Gloves	Eye Protection
Recommended	Recommended

Other Protective Clothing or Equipment
N/A

Work/Hygienic Practices
N/A

CADILLAC PLASTICS & CHEMICAL
130 CANAL ST
MALDEN, MA 02148
TODD ST. GERMAIN

TOWN OF BURLINGTON
RECEIVED
BOARD OF HEALTH

DOW CORNING CORPORATION
MATERIAL SAFETY DATA SHEET

MATL NAME: TRADE MATE(TM) PLSTC, MTL, AND MSNRY SLNT, CLEAR
EMERGENCY TELEPHONE NO. (517) 496-5900

SECTION I - GENERAL INFORMATION

MANUFACTURER'S NAME: DOW CORNING CORP. PRODUCT INFORMATION NO. (517) 496-6000
ADDRESS: SOUTH SAGINAW ROAD, MIDLAND MI 48686

PROPER SHIPPING NAME(49CFR 172.101): NONE
D.O.T. HAZARD NAME(49CFR 172.101): NONE
D.O.T. ID NO(49CFR 172.101): NONE
D.O.T. HAZARD CLASS(49CFR 172.101): NONE
RCRA HAZARD CLASS(40CFR 261)(IF DISCARDED): NONE
E.P.A. PRIORITY POLLUTANTS(40CFR 122 53): NONE
NFPA = NATIONAL FIRE PROTECTION ASSOCIATION - 704
HEALTH (NFPA): 1 FLAMMABILITY (NFPA): 1 REACTIVITY (NFPA): 0
CAS NO: MIXTURE DOW CORNING WARNING CODE: NOT USED
GENERIC DESCRIPTION: SILICONE

SECTION II - HAZARDOUS INGREDIENTS AS DEFINED IN 29 CFR 1910.1200
(CARCINOGENS IDENTIFIED WITH AN ASTERISK *)

CAS NO.	INGREDIENT	WT.%	EXPOSURE LIMITS
007631869	SILICA, AMORPHOUS	11	OSHA PEL: TWA 6 MG/M3 ACGIH TLV: TWA 10 MG/M3 TOTAL DUST
PROPRIETARY	PROPRIETARY INGREDIENTS	4	DOW CORNING GUIDE: TWA 20 PPM. SEE COMMENTS 1 AND 2.

COMMENT 1: OBSERVE EXPOSURE LIMITS FOR METHYL ALCOHOL, FORMED ON EXPOSURE TO WATER OR HUMID AIR. OSHA PEL-SKIN AND ACGIH TLV-SKIN BOTH TWA 200 PPM, STEL 250 PPM.

COMMENT 2: DOW CORNING GUIDE BASED ON METHYLETHYLKETOXIME, FORMED DURING CURING ON EXPOSURE TO WATER OR HUMID AIR. NO OSHA PEL OR ACGIH TLV ESTABLISHED.

DOW CORNING CORPORATION
MATERIAL SAFETY DATA SHEET

MATL NAME: TRADE MATE(TM) PLSTC, MTL, AND MSNRY SLNT, CLEAR

SECTION III - EFFECTS OF OVEREXPOSURE

EYE: DIRECT CONTACT IRRITATES SLIGHTLY TO MODERATELY WITH REDNESS AND SWELLING.

SKIN: A SINGLE SHORT EXPOSURE (LESS THAN 24 HOURS) MAY IRRITATE. REPEATED PROLONGED CONTACT (24 TO 48 HOURS) MAY IRRITATE MODERATELY. REPEATED CONTACT MAY CAUSE ALLERGIC SKIN SENSITIZATION.

INHALATION: VAPOR OVEREXPOSURE MAY INJURE BLOOD, AND MAY IRRITATE EYES, NOSE AND THROAT. VAPORS MAY INJURE NERVOUS SYSTEM.
THE DEGREE OF INJURY WILL DEPEND ON THE CONCENTRATION AND DURATION OF EXPOSURE. HIGH CONCENTRATIONS FOR REPEATED PROLONGED EXPOSURES MAY CAUSE ALLERGIC SENSITIZATION.

ORAL: SMALL AMOUNTS TRANSFERRED TO THE MOUTH BY FINGERS DURING USE, ETC., SHOULD NOT INJURE. SWALLOWING LARGE AMOUNTS MAY INJURE SLIGHTLY.

COMMENTS: ANIMAL STUDIES WITH METHYLETHYLKETOXIME, FORMED DURING CURING, INDICATE DIRECT CONTACT WITH UNCURED SEALANT MAY POSE A RISK OF ALLERGIC SKIN SENSITIZATION. CURED SEALANT IS NONHAZARDOUS. NO INJURY FROM DUST SHOULD OCCUR DURING REASONABLE USE. IF USE CREATES RESPIRABLE PARTICLES, SOME RESPIRATORY SYSTEM INJURY MAY OCCUR.

SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.

SKIN: WIPE OFF AND FLUSH WITH WATER. GET MEDICAL ATTENTION IF REACTION DEVELOPS.

INHALATION: REMOVE TO FRESH AIR. GET MEDICAL ATTENTION IF ILL EFFECTS PERSIST.

ORAL: GET MEDICAL ATTENTION.

COMMENT: NONE.

SECTION V - FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED): CLOSED CUP ABOVE 212F/100C.
AUTOIGNITION: NOT DETERMINED
FLAMMABILITY LIMITS IN AIR : LOWER:N.D UPPER: N.D.

EXTINGUISHING MEDIA: WATER WATER FOG X CO2 X DRY CHEMICAL X FOAM X OTHER

SPECIAL FIRE FIGHTING PROCEDURES: SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN IN FIGHTING FIRES INVOLVING CHEMICALS

UNUSUAL FIRE AND EXPLOSION HAZARDS: HAZARDOUS NITROGEN OXIDES FORM.

COMMENTS: N.D. - NOT DETERMINED

SECTION VI - PHYSICAL DATA

BOILING POINT(@ 760 MM HG): NOT APPLICABLE
SPECIFIC GRAVITY (AT 77 DEG F/25 DEG C): 1.04
MELTING POINT: NOT APPLICABLE
VAPOR PRESSURE (AT 77 DEG F/25 DEG C): NOT APPLICABLE
VAPOR DENSITY (AIR = 1 AT 77 DEG F/25 DEG C): NOT APPLICABLE
PERCENT VOLATILE BY WEIGHT (%): APPROX. 5
EVAPORATION RATE (ETHER = 1): NOT APPLICABLE
SOLUBILITY IN WATER(%): LESS THAN 0.1
ODOR, APPEARANCE, COLOR: VERY LITTLE ODOR, PASTE-LIKE, CLEAR.

NOTE: THE ABOVE INFORMATION IS NOT INTENDED FOR USE IN PREPARING PRODUCT SPECIFICATIONS. CONTACT DOW CORNING BEFORE WRITING SPECIFICATIONS

DOW CORNING CORPORATION
MATERIAL SAFETY DATA SHEET

MATL NAME: TRADE NATE(TM) PLSTC, NTL, AND MSNRY SLNT, CLEAR

SECTION VII - REACTIVITY DATA

STABILITY: STABLE

INCOMPATABILITY(MATERIAL TO AVOID): OXIDIZING MATERIAL CAN CAUSE A REACTION.

CONDITIONS TO AVOID: EXPOSURE TO WATER, MOISTURE, OR AIR UNTIL READY TO APPLY--
PRODUCT CURES UPON EXPOSURE.

HAZARDOUS DECOMPOSITION PRODUCTS: NITROGEN OXIDES, SILICON DIOXIDE, CARBON
DIOXIDE, AND TRACES OF INCOMPLETELY BURNED CARBON PRODUCTS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: NOT APPLICABLE

COMMENTS: NONE

SECTION VIII - SPILL, LEAK, MAINTENANCE/REPAIR AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: REMOVE PRODUCT
AND CONTAIN FOR SALVAGE OR DISPOSAL.

PROTECTIVE EQUIPMENT:
EYES: USE PROPER PROTECTION -- SAFETY GLASSES, AS A MINIMUM.

SKIN: AVOID CONTACT BY USING IMPERVIOUS PROTECTIVE CLOTHING: RUBBER OR PLASTIC
GLOVES, APRONS, BOOTS, ETC. USE PROTECTIVE GLOVES AS A MINIMUM AND WASH
IMMEDIATELY UPON ANY DETECTABLE CONTACT.

INHALATION: USE RESPIRATORY PROTECTION UNLESS LOCAL EXHAUST VENTILATION IS
ADEQUATE OR AIR SAMPLING DATA SHOW EXPOSURES ARE WITHIN TLV AND PEL GUIDELINES.

WASTE DISPOSAL METHOD: DOW CORNING SUGGESTS THAT ALL LOCAL,STATE AND FEDERAL
REGULATIONS CONCERNING HEALTH AND POLLUTION BE REVIEWED TO DETERMINE APPROVED
DISPOSAL PROCEDURES. CONTACT DOW CORNING IF THERE ARE ANY DISPOSAL QUESTIONS.

D.O.T. (49CFR 171.8)/E.P.A. (40CFR 117) SPILL REPORTING INFORMATION
HAZARDOUS SUBSTANCE: NONE REPORTABLE QUANTITY: NOT APPLICABLE
CONCENTRATION OF HAZARDOUS SUBSTANCE: NOT APPLICABLE
REPORTABLE QUANTITY OF PRODUCT: NOT APPLICABLE

COMMENTS: PRODUCT CONTAINS NO INGREDIENT SUBJECT TO D.O.T OR E.P.A. CERCLA/SARA
ENVIRONMENTAL RELEASE REPORTING REGULATIONS. SEE SEC. XI FOR ADDITIONAL SARA
COMPLIANCE INFORMATION.

SECTION IX - ROUTINE HANDLING PRECAUTIONS

PROTECTIVE EQUIPMENT:
EYES: USE PROPER PROTECTION -- SAFETY GLASSES, AS A MINIMUM.

SKIN *: AVOID CONTACT BY USING IMPERVIOUS PROTECTIVE CLOTHING: RUBBER OR
PLASTIC GLOVES, APRONS, BOOTS, ETC. USE PROTECTIVE GLOVES AS A MINIMUM AND
WASH IMMEDIATELY UPON ANY DETECTABLE CONTACT.

INHALATION: USE RESPIRATORY PROTECTION UNLESS LOCAL EXHAUST VENTILATION IS
ADEQUATE OR AIR SAMPLING DATA SHOW EXPOSURES ARE WITHIN TLV AND PEL GUIDELINES.

VENTILATION:
LOCAL EXHAUST: RECOMMENDED
MECHANICAL (GENERAL): RECOMMENDED

SUITABLE RESPIRATOR: ORGANIC VAPOR TYPE.

THESE PRECAUTIONS ARE FOR ROOM TEMPERATURE HANDLING. USE AT ELEVATED
TEMPERATURES, OR AEROSOL/SPRAY APPLICATIONS, MAY REQUIRE ADDED PRECAUTIONS.
* GOOD PRACTICE REQUIRES THAT GROSS AMOUNT OF ANY CHEMICAL BE REMOVED
FROM THE SKIN AS SOON AS PRACTICAL, ESPECIALLY BEFORE EATING OR SMOKING.
COMMENTS: AVOID BREATHING VAPORS AND EYE AND SKIN CONTACT. USE ONLY WITH
ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY.

DOW CORNING CORPORATION
MATERIAL SAFETY DATA SHEET

MATL NAME: TRADE MATE(TM) PLSTC, MTL, AND MSNRY SLNT, CLEAR

SECTION X - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: STORE BELOW 90F/32C. KEEP CONTAINER CLOSED WHEN NOT IN USE.

OTHER PRECAUTIONS: WHEN EXPOSED TO WATER OR HUMID AIR, MATERIAL FORMS METHYL ETHYL KETOXIME (MEKO). PROVIDE VENTILATION DURING USE TO CONTROL EXPOSURE WITHIN 20 PPM (DOW CORNING EXPOSURE GUIDELINE) OR USE RESPIRATORY PROTECTION.
COMMENTS: PRODUCT EVOLVES METHYL ALCOHOL WHEN EXPOSED TO WATER OR HUMID AIR. PROVIDE VENTILATION DURING USE TO CONTROL EXPOSURES WITHIN SECTION II LIMITS OR USE RESPIRATORY PROTECTION.

SECTION XI - COMMENTS

ADDITIONAL SARA REGULATORY COMPLIANCE INFORMATION
SEC. 312 HAZARD CLASS: IMMEDIATE AND DELAYED.
SEC. 313 NOTIFICATION: NOT APPLICABLE - EITHER NONE PRESENT OR NONE PRESENT IN REGULATED QUANTITIES.

THESE DATA ARE OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.

PREPARED BY: JACK L. SHENEBERGER
LAST REVISION DATE: JANUARY 23, 1990
PREVIOUS REVISION DATE: NOV. 22, 1989 (WAS X3-0408)
DATE: JANUARY 31, 1991
(R) INDICATES REGISTERED OR TRADEMARK OF THE DOW CORNING CORPORATION.

MATERIAL SAFETY DATA SHEET

BOARD OF HEALTH

PRODUCT NAME	SCENTED ABSORB COMPOUND

HAZARD RATING
4 = EXTREME
3 = HIGH
2 = MODERATE
1 = SLIGHT
0 = INSIGNIFICANT

FIRE 1 · HEALTH 0 · REACTIVITY 0 · COMB · SPECIFIC HAZARD

MANUFACTURED BY:

SAVIN PRODUCTS COMPANY Inc.
214 HIGH ST.
RANDOLPH MA 02368

EMERGENCY PHONE: 617-961-2744

DATE: 12/1/88 SUPERSEDES: 3/5/84

WARNING STATEMENT	CAUTION: KEEP OUT OF THE REACH OF CHILDREN. MAY BE HARMFUL IF SWALLOWED. FOR INSTITUTIONAL USE ONLY. DO NOT STORE IN HOUSEHOLD AREA.
HAZARDOUS COMPONENTS	THE PHYSICAL STATE, NATURE AND CONCENTRATION OF DEODORIZING COMPONENTS ARE SUCH THAT THE MATERIAL IS BELEIVED NOT TO PRESENT A HAZARD AS DEFINED UNDER CURRENT OSHA, FHSLA, CPSC AND STATE RIGHT TO KNOW REGULATIONS. THE PRODUCT DOES PRESENT AN ATTRACTIVE ODOR AND TASTE ATTRACTION TO CHILDREN WHICH CONCEIVABLY COULD LEAD TO AN INGESTION ABUSE. CONTAINS: SALICYLIC ACID, METHYL ESTER (OIL OF WINTERGREEN) CAS#119-36-8
PHYSICAL DATA	BOILING POINT: SOLID N/A · DENSITY: Less Than 4 lbs/gal VAPOR PRESSURE: SOLID N/A · % VOLATILE: Approx. 5% wt/wt VAPOR DENSITY: SOLID N/A · EVAP. RATE: LOW WATER SOLUBILITY: INSOLUBLE · pH DATA: Essentially Neutral GENERAL APPEARANCE: Light Brown, Sawdust-like Solid. Pleasant Mint Odor
FIRE AND EXPLOSION HAZARDS	FLASH POINT: OVER 220°F Tag CC · FLAMMABLE LIMITS (% Vol. In Air) LEL none UEL EXTINGUISHING MEDIA: USE WATER SPRAY, DRY CHEMICAL, FOAM etc. USE WATER SPRAY TO KEEP CONTAINERS COOL. SPECIAL PROCEDURES & UNUSUAL HAZARDS: NONE KNOWN. NFPA/OSHA CLASS III-B COMBUSTIBLE. NFPA FIRE HAZARD RATING =1
HEALTH HAZARD DATA — Effects of Overexposure	EYES: MAY CAUSE TRANSIENT IRRITATION. SKIN: NONE WITH NORMAL USE. INHALATION: NONE WITH NORMAL USE. INGESTION: MAY CAUSE GASTRIC DISCOMFORT AND IRRITATION. CHRONIC DATA: CURRENT DATA INDICATES NO EVIDENCE OF CARCINOGENIC HAZARDS.
HEALTH HAZARD DATA — First Aid	EYES: FLUSH WITH RUNNING WATER. SEEK MEDICAL ADVICE IF IRRITATION PERSISTS. SKIN: WASH WITH SOAP AND WATER. INHALATION: REMOVE PATIENT TO FRESH AIR. INGESTION: GIVE SEVERAL GLASSES OF MILK OR WATER. INDUCE VOMITING AND GET MEDICAL ATTENTION. ACGIH/OSHA/NIOSH DATA: PRODUCT IS MIXTURE AND IS NOT REFERENCED SPECIFICALLY. OIL OF WINTERGREEN (METHYL SALICYLATE) IS NIOSH LISTED ORAL-CHILD TXDS 10ml. NOT ACGIH/OSHA LISTED. CONTAINS LESS THAN 5 mls/1 lb of Product.

'ABILITY: STABILE

POLYMER.HAZARD: NONE

ONDITIONS) AVOID: NONE KNOWN

ATERIALS) AVOID: STRONG OXIDIZING AGENTS. PRODUCT IS PRIMARILY ORGANIC.

NO PROBLEMS ANTICIPATED. SWEEP UP PRODUCT AND RETURN TO CONTAINER.

COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS

GENERALLY PERMITTED IN SANITARY LANDFILL APPROVED UNDER LOCAL ORDINANCES

GENERALLY CONSIDERED ACCEPTABLE FOR SANITARY DISPOSAL SYSTEMS AND SEWERS.

CONTROLLED INCINERATION IS PREFERRED FOR LARGE SPILL DISPOSAL.

'ES: NONE WITH NORMAL USE.

IN: NONE WITH NORMAL USE.

HALATION: NONE WITH NORMAL USE. USE ADEQUATE VENTILATION.

THER: NONE WITH NORMAL USE.

DO NOT STORE WITH STRONG OXIDIZING AGENTS. I.e. Chlorine Bleach.

DO NOT STORE WITH FLAMMABLE OR COMBUSTIBLE SOLVENTS Etc.

KEEP FROM THE REACH OF CHILDREN. ODOR AND TASTE MAY LEAD TO MISUSE. FOR SUPERVIZED INSTITUTION USE ONLY. NOT FOR USE AT HOME.

THIS PRODUCT IS BELEIVED TO PRESENT MINIMUM HAZARD WHEN PROPERLY STORED AND HANDLED.

THE PLEASANT WINTERGREEN ODOR & TASTE COULD LEAD TO INGESTION BY UNSUPERVIZED CHILDREN. INGESTION OF LARGE AMOUNTS ARE HARMFUL.

CONTACT YOUR TECHNICAL REPRESENTATIVE FOR FURTHER INFORMATION

JJS/NER

ethods of use are beyond our contol, we do not assume any responsibilities and expressly disclaim e of the material. Information contained herein is believed to be true and accurate but all statements de without any warranty, express or implied, regarding accuracy of the information, the hazards e of the material or the results to be obtained from the use thereof.

NFPA Rating* Health 1 Flammability 1 Reactivity 0 Special 0

HMIS Rating* Health 1 Flammability 1 Reactivity 0 Personal Protection B

Material Safety Data Sheet

This MSDS complies with OSHA's Hazard Communication Standard 29 CFR 1910. 1200 and OSHA FORM 174.

DOT HAZARD CLASSIFICATION:* DRM-D

Identity (Trade Name As Used On Label) HISLY PAINLESS STAINLESS

MSDS Number* 142- 6

CHEM TREC: 1-800-424-9300

Date Prepared 2/20/90

Prepared By* IMJ/STN

NOTICE:JUDGEMENT BASED ON INDIRECT TEST DATA

MANUFACTURER'S NAME: AMREP, INC.

ADDRESS: 990 Industrial Park Drive, Marietta, Georgia 30062

Phone Number (For Information): (404) 386-3083

Emergency Phone Number: (404) 386-3083

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS — Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	APPROX. % (wt)*	OSHA PEL (ppm)	ACGIH TLV (ppm)	CARCINOGEN REFERENCE SOURCE **
Isobutane	75-28-5	11	1000	1000	d
Mineral Oil	8042-47-5	25	5mg/M^3	5 mg/M^3	d

NOTICE: THIS PRODUCT MAY CONTAIN ONE OF THE LISTED SARA TITLE III SECTION 313 CHEMICALS.

67-64-1 Acetone
50-00-0 Formaldehyde
67-56-1 Methanol
75-44-2 o-Cresol
94-75-7 2,4-D
72-43-5 Methoxychlor
78-92-2 sec-Butyl alcohol
*Possible glycol ethers.
79-34-5 1,1,2,2-Tetrachloroethane
75-09-2 Methylene chloride
107-21-1 Ethylene glycol*
114-26-1 Propoxur
108-88-3 Toluene
127-18-4 Tetrachloroethylene
139-13-9 Nitrilotriacetic Acid
12542-67-7 Titanium Dioxide
7664-38-2 Phosphoric Acid
7761-88-8 Silver nitrate
7664-93-9 Sulfuric Acid
7440-66-6 Zinc (dust)
7647-01-0 Hydrochloric Acid
1330-20-7 Xylene(mixed isomers
76-13-1 Freon TF

BOARD OF HEALTH

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	NA	Specific Gravity (H_2O = 1) Concentrate Only =	0.960
Vapor Pressure PSIG @ 70°F (Aerosols)	Max: 60	Vapor Pressure (Non-Aerosols) (mm Hg and Temperature)	NA
Vapor Density (Air = 1)	NE	Evaporation Rate (= 1)	NE
Solubility in Water	Soluble	Water Reactive	No

Appearance and Odor: White foam with light lemon fragrance.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (AEROSOLS) NON-FLAMMABLE	Auto-Ignition Temperature NE	Flammability Limits in Air % by Volume	LEL NE	UEL NE

Flash Point and Method Used (Non-Aerosols): NA

Extinguisher Media: Foam, dry chemical, carbon dioxide, water.

Special Fire Fighting Procedures: Self contained breathing apparatus

Unusual Fire and Explosion Hazards: Do not expose aerosols to temperatures above 130° F or the container may rupture.

*Optional

** Chemical Listed as Carcinogen or Potential Carcinogen: [D] NTP [B] IARC Monograph [O] OSHA [Z] Not Listed [A] Animal Data Only

SECTION 4 - REACTIVITY HAZARD DATA

142-6

STABILITY
☒ Stable
☐ Unstable

Conditions To Avoid
Open flame, welding arcs, heat

Incompatibility (Materials to Avoid) Strong oxidants.

Hazardous Decomposition Products CO, CO_2.

HAZARDOUS POLYMERIZATION
☐ May occur
☒ Will Not Occur

Conditions To Avoid
None Known

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY ☒ Inhalation ☐ Ingestion ☐ Not Hazardous ☒ Skin Absorption ☐ Eye

ACUTE EFFECTS

Inhalation: Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.

Eye Contact Mild irritation.

Skin Contact May aggravate existing skin conditions.

Ingestion Possible chemical pneumonitis if aspirated into lungs. Nausea.

CHRONIC EFFECTS (Effects due to excessive exposure to the raw materials of this mixture) May cause headaches, dizziness and nausea.

Medical Conditions Generally Aggravated by Exposure May aggravate existing eye, skin, or upper respiratory conditions.

EMERGENCY FIRST AID PROCEDURES –

Eye Contact Flush with water for 15 minutes. If irritated, see physician.

Skin Contact Wash with soap and water. If irritated, see physician.

Inhalation Remove to fresh air. Resuscitate if necessary. Get medical aid.

Ingestion INDUCE VOMITING. CALL PHYSICIAN IMMEDIATELY.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type) If vapor conc. exceeds TLV, use respirator approved by NIOSH in positive pressure mode.

Protective Gloves Latex, if skin easily irritated.

Eye Protection Safety glasses recommended

VENTILATION REQUIREMENTS Adequate ventilation to keep vapor concentration below TLV.

Other Protective Clothing and Equipment None

Hygienic Work Practices Wash with soap and water before handling food. Remove contaminated clothing.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

Steps to be Taken If Material is Spilled Or Released Absorb with suitable medium. Incinerate or landfill according to local, state, or federal regulations. Do not flush to sewer.

Waste Disposal Methods Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.

Precautions to be Taken in Handling and Storage Do not puncture or incinerate containers. Do not store at temperatures above 130°F.

Other Precautions and / or Special Hazards Avoid food contamination. KEEP OUT OF REACH OF CHILDREN. Avoid breathing vapors.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied.

S.C. Johnson Wax
Racine, Wisconsin 53403-5011
Phone:(414) 631-2777
Emergency Phone:(414) 631-2000

HAZARD RATINGS
4=Very High
3=High
2=Moderate
1=Slight
0=Insignificant

	HMIS	NFPA
Health	2	
Flammability	0	
Reactivity	0	

MATERIAL SAFETY DATA SHEET

SECTION I-PRODUCT IDENTIFICATION

Product Name:			Product Code:
HORIZON 420 NO RINSE NEUTRAL CLEANER			7018W25-001
Chemical or Common Name:	**Date Issued:**	**Supersedes:**	**Prepared by:**
NA	06/29/90	05/05/89	Terry A. Meyers Chemical Info. Adm.

SECTION II-INGREDIENT INFORMATION

Ingredient	Weight %	Exposure Limit
Nonylphenol Polyethylene Glycol Ether (CAS #26027-38-3)	3-6	NOT ESTABLISHED
Water (CAS #7732-18-5)	94-97	NA

SECTION III-PHYSICAL DATA

APPEARANCE/ODOR: Dark blue liquid with floral odor	SPECIFIC GRAVITY (H2O=1): 1.01
VAPOR PRESSURE (mm Hg): Same as water	PERCENT VOLATILE BY VOLUME (%): NA
SOLUBILITY IN WATER: Complete	VAPOR DENSITY (AIR=1): Same as water
FREEZING POINT (°F): about 32	BOILING POINT (°F): above 200
pH: 7.7	EVAPORATION RATE (BUTYL ACETATE=1): NA

SECTION IV-FIRE AND EXPLOSION INFORMATION

FLASH POINT (°F) (METHOD USED): above 200

FLAMMABLE LIMITS: NA

EXTINGUISHING MEDIA: Foam. , CO2. , Dry Chemical. , Water Fog.

SPECIAL FIREFIGHTING PROCEDURES: Normal fire fighting procedures may be used.

UNUSUAL FIRE AND EXPLOSION HAZARDS: No special hazards known

RECEIVED
DEC 1 1995
BOARD OF HEALTH

SECTION V-HEALTH HAZARD DATA

PRIMARY ROUTE OF ENTRY: Skin contact

SIGNS AND SYMPTOMS: Direct contact of product with eyes can cause irritation. Prolonged or repeated contact of product with skin may cause irritation. Product may cause irritation and nausea if taken internally.

FIRST AID PROCEDURES: Flush eyes with water for 15 minutes. If irritation persists, seek medical aid. If product gets on skin, remove with soap and water. If product is swallowed, drink large amounts of water or milk and seek medical aid.

S.C. Johnson Wax
Racine, Wisconsin 53403-5011
Phone:(414) 631-2777
Emergency Phone:(414) 631-2000

HAZARD RATINGS

	HMIS	NFPA
4=Very High		
3=High		
2=Moderate	2 Health	
1=Slight	2 Flammability	
0=Insignificant	0 Reactivity	

MATERIAL SAFETY DATA SHEET

SECTION I-PRODUCT IDENTIFICATION

Product Name:			Product Code:
RUGBEE EXTRACTION PLUS			13840-001
Chemical or Common Name:	Date Issued:	Superceded:	Prepared by:
NA	06/29/90	10/06/89	Terry A. Meyers Chemical Info. Adm.

SECTION II-INGREDIENT INFORMATION

Ingredient	Weight %	Exposure Limit
Tetrapotassium Pyrophosphate (CAS #7320-34-5)	1-3	NE
(PA,NJ,MA) Glycol Ether (CAS #111-76-2)	2-5	25 ppm ACGIH TLV-TWA; 50 ppm OSHA PEL
D-Limonene (CAS #5989-27-5)	3-8	NE
Sodium Perborate (CAS #10486-00-7)	1-3	5 mg\m³ (Supplier Recommended)
Amine Aryl Sulfonate (CAS # NA)	3-8	NE
Alkyl Napthalene Sodium Sulfonate	1-3	NE
Water (CAS #7732-18-5)	70-90	NA
See Regulatory Information (Section XII) for explanation of bracketed information.		

TOWN OF THURSTON
RECEIVED
OCT 1 1995
BOARD OF HEALTH

SECTION III-PHYSICAL DATA

APPEARANCE/ODOR: Clear, light yellow, low viscosity liquid, with a sweet citrus odor	SPECIFIC GRAVITY (H2O=1): 1.0
VAPOR PRESSURE (mm Hg): ND	PERCENT VOLATILE BY VOLUME (%): 89.5
SOLUBILITY IN WATER: Complete	VAPOR DENSITY (AIR=1): ND
FREEZING POINT (°F): ND	BOILING POINT (°F): ND
pH: 9.0-10.0	EVAPORATION RATE (BUTYL ACETATE=1): ND

SECTION IV-FIRE AND EXPLOSION INFORMATION

FLASH POINT (°F) (METHOD USED): 118 (TCC); 143 (TOC)

FLAMMABLE LIMITS: ND

EXTINGUISHING MEDIA: Foam. , CO2. , Dry Chemical. , Water Fog.

JOHNSON WAX MATERIAL SAFETY DATA SHEET Page 2

S.C. Johnson Wax
1525 Howe Street
Racine, Wisconsin 53403

RUGBEE 420 NO RINSE NEUTRAL CLEANER
Product Number: 701N25
Serial Number: 1

SECTION V-REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY: Strong acids (e.g., muriatic acid).

HAZARDOUS DECOMPOSITION PRODUCTS: When exposed to fire, produces normal products of combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID: None known

SECTION VI-SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Wipe up with dry cloth or absorbent material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water.

Waste disposal method: In accordance with applicable Federal/State regulations and local ordinances regarding disposal of non-hazardous materials. Waste from normal product use may be covered by a public-owned treatment works (POTW) in compliance with applicable Federal, State, and local pretreatment requirements.

SECTION VII-SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: No special requirements under normal use conditions.

VENTILATION: General room ventilation adequate.

PROTECTIVE GLOVES: If prolonged or repeated contact is possible: Any impervious material.

EYE PROTECTION: Chemical splash-proof goggles

OTHER PROTECTIVE MEASURES: Use good personal hygiene practices. Waste product eyewash contact may be a problem, wear use appropriate protective equipment.

SECTION VIII-SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: CAUTION: Contains detergents. May be irritating to eyes. May be harmful if swallowed. If product gets in eyes, flush with water for 15 minutes. If irritation persists, go to a doctor or hospital emergency room.

OTHER PRECAUTIONS: Wash thoroughly after handling. Keep from freezing. Keep out of reach of children.

JOHNSON WAX MATERIAL SAFETY DATA SHEET Page 3

S.C. Johnson Wax
1525 Howe Street
Racine, Wisconsin 53403

RUGBEE 420 NO RINSE NEUTRAL CLEANER
Product Number: 701N25
Serial Number: 1

SECTION X-ADDITIONAL INFORMATION

ADDITIONAL INFORMATION: NA

SECTION XI-TRANSPORTATION INFORMATION

DOT CLASS:

DOT #:

SHIPPING NAME:

DOT NOTES:

SECTION XII-REGULATORY INFORMATION

Toxic Substances Control Act (TSCA) Inventory Status: All ingredients are listed on the TSCA Inventory.

California's Proposition 65: [illegible]

The information in this section is provided as a guide to applicable Federal Regulations, Rules and Laws. Any and all other applicable Federal, State, and Local laws and regulations. The information contained herein is based on data considered accurate to the best of our knowledge at the date of issue. No representation is made as to its accuracy or completeness and it should be used only as a guide.

TOWN OF BURLINGTON
RECEIVED
OCT 1 1991
05/08/91
BOARD OF HEALTH

MATERIAL SAFETY DATA SHEET
For Coatings, Resins and Related Materials

SECTION I - PRODUCT IDENTIFICATION

Manufactured for: Triple S
141 Middlesex Tpke
Burlington, MA 01803

Information Phone: 617-273-20
Emergency Phone 24HR: 800-228-56

Product Class: Waterbase Cleaner
Trade Name: NewAge Maintenance Cleaner
Product Code: 4P2309

Hazard Ratings:
Health -
Fire -
Reactivity -
Personal Protection -

SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS #	Weight %	Exposure Limits		Vapor Pr. mm Hg
2-PROPANOL	67-63-0	9.1	400.	ppm	37.
2-BUTOXYETHANOL	111-76-2	10.0	25.	ppm	.6

SECTION III - PHYSICAL DATA

Boiling Range: 175-343 F
Evap. Rate: Slower than n-Butyl Acetate
Volatiles volume: >99 %
Appearance: LIGHT BLUE LIQUID

Vapor Density: Heavier than Air.
Liquid Density: Lighter than Water.
Wgt per gallon: 8.15 Pounds.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: II Flash Point: 112 F TCC LEL : 2.

-EXTINGUISHING MEDIA:
CARBON DIOXIDE, DRY CHEMICAL, FOAM

-SPECIAL FIREFIGHTING PROCEDURES:
NONE

-UNUSUAL FIRE & EXPLOSION HAZARDS:
SELF-CONTAINED BREATHING APPARATUS MAY BE REQUIRED FOR FIREFIGHTERS.

SECTION V - HEALTH HAZARD DATA

-PERMISSIBLE EXPOSURE LEVEL:
SEE SECTION II

-EFFECTS OF OVEREXPOSURE:
MAY CAUSE SKIN AND EYE IRRITATION. BREATHING OF VAPORS MAY CAUSE HEADACHE OR DIZZINESS. MAY CAUSE DAMAGE TO EYE TISSUES.
MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: PREXISTING EYE, SKIN, AND LUNG DISORDERS.
PRIMARY ROUTES OF ENTRY: EYES, SKIN, INHALATION.

-FIRST AID:
INHALATION: IF OVERCOME BY VAPORS, REMOVE TO FRESH AIR, TREAT SYMPTOMATICALLY AND CALL A PHYSICIAN. EYES: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION. SKIN: WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

S.C. Johnson Wax
1525 Howe Street
Racine, Wisconsin 53403

NUMBER EXTRACTION PLUS
Product Number: 13640
Serial Number: 1

SECTION VI-SPECIAL PROTECTION INFORMATION (cont)

PROTECTIVE GLOVES: No special requirements under normal use conditions. If prolonged or repeated contact is possible: Any impervious material.

EYE PROTECTION: Eye protection not required unless contact with undiluted product is possible.

OTHER PROTECTIVE EQUIPMENT: Use good personal hygiene practices.

SECTION VII-SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a cool, dry place with adequate ventilation. Wash thoroughly after handling. Keep from freezing. Keep out of reach of children.

SECTION X-ADDITIONAL INFORMATION

ADDITIONAL INFORMATION: NA

SECTION XI-REGULATORY INFORMATION

SARA 313:

RCRA:

TSCA INVENTORY:

TSCA NOTES:

SPECIAL SYS NO TRACKING: Subject to the reporting requirements under California's Proposition 65.

PA - These ingredients are subject to the reporting requirements under the Pennsylvania Hazardous Substance List.

NJ - These ingredients are subject to the reporting requirements under the New Jersey Right to Know Hazardous Substance List.

MA - These ingredients are subject to the reporting requirements under the Massachusetts Hazardous Substance List.

S.C. Johnson Wax
1525 Howe Street
Racine, Wisconsin 53403

NUMBER EXTRACTION PLUS
Product Number: 13640
Serial Number: 1

SECTION IV-FIRE AND EXPLOSION INFORMATION (cont)

SPECIAL FIREFIGHTING PROCEDURES: Normal fire fighting procedures may be used.

UNUSUAL FIRE AND EXPLOSION HAZARDS: No special hazards known.

SECTION V-HEALTH HAZARD DATA

PRIMARY ROUTE OF ENTRY: SKIN CONTACT

EMERGENCY AND FIRST AID PROCEDURES: Direct contact of product with eyes can cause irritation. Direct contact of product with skin can cause irritation.

FIRST AID PROCEDURES: Flush eyes with water for 15 minutes. If irritation persists, seek medical aid. Wash skin with plenty of water. If irritation persists, seek medical aid. If product is swallowed, drink large amounts of water or milk, induce vomiting and seek medical aid.

SECTION VI-REACTIVITY DATA

STABILITY: Stable

HAZARDOUS POLYMERIZATION: None known

INCOMPATIBILITY: None known

HAZARDOUS DECOMPOSITION PRODUCTS: When exposed to fire, produces normal products of combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known

SECTION VII-SPECIAL PRECAUTIONS

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb with dry-soft or similar inert material. Sweep or scoop up, and containerize.

WASTE DISPOSAL METHOD: No special method. Observe all applicable Federal, State regulations and local ordinances regarding disposal of hazardous materials. Waste from normal product use may be poured to a public sewer system. Work from in compliance with applicable Federal, State, and local pretreatment requirements.

SECTION VIII-SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: No special requirements under normal use conditions.

VENTILATION: General room ventilation is normally adequate. Substantial amounts of mist/vapors can be controlled with local exhaust ventilation or respiratory protection.

Product Code: 4P2309 Trade Name: NEW AGE MAINTENANCE CLEANER

SECTION VI - REACTIVITY DATA (cont.)

STABLITY: [ ] Unstable [x] Stable
HAZARDOUS POLYMERIZATION: [ ] May occur [x] Will not occur
-INCOMPATIBILITY
ACIDS AND ALKALIES.
-CONDITIONS TO AVOID:
NONE
-HAZARDOUS DECOMPOSITION PRODUCTS:
THERMAL DECOMPOSITION MAY PRODUCE CO & CARBON DIOXIDE.

SECTION VII - SPILL OR LEAK PROCEEDURES

-STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
ELIMINATE ALL SOURCES OF IGNITION. CONTAIN SPILL AND COLLECT FOR DISPOSAL.
-WASTE DISPOSAL METHOD:
DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION INFORMATION:

-RESPIRATORY PROTECTION:
USUALLY NOT NEEDED. IF HIGH CONCENTRATION OF VAPOR IS ENCOUNTERED, USE ALL PURPOSE CANISTER MASK.
-VENTILATION:
GENERAL (MECHANICAL)
-PROTECTIVE GLOVES:
RUBBER
-EYE PROTECTION:
GOGGLES
-OTHER PROTECTIVE EQUIPMENT:
EYE WASH

SECTION IX - SPECIAL PRECAUTIONS

-PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
STORE IN A COOL, DRY PLACE AWAY FROM SOURCES OF IGNITION. KEEP CONTAINERS CLOSED AND UPRIGHT.
-OTHER PRECAUTIONS:
FOR INDUSTRY USE ONLY.

DOT CATEGORY: COMBUSTIBLE LIQUID

CONTAINS: WATER, 2-PROPANOL*, 2-BUTOXYETHANOL*. OTHER INGREDIENTS UNKNOWN OR PARTIALLY UNKNOWN.

* INDICATES COMPONENTS WHICH MAY BE REPORTABLE UNDER SARA TITLE III, SECTION 313.

NOTICE: THIS PRODUCT MAY CONTAIN TRACE AMOUNTS OF ETHYLENE OXIDE, A SUBSTANCE KNOWN TO THE STATE OF CALIFORNIA AS A CANCER HAZARD AND REPRODUCTIVE TOXICANT.

Material Safety Data Sheet

The information and data contained herein are believed to be correct. However, Viking Mfg. Co. does not warrant either expressly or by implication the accuracy thereof.

Date last revised 6/1/90

Prepared by Walter Zwible

I. General Information

Chemical Name & Synonyms: METHYL ALCOHOL, METHANOL, WOOD ALCOHOL	Trade Name & Synonyms: DUPLICATING FLUID
Chemical Family: ALCOHOL	Formula: CH_3OH
Proper DOT Shipping Name: METHYL ALCOHOL UN 1230	DOT Hazard Classification: FLAMMABLE LIQUID
Manufacturer: VIKING MFG. CO.	Manufacturer's Phone Number: (508)653-0940
Manufacturer's Address: 68 MIDDLESEX AVE., NATICK, MA. 01760	Chemtrec Phone Number: 1-800-424-9300

II. Ingredients

Principal Hazardous Components	Percent	Threshold Limit Value (units)
METHYL ALCOHOL CAS No. 67-56-1	99+%	200 ppm
ETHYLENE GLYCOL MONOBUTYL ETHER CAS No. 111-76-2	<1%	50 ppm

TOWN OF BURLINGTON RECEIVED
BOARD OF HEALTH

III. Physical Data

Boiling Point (°F): 148°F	Specific Gravity (H₂O = 1): 0.791
Vapor Pressure (mm Hg.): 96 @ 20°C	Percent Volatile By Volume (%): 100%
Vapor Density (Air = 1): 1.11	Evaporation Rate (butyl acetate=1): <1
Solubility in Water: complete	pH: 8
Appearance & Odor: Clear liquid, slight alcohol odor.	

IV. Fire & Explosion Hazard Data

Flash Point (Test Method): Tag closed cup 52°F	Auto Ignition Temperature: 725°F	
Flammable Limits	LEL: 6%	UEL: 36.5%

Extinguishing Media
Water Spray, Alcohol Foam, CO_2, Dry Chemical, Any Class B Extinguishing Agent

Special Fire Fighting Procedures
Full protective clothing & self contained breathing apparatus should be worn when exposed to vapors or products of combustion.

Unusual Fire & Explosion Hazards
N/A

NOTICE:JUDGEMENT BASED ON INDIRECT TEST DATA

NFPA Rating* Health 2 Flammability 1 Reactivity 0 Special 0

HMIS Rating* Health 2 Flammability 1 Reactivity 0 Personal Protection 0

Material Safety Data Sheet

This MSDS complies with OSHA's Hazard Communication Standard 29 CFR 1910.1200 and OSHA FORM 174.

DOT HAZARD CLASSIFICATION:* ORM-D

Identity (Trade Name As Used On Label) MISTY ACCUR-SPRAY II WASP & HORNET KILLER

MSDS Number* 434- 2 7

MANUFACTURER'S NAME AHROP, INC.

ADDRESS 990 Industrial Park Drive

Marietta, Georgia 30062

Phone Number (For Information) (404) 386-3083

Emergency Phone Number (404) 386-3083

EMERGENCY RESPONSE NUMBER: 800-255-3924

Date Prepared 2/20/90

Prepared By* TRJ/STN

NOTICE:JUDGEMENT BASED ON INDIRECT TEST DATA

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS — Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	APPROX. % (wt)*	OSHA PEL (ppm)	ACGIH TLV (ppm)	CARCINOGEN REFERENCE SOURCE **
Methyl chloroform	71-55-6	84.75	350	350	d
Insecticide concentrate including:					
Resmethrin	10453-86-8	0.25	NE	NE	d
Carbon dioxide	124-38-9	4	5000	5000	d
Petroleum distillate	8052-41-3	11	500	100	d

*(SELECT) THIS PRODUCT MAY CONTAIN ONE OF THE CERCLA SARA TITLE III SECTION 313 CHEMICALS.

67-64-1 Acetone	71-55-6 1,1,1-Trichloroethane	1314-62-1 Vanadium Pentoxide
50-00-0 Formaldehyde	75-09-2 Methylene chloride	7664-38-2 Phosphoric Acid
67-56-1 Methanol	107-21-1 Ethylene glycol*	7761-88-8 Silver nitrate
95-48-7 o-Cresol	108-38-3 Propanol	7664-93-9 Sulfuric Acid
94-75-7 2,4-D	108-88-3 Toluene	7440-66-6 Zinc (dust)
52-68-6 Trichlorfon	127-18-4 Tetrachloroethylene	7647-01-0 Hydrochloric Acid
26-92-2 n-Butyl alcohol	137-05-9 Methylmethacrylate Acid	1330-20-7 Xylene/mixed isomers
*Ethylene glycol ethers.		76-13-1 Freon TF

TOWN OF BURLINGTON RECEIVED

BOARD OF HEALTH

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	NA	Specific Gravity (H_2O = 1). Concentrate Only =	1.190
Vapor Pressure* PSIG @ 70°F (Aerosols)	85 - 100	Vapor Pressure (Non-Aerosols) (mm Hg and Temperature)	NA
Vapor Density (Air = 1)	NE	Evaporation Rate (= 1) =	NE
Solubility In Water	Insoluble	Water Reactive	No

Appearance and Odor Clear yellow liquid, chlorinated solvent odor.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (AEROSOLS)	Auto-Ignition Temperature	Flammability Limits in Air % by Volume	LEL	UEL
NON-FLAMMABLE	NE		NE	NE

Flash Point and Method Used (Non-Aerosols) NA

Extinguisher Media Foam, dry chemical, carbon dioxide

Special Fire Fighting Procedures Self contained breathing apparatus

Unusual Fire and Explosion Hazards Do not expose aerosols to temperatures above 130° F or the container may rupture.

SECTION 4 - REACTIVITY HAZARD DATA

434-2

STABILITY ☑ Stable ☐ Unstable — **Conditions To Avoid:** Open flame, welding arcs, heat

Incompatibility (Materials to Avoid): Strong oxidizing agents, reactive metals such as aluminum and magnesium.

Hazardous Decomposition Products: CO_2, CO, HCl, small amounts of phosgene and chlorine.

HAZARDOUS POLYMERIZATION ☐ May occur ☑ Will Not Occur — **Conditions To Avoid:** None Known

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: ☑ Inhalation ☐ Ingestion ☐ Not Hazardous ☐ Skin Absorption ☐ Eye

ACUTE EFFECTS

Inhalation: Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.

Eye Contact: Possible mild irritation.

Skin Contact: Possible irritation due to defatting of skin.

Ingestion: Possible chemical pneumonitis if aspirated into lungs. Nausea.

CHRONIC EFFECTS (Effects due to excessive exposure to the raw materials of this mixture) May cause cardiac abnormality, liver abnormalities, kidney and/or lung damage.

Medical Conditions Generally Aggravated by Exposure: May aggravate existing eye, skin, or upper respiratory conditions.

EMERGENCY FIRST AID PROCEDURES –

Eye Contact: Flush with water for 15 minutes. If irritated, see physician.

Skin Contact: Wash with soap and water. If irritated, see physician.

Inhalation: Remove to fresh air. Resuscitate if necessary. Get medical aid.

Ingestion: DO NOT INDUCE VOMITING. CALL PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type): If vapor conc. exceeds TLV, use respirator approved by U.S. Bureau of Mines for organic vapor.

Protective Gloves: Neoprene gloves recommended

Eye Protection: Safety glasses recommended

VENTILATION REQUIREMENTS: Adequate ventilation to keep vapor concentration below TLV.

Other Protective Clothing and Equipment: None

Hygienic Work Practices: Wash with soap and water before handling food. Remove contaminated clothing.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

Steps to be Taken If Material is Spilled Or Released: Absorb with suitable medium. Incinerate or landfill according to local, state, or federal regulations. Do not flush to sewer.

Waste Disposal Methods: Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.

Precautions to be Taken in Handling and Storage: Do not puncture or incinerate containers. Do not store at temperatures above 130°F.

Other Precautions and / or Special Hazards: Avoid food contamination. KEEP OUT OF REACH OF CHILDREN. Avoid plastics. Avoid breathing vapors.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied.

Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List): KITCHEN KLENZER DISINFECTANT

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name: FITZPATRICK BROS., INC.	Emergency Telephone Number: (312) 777-3300
Address (Number, Street, City, State, and ZIP Code): 625 N. SACRAMENTO BLVD. CHGO, IL. 60612	Telephone Number for Information: (312) 777-3300
	Date Prepared: 5-3-86
	Signature of Preparer (optional):

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
NONE				

NO HAZARDOUS INGREDIENTS REGULATED BY THE MASSACHUSETTS RIGHT TO KNOW LAW.

TOWN OF BRIDGEWATER RECEIVED BOARD OF HEALTH

Section III — Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H_2O = 1)	N/A
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water: PARTIALY SOLUBLE

Appearance and Odor: GREEN POWDER, ODOR.

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
N/A	N/A	N/A	N/A

Extinguishing Media: NO FIRE OR EXPLOSIVE HAZARD

Special Fire Fighting Procedures: NONE

Unusual Fire and Explosion Hazards: N/A

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		AVOID CONTACT WITH ACIDS
	Stable	X	

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	N/A

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

Health Hazards (Acute and Chronic)

SCOURING POWDER MAY BE HARMFUL IF SWALLOWED AND IS INJURIOUS TO THE EYES.

SCOURING POWDER IS NOT IRRITATING TO THE SKIN.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure

NONE

Medical Conditions Generally Aggravated by Exposure

NONE

Emergency and First Aid Procedures

IN CASE OF EYE CONTACT, IMMEDIATELY REMOVE CONTACT LENSES AND FLUSH THOROUGHLY WITH WATER. IF IRRITATION PERSITS, SEE A PHYSICIAN. IN CASE OF INGESTION, DRINK A LARGE QUANTITY OF WATER OR MILK, CALL A DOCTOR.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

NORMAL CLEAN UP PROCEDURES

Waste Disposal Method

CONFORM TO STATE AND LOCAL REGULATIONS

Precautions to Be Taken in Handling and Storing

DRY STORAGE AREA

Other Precautions

KEEP OUT OF REACH OF CHILDREN.

Section VIII — Control Measures

Respiratory Protection (Specify Type)

IF DUSTY, WEAR MASK

Ventilation			
	Local Exhaust	NATURAL	Special
	Mechanical (General)		Other

Protective Gloves: OPTIONAL

Eye Protection: WEAR GOGGLES, IF NEEDED

Other Protective Clothing or Equipment

Work/Hygienic Practices

BOARD OF HEALTH RECEIVED
BOARD OF HEALTH

Material Safety Data Sheet

SECTION I - IDENTITY

#118 ELIMINATOR

Hazardous - YES

Health	2
Flammability	0
Reactivity	0
Personal Protection	B

4 = Most Hazardous

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Telephone Number for Information
508/667-5161
Date Prepared
01/15/91
Prepared By A. Vadasz

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components	CAS Reg#	PEL ppm	TWA ppm	STEL ppm	Other Limits	% (opt)
2-BUTOXYETHANOL	# 111-76-2	50	25			< 30
ETHANOLAMINE	# 141-43-5	3	3	6		< 20

*LISTED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SCT.131 OF TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point - 215F
Vapor Pressure (mm Hg) - 16.0
Vapor Density (air=1) - 1.2
Viscosity (CPS) - 12.5
Auto Ignition Temp. - NA.
pH - 11-13+/-
Specific Gravity (Water=1) - 1.08
Melting Point - N.A.
Evaporation Rate (Butyl Acetate=1) - 0.25
Decomposition Temperature - NA.
Solubility in Water -COMPLETE
Appearance and Odor - THIN, YELLOW LIQUID, DETERGENT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - ABOVE 200 F TCC

Flammable Limits
LEL - N.A. UEL - N.A.

Extinguishing media -WATER SPRAY

Fire Fighting Procedure - COOL CONTAINERS WITH WATER

Fire and Explosion Hazards - CLOSED CONTAINERS MAY BURST WHEN EXPOSED TO EXTREME HEAT. ISOLATE FROM HEAT, SPARKS AND OPEN FLAME.

SECTION V - REACTIVITY DATA

Stability -STABLE
Conditions to Avoid N.A.

Incompatibility - ACIDS, STRONG OXIDIZERS
Hazardous Decomposition or Byproduct - THERMAL DECOMPOSITION MAY YIELD CARBON MONOXIDE

Hazardous Polymerization - WILL NOT OCCUR
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - YES Skin - YES Ingestion - YES

Health Hazards-Acute: CAUSES CHEMICAL BURNS TO EYES, SKIN AND MUCOUS MEMBRANES. CHRONIC: REDNESS OF SKIN, DERMATITIS, HEMOGLOBINURIA
TARGET ORGANS: LIVER, KIDNEYS, SKIN, EYES

Carcinogenicity: NO
NTP - N.A. IARC Monographs - N.A. OSHA Regulated - NO

Signs and Symptoms of Exposure - ITCHING, BURNING SENSATION, REDNESS OF SKIN, BURNING OF EYES

Medical Conditions Aggravated - SENSITIZED SKIN, RENAL DEFICIENCY

Emergency and First Aid Procedures -WASH CONTACT AREAS WITH PLENTY OF WATER: 15 MINUTES. INGESTION: GIVE MILK, WATER OR CITRUS JUICE, INDUCE VOMITING WITH OIL OF IPECAC. MOVE SUBJECT TO FRESH AIR. CALL PHYSICIAN IMMEDIATELY

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO PLASTIC CONTAINER. WATER RINSE AND DRAIN, FLUSH SMALL AMOUNTS. (BIODEGRADABLE)

Waste Disposal Method - USE SANITARY LANDFILL DISPOSAL. (NOT A HAZARDOUS WASTE) FOLLOW STATE AND LOCAL REGULATIONS (RCRA; SUBTITLE D)

Precautions to be Taken in Handling and Storage -
DO NOT MIX WITH OTHER CHEMICALS.
AVOID PROLONGED CONTACT. KEEP FROM FREEZING AND EXCESSIVE HEAT.

Other Precautions - STORE IN SECURE AREA. AVOID FOOD OR FEED CONTAMINATION. AVOID PROLONGED INHALATION OF VAPORS. KEEP OUT OF REACH OF CHILDREN !

SECTION VIII - CONTROL MEASURES

Respiratory Protection - NOT REQUIRED WITH NORMAL USE IN WELL VENTILATED AREA

Ventilation
- Local Exhaust -RECOMMENDED
- Mechanical -REQUIRED: EXCHANGE EVERY 10-15 MINUTES
- Special -N.A.
- Other -ASSURE FRESH AIR CIRCULATION.

Protective Gloves - REQUIRED: RUBBER, PLASTIC
Eye Protection - REQUIRED: SAFETY GLASSES, GOGGLES
Other Protection - RECOMMENDED: RUBBER OR PLASTIC APRON, SHOWER, EYE WASH FACILITY
Work/Hygienic Practices - DO NOT EAT, DRINK NEXT TO MATERIAL. WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,5,1 GAL. PLASTIC CONT Report Qty. (lbs) - NA.
OSHA - NOT REGULATED Labels - UN-CORROSIVE
DOT - NOT REGULATED
UN - HAZARDOUS /X/ CORROSIVE LIQUID-PACKAGING GROUP III

DOT-NOT REGULATED
UN- HAZARDOUS /X/ CORROSIVE LIQUID N.O.S. (ETHANOLAMINE) 8 UN1760

Vendor assumes no responsiblity for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee, or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

BOARD OF HEALTH
RECEIVED
BOARD OF HEALTH

Material Safety Data Sheet

SECTION I - IDENTITY

#112 POUR & CLING
Hazardous - YES

Health	2
Flammability	0
Reactivity	1
Personal Protection	C

4 = Most Hazardous

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Telephone Number for Information
508/667-5161
Date Prepared
01/15/91
Prepared By T. Pitrolffy

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components	CAS Reg#	PEL mg/m3	TWA mg/m3	STEL mg/m3	Other Limits	% (opt)
*PHOSPHORIC ACID	#7664-38-2	1	1	3		< 15

*LISTED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SCT.313 OF TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 212F	Specific Gravity(Water=1)	- 1.09
Vapor Pressure (mm Hg)	- 17	Melting Point	- N.A.
Vapor Density (air=1)	- 1	Evaporation Rate(Butyl Acetate=1)	- 0.33
Viscosity (CPS)	- 250	Decomposition Temperature	- NA.
Auto Ignition Temp.	- NA.	Solubility in Water	-COMPLETE

pH - 2.5 +/-.5
Appearance and Odor - PINK LIQUID WITH FRAGRANCE

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - N.A. Flammable Limits
LEL - N.A. UEL - N.A.

Extinguishing media -WATER

Fire Fighting Procedure - COOL CONTAINERS WITH WATER

Fire and Explosion Hazards - NON FLAMMABLE, BUT MAY REACT WITH MOST METALS ON LONG CONTACT, WITH THE POSSIBLE EVOLUTION OF HYDROGEN

SECTION V - REACTIVITY DATA

Stability -STABLE
Conditions to Avoid N.A.

Incompatibility - ALKALINE, MILD STEEL ALUMINIUM
Hazardous Decomposition or Byproduct -

Hazardous Polymerization - WILL NOT OCCUR
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - YES Skin - YES Ingestion - YES

Health Hazards-Acute: CAUSES SEVERE CHEMICAL BURNS TO EYES, SKIN AND MUCOUS MEMBRANES. CHRONIC: CHEMICAL BURNS AND/OR ULCERATION OF SKIN, MAY PERMANENTLY DAMAGE EYES. TARGET ORGANS: EYES, RESP. SYS., UPPER GI. TRACT, SKIN

Carcinogenicity: NO
NTP - N.A. IARC Monographs - N.A. OSHA Regulated - NO

Signs and Symptoms of Exposure - REDNESS, IRRITATION OF EYES, SKIN OR MUCOUS MEMBRANES

Medical Conditions Aggravated - SENSITIZED SKIN

Emergency and First Aid Procedures -IMMEDIATELY WASH CONTACT AREAS (EYES) WITH LARGE QUANTITIES OF WATER FOR 15 MINUTES.
INGESTION: DRINK LARGE AMOUNTS OF WATER OR MILK, CALL PHYSICIAN.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO PLASTIC CONTAINER. WATER RINSE AND DRAIN, FLUSH SMALL AMOUNTS.NEUTRALIZE WITH SODA, ASH OR LIME. (BIODEGRADABLE)

Waste Disposal Method - DISPOSE OF ACCORDING TO LOCAL, STATE AND FEDERAL HAZARDOUS WASTE REGULATIONS; USE SANITARY LANDFILL.
EPA WASTE NO. D002

Precautions to be Taken in Handling and Storage -
USE ADEQUATE VENTILATION. DO NOT MIX WITH OTHER CHEMICALS. AVOID PROLONGED CONTACT. KEEP FROM FREEZING AND EXCESSIVE HEAT

Other Precautions - STORE IN SECURE AREA. AVOID FOOD OR FEED CONTAMINATION. RINSE EMPTY CONTAINERS BEFORE DISPOSAL. KEEP OUT OF REACH OF CHILDREN !

SECTION VIII - CONTROL MEASURES

Respiratory Protection - USE IN WELL VENTILATED AREA, FOLLOW DIRECTIONS, AVOID INHALING MIST.

Ventilation
- Local Exhaust -RECOMMENDED
- Mechanical -N.A.
- Special -N.A.
- Other -ASSURE FRESH AIR CIRCULATION.

Protective Gloves - REQUIRED; RUBBER, PLASTIC
Eye Protection - REQUIRED; SAFETY GLASSES, GOGGLES
Other Protection - RECOMMENDED; RUBBER OR PLASTIC APRON, EYE WASH

Work/Hygienic Practices - DO NOT EAT, DRINK OR SMOKE NEXT TO MATERIAL. WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,1 GAL.,1 QT. PLASTIC Report Qty. (Lbs) - NA.
OSHA - IRRITANT Labels - CORROSIVE
DOT - HAZARDOUS /X/ CORROSIVE MATERIAL
UN - HAZARDOUS /X/ CORROSIVE LIQUID, PACKAGING GROUP III

DOT:HAZARDOUS /X/ COMPOUND, CLEANING, LIQUID, CORROSIVE MATERIAL, NA 1760
UN: HAZARDOUS /X/ CORROSIVE LIQUID, N.O.S. (PHOSPHORIC ACID) 8 UN1760

Vendor assumes no responsiblity for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

NFPA Rating* Health 2 Flammability 2 Reactivity 0 Special 0

NMIS Rating* Health 2 Flammability 2 Reactivity 0 Personal Protection* B

Material Safety Data Sheet

This MSDS complies with OSHA's Hazard Communication Standard 29 CFR 1910. 1200 and OSHA FORM 174.

DOT HAZARD CLASSIFICATION*: ORM-D

Identity (Trade Name As Used On Label): MISTY FURNITURE POLISH

MSDS Number*: 135- 0

CHEM TREC: 1-800-424-9300

Date Prepared: 2/20/90

Prepared By*: IMJ/SYN

NOTICE:JUDGEMENT BASED ON INDIRECT TEST DATA

MANUFACTURER'S NAME: AMREP, INC.
ADDRESS: 990 Industrial Park Drive
Marietta, Georgia 30062
Phone Number (For Information): (404) 386-3083
Emergency Phone Number: (404) 306-3083

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS -- Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	APPROX. % (wt)*	OSHA PEL (ppm)	ACGIH TLV (ppm)	CARCINOGEN REFERENCE SOURCE **
Petroleum distillates	68551-15-5	22	NE	NE	d
Isobutane	75-28-5	12	1000	1000	d
NOTICE: THIS PRODUCT MAY CONTAIN ONE OF THE LISTED SARA TITLE III SECTION 313 CHEMICALS.					

67-64-1 Acetone; 71-55-6 1,1,1-Trichloroethane; 12065-67-7 Titanium Dioxide; 50-00-0 Formaldehyde; 75-09-2 Methylene chloride; 7664-38-2 Phosphoric Acid; 67-56-1 Methanol; 107-21-1 Ethylene glycol*; 7761-88-8 Silver Nitrate; 95-48-7 o-Cresol; 115-07-1 Propylene; 7664-93-9 Sulfuric Acid; 108-95-2 Phenol; 108-88-3 Toluene; 7440-66-6 Zinc (Dust); 71-43-2 Benzene; 127-18-4 Tetrachloroethylene; 7647-01-0 Hydrochloric Acid; 78-93-3 sec-Butyl alcohol; 139-13-9 Nitrilotriacetic Acid; 1330-20-7 Xylene, mixed isomers; 76-11-1 Freon 11*; *Possible glycol ethers.

BOARD OF HEALTH

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	NA	Specific Gravity (H_2O = 1) Concentrate Only =	0.905
Vapor Pressure PSIG @ 70° F (Aerosols)	Max. 60	Vapor Pressure (Non-Aerosols) (mm Hg and Temperature)	NA
Vapor Density (Air = 1)	NE	Evaporation Rate (_____ = 1)	NE
Solubility In Water	Partial	Water Reactive	No

Appearance and Odor: Cream color, lemon fragrance.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (AEROSOLS) COMBUSTIBLE	Auto-Ignition Temperature NE	Flammability Limits in Air % by Volume	LEL NE	UEL NE

Flash Point and Method Used (Non-Aerosols): NA

Extinguisher Media: Foam, dry chemical, carbon dioxide, water fog.

Special Fire Fighting Procedures: Self contained breathing apparatus

Unusual Fire and Explosion Hazards: Do not expose aerosols to temperatures above 130° F or the container may rupture.

*Optional

** Chemicals Listed as Carcinogen or Possible Carcinogen: [1] NTP [2] IARC Monographs [3] OSHA [4] Not Listed [d] Animal Data Only

SECTION 4 - REACTIVITY HAZARD DATA

135- 0

STABILITY
[X] Stable
[ ] Unstable

Conditions To Avoid: Open flame, welding arcs, heat, sparks

Incompatibility (Materials to Avoid): Strong oxidizers.

Hazardous Decomposition Products: CO, CO_2

HAZARDOUS POLYMERIZATION
[ ] May occur
[X] Will Not Occur

Conditions To Avoid: None Known

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: [X] Inhalation [X] Skin Absorption [ ] Ingestion [ ] Eye [ ] Not Hazardous

ACUTE EFFECTS

Inhalation: Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.

Eye Contact: Slight irritation.

Skin Contact: Slight irritation.

Ingestion: Possible chemical pneumonitis if aspirated into lungs. Nausea.

CHRONIC EFFECTS (Effects due to excessive exposure to the raw materials of this mixture): Petroleum distillate has caused kidney injury in laboratory animals. Stomach and intestine irritant.

Medical Conditions Generally Aggravated by Exposure: May aggravate existing eye, skin, or upper respiratory conditions.

EMERGENCY FIRST AID PROCEDURES –

Eye Contact: Flush with water for 15 minutes. If irritated, see physician.

Skin Contact: Wash with soap and water. If irritated, see physician.

Inhalation: Remove to fresh air. Resuscitate if necessary. Get medical aid.

Ingestion: DO NOT INDUCE VOMITING. CALL PHYSICIAN IMMEDIATELY.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type): If vapor conc. exceeds TLV, use respirator approved by U.S. Bureau of Mines for organic vapor.

Protective Gloves: Latex, if skin easily irritated.

Eye Protection: Safety glasses recommended

VENTILATION REQUIREMENTS: Adequate ventilation to keep vapor concentration below TLV.

Other Protective Clothing and Equipment: None

Hygienic Work Practices: Wash with soap and water before handling food. Remove contaminated clothing.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

Steps to be Taken If Material is Spilled Or Released: Absorb with suitable media. Incinerate or landfill according to local, state, or federal regulations. Do not flush to sewer.

Waste Disposal Methods: Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.

Precautions to be Taken in Handling and Storage: Do not puncture or incinerate containers. Do not store at temperatures above 130°F.

Other Precautions and / or Special Hazards: Avoid food contamination. KEEP OUT OF REACH OF CHILDREN. Remove ignition sources. Avoid breathing vapors.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied.

NFPA Rating* Health 2 Flammability 3 Reactivity 0 Special 0

HMIS Rating* Health 2 Flammability 3 Reactivity 0 Personal Protection B

Material Safety Data Sheet

This MSDS complies with OSHA's Hazard Communication Standard 29 CFR 1910.1200 and OSHA FORM 174.

MANUFACTURER'S NAME: AMREP, INC.

ADDRESS: 990 Industrial Park Drive, Marietta, Georgia 30062

Phone Number (For Information): (404) 386-3083

Emergency Phone Number: (404) 386-3083

DOT HAZARD CLASSIFICATION: ORM-D

Identity (Trade Name As Used On Label): MIGHTY ANTI-CRAWL RESIDUAL INSECTICIDE

MSDS Number: 425- 0

CHEM TREC: 1-800-424-9300

Date Prepared: 8/15/89

Prepared By: THJ/SIN

NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS – Chemical Name & Common Name (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	APPROX. % (wt)*	OSHA PEL (ppm)	ACGIH TLV (ppm)	CARCINOGEN ANTICIPATED SOURCE**
Petroleum distillates	8052-41-3	31.5	500	100	d
Isobutane/Propane blend	74-98-2	23.634	1000	1000	d
Propane	114- 26-1	0.5	NE	NE	d
n-Octyl bicycloheptene dicarboximide	113-48-4	0.268	NE	NE	d
Pyrethrin	8003-34-3	0.1	5mg/m³	5mg/m³	d
Piperonyl butoxide	51-03-6	0.1	NE	NE	d
Methyl chloroform	71-55-6	29	350	350	d
Isopropanol	67-63-0	8	400	400	d

NOTE: THIS PRODUCT DOES NOT CONTAIN ONE OF THE LISTED SARA TITLE III SECTION 313 CHEMICALS.

67-64-1 Acetone; 71-55-6 1,1,1-Trichloroethane; 1983-67-1 Tetrahydro Dipyrone; 50-00-0 Formaldehyde; 75-09-2 Methylene chloride; 2664-99-3 Phosphoric Acid; 67-56-1 Methanol; 108-21-4 Ethylene Glycol*; 7761-88-8 Silver nitrate; 95-48-7 o-Cresol; 115-26-1 Propylene; 2644-93-9 Sulfuric Acid; 108-95-2 Phenol; 108-88-3 Toluene; 2440-66-6 Zinc Chloride; 75-45-6 Chlorodifluoromethane; 222-18-4 Tetra-Sodium Diphosphate; 2641-01-0 Hydrochloric Acid; 68-94-2 Methyl alcohol; 329-23-9 Nitrilotriacetic Acid; 1330-20-7 Xylene/Mixed Isomers; *Possible liquid solvent; 34-13-1 Cresol

TOWN OF BURLINGTON RECEIVED OCT 1 1996 BOARD OF HEALTH

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	NA	Specific Gravity (H2O = 1) Concentrate Only =	0.900
Vapor Pressure PSIG @ 70°F (Aerosols)	Max. 60	Vapor Pressure (Non-Aerosols) (mm Hg and Temperature)	NA
Vapor Density (Air = 1)	NE	Evaporation Rate (_____ = 0)	NE
Solubility in Water	Insoluble	Water Reactive	No

Appearance and Odor: Clear light straw colored liquid, insecticide/pineapple fragrance

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (AEROSOLS): EXTREMELY FLAMMABLE	Auto-Ignition Temperature: NE	Flammability Limits in Air % by Volume	LEL: NE	UEL: NE

Flash Point and Method Used (Non-Aerosols): NA

Extinguisher Media: Foam, dry chemical, carbon dioxide

Special Fire Fighting Procedures: Self contained breathing apparatus

Unusual Fire and Explosion Hazards: Do not expose aerosols to temperatures above 130° F or the container may rupture.

*Optional

** Chemical Listed as Carcinogen or Potential Carcinogen: [X] NTP [X] IARC Monograph [X] OSHA [X] Not Listed [X] Animal Data Only

SECTION 4 - REACTIVITY HAZARD DATA

425-B

STABILITY
☒ Stable
☐ Unstable

Conditions To Avoid
Open flame, welding arcs, heat, sparks

Incompatability (Materials to Avoid) Water, reactive metals, aluminum, magnesium, potassium, sodium, alkalis, strong oxidizing agents.

Hazardous Decomposition Products CO_2, CO, HCl, small amounts of phosgene and chlorine.

HAZARDOUS POLYMERIZATION
☐ May occur
☒ Will Not Occur

Conditions To Avoid
None Known

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY ☒ Inhalation ☐ Skin Absorption ☐ Ingestion ☐ Eye ☐ Not Hazardous

ACUTE EFFECTS

Inhalation
Excessive inhalation of vapors can be harmful and may cause headache, dizziness, asphyxia, anesthetic effects and possible unconsciousness.

Eye Contact
Irritation

Skin Contact
Possible mild irritation due to defatting of skin.

Ingestion
Possible chemical pneumonitis if aspirated into lungs. Nausea.

CHRONIC EFFECTS Effects due to excessive exposure to the raw materials of this mixture May cause cardiac sensitization, central nervous system depression, lung, kidney, liver damage, inhibits cholinesterase.

Medical Conditions Generally Aggravated by Exposure May aggravate existing eye, skin, or upper respiratory conditions.

EMERGENCY FIRST AID PROCEDURES -

Eye Contact
Flush with water for 15 minutes. If irritated, see physician.

Skin Contact
Wash with soap and water. If irritated, see physician.

Inhalation
Remove to fresh air. Resuscitate if necessary. Get medical aid.

Ingestion Atropine sulfate antidotal.
Call physician immediately. Treat like typical organic phosphate poisoning. Induce vomiting at physicians recommendations.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type) If vapor conc. exceeds TLV, use respirator approved by U.S. Bureau of Mines for organic vapor.

Protective Gloves
Rubber gloves recommended.

Eye Protection
Safety glasses recommended

VENTILATION REQUIREMENTS
Adequate ventilation to keep vapor concentration below TLV.

Other Protective Clothing and Equipment None

Hygienic Work Practices Wash with soap and water before handling food. Remove contaminated clothing.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE / LEAK PROCEDURES

Steps to be Taken If Material is Spilled Or Released Absorb with suitable medium. Incinerate or landfill according to local, state, or federal regulations. Do not flush to sewer.

Waste Disposal Methods Aerosol cans when vented to atmospheric pressure (through normal use, pose no disposal hazard.

Precautions to be Taken in Handling and Storage Do not puncture or incinerate containers. Do not store at temperatures above 130°F.

Other Precautions and / or Special Hazards
Avoid food contamination. KEEP OUT OF REACH OF CHILDREN. Remove ignition sources.
Avoid breathing vapors.

We believe the statements, technical information and recommendations contained herein are reliable, but they

Material Safety Data Sheet

SECTION I - IDENTITY

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Telephone Number for Information
508/667-5161
Date Prepared
01/13/91
Prepared By T.Pitroiffy

#20 PERMA TILE
Hazardous -NO

Health	1
Flammability	0
Reactivity	0
Personal Protection	B

4 = Most Hazardous

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components CAS Reg#	PEL	TWA	STEL	Other Limits	% (opt)
	--	--	--	--	

Not a hazardous mixture, as defined in 29 CFR 1910,1200 and M.G.L. c. 111F

CONTAINS: GLYCOL ETHERS* <6
*CHEMICAL CATEGORY SUBJECT TO REPORTING REQUIREMENTS OF SEC.313, TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 212F	Specific Gravity(Water=1)	- 1.04
Vapor Pressure (mm Hg)	- 18	Melting Point	- NA.
Vapor Density (air=1)	- 1.1	Evaporation Rate(Butyl Acetate=1)	- 0.36
Viscosity (CPS)	- 12.5	Decomposition Temperature	- NA>
Auto Ignition Temp.	- NA.	Solubility in Water	-Complete

pH - 9.0 +/-.5
Appearance and Odor - White milky emulsion

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - None

Flammable Limits
LEL - NA UEL - NA

Extinguishing media -NA

Fire Fighting Procedure - NA

Fire and Explosion Hazards - NA

TOWN OF BURLINGTON RECEIVED
OCT 1 1991
BOARD OF HEALTH

SECTION V - REACTIVITY DATA

Stability -Stable
Conditions to Avoid Freezing, extreme heat

Incompatibility - Acids, oxidizers
Hazardous Decomposition or Byproduct - Thermal decomposition may yield carbon monoxide
Hazardous Polymerization - Will not occur
Conditions to Avoid - NA

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - NO Skin - NO Ingestion - NO

Health Hazards-Acute: Causes eye and skin irritation
CHRONIC:Redness of skin

Carcinogenicity: NO
NTP - NA IARC Monographs - NA OSHA Regulated - NO

Signs and Symptoms of Exposure - Itching irritating sensation

Medical Conditions Aggravated - NA

Emergency and First Aid Procedures -Wash contact areas with soap and water
INGESTION:Drink milk, water, fruit juice, induce vomiting with oil of ipecac, get medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - Dike, collect material into watertight container, rinse surface with clean water.

Waste Disposal Method - Use sanitary landfill disposal, (not a hazardous waste) according to federal, state and local regulations. (RCRA, Subtitle D.)

Precautions to be Taken in Handling and Storage - Do not mix with other chemical, store away from heat. KEEP FROM FREEZING.

Other Precautions - KEEP AWAY FROM CHILDREN

SECTION VIII - CONTROL MEASURES

Respiratory Protection - Not required with normal use.

Ventilation
- Local Exhaust -NA
- Mechanical - -NA
- Special -NA
- Other -Assure fresh air circulation.

Protective Gloves - RECOMMENDED: Rubber, Plastic
Eye Protection - RECOMMENDED: Safety glasses
Other Protection - NA

Work/Hygienic Practices - Do not eat or drink next to material, wash hands after work.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,5,1 GAL. PLASTIC CONT Report Qty. (Lbs) - NA.
OSHA - NOT REGULATED Labels - NO.
DOT - NOT REGULATED
UN - NOT REGULATED

Vendor assumes no responsiblity for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

Material Safety Data Sheet

SECTION I - IDENTITY

#66 HIGH SPEED MAINTAINER
Hazardous - NO

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Health	1
Flammability	0
Reactivity	0
Personal Protection	B

4 = Most Hazardous

Telephone Number for Information
508/667-5161
Date Prepared
01/13/91
Prepared By T.Pitrolffy

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components CAS Reg#	PEL	TWA	STEL	Other Limits	% (opt)
Not a hazardous mixture, as defined in 29 CFR 1910,1200 and M.G.L. c. 111F					
CONTAINS: GLYCOL ETHERS*					<4

*CHEMICAL CATEGORY SUBJECT TO REPORTING REQUIREMENTS OF SEC.313, TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 212F	Specific Gravity(Water=1)	- 1.02
Vapor Pressure (mm Hg)	- 18	Melting Point	- NA.
Vapor Density (air=1)	- 1.1	Evaporation Rate(Butyl Acetate=1)	- 0.36
Viscosity (CPS)	- 15	Decomposition Temperature	- N.A.
Auto Ignition Temp.	- N.A	Solubility in Water	-Complete

pH - . 8.5 +/-.5
Appearance and Odor - Transparent Blue Liquid, Bouquet Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - None Flammable Limits
LEL - NA UEL - NA

Extinguishing media -NA

Fire Fighting Procedure - NA

Fire and Explosion Hazards - NA

SECTION V - REACTIVITY DATA

Stability -Stable
Conditions to Avoid Freezing, extreme heat

Incompatibility - Acids, oxidizers
Hazardous Decomposition or Byproduct - Thermal decomposition may yield carbon monoxide
Hazardous Polymerization - Will not occur
Conditions to Avoid - NA

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - NO Skin - NO Ingestion - NO

Health Hazards-Acute: Causes eye and skin irritation
CHRONIC:Redness of skin

Carcinogenicity: NO
NTP - NA IARC Monographs - NA OSHA Regulated - NO

Signs and Symptoms of Exposure - Itching irritating sensation

Medical Conditions Aggravated - NA

Emergency and First Aid Procedures -Wash contact areas with soap and water
INGESTION:Drink milk, water, fruit juice, induce vomiting with oil of ipecac, get medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - Dike, collect material into watertight container, rinse surface with clean water.

Waste Disposal Method - Use sanitary landfill disposal, (not a hazardous waste) according to federal, state and local regulations. (RCRA, Subtitle D.)

Precautions to be Taken in Handling and Storage - Do not mix with other chemical, store away from heat. KEEP FROM FREEZING.

Other Precautions - KEEP AWAY FROM CHILDREN

SECTION VIII - CONTROL MEASURES

Respiratory Protection - Not required with normal use.

Ventilation
- Local Exhaust -NA
- Mechanical -NA
- Special -NA
- Other -Assure fresh air circulation

Protective Gloves - RECOMMENDED: Rubber, Plastic
Eye Protection - RECOMMENDED: Safety glasses
Other Protection - NA

Work/Hygienic Practices - Do not eat or drink next to material, wash hands after work.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,5,1 Gal. Plastic Cont. Report Qty. (lbs) - N.A.
OSHA - NOT REGULATED Labels - None
DOT - NOT REGULATED
UN - NOT REGULATED

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

Material Safety Data Sheet

SECTION I - IDENTITY

#111 LAVATROL

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Telephone Number for Information
508/667-5161
Date Prepared
01/15/91
Prepared By T. Sitroliffy

Hazardous - YES

Health	2
Flammability	0
Reactivity	1
Personal Protection	C

4 = Most Hazardous

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components.	CAS Reg#	PEL mg/m3	TWA mg/m3	STEL mg/m3	Other Limits mg/m3	% (opt)
					CEILING	
*PHOSPHORIC ACID	#7664-38	1	1	3		< 8
*HYDROGEN CHLORIDE	#7647-01-0	N.A.	N.A.	N.A.	7	< 20
OXALIC ACID	# 144-62-7	1	1	2		< 3

*LISTED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SCT.313 OF TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 210F	Specific Gravity(Water=1)	- 1.04
Vapor Pressure (mm Hg)	- 18.5	Melting Point	- N.A.
Vapor Density (air=1)	- 1.1	Evaporation Rate(Butyl Acetate=1)	- 0.2
Viscosity (CPS)	- 5	Decomposition Temperature	- NA.
Auto Ignition Temp.	- NA.	Solubility in Water	-COMPLETE

pH - 1.5 +/- 1
Appearance and Odor - BLUE MILKY LIQUID WITH FRAGRANCE

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - N.A. Flammable Limits
LEL - N.A. UEL - N.A.

Extinguishing media -WATER

Fire Fighting Procedure - COOL CONTAINERS WITH WATER

Fire and Explosion Hazards - NON FLAMMABLE, BUT MAY REACT WITH MOST METALS ON LONG CONTACT, WITH THE POSSIBLE EVOLUTION OF HYDROGEN

SECTION V - REACTIVITY DATA

Stability -STABLE
Conditions to Avoid N.A.

Incompatibility - ALKALINE, CHLORINE AND CELLULOSE BASED MATERIALS
Hazardous Decomposition or Byproduct - HYDROGEN CHLORIDE GAS

Hazardous Polymerization - WILL NOT OCCUR
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

RECEIVED
BOARD OF HEALTH

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - YES Skin - YES Ingestion - YES

Health Hazards-Acute: CAUSES SEVERE CHEMICAL BURNS TO EYES, SKIN AND MUCOUS MEMBRANES. CHRONIC: CHEMICAL BURNS AND/OR ULCERATION OF SKIN, MAY PERMANENTLY DAMAGE EYES, TARGET ORGANS: EYES, RESP. SYS., UPPER GI. TRACT, SKIN

Carcinogenicity: NO
NTP - N.A. IARC Monographs - N.A. OSHA Regulated - NO

Signs and Symptoms of Exposure - REDNESS, IRRITATION OF EYES, SKIN OR MUCOUS MEMBRANES

Medical Conditions Aggravated - SENSITIZED SKIN

Emergency and First Aid Procedures -IMMEDIATELY WASH CONTACT AREAS (EYES) WITH LARGE QUANTITIES OF WATER FOR 15 MINUTES.
INGESTION: DRINK LARGE AMOUNTS OF WATER OR MILK, CALL PHYSICIAN.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO PLASTIC CONTAINER. WATER RINSE AND DRAIN, FLUSH SMALL AMOUNTS.NEUTRALIZE WITH SODA, ASH OR LIME. (BIODEGRADABLE)

Waste Disposal Method - DISPOSE OF ACCORDING TO LOCAL, STATE AND FEDERAL HAZARDOUS WASTE REGULATIONS; USE SANITARY LANDFILL.
EPA WASTE NO. D002

Precautions to be Taken in Handling and Storage -
USE ADEQUATE VENTILATION. DO NOT MIX WITH OTHER CHEMICALS.
AVOID PROLONGED CONTACT. KEEP FROM FREEZING AND EXCESSIVE HEAT

Other Precautions - STORE IN SECURE AREA. AVOID FOOD OR FEED CONTAMINATION. RINSE EMPTY CONTAINERS BEFORE DISPOSAL. KEEP OUT OF REACH OF CHILDREN !

SECTION VIII - CONTROL MEASURES

Respiratory Protection - USE IN WELL VENTILATED AREA, FOLLOW DIRECTIONS, AVOID INHALING MIST.

Ventilation
Local Exhaust -RECOMMENDED
Mechanical -N.A.
Special -N.A.
Other -ASSURE FRESH AIR CIRCULATION.

Protective Gloves - REQUIRED: RUBBER, PLASTIC
Eye Protection - REQUIRED: SAFETY GLASSES, GOGGLES
Other Protection - RECOMMENDED: RUBBER OR PLASTIC APRON, EYE WASH

Work/Hygienic Practices - DO NOT EAT, DRINK OR SMOKE NEXT TO MATERIAL. WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,1 GAL.,1 QT. PLASTIC Report Qty. (Lbs) - NA
OSHA - IRRITANT Labels - CORROSIVE
DOT - HAZARDOUS /X/ CORROSIVE MATERIAL
UN - HAZARDOUS /X/ CORROSIVE LIQUID, PACKAGING GROUP II

DOT:HAZARDOUS /X/ COMPOUND, CLEANING, LIQUID, CORROSIVE MATERIAL, NA 1789
UN: HAZARDOUS /X/ CORROSIVE LIQUID, N.O.S. (HYDROGEN CHLORIDE) 8 UN1760 -

Vendor assumes no responsiblity for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

Material Safety Data Sheet

TOWN OF BURLINGTON RECEIVED
BOARD OF HEALTH

SECTION I - IDENTITY

Urethane Finish #550/555
Hazardous -YES

Health	1
Flammability	2
Reactivity	0
Personal Protection	B

4 = Most Hazardous

PERMA Incorporated
605 Springs Road
Bedford, MA. 01730

Telephone Number for Information
508/667-5161
Date Prepared
01/16/91
Prepared By A.Vadasz

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components CAS Reg#	PEL ppm	TWA ppm	STEL	Other Limits	% (opt)
Stoddard Solvent CAS# 8052 - 41 - 3	500	100			< 50

*LISTED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SCT.313 OF TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 350F	Specific Gravity(Water=1)	- 0.86
Vapor Pressure (mm Hg)	- 1.5	Melting Point	- N.A.
Vapor Density (air=1)	- 4.5	Evaporation Rate(Butyl Acetate=1)	- 0.08
Viscosity (CPS)	- NA	Decomposition Temperature	- NA.
Auto Ignition Temp.	- NA	Solubility in Water	-NEGLIGIBLE

pH - N.A. +/-
Appearance and Odor - CLEAR AMBER LIQUID, SOLVENT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - TCC 140 F Flammable Limits LEL - 0.7 UEL - 6.0

Extinguishing media -CO2, FOAM, DRY CHEMICAL

Fire Fighting Procedure - COOL CONTAINERS WITH WATER, USE SELF CONTAINED BREATHING APPARATUS, BURNING PRODUCT IS TOXIC

Fire and Explosion Hazards - CLOSED CONTAINERS MAY BURST WHEN EXPOSED TO EXTREME HEAT. ISOLATE FROM HEAT, SPARKS, OPEN FLAME.

SECTION V - REACTIVITY DATA

Stability -STABLE
Conditions to Avoid HEAT, SPARKS, OPEN FLAME

Incompatibility - STRONG OXIDIZING AGENTS.
Hazardous Decomposition or Byproduct - THERMAL DECOMPOSITION MAY YIELD CARBON MONOXIDE.

Hazardous Polymerization - WILL NOT OCCUR
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - YES Skin - NO Ingestion - YES

Health Hazards-Acute: CAUSES EXE IRRITATION, DRYING OF SKIN, DIZZINESS
CHRONIC: RESPIRATORY TRACT IRRITATION, DERMATITIS
TARGET ORGANS: SKIN, EYES, RESPIRATORY SYSTEM

Carcinogenicity: NO
NTP - N.A. IARC Monographs - N.A. OSHA Regulated - YES

Signs and Symptoms of Exposure - IRRITATION AND REDNESS OF SKIN, DIZZINESS

Medical Conditions Aggravated - DERMATITIS
BRONCHO-PULMONARY PROBLEMS

Emergency and First Aid Procedures -EYE&SKIN CONTACT: BLOT WITH TOWEL, FLUSH WITH LARGE QUANTITIES OF WATER. INHALATION: REMOVE TO FRESH AIR. INGESTION: INDUCE VOMITING, GET IMMEDIATE MEDICAL ATTENTION

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO METAL CONTAINER. USE NON-SPARKING TOOLS. USE WATER OR FOAM SPRAY TO LESSEN FIRE HAZARD. USE ABSORBENT FOR SMALL SPILL.

Waste Disposal Method - RECYCLE, INCINERATE, OR USE HAZARDOUS WASTE MANAGEMENT FACILITY FOR DISPOSAL ACCORDING TO STATE AND FEDERAL REGULATIONS.
EPA WASTE NO. D001

Precautions to be Taken in Handling and Storage - COMBUSTIBLE, KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. USE ADEQUATE VENTILATION. AVOID PROLONGED OR REPEATED CONTACT.

Other Precautions - STORE IN SECURE AREA. DISPOSE OF EMPTY CONTAINERS SAFELY
KEEP OUT OF REACH OF CHILDREN

SECTION VIII - CONTROL MEASURES

Respiratory Protection - USE SELF-CONTAINED BREATHING APPARATUS FOR CONCENTRATIONS ABOVE THRESHOLD LIMIT VALUE.

Ventilation
- Local Exhaust -RECOMMENDED
- Mechanical -REQUIRED; EXCHANGE EVERY 10-15 MIN.
- Special -BLOW AIR INTO PITS AND DEPRESSIONS
- Other -ASSURE FRESH AIR CIRCULATION

Protective Gloves - REQUIRED: RUBBER, PLASTIC
Eye Protection - REQUIRED: SAFETY GLASSES
Other Protection - APRON OR SHOP COAT RECOMMENDED

Work/Hygienic Practices - DO NOT EAT/DRINK OR SMOKE NEXT TO MATERIAL. WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,5,1 GAL. METAL CONT. Report Qty. (Lbs) - NA
OSHA - CLASS II. COMBUSTIBLE LIQUID Labels - UN-FLAMMABLE LQ
DOT - COMBUSTIBLE LIQUID-EXEMPT PER 49 CFR 173.118A
UN - HAZARDOUS /X/ FLAMMABLE LIQUID-PACKAGING GROUP III

DOT-PAINT, COMBUSTIBLE LIQUID, UN1263
UN- HAZARDOUS /X/ PAINT 3 UN1263

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

Material Safety Data Sheet

BOARD OF HEALTH

SECTION I - IDENTITY

Urethane Finish #550@45%
Hazardous -YES

PERMA Incorporated
605 Springs Road
Redford, MA. 01730

Health	1
Flammability	2
Reactivity	0
Personal Protection	B

4 = Most Hazardous

Telephone Number for Information
508/667-5161
Date Prepared
01/16/91
Prepared By A.Vadasz

Emergency Phone Number
1-800-255-3924 or Poison Center

SECTION II - HAZARDOUS INGREDIENTS

Hazardous Components CAS Reg#	PEL ppm	TWA ppm	STEL	Other Limits	% (opt)
Stoddard Solvent CAS# 8052 - 41 - 3	500	100			< 60

*ASTERISKED CHEMICAL SUBJECT TO REPORTING REQUIREMENT OF SEC.313 TITLE III.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling point	- 310F	Specific Gravity(Water=1)	- 0.87
Vapor Pressure (mm Hg)	- 2.0	Melting Point	- N.A.
Vapor Density (air=1)	- 4.5	Evaporation Rate(Butyl Acetate=1)	- 0.08
Viscosity (CPS)	- NA.	Decomposition Temperature	- NA.
Auto Ignition Temp.	- NA.	Solubility in Water	-NEGLIGIBLE

pH - N.A. +/-
Appearance and Odor - CLEAR AMBER LIQUID, AROMATIC ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point - TCC 105 F Flammable Limits LEL - 0.7 UEL - 6.0

Extinguishing media -CO2, FOAM, DRY CHEMICAL

Fire Fighting Procedure - COOL CONTAINERS WITH WATER.

Fire and Explosion Hazards - CLOSED CONTAINERS MAY BURST WHEN EXPOSED TO EXTREME HEAT. ISOLATE FROM HEAT, SPARKS AND OPEN FLAME.

SECTION V - REACTIVITY DATA

Stability -STABLE
Conditions to Avoid HEAT, SPARKS, OPEN FLAME OR FIRE

Incompatibility - STRONG OXIDIZING AGENTS.
Hazardous Decomposition or Byproduct - THERMAL DECOMPOSITION MAY YIELD CARBON MONOXIDE AND DIOXIDE

Hazardous Polymerization - WILL NOT OCCUR
Conditions to Avoid - N.A.

The information herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or results to be obtained from use thereof.
Essentially similar to OSHA form # 174

SECTION VI - HEALTH HAZARD DATA

Routes of entry:
Inhalation - YES Skin - NO Ingestion - YES

Health Hazards-Acute: CAUSES EYE IRRITATION, DRYING OF SKIN, DIZZINESS
CHRONIC: RESPIRATORY TRACT IRRITATION, DERMATITIS
TARGET ORGANS: SKIN, EYES, RESPIRATORY SYSTEM

Carcinogenicity: NO
NTP - N.A. , IARC Monographs - N.A. OSHA Regulated - YES

Signs and Symptoms of Exposure - IRRITATION AND REDNESS OF SKIN, DIZZINESS

Medical Conditions Aggravated - DERMATITIS
BRONCHO-PULMONARY PROBLEMS

Emergency and First Aid Procedures -EYE&SKIN CONTACT: BLOT WITH TOWEL, FLUSH WITH LARGE QUANTITIES OF WATER. INHALATION: REMOVE TO FRESH AIR. INGESTION: INDUCE VOMITING, GET IMMEDIATE MEDICAL ATTENTION

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - DIKE AND COLLECT MATERIAL INTO METAL CONTAINER. USE NON-SPARKING TOOLS. USE WATER OR FOAM SPRAY TO LESSEN FIRE HAZARD. USE ABSORBENT FOR SMALL SPILL.

Waste Disposal Method - RECYCLE, INCINERATE, OR USE HAZARDOUS WASTE MANAGEMENT FACILITY FOR DISPOSAL ACCORDING TO STATE AND FEDERAL REGULATIONS. EPA WASTE NO. D001

Precautions to be Taken in Handling and Storage - COMBUSTIBLE, KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. USE ADEQUATE VENTILATION. AVOID PROLONGED OR REPEATED CONTACT.

Other Precautions - STORE IN SECURE AREA. DISPOSE OF EMPTY CONTAINERS SAFELY KEEP OUT OF REACH OF CHILDREN

SECTION VIII - CONTROL MEASURES

Respiratory Protection - USE SELF-CONTAINED BREATHING APPARATUS FOR CONCENTRATIONS ABOVE THRESHOLD LIMIT VALUE.

Ventilation Local Exhaust -RECOMMENDED
Mechanical -REQUIRED; EXCHANGE EVERY 10-15 MIN.
Special -BLOW AIR INTO PITS AND DEPRESSIONS
Other -ASSURE FRESH AIR CIRCULATION

Protective Gloves - REQUIRED: RUBBER, PLASTIC
Eye Protection - REQUIRED: SAFETY GLASSES
Other Protection - APRON OR SHOP COAT RECOMMENDED

Work/Hygienic Practices - DO NOT EAT/DRINK OR SMOKE NEXT TO MATERIAL. WASH HANDS/FACE AFTER WORK.

SECTION IX - TRANSPORTATION 49 CFR

Unit Cont. - 55,30,5,1 GAL. METAL CONT. Report Qty. (Lbs) - NA.
OSHA - CLASS II. COMBUSTIBLE LIQUID Labels - UN-FLAMMABLE LQ
DOT - COMBUSTIBLE LIQUID-EXEMPT PER 49 CFR 173.118A
UN - HAZARDOUS /X/ FLAMMABLE LIQUID-PACKAGING GROUP III

DOT-PAINT, COMBUSTIBLE LIQUID, UN1263
UN- HAZARDOUS /X/ PAINT 3 UN1263

Vendor assumes no responsibility for injury to vendee or third person proximately caused if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Further more, vendee assumes the risk in use of the material.

Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form) MSDS NO.F-0151-1
Form Approved
OMB No. 1218-0072

*Not applicable

IDENTITY (As Used on Label and List)
SF-880HT1 Black Toner

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Distributor's Name: Sharp Electronics Corporation	Emergency Telephone Number: 201-529-9223
Address (Number, Street, City, State, and ZIP Code): Sharp Plaza,Mahwah,NJ 07430	Telephone Number for Information: 201-529-8200
Manufacturer's Name: Sharp corporation	Date Prepared: Sep. 30, 1988
Address: 22-22,Nagaike-cho,Abeno-ku,Osaka,JAPAN	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Carbon black (CAS No. 1333-86-4)	3.5 mg/m³	3.5 mg/m³	None	<5
None hazardous ingredients				
Styrene-Acrylate copolymer	-	Not listed	None	>92
Organic ammonium salt	-	Not listed	None	<2

Section III — Physical/Chemical Characteristics

Boiling Point	n.a.	Specific Gravity (H_2O = 1)	1.1
Vapor Pressure (mm Hg.)	n.a.	Melting Point	n.a.
Vapor Density (AIR = 1)	n.a.	Evaporation Rate (Butyl Acetate = 1)	n.a.

Solubility in Water
Negligible

Appearance and Odor
Fine, black powder, odorless

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) n.a.	Flammable Limits	LEL n.a.	UEL n.a

Extinguishing Media
CO_2,dry chemical,foam or water.

Special Fire Fighting Procedures
This material will burn in the case of fire.

The decomposition products are CO,CO_2 and NOx.

Unusual Fire and Explosion Hazards
This material has no unusual fire or explosion hazards.

RECEIVED
OCT 1 1995
BOARD OF HEALTH

(Reproduce locally) OSHA 174, Sept. 1985

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable		None
	Stable	x	

Incompatibility (Materials to Avoid)
None

Hazardous Decomposition or Byproducts
CO, CO_2 and NO_x

Hazardous Polymerization			Conditions to Avoid
	May Occur		None
	Will Not Occur	x	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Yes Skin? No Ingestion? Possible but very unusual

Health Hazards (Acute and Chronic)
LD_{50} value of the toner in an oral acute toxicity test is over 5.0g/kg.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure
Minimum irritation to respiratory tract may occur as with exposure to any non-toxic dust.

Medical Conditions Generally Aggravated by Exposure
Accumulation of dust in the respiratory system.

Emergency and First Aid Procedures
Inhalation: Remove to fresh air if effects occur, consult local medical personel.
Eyes: In case of contact, immediately flush eyes with water for 5 minutes.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
Sweep up or clean up with a vacuum cleaner.

Waste Disposal Method
Waste material may be dumped or incinerated under conditions which meet all federal, state and local environmental regulations.

Precautions to Be Taken in Handling and Storing
No special storage requirements for safety reasons.

Other Precautions
None

Section VIII — Control Measures

Respiratory Protection (Specify Type)
None required under normal use

Ventilation				
	Local Exhaust	No	Special	No
	Mechanical (General)	No	Other	No

Protective Gloves: None required under normal use
Eye Protection: None required under normal use

Other Protective Clothing or Equipment
None required under normal use

Work/Hygienic Practices
Inhalation should be avoided.

Recon
Environmental Corp.

ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA) THREE YEAR REINSPECTION REPORT

FOX HILL ELEMENTARY SCHOOL
BURLINGTON, MA

RECON PROJECT NO.:
W50139FH

PREPARED FOR:

MR. WILLIAM KOUTROUBA
BURLINGTON SCHOOL DEPARTMENT
123 CAMBRIDGE STREET
BURLINGTON, MA 01803

PREPARED BY:

RECON ENVIRONMENTAL CORP.
25 MATHEWSON DRIVE
WEYMOUTH, MA 02189

DATE ISSUED:

MAY 15, 1995

I:\ADMIN\DATA\PROJ95\W50139FH

TOWN OF BURLINGTON
RECEIVED
JUN 14 1995
BOARD OF HEALTH

25 Mathewson Drive, Weymouth, MA 02189 • (617) 337-7887 • Fax (617) 337-8237

The Asbestos Hazard Emergency Response Act (AHERA) reinspection described herein was conducted by the undersigned, of Recon Environmental Corp. (RECON). RECON's investigation consisted solely of the reinspection activities required by the AHERA Regulation (40 CFR 763) and as described in RECON's Proposal Number W95-146. In addition, the reinspection was subject to the Limitations and Service Constraints provided in Appendix A and the Terms and Conditions of the Standard Consulting Agreement executed prior to commencement of the reinspection.

This reinspection report for the Fox Hill Elementary School, Burlington, Massachusetts, must be incorporated into the original Management Plan for the school.

Asbestos Survey Report Prepared by:

Ted Sherry
Project Manager
Inspector License #I02654

Date 5/15/95

AHERA Reinspection Report Reviewed and Approved by:

Timothy C. Woodward
Operations Manager, Industrial Hygiene
Management Planner License # MP01913

Date 5/15/95

W50139FH
Recon

TABLE OF CONTENTS

Section Page

1.0 INTRODUCTION 1-2

2.0 LOCAL EDUCATION AGENCY RESPONSIBILITIES 2

2.1 Completion of Asbestos-Related Activities 2
2.2 Custodial/Maintenance Training 2
2.3 Building Occupant Notification 3
2.4 Short Term Workers 3
2.5 Warning Labels 3
2.6 Management Plan Responsibilities 3
2.7 Designated Person 3
2.8 Conflict of Interest 3-4
2.9 Response Actions 4
2.10 Reinspection Documentation 4
2.11 Periodic Surveillance 4
2.12 Required Cleanings 4
2.13 Small-Scale, Short Duration Activities 4
2.14 Maintenance Activities 5
2.15 Fiber Release Episodes 5

3.0 REINSPECTION FINDINGS & RECOMMENDATIONS 5

3.1 Warning Labels 5
3.2 Initial Cleaning 5-6
3.3 Short-Term Worker Notification 6
3.4 Fiber Release Episodes 6-7
3.5 Designated Person 7
3.6 Custodial/Maintenance Training 7
3.7 Building Occupant Notification 8
3.8 Response Actions Completed 8
3.9 Periodic Surveillance 9
3.10 Three Year Reinspection 9
3.11 General 9-10

4.0 HAZARD PRIORITY SUMMARY (Updated) 10

Appendix A . . . . . LIMITATIONS AND SERVICE CONSTRAINTS
Appendix B . . . . . LOCATION OF REMAINING ACM
Appendix C . . . . . HAZARD ASSESSMENT SUMMARY SHEETS
Appendix D . . . . . RESPONSE ACTION SELECTION CRITERIA

1.0 INTRODUCTION

Recon Environmental Corp. (RECON) was retained by the Burlington School Department to reinspect the Fox Hill Elementary School, Burlington, Massachusetts, in compliance with the Asbestos Hazard Emergency Response Act (AHERA) of October, 1987. To review prior asbestos-containing building information for the Fox Hill Elementary School, refer to the Fox Hill Elementary School Management Plan which is maintained at the main Local Education Agency (LEA) office and the Fox Hill Elementary School. The Reinspection was conducted by RECON's representative, Mr. Ted Sherry, Massachusetts Asbestos Inspector (License #I02654) on March 14, 1995.

The objective of the reinspection was to maintain the Fox Hill Elementary School's compliance with the AHERA Regulation by visually reinspecting and reassessing the condition of all known or assumed asbestos-containing building materials (ACBM). In accordance with the regulation, RECON also visually inspected and reassessed materials that were previously considered non-friable ACBM and touched the material to determine whether it had become friable since the last inspection or reinspection.

All findings of this reinspection must be incorporated into the original Management Plan document for the Fox Hill Elementary School.

As described in the Reinspection Hazard Assessment Sheets included as Appendix C, RECON has identified any changes in quantity or condition of ACBM noted during the reinspection and has included updated response action recommendations, where appropriate. RECON has also provided an updated Hazard Priority Summary which indicates the priority of Homogeneous Areas and RECON's recommendation for addressing confirmed or assumed asbestos-containing material (ACM).

Under AHERA protocol, certain assessment criteria were used as the basis for recommended response actions. These assessment criteria were as follows: the existence of barriers, abnormal access features, activity in the area, air erosion, potential for fiber release, and existing damage.

Based on the aforementioned assessment criteria, RECON made recommendations for ACBM at the Fox Hill Elementary School. RECON's recommendations generally fall into six categories:

1. Homogeneous Areas which can be maintained under the Provisions of an Operations & Maintenance (O&M) Program;

2. Homogeneous Areas which should be properly removed immediately by a qualified abatement contractor;

3. Homogeneous Areas which should be removed when practical;

4. Homogeneous Areas requiring short-term, short-duration remedial measures (patch & repair) performed either by in-house maintenance personnel who have successfully completed the 16-hour O&M training course or by a qualified abatement contractor depending on the amount of material;

5. Homogeneous Areas requiring enclosure or spot repairs; and

6. Homogeneous Areas requiring encapsulation.

2.0 LOCAL EDUCATION AGENCY RESPONSIBILITIES

The Local Education Agency's (LEA) responsibilities regarding recordkeeping and other activities for the Fox Hill Elementary School's Asbestos Management Plan are defined in the Environmental Protection Agency (EPA) Rules and Regulations 40 CFR Part 763 (Asbestos-Containing Materials in Schools; Final Rule and Notice) and summarized as follows:

2.1 Completion of Asbestos-Related Activities

The AHERA Regulation 763.84(a) states that the LEA is responsible for ensuring that "any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, develop and implement response actions, including operation & maintenance, are carried out in accordance with subpart E of this part.

2.2 Custodial/Maintenance Training

The AHERA regulation 763.92(a) states that the LEA shall "ensure, prior to the implementation of the O&M provisions of the Management Plan, that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in a building that contains ACBM receive awareness training of at least 2 hours, whether or not they are required to work with ACBM. New custodial and maintenance employees shall be trained within 60 days after commencement of employment". The LEA shall maintain all documentation regarding their training.

2.3 **Building Occupant Notification**

The AHERA regulation 763.84(c) states that the LEA shall "ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress".

2.4 **Short Term Workers**

The AHERA regulation 763.84(d) states that the LEA shall "ensure that short term workers (e.g. telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding locations of ACBM and suspected ACBM assumed to be ACM".

2.5 **Warning Labels**

The AHERA regulation 763.84(e) states that "warning labels shall be posted in routine maintenance areas in accordance with Section 763.95".

2.6 **Management Plan Responsibilities**

The AHERA regulation 763.84(f) states that "management plans shall be made available for inspection and notification of such availability has been provided as specified in the management plan under Section 763.93(g)".

2.7 **Designated Person**

The AHERA regulation 763.84(g)(1) states that "the LEA shall designate a person to ensure that requirements under this section are properly implemented". Section 763.84(g)(2) further states that "the LEA shall ensure that the designated person receives adequate training to perform duties assigned under this section". All documentation regarding designated person training shall be maintained.

2.8 **Conflict of Interest**

The AHERA regulation 763.84(h) states that the LEA should "consider whether any conflict of interest may arise from the interrelationship

among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under this subpart".

The Local Education Agency and each school within its jurisdiction must keep accurate records of relevant events with the management plan. Relevant events include:

2.9 **Response Actions**

Ensure accurate records are kept for any response action or preventative measure taken for ACBM. Provide a detailed description of the actions and information on sample analysis [see 40 CFR Part 763.94(b)].

2.10 **Reinspection Documentation**

For each reinspection: document the name and accreditation information of the inspector, the date of the reinspection, and any changes noted in the condition of the material.

2.11 **Periodic Surveillance**

For each periodic surveillance conducted: document the name of each person performing the surveillance, date of surveillance, and any changes in the condition of materials. Periodic surveillance inspection should be conducted every six months.

2.12 **Required Cleanings**

For each required cleaning: document the name of the person performing the cleaning, date of the cleaning, locations/areas cleaned, and the methods used.

2.13 **Small-Scale, Short-Duration Activities**

For each small-scale, short-duration activity: document the name and signature of the person performing the activity, activity start and completion dates, precise locations and a description of the activity and any preventative measures taken. If ACBM is removed, document the name and location of the storage or disposal facility.

2.14 Maintenance Activities

For maintenance activities other than small-scale, short-duration activities: document the name and signature of the person performing the activity, their State accreditation and, if applicable, the accreditation number of each person conducting the activity, activity start and completion dates, precise locations, and if ACBM is removed, the name and location of the storage or disposal facility.

2.15 Fiber Release Episodes

For each fiber release episode: document the date and location of the release, method of repair, preventative or response actions taken, the name of each person performing the work, and if ACBM is removed, the name and location of the storage or disposal facility.

3.0 REINSPECTION FINDINGS AND RECOMMENDATIONS

RECON performed a review of the original Burlington Schools Asbestos Management Plan and all accompanying documentation pertaining to employee training, patch and repair work performed under the O&M Program, and asbestos abatement operations that have taken place since the implementation of the O&M Program. The following information summarizes RECON's Findings and Recommendations:

3.1 Warning Labels

RECON did not observe the presence of warning labels in routine maintenance areas at the Fox Hill Elementary School.

As per section 2.5 of this document and AHERA Regulation 763.95(a), "the LEA shall attach a warning label immediately adjacent to any friable and non-friable ACBM and suspected ACBM assumed to be ACM located in routine maintenance areas (such as boiler rooms) at each school building".

3.2 Initial Cleaning

Upon review of the Management Plan, RECON did not observe records pertaining to initial and/or subsequent cleanings.

As per AHERA regulation 763.91(c), and Section 2.12 of this document: "Unless the building has been cleaned using equivalent methods within the previous 6 months, all areas of a school building

where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM are present shall be cleaned at least once after the completion of the inspection required by 763.85(a) and before the initiation of any response action, other than O&M activities or repair".

"For each time that cleaning under section 763.91(c) is performed, the LEA shall record the name of each person performing the cleaning, the date of such cleaning, the locations cleaned, and the methods used to perform such cleaning", as per the AHERA regulation section 763.94(e).

RECON recommends that if a reinspection/surveillance requires an initial or subsequent cleaning, proper documentation shall be implemented and included in the management plan.

3.3 Short-Term Worker Notification

Upon review of the Management Plan documents, RECON did not observe any notification to short-term workers.

Section 2.4 of this document and AHERA regulation 763.84(d) requires that the LEA shall, "ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.

RECON recommends that any person categorized as a short-term worker be notified in writing, regarding the location of all ACBM and suspect ACBM identified in the school.

3.4 Fiber Release Episodes

Upon review of the Management Plan documents, RECON did not observe any documentation regarding fiber release episodes.

Section 2.5 of this document and AHERA regulation 763.94(h) states that, "For each fiber release episode under 763.91(f), the LEA shall provide the date and location of the episode, the method of repair, preventive measures or response action taken, the name of each person performing the work, and if ACBM is removed, the name and location of storage or disposal site of the ACM".

RECON recommends that if a fiber release episode transpires, proper response actions must be implemented and documentation included in the management plan.

3.5 Designated Person

RECON did not observe training documentation for the LEA's appointed designated person. The following summarizes RECON's findings:

Name: _____

Title: _____

Address: _____

_____

Tel. #: (617) ___-____

Training: _____

_____

_____

Section 2.7 of this document and AHERA regulation 763.84(g)(2) states that "the LEA shall ensure that the designated person receives adequate training to perform duties assigned under this section".

RECON recommends that the LEA ensure proper training of the designated person in the following areas: health effects of asbestos; detection, identification, and assessment of ACM; options for controlling ACBM; Asbestos Management programs; knowledge of relevant Federal, State, Occupational Safety and Health Administration (OSHA), and Department of Labor and Industries regulations.

3.6 Custodial/Maintenance Training

RECON did not observe training documentation for the schools custodial/maintenance staff.

RECON recommends that the Burlington Schools ensures that all maintenance personnel assigned to the Fox Hill Elementary School have or will receive, at a minimum, the two (2) hour asbestos-awareness training, as required by the AHERA regulation.

3.7 Building Occupant Notification

RECON did not observe yearly building occupant documentation regarding the status of the Management Plan document, ACBM related activities and the availability of the Management Plan for review.

In accordance with the AHERA Regulation, RECON recommends that the LEA ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.

3.8 Response Actions Completed

It was confirmed through documentation review and on-site inspection that the following Homogeneous Areas have been completely removed from the Fox Hill Elementary School. Asbestos abatement was performed by Dec-Tam Asbestos Abatement in July, August, October, and November of 1989.

CHART OF HOMOGENEOUS AREAS ABATED FROM THE BUILDING

HOMOGENEOUS AREA	MATERIAL DESCRIPTION	MATERIAL LOCATION
T-04	Elbow Fitting Insulation	Above Ceilings and Behind Walls (Removed from above all suspended ceilings)
T-05	Emergency Generator Exhaust Insulation	Electrical Room
M-04	2' x 4' Suspended Ceiling Tiles	Bathroom, Cafeteria, Kitchen, Offices, etc.

Homogeneous Areas T-05, and M-04 have been removed from the Hazard Priority Listing.

3.9 Periodic Surveillance

RECON did not observe any records regarding periodic surveillance activities at the Fox Hill Elementary School.

RECON recommends that records of each future periodic surveillance be inserted into the management plan.

"At least once every 6 months after a management plan is in effect, each local education agency shall conduct periodic surveillance in each building that it leases, owns, or otherwise uses as a school building that contains ACBM or is assumed to contain ACBM", as per the AHERA regulation section 763.92 (b) (1).

3.10 Three Year Reinspection

RECON did not observe any records regarding previous AHERA Three Year Reinspections.

"At least once every 3 years after a Management Plan is in effect, each local education agency (LEA) shall conduct a reinspection of all friable and non-friable known or assumed ACBM in each school building that they lease, own, or otherwise use as a school building", as per the AHERA regulation section 763.85 (b) (1). Each AHERA Three Year Reinspection must be conducted by an accredited inspector.

3.11 General

All Asbestos-containing/suspect asbestos-containing homogeneous areas must be maintained under the provisions of an O&M Program as long as they remain in the Fox Hill Elementary School.

The Burlington Schools designated person must be notified of all scheduled renovations or demolitions that are to occur. Notification to the designated person allows for any possible disturbance of asbestos-containing materials to be prevented and for the proper handling of ACM at the Fox Hill Elementary School.

If materials are discovered that have not been listed in this reinspection report or the initial Asbestos Management Plan, RECON recommends that they be treated as asbestos-containing until sampling can be performed to determine asbestos content.

The Reinspection Hazard Assessment Sheets for all confirmed and assumed Homogeneous Areas at the Fox Hill Elementary School are provided in Appendix C of this report. The updated Hazard Priority Summary included as section 4.0 shall become the main Hazard Priority List for the LEA.

4.0 HAZARD PRIORITY SUMMARY

The Hazard Priority Summary List ranks the Homogeneous Areas which contain asbestos according to their potential for fiber release. Based on material condition as observed during the inspector's survey, no areas require immediate abatement. However, locations requiring patch & repair and removal operations should be addressed in a timely manner. The response action selected by the LEA must be sufficient to protect human health and the environment, at a minimum. All asbestos abatement work must be completed in accordance with applicable federal, state and/or local regulations.

Factors which may influence decisions as to the patching and repair of damaged ACBM versus complete abatement, apart from an area's potential for fiber release, might include scheduled renovations, appropriate funding, or the availability of unoccupied areas (such as during vacation periods).

The Hazard Priority Summary List is as follows:

HOMOGENEOUS AREA	RECOMMENDED RESPONSE ACTION
T-01	O&M Program/Patch & Repair
M-01	O&M Program/Remove When Practical
T-02	O&M Program/Patch & Repair
T-03	O&M Program/Patch & Repair
T-04	O&M Program/Patch & Repair
M-02	O&M Program
M-03	O&M Program
S-01	O&M Program

W50139FH

Recon

APPENDIX A

LIMITATIONS AND SERVICE CONSTRAINTS

LIMITATIONS AND SERVICE CONSTRAINTS

All professional opinions presented in this report are based on information made available to us either by review of data provided by others or data gathered by RECON personnel.

RECON affirms that data gathered and presented by RECON in this report was collected in an appropriate manner in accordance with generally accepted methods and practices. RECON cannot be responsible for decisions made by our client solely on the basis of economic factors.

Conditions described in this report are as found at the time of investigation, unless otherwise stated.

RECON analyzed only the substances, conditions and locations described in the report at the time indicated. No inferences regarding other substances, conditions, location or time can be made unless specifically stated in this report.

No recommendations were provided for materials containing less than one percent asbestos. Materials containing less than one percent asbestos do not meet either the generally accepted industry definition of asbestos-containing material (any material containing greater than one percent asbestos) or the EPA definition of friable ACM (any material friable bulk insulation material containing greater than one percent asbestos by weight as analyzed by Polarized Light Microscopy.) RECON, however, makes no statement, implied or explicit, about the hazards of materials containing less than one percent asbestos.

This report is intended for the use listed in the section of this report described as the Introduction. The use of this report in any manner other than that listed in the Introduction requires the written consent of RECON Engineering and Testing Company, Inc. This report must be presented in its entirety.

F:\ADMINDAT\BOILERPL\LIMITS.ASB

APPENDIX B

LOCATION OF REMAINING ACM

W50139FH
Recon

APPENDIX B

LOCATION OF REMAINING ACM FOX HILL ELEMENTARY SCHOOL BURLINGTON, MA				
LOCATION	MATERIAL DESCRIPTION	APPROXIMATE QUANTITY	CONDITION	HOMO. AREA
Inside boiler doors	Boiler gasket	3 sf	Undetermined	M-01
Outside & inside building	Blue & Gray transite siding panels	5,346 sf	Good	M-02
Classrooms, storage areas, offices, cafeteria and halls	12" X 12" floor tile and mastic in various colors	49,332 sf	O.K.	M-03
Cafeteria Walls	Hard plaster	1,500 sf	Good	S-01
Boiler room	Gray, fibrous material on hot water tank	126 sf	Damaged (5 sf)	T-01
Boiler room	Pipe fittings	85 lf	Good	T-02
Boiler room	Breeching insulation	40 lf	Good	T-03
Behind walls & ceilings	Elbow fitting insulation	undetermined	N/A	T-04

APPENDIX C

HAZARD ASSESSMENT SUMMARY SHEETS

W50139FH

Recon

3-YEAR ASBESTOS REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Project Number: W50139
School: FOX HILL ELEMENTARY SCHOOL
Homogeneous Area ID#: M-01
Type of Material: MISCELLANEOUS
Analysis Result: ASSUMED ASBESTOS
Square/Linear Footage: 3
EPA Assessment Category:

********** AREA DESCRIPTIONS **********
Homogeneous Area: THE MATERIAL IS BOILER GASKET
Description

Location: MATERIAL IS LOCATED ON INSIDE OF THE BOILER DOORS
********** ASSESSMENT CRITERIA - CURRENT CONDITIONS **********
Existence of Barriers: NO Explain:
Abnormal Access Features: YES Explain: MUST PRY OPEN

Air Erosion: LOW Maintenance Activities: LOW

Vandalism: Potential for fiber release: LOW

Comments: VANDALISM: NONE - NO ACCESS
********** DAMAGE FACTORS **********
Water: Percentage: %
Physical: Percentage: %
Probable Damage Sources: * UNDETERMINED

Is this a change in condition, existing damage, or potential for fiber release from the original assessment ? NO
Explain:

********** RECOMMENDED RESPONSE ACTION (OVERALL) **********
Recommended Action: OPERATIONS & MAINTENANCE PROGRAM, REMOVE WHEN PRACTICAL
Is this a change in response action from the original recommendation ? NO

Response Action Rationale:

********** TOTAL REMOVAL COST ESTIMATE **********

3 Sq./Lin. Feet x $25.00/Foot = $75.00

3-YEAR ASBESTOS REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Project Number: W50139
School: FOX HILL ELEMENTARY SCHOOL
Homogeneous Area ID#: M-02
Type of Material: SURFACING
Analysis Result: 35%-45% ASBESTOS
Square/Linear Footage: 5,346
EPA Assessment Category: 1

********** AREA DESCRIPTIONS **********
Homogeneous Area: BLUE AND GREAY TRANSITE SIDING PANELS
Description

Location: OUTSIDE & INSIDE OF BUILDING
********** ASSESSMENT CRITERIA - CURRENT CONDITIONS **********
Existence of Barriers: NO Explain:
Abnormal Access Features: NO Explain:

Air Erosion: MODERATE Maintenance Activities: LOW

Vandalism: MODERATE Potential for fiber release: LOW

Comments:
********** DAMAGE FACTORS **********
Water: LOW Percentage: <1%
Physical: LOW Percentage: 2%
Probable Damage Sources:

Is this a change in condition, existing damage, or potential for fiber release from the original assessment ? NO
Explain:

********** RECOMMENDED RESPONSE ACTION (OVERALL) **********
Recommended Action: OPERATIONS & MAINTENANCE PROGRAM
Is this a change in response action from the original recommendation ? NO

Response Action Rationale:

********** TOTAL REMOVAL COST ESTIMATE **********

5,346 Sq./Lin. Feet x $30.00/Foot = $160,380.00

3-YEAR ASBESTOS REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Project Number: W50139
School: FOX HILL ELEMENTARY SCHOOL
Homogeneous Area ID#: M-03
Type of Material: MISCELLANEOUS
Analysis Result: NOT ANALYZED
Square/Linear Footage: 49,332
EPA Assessment Category: 1

********** AREA DESCRIPTIONS **********
Homogeneous Area: 12" X 12" FLOOR TILE AND MASTIC IN VARIOUS COLORS
Description

Location: CLASSROOMS, STORAGE AREAS, OFFICES, CAFETERIA, HALLWAYS
********** ASSESSMENT CRITERIA - CURRENT CONDITIONS **********
Existence of Barriers: YES Explain: LIBRARY FLOOR TILE CARPETED
Abnormal Access Features: NO Explain:

Air Erosion: LOW Maintenance Activities: LOW

Vandalism: LOW Potential for fiber release:

Comments:
********** DAMAGE FACTORS **********
Water: LOW Percentage: 2%
Physical: LOW Percentage: 3%
Probable Damage Sources: SLIGHT WATER DAMAGE & DETERIORATION FROM AGE AND USE

Is this a change in condition, existing damage, or potential for fiber release from the original assessment ?
Explain:

********** RECOMMENDED RESPONSE ACTION (OVERALL) **********
Recommended Action: OPERATIONS & MAINTENANCE PROGRAM
Is this a change in response action from the original recommendation ? NO

Response Action Rationale:
REPLACE ANY DAMAGED TILES

********** TOTAL REMOVAL COST ESTIMATE **********

49,332 Sq./Lin. Feet x $3.00 /Foot = $147,996.00

3-YEAR ASBESTOS REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Project Number: W50139
School: FOX HILL ELEMENTARY SCHOOL
Homogeneous Area ID#: S-01
Type of Material: SURFACING
Analysis Result: ASSUMED ASBESTOS
Square/Linear Footage: 1,500
EPA Assessment Category:

********** AREA DESCRIPTIONS **********
Homogeneous Area: HARD PLASTER
Description

Location: ON CAFETERIA WALLS
********** ASSESSMENT CRITERIA - CURRENT CONDITIONS **********
Existence of Barriers: NO Explain:
Abnormal Access Features: NO Explain:

Air Erosion: LOW Maintenance Activities: LOW

Vandalism: LOW Potential for fiber release:

Comments:
********** DAMAGE FACTORS **********
Water: LOW Percentage: 1%
Physical: LOW Percentage: 1%
Probable Damage Sources:

Is this a change in condition, existing damage, or potential for fiber release from the original assessment ? NO
Explain:

********** RECOMMENDED RESPONSE ACTION (OVERALL) **********
Recommended Action: OPERATIONS & MAINTENANCE PROGRAM
Is this a change in response action from the original recommendation ?

Response Action Rationale:

********** TOTAL REMOVAL COST ESTIMATE **********

1,500 Sq./Lin. Feet x $30.00/Foot = $45,000.00

3-YEAR ASBESTOS REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Project Number: W50139
School: FOX HILL ELEMENTARY SCHOOL
Homogeneous Area ID#: T-01
Type of Material: THERMAL
Analysis Result: 30%-50% ASBESTOS
Square/Linear Footage: 126
EPA Assessment Category: 4

********** AREA DESCRIPTIONS **********
Homogeneous Area: GRAY, FIBROUS INSULATION MATERIAL ON HOT WATER TANK
Description

Location: IN BOILER ROOM
********** ASSESSMENT CRITERIA - CURRENT CONDITIONS **********
Existence of Barriers: NO Explain:
Abnormal Access Features: NO Explain:

Air Erosion: LOW Maintenance Activities: LOW

Vandalism: LOW Potential for fiber release: MODERATE

Comments:
********** DAMAGE FACTORS **********
Water: MODERATE Percentage: 5% LOCALIZED
Physical: MODERATE Percentage: 5% LOCALIZED
Probable Damage Sources: ABOUT 2 YEARS AGO A WATER LEAK ON THE TANK CREATED 5 SF OF ASBESTOS DAMAGE

Is this a change in condition, existing damage, or potential for fiber release from the original assessment ? YES
Explain: 5 SF OF TSI FROM THE TANK WAS ABATED FOR REPAIR PURPOSES

********** RECOMMENDED RESPONSE ACTION (OVERALL) **********
Recommended Action: OPERATIONS & MAINTENANCE PROGRAM, PATCH & REPAIR
Is this a change in response action from the original recommendation ? YES

Response Action Rationale:
THE PATCH & REPAIR IS MORE SIGNIFICANT DUE TO THE AMOUNT OF DAMAGE

********** TOTAL REMOVAL COST ESTIMATE **********

126 Sq./Lin. Feet x $15.00/Foot = $1,890.00

3-YEAR ASBESTOS REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Project Number: 339
School: FOX HILL ELEMENTARY SCHOOL
Homogeneous Area ID#: T-02
Type of Material: THERMAL
Analysis Result: 1%-3% ASBESTPS
Square/Linear Footage: 85
EPA Assessment Category: 1

********** AREA DESCRIPTIONS **********
Homogeneous Area: PIPE FITTINGS ON FIBERGLASS INSULATED PIPES
Description

Location: IN BOILER ROOM
********** ASSESSMENT CRITERIA - CURRENT CONDITIONS **********
Existence of Barriers: NO Explain:
Abnormal Access Features: NO Explain:

Air Erosion: LOW Maintenance Activities: LOW

Vandalism: LOW Potential for fiber release: MODERATE

Comments:
********** DAMAGE FACTORS **********
Water: MODERATE Percentage: 5% LOCALIZED
Physical: LOW Percentage: 3% LOCALIZED
Probable Damage Sources:

Is this a change in condition, existing damage, or potential for fiber release from the original assessment ? NO
Explain:

********** RECOMMENDED RESPONSE ACTION (OVERALL) **********
Recommended Action: OPERATIONS & MAINTENANCE PROGRAM, PATCH & REPAIR
Is this a change in response action from the original recommendation ? NO

Response Action Rationale:

********** TOTAL REMOVAL COST ESTIMATE **********

85 Sq./Lin. Feet x $15.00/Foot = $1,275.00

3-YEAR ASBESTOS REINSPECTION
HAZARD ASSESSMENT SUMMARY SHEET

Project Number: WS0139
School: FOX HILL ELEMENTARY SCHOOL
Homogeneous Area ID#: T-03
Type of Material: THERMAL
Analysis Result: 45%-55% ASBESTOS
Square/Linear Footage: 40
EPA Assessment Category: 1

********** AREA DESCRIPTIONS **********
Homogeneous Area: BOILER BREECHING INSULATION. IT IS 2" THICK GRAY AND
Description FIBROUS MATERIAL ON 12" DIAMETER PIPE.

Location: IN BOILER ROOM
********** ASSESSMENT CRITERIA - CURRENT CONDITIONS **********
Existence of Barriers: NO Explain:
Abnormal Access Features: YES Explain: 6' OFF THE GROUND

Air Erosion: MODERATE Maintenance Activities: LOW

Vandalism: LOW Potential for fiber release: MODERATE

Comments:
********** DAMAGE FACTORS **********
Water: LOW Percentage: 2%
Physical: LOW Percentage: 4%
Probable Damage Sources:

Is this a change in condition, existing damage, or potential for fiber release from the original assessment ? NO
Explain:

********** RECOMMENDED RESPONSE ACTION (OVERALL) **********
Recommended Action: OPERATIONS & MAINTENANCE PROGRAM, PATCH & REPAIR
Is this a change in response action from the original recommendation ? NO

Response Action Rationale:

********** TOTAL REMOVAL COST ESTIMATE **********

40 Sq./Lin. Feet x $15.00/Foot = $600.00

APPENDIX D

RESPONSE ACTION SELECTION CRITERIA

W50139PG
Recon

APPENDIX D

Response Action Selection Criteria

The LEA must select and implement in a timely manner the appropriate response actions consistent with the EPA Assessment Codes. The response actions selected shall be sufficient to protect human health and the environment.

The LEA may select the action that is the least burdensome method. In determining which is least burdensome, the LEA may consider local circumstances including occupancy and use patterns within the school building, and its economic concerns, long and short term.

Note: Nothing prohibits the removal of ACBM from a school building at any time, should removal be the preferred response action of the LEA.

The EPA has developed a seven (7) category assessment code depending upon the type of condition of ACBM.

EPA Assessment

Code	Description
1.	Damaged or significantly damaged thermal system insulation ACM.
2.	Damaged friable surfacing ACM.
3.	Significantly damaged friable surfacing ACM.
4.	Damaged or significantly damaged friable miscellaneous ACM.
5.	ACBM with potential for damage.
6.	ACBM with potential for significant damage.
7.	Any remaining friable ACBM or friable suspected ACBM.

In applying the EPA's Assessment code, it is necessary to understand the following EPA definitions.

Damaged ACBM: That material which has deterioration, delamination, water damage, lacks cohesion, is blistered, crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over more than 1% but less than 10% of the surface area if the damage is evenly distributed or less than 25% if the damage is localized in one area of the homogeneous area.

Significantly Damaged ACBM: That material which has deterioration, delamination, water damage, lacks cohesion, is blistered, crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over at least 10% of the surface area if the damage is evenly distributed or at least 25% if the damage is localized in one area of the homogeneous area.

Good Condition ACBM: ACBM with no visible damage or deterioration.

ACBM with potential for damage: Pertains to circumstances in which:

- Friable ACBM is in an area regularly used by building occupants, including maintenance workers.
- There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated or delaminated due to factors such as changes in building use, changes in O&M practices, changes in occupancy or recurrent damage.

ACBM with potential for significant damage: Pertains to circumstances in which:

- Friable ACBM is in an area regularly used by building occupants, including maintenance workers.
- There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated or delaminated due to factors such as changes in building use, changes in O&M practices, changes in occupancy or recurrent damage.
- The material is subject to major or continuing disturbance, due to factors including, but not limited to accessibility or under certain circumstances, vibration or air erosion.

In applying EPA's category code, the person making the assessment must consider the following factors:

1. Accessibility;
2. Potential for contact with the material;
3. Quantity of the asbestos containing material;
4. Composition of the ACM;
5. Size of the population exposed;
6. Likelihood of continual exposure;
7. Pedestrian traffic and adjacent room use;
8. Vibration and air movement;
9. Planned future use of the area(s).

The selection of Response Actions is guided by minimum response requirements imposed by the AHERA Regulation:

If damaged or significantly damaged thermal system insulation (TSI) ACM (EPA Code #1) is present in a building, the LEA shall:

1) At least repair the damaged area, or remove the damaged material if it is not feasible to repair the damage.

2) Maintain all TSI ACM and its covering in an intact and undamaged condition.

If damaged friable surfacing ACM or damaged friable miscellaneous ACM (EPA Code #2 and 4) is present in a building the LEA shall:

1) Select encapsulation, enclosure, removal or repair of the damaged material.

If significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM (EPA Codes #3 and 4) is present in a building, the LEA shall:

1) Immediately isolate and restrict access, unless isolation is not necessary to protect human health and the environment.

2) Remove the ACM from the functional space, unless encapsulation or enclosure is sufficient.

If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM (EPA Code #5) is present in a building, the LEA shall:

1) At least institute an O&M Program, as described in 763.91.

If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous material has potential for significant damage, (EPA Code #6) is present in a building, the LEA shall:

1) Implement an O&M Program, as described under 763.91.

2) Institute preventive measures appropriate to eliminate the reasonable likelihood that the ACM or its covering will become significantly damaged, deteriorated, or delaminated.

3) Remove the material as soon as possible if appropriate preventative measures cannot be effectively implemented, or unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary to avoid an imminent and substantial endangerment to human health or environment.

TOWN OF BURLINGTON

BOARD OF HEALTH
61 Center Street
Burlington, Massachusetts 01803
(617) 270-1955 • Fax 270-1009

To: Richard Benowitz
Principal Fox Hill School

From: Todd H. Dresser TH

RE: Inspection of Ceramics Program at Fox Hill School

On January 24, 1995, I inspected the ceramics program conducted at the Fox Hill School. Currently, the school fires all ceramic pieces in a kiln located in a boiler room. No students are allowed in the area. Your ability to control and restrict access to the kiln is commendable. While inspecting the kiln, I noted that the kiln is not currently vented. Electric kilns similar to the unit operated at the school will generate ozone, carbon monoxide, volatile organics and metallic fumes and consequently must be vented directly to the atmosphere. Therefore, you are required to have this unit vented directly to the outdoors in order to continue using the unit. Failure to vent the kiln may adversely affect the air quality at the School. I also noted that the cover to the kiln is loose and that the cover has not been provided with a re-enforcing support bar to prevent the cover from dropping when open. Both of these deficiencies should be repaired to protect the operator.

During my survey, I also reviewed the paints and glazes used in the ceramics curriculum. I found that all the materials were lead free and complied with ASTM D 4236, a U.S. Food and Drug Administration regulation prohibiting the use of toxic materials in the instruction of the arts to children. The Board of Health commends your instructor, Mrs. Olansky, for her professionalism and diligence in complying with these requirements. Her efforts have resulted in a safer environment for the students.

In conclusion, I suggest that the school prepare a master inventory of all chemicals, art supplies, cleaning compounds or paints present at the school. The Massachusetts Right to Know law also requires that you maintain a copy of the material safety data sheet for each substance maintained at the school. These records should also be collected and reviewed when you prepare your master inventory list. A material safety data sheet is an informational sheet prepared and supplied by the manufacturer which describes the composition of the material, proper storage, and health hazards. A copy of this information should be submitted to the Board of Health.

A target date for completing the necessary improvements is March 17, 1995. Do not hesitate to contact me if you have any questions.

tf
cc: Bill Koutrouba, School Dept.
Mrs. Olansky, Fox Hill School

TOWN OF BURLINGTON
Inter-office Correspondence

NO. 12/19/94
DATE

FROM: Todd H. Dresser TH
Environmental Engineer

TO: Bill Koutrouba
School Department

SUBJECT: Kilns Maintained by the School Department

The Board of Health is currently reviewing health and safety concerns associated with the operation of ceramic kilns. In order to ensure the air quality of the local schools, I request that you furnish the Board of Health with a listing of the number and location of all kilns owned and operated by the School Department.

Please do not hesitate to contact me if you have any questions.

lmo

Fox Hill School - 1
Located in Boiler Room

TOWN OF BURLINGTON
BOARD OF HEALTH
BURLINGTON, MASSACHUSETTS 01803
TOWN HALL 270-1855

Inspection of: Oil Release — Date: 12/14/93 — Time: 10:30AM
Name: Fox Hill School — Address:
Owner: Town of Burlington — Tel. No.:
Type of Inspection: — Inspector: Todd Dresser / Brian Lockard
(*) Remarks and Violations are listed below: Brian and I investigated the report of an oil release at Fox Hill school. We found that someone had discarded approximately eight quart containers filled with oil on the access road behind the Fox Hill Road. Two of these containers had been ruptured at the time of discovery. The oil had been released on pavement and soil adjacent to the access road. Recreation department personnel have collected the contaminated soil (approximately 0.5 cubic yards of soil) and have deposited the material in the school dumpster. This material will be sent to NESWIC for incineration. The remaining oil will be taken to the highway garage for disposal via the municipal hazardous waste hauler.

Report Received by:

TOWN OF BURLINGTON

HAZARDOUS MATERIALS REGISTRATION FORM

NAME OF FIRM: Fox Hill School — FACILITY ADDRESS: Fox Hill RD
MAIL ADDRESS: — PHONE: 270-1791
FIRM'S CEO: — S.I.C.(s)
TYPE OF BUSINESS: LIST PRINCIPAL PRODUCTS OR SERVICES

1.0 DOES YOUR BURLINGTON FACILITY HANDLE, USE, OR STORE ANY "TOXIC OR HAZARDOUS" MATERIALS, AS DEFINED IN THE "CONTROL OF TOXIC AND HAZARDOUS MATERIALS" BY-LAW? (i.e., oils, solvents, acids/bases, cleaning agents, fuels, gas cylinders)
YES ✓ NO

2.0 WHO ARE YOUR FACILITY'S EMERGENCY COORDINATORS?
NAME John R Davidson TITLE SR Custodian HOME PHONE 272-8255
NAME TITLE HOME PHONE

3.0 LIST "TOXIC OR HAZARDOUS" MATERIALS OR WASTES THAT YOUR FACILITY HANDLES. EXPRESS QUANTITIES IN EITHER GALLONS OR POUNDS, AND ONLY IF CONTAINER CAPACTIY EQUALS OR EXCEEDS 1-QUART OR 2-POUNDS.

LIST OF HAZARDOUS MATERIALS

HAZARDOUS PRODUCT OR CHEMICAL	TYPE OF[1] STORAGE	MAXIMUM STORED QUANTITY	PHYSICAL HEALTH HAZARD
OIL	UT	8,000	
OIL	AT	200	

[1] USE CODE: UT=UNDERGROUND TANK, AT=ABOVE GROUND TANK, D-DRUM, AC=ABOVE GROUND CONTAINER, OR C=GAS CYLINDER

effective 5/20/91 Revision 2

LIST OF HAZARDOUS WASTES

HAZARDOUS WASTE	EPA WASTE NUMBER	MAXIMUM QUANTITY	DOT SHIPPING NAME

4.0 IF YOUR FACILITY GENERATES HAZARDOUS WASTE, SUPPLY THE FOLLOWING INFORMATION

EPA ID NO._____GENERATOR STATUS____VSQG____SQG____LQG
VSQG (<100kg/monthly) SQG (100-1000kg/monthly) LQG (>1000kg/monthly)

5.0 DOES YOUR FACILITY HAVE ANY UNDERGROUND STORAGE TANKS (USTs)? PLEASE NOTE THAT ALL TANKS IN SERVICE FOR 20 YEARS AND WITH A CAPACITY OF GREATER THAN 1000 GALLONS MUST BE TESTED ANNUALLY, UNLESS THE TANK(s) SYSTEM HAS SECONDARY CONTAINMENT.

	TANK 1UT	TANK 2UT	TANK 3UT	TANK 4UT
DATE OF INSTALLATION	12-3-67			
MOST RECENT TANK TEST				
CAPACITY IN GALLONS	8,000			
TYPE (i.e., steel or fiberglass)	Steel			
STORED MATERIAL				

6.0 DOES YOUR FACILITY HAVE ANY ABOVE GROUND STORAGE TANKS?

	TANK 1AT	TANK 2AT	TANK 3AT	TANK 4AT
DATE OF INSTALLATION	10-17-87			
CAPACITY IN GALLONS	200			
TYPE (i.e., steel or fiberglass)	Steel			
STORED MATERIAL				

7.0 IN THE SPACE PROVIDED BELOW, DRAW A SITE MAP OF THE PROPETY INDICATIN(THE LOCATION(s) OF STORAGE TANK(s) AND OTHER HAZARDOUS MATERIALS/ WASTES STORED OUTDOORS. PLEASE IDENTIFY STORAGE TANKS USING THE SAME ALPHA-NUMERIC NOTATION USED IN ITEMS 5.0-6.0.

8.0 IN THE SPACE PROVIDED BELOW, DRAW A FLOOR PLAN OF THE INTERIOR OF YOUR FACILITY INDICATING LOCATIONS WHERE HAZARDOUS MATERIALS ARE HANDLED, USED, OR STORED. ALSO, LOCATE SAFETY AND SPILL CONTROL EQUIPMENT/ MATERIALS, AS WELL AS, COUNTERMEASURE PLAN POSTING(s). IN CASE OF A HAZARDOUS MATERIAL INCIDENT, PLEASE NOTE ANY SPECIAL HAZARDS WHICH THREATEN EMERGENCY RESPONSE PERSONNEL WITHIN THESE AREAS.

9.0 NAME OF INDIVIDUAL COMPLETING FORM: John A Daniels

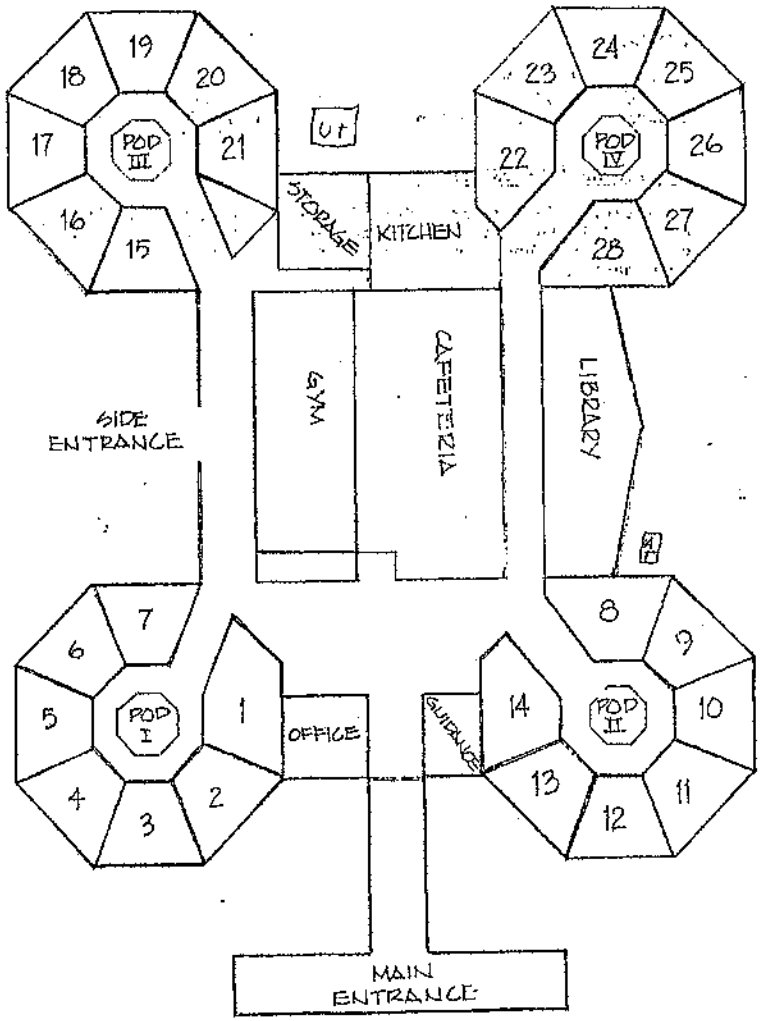
TITLE: SA Custodian

TELEPHONE NO: 270-7791

DATE: 9/20/93

effective 5/20/91 Revision 2

LAYOUT OF THE SCHOOL



TOWN OF BURLINGTON
BOARD OF HEALTH
BURLINGTON, MASSACHUSETTS 01803
TOWN HALL 272-8700

Inspection of Oil Spill in Parking Lot Date JAN 8, 1990 Time PM
Name Address Fox Hill Elementary School
Owner Town of Burlington Tel. No.
Type of Inspection Spill Inspector R Lombard
(*) Remarks and Violations are listed below:

Investigated Release of Waste Oil at Fox-Hill Elementary School Apparently someone Disposed of (2) 1-Gal Plastic containers w/ waste oil into a trash barrel in the school parking lot. One of these containers opened & released its contents. Approximately 3 qt of liquid drained into parking lot

Highway Dept. placed school absorbent pads to absorb the waste oil. The other waste oil container was brought to the Highway Garage for disposal

Highway will return to pick up contaminated material

Report Received by: R Tomb

TOXIC OR HAZARDOUS SUBSTANCES

Fox Hill School

INVENTORY LIST

Product or Chemical Name	Work Area Location	Container Size or Quantity	Manufacturer's Name and Address
Duplicating Fluid	O Office	1 gallon	Viking Mfg. Co. Natick, MA 01760
Protective Clear Spray	C Art Classes	* Spray Can 13 oz.	Products Corp. Norristown, PA 19404
Perma Clear Acrylic	C Art Classes	* Spray Can 11 oz.	Borden, INC. Dept. CP Columbus, Ohio 43215

* only one can of each in bldg.

TOWN OF BURLINGTON

HAZARDOUS MATERIALS REGISTRATION FORM

NAME OF FIRM: School Dept. (Fox Hill School)

ADDRESS:

TELEPHONE: 273-1870

FIRM'S MANAGER: Thomas J. Doherty Jr.

TYPE OF BUSINESS: LIST PRINCIPAL PRODUCTS OR SERVICES S.I.C.

1.0 DOES YOUR BURLINGTON FIRM HANDLE, USE, OR STORE ANY "TOXIC OR HAZARDOUS" MATERIALS, AS DEFINED IN THE "CONTROL OF TOXIC AND HAZARDOUS MATERIALS" BYLAW? YES ✓ NO

IF THE ANSWER IS NO, GO TO ITEM 11.0.

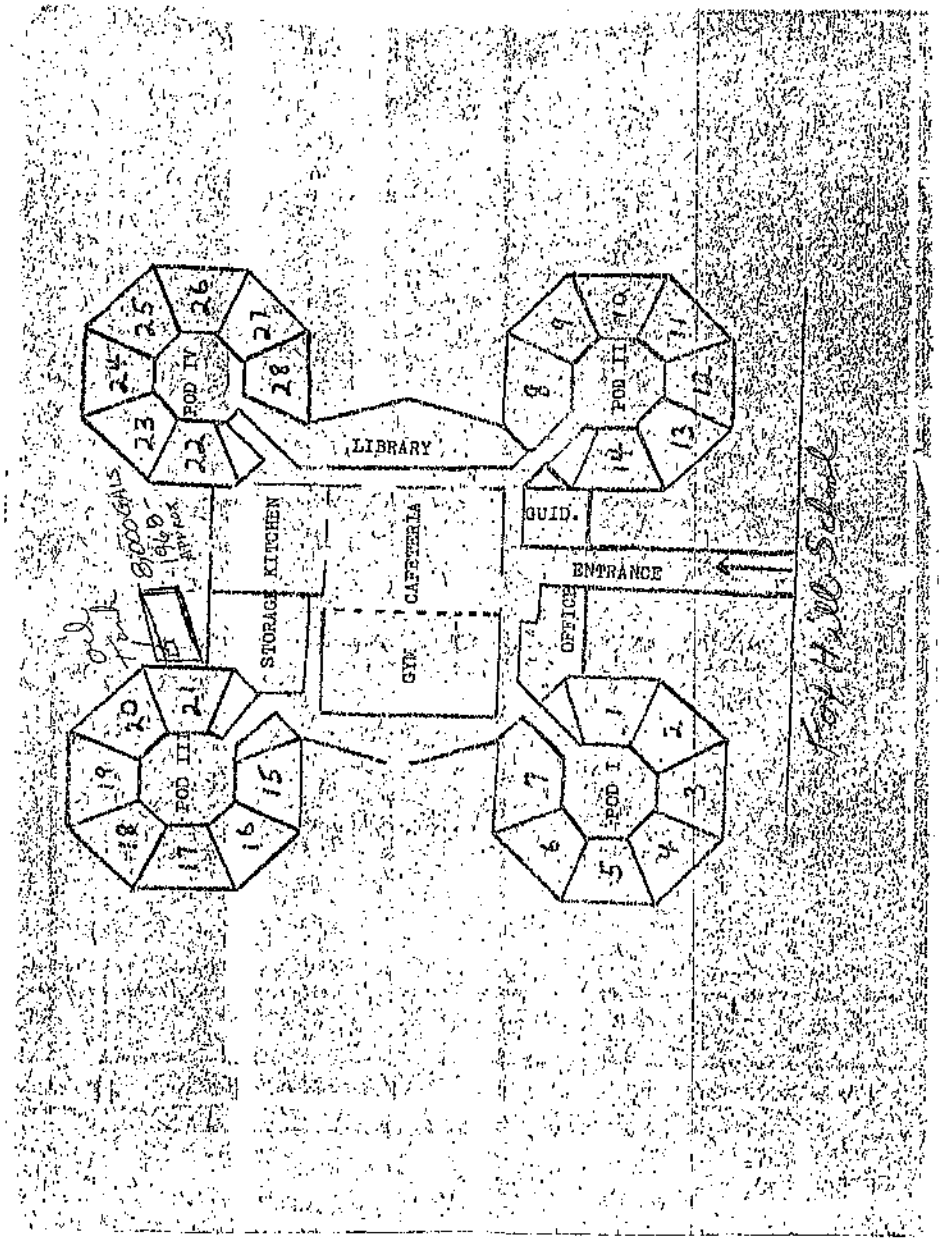
IF THE ANSWER IS YES, TO TO ITEM 2.0.

2.0 LIST "TOXIC AND HAZARDOUS" MATERIALS OR WASTES THAT YOUR BURLINGTON FIRM HANDLES. EXPRESS QUANTITIES IN EITHER GALLONS OR POUNDS, AND ONLY THOSE HANDLED IN EXCESS OF FIVE (5) GALLONS OR TWO (2) POUNDS DRY WEIGHT.

MATERIAL NAME OR EPA WASTE CODE	TYPE OF STORAGE[1]	MAXIMUM QUANTITY	CONSUMPTION OR GENERATION RATE[2]	HAZARDOUS PROPERTIES (OR DOT HAZARD CLASS

[1]USE CODE: UT=UNDERGROUND TANK, AT=ABOVEGROUND TANK, D=DRUMS, OR AC=ABOVEGROUND CONTAINERS

[2]MONTHLY BASIS



TOWN OF BURLINGTON

HAZARDOUS MATERIALS REGISTRATION FORM

NAME OF FIRM: School Dept. (Fox Hill School)

ADDRESS:

TELEPHONE: 273-1870

FIRM'S MANAGER: Thomas J. Doherty Jr.

TYPE OF BUSINESS: LIST PRINCIPAL PRODUCTS OR SERVICES S.I.C.

1.0 DOES YOUR BURLINGTON FIRM HANDLE, USE, OR STORE ANY "TOXIC OR HAZARDOUS" MATERIALS, AS DEFINED IN THE "CONTROL OF TOXIC AND HAZARDOUS MATERIALS" BYLAW? YES ✓ NO

IF THE ANSWER IS NO, GO TO ITEM 11.0.

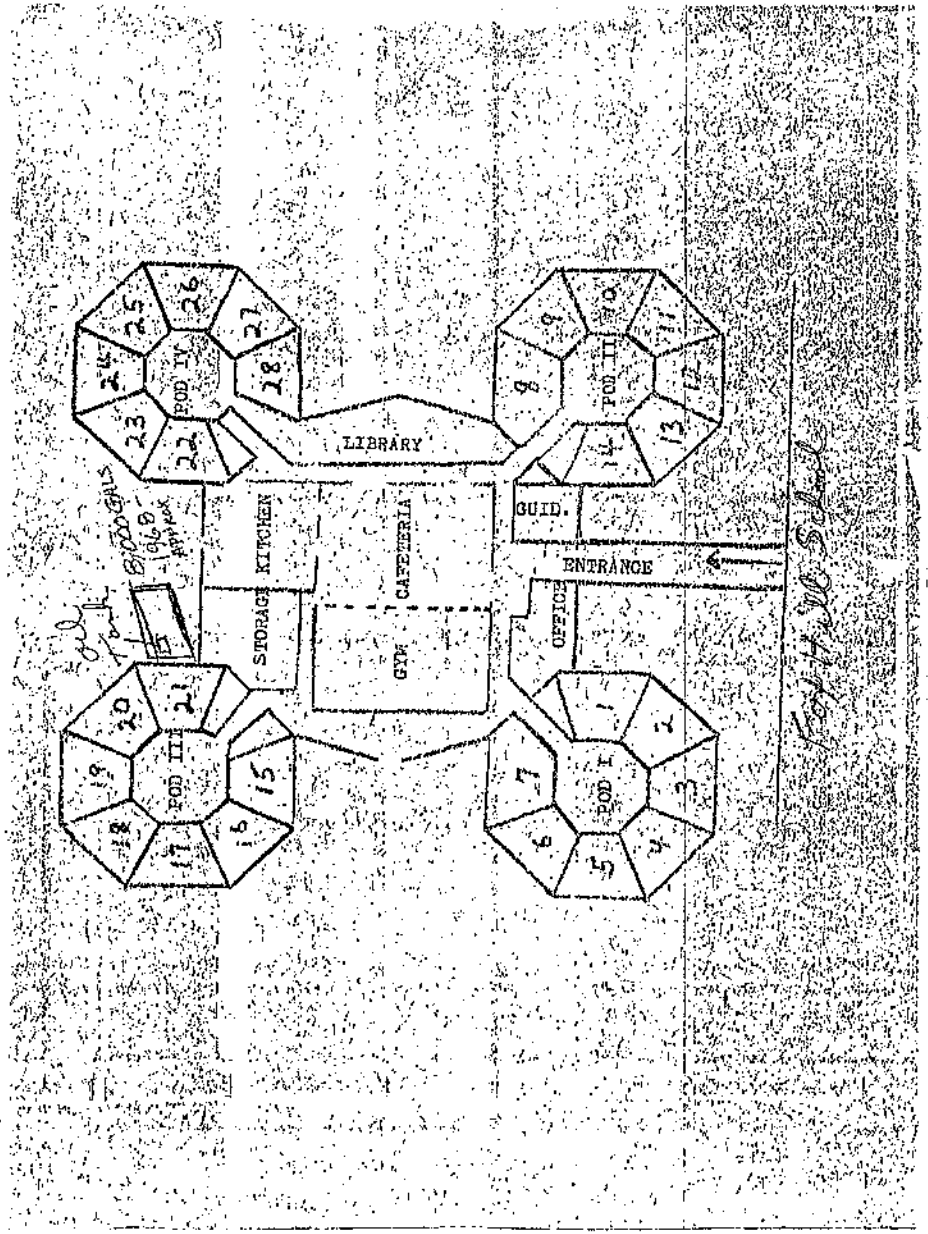
IF THE ANSWER IS YES, TO TO ITEM 2.0.

2.0 LIST "TOXIC AND HAZARDOUS" MATERIALS OR WASTES THAT YOUR BURLINGTON FIRM HANDLES. EXPRESS QUANTITIES IN EITHER GALLONS OR POUNDS, AND ONLY THOSE HANDLED IN EXCESS OF FIVE (5) GALLONS OR TWO (2) POUNDS DRY WEIGHT.

MATERIAL NAME OR EPA WASTE CODE	TYPE OF STORAGE[1]	MAXIMUM QUANTITY	CONSUMPTION OR GENERATION RATE[2]	HAZARDOUS PROPERTIES (OR DOT HAZARD CLASS)

[1]USE CODE: UT=UNDERGROUND TANK, AT=ABOVEGROUND TANK, D=DRUMS, OR AC=ABOVEGROUND CONTAINERS

[2]MONTHLY BASIS



TOWN OF BURLINGTON

Town Clerk's Office

Amy E. Warfield, Town Clerk, CMC
Linda A. McNeill, Assistant Town Clerk
Kirsten Midgley, Administrative Assistant

Daniel C. McCormack, CA
Records Manager/Archivist
Kaitlyn O'Shea, Administrative Assistant

PUBLIC RECORDS REQUEST

Date: April 7, 2023

Information of Requestor

Name:	Cheryl A. Cambria
Address:	1 Wallace Way
City, State, Zip:	West Bridgewater, MA 02379
Phone:	508-942-0366

Public Information Requested (Please specify in exact detail)

Permits for installation or removal of underground or aboveground storage tanks and/
or spills or releases of oil or other hazardous substances at Fox Hill Elementary
School at 252 Fox Hill Road from Clerk's Office and Fire Department

_____**NON-OFFICIAL** (Fee to be determined by record clerk)
_____**OFFICIAL** (Committee or Board)

FOR OFFICE USE ONLY

Date Information Released:	
Information Picked Up By:	
Fee Charged:	

Signature of Record Clerk:_____

G:\TEMPLATES_FORMS_LABELS\Public Records Request Form.doc

29 CENTER STREET • BURLINGTON, MASSACHUSETTS 01803 • TEL (781) 270-1660 • FAX (781) 238-4692
www.burlington.org • clerk@burlington.org

Fox Hill Elementary School
252 Fox Hill Road
Burlington, MA 01803

Inquiry Number: 7295798.5
April 03, 2023

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. **NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT.** Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, LLC. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, LLC, or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	*Target Street*	*Cross Street*	*Source*
2020	☑	☑	EDR Digital Archive
2017	☐	☐	Cole Information
2014	☑	☑	Cole Information
2010	☑	☑	Cole Information
2005	☑	☑	Cole Information
2000	☑	☑	Cole Information
1995	☑	☑	Cole Information
1992	☑	☑	Cole Information
1989	☑	☑	Cole Criss-Cross Directory
1984	☑	☑	Cole Criss-Cross Directory
1975	☑	☑	Cole Criss-Cross Directory
1970	☑	☑	Cole Criss-Cross Directory
1968	☑	☑	Cole Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

252 Fox Hill Road
Burlington, MA 01803

Year	*CD Image*	*Source*	
FOX HILL RD			
2020	pg A2	EDR Digital Archive	
2017	-	Cole Information	Street not listed in Source
2014	pg A9	Cole Information	
2010	pg A12	Cole Information	
2005	pg A15	Cole Information	
2000	pg A18	Cole Information	
1995	pg A20	Cole Information	
1992	pg A22	Cole Information	
1989	pg A24	Cole Criss-Cross Directory	
1984	pg A26	Cole Criss-Cross Directory	
1975	pg A28	Cole Criss-Cross Directory	
1975	pg A29	Cole Criss-Cross Directory	
1970	pg A31	Cole Criss-Cross Directory	
1968	pg A34	Cole Criss-Cross Directory	

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
WESTWOOD ST			
2020	pg. A6	EDR Digital Archive	
2017	-	Cole Information	Street not listed in Source
2014	pg. A11	Cole Information	
2010	pg. A14	Cole Information	
2005	pg. A17	Cole Information	
2000	pg. A19	Cole Information	
1995	pg. A21	Cole Information	
1992	pg. A23	Cole Information	
1989	pg. A25	Cole Criss-Cross Directory	
1984	pg. A27	Cole Criss-Cross Directory	
1975	pg. A30	Cole Criss-Cross Directory	
1970	pg. A32	Cole Criss-Cross Directory	
1970	pg. A33	Cole Criss-Cross Directory	
1968	pg. A35	Cole Criss-Cross Directory	

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

FOX HILL RD 2020

174	Patrick Clancy
176	Anila Desai
	Max Julien
	Safiyyah Ilyas
177	Christopher Anderson
	Joan Wheeler
	Lynda Anderson
	Matthew Anderson
178	Paras Mukadam
	Shree Harlalka
179	Joan Villandry
180	Erica Catanese
	Erin Spyropoulos
	Gregory Spyropoulos
181	Freddy Delatorre
	HEALTHMARKETS INSURANCE-FRED
	HEALTHMARKETS INSURANCE-FREDDY
	Janet Delatorre
	Joseph Delatorre
182	Ernest Rajakumar
184	Nhu-Ny Nguyen
185	Dhiru Patel
	Gitaben Patel
	Miteshkumar Patel
	Vijeta Patel
	Vivek Patel
186	Denise Clark
	Raymond Starkey
187	Amy Weiss
	Athur Weiss
	Benjamin Weiss
	Shari Weiss
189	Eric Lewis
	Marjorie Lewis
190	Gail Tuccero
	William Tuccero
191	John Soares
	Theresa Soares
192	Danielle Schissler
	Lauren Schissler
	Maryellen Schissler
193	Alyson Magrane
	Byron Magrane
	Nancy Rubin
194	Caron Lau
	Caron Shing
	Kim Lau
195	James Walton
	Kelley Walton
	Nancy Walton

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

FOX HILL RD 2020 (Cont'd)

196	Shawn Cote
	Tiffany Cote
	Tiffany Lung
200	Maura McCarthy
	Philip Lajoie
202	Emanuel Tucker
	Rose Tucker
204	Andrew Ulliani
	Melissa Ulliani
206	Anna McGowan
	Donald McGowan
207	Giuseppe Mollica
	Ronald Mollica
	Sofia Mollica
	Stacey Mollica
	Talia Mollica
208	Kusum Narayan
	Lianne Abramo
	Michelle Abramo
	Philip Abramo
	Stephen Abramo
209	Erica Hudson
	Maria Hudson
	Raymond Hudson
	Stephanie Hudson
210	Kimberly Mancini
	Todd Mancini
211	Kelly Edwards
	Michael Edwards
212	Cameron Hurley
	Dennis Keane
	Diane Hurley
	Lauren Hurley
	Lauren Keane
	Robert Hurley
213	Barbara Mitchell
	Jane Boivin
	Maryjane Boivin
	William Boivin
214	Brett Boschetti
	Katrina Boschetti
	Katrina Calvert
216	Karen Butler
	Richard Butler
218	Debra Flynn
	Eleanor Flynn
	Michelle Flynn
	Paul Flynn
	Wilson Paul
220	Michael Buonopane

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

FOX HILL RD 2020 (Cont'd)

220	Pauline Buonopane
222	Daniella Morganelli
	Kathleen Casey
	Michael Morganelli
	Stephen Morganelli
224	Anthony Freda
	Leanne Freda
	LITTLE STEPS INC
	Mildred Freda
226	Jeffrey Siersma
228	Andrea Sheehan
	Erica Sheehan
	Joseph Sheehan
	Kevin Sheehan
	Thom Russo
229	Nicole Spano
	Patrick Niedermeier
230	Chandni Tailor
	Vipin Tailor
231	James Healy
	Monica Healy
232	Brian Savage
	Erin Savage
	Mark Savage
	Paulette Savage
233	Martha Sheridan
	Mary Sheridan
	Thomas Sheridan
234	Joanm Lamb
	Ronald Lamb
	Winter Wheat
235	Kristin Cardarelli
	Kristin Panagiotis
	William Panagiotis
236	Cheryl Oley
	Edwin Oley
	Lillian Oley
	Ryan Harrington
237	Lore Porter
238	Dorothy MacDonald
239	Nikolaos Dalalelis
240	Lynna Soohoo
	Thomas Soohoo
241	Judith Sullivan
	Theresa Sullivan
243	Bobby Negron
	Kimberly Negron
	Richard Vita
245	Anthony Patti
	Margaret Patti

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

FOX HILL RD 2020 (Cont'd)

246	Berj Zamanian
	Jennifer Zamanian
	Marjorie Zamanian
247	Dennis Delorey
	Nancy Delorey
248	Carl Humphreys
	Michael Humphreys
	Valerie Humphreys
249	Daniel Muise
	Leta Benjamin
	Marcella Garcia
250	Anthony Viapiano
	Kimberly Shubrooks
251	Bruce Foster
	Laurian Foster

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WESTWOOD ST 2020

1	Joseph Sullivan
	Kathryn Sullivan
2	Emily Cayon
	Patricia Cayon
	Scott Cayon
4	Chuck Carnell
	Deborah Carnell
	Jacqueline White
	Kayla Carnell
	Kelsey Carnell
5	Michael Shutan
7	Andrea Lamb
	Gregory Lamb
	Mary Higgins
	Nicole Lamb
9	Lyons Rosemary
	Michael Lyons
	Michael Spooner
	Shiang Jan
11	Kathleen Horton
12	Daniel McDonnell
	Eileen Comeau
	Eileen Curtin
	Jade Escobar
	Meghan McDonnell
	Shaun McDonnell
13	Cristina Mateo
	Jorge Garcia
14	Kevin Negrats
	William Crowley
15	Aarohi Joshi
	Amisha Soni
	Avnish Soni
	Kirti Joshi
	Maulesh Soni
16	Julie Kroner
	Todd Kroner
17	Jose Biju
	Lijimol Biju
	Lijimol Scaria
18	Cathryn Szekely
	Claudio Corsi
19	Bhanoben Patel
	Khushalbhai Patel
	Kokila Patel
	Niket Patel
	Praful Patel
	Rajesh Patel
21	David Lin
	Hoan Chung

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WESTWOOD ST 2020 (Cont'd)

21	Jeanne Lin
	Jessica Lin
22	Paul Baldi
23	Christopher Kraft
	Georgia Kraft
24	Helen Munro
	Janie Munro
	Jillian Munro
	John Cherubino
	Kenneth Munro
25	Futaba Shioda
	Keiko Shioda
	Marimo Shioda
	Toshihiro Shioda
26	Cecilia Chiang
	Pauline Chiang
	Pijian Chiang
	Simon Chiang
	XI Chiang
27	Jon Washisko
	Theresa Washisko
28	Manu Bhalla
	Meena Bhalla
	Tanishq Bhalla
	Vijay Bhalla
29	John Seremetis
	Paula Seremetis
32	Gary Yu
	Ken Yu
	Kin Yu
33	Danielle Barrett
	Michael Fatal
	Nicholas Barrett
34	Alan Lee
35	Alberto Grandi
	Cameron Bugley
	Gloria Bugley
	Maria Grandi
	Olivia Grandi
	Tyler Bugley
37	Tien Doan
39	Kimberly Tolpa
	Steven Tolpa
40	A-Z DESIGN & BUILD INC
	Kevin Thibodeau
	Marion Grant
	Melanie Thibodeau
41	Lois Turnbull
	Thomas Turnbull
43	Edward Mullen

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WESTWOOD ST 2020 (Cont'd)

43	Manickathan Martin
	T Manickathan-Martin
44	Hilbert Fitch
	Jeane Fitch
45	Ellen Mendes
	John Mendes
	Michael Mendes
46	Brenda McCarthy
	Matthew McCarthy
	Michael McCarthy
48	Deanna Duffy
	Michael Williams
	Pamela Duffy
	Pamela Williams
	Sean Duffy
49	Donna Ross
	Harvey Ross
50	John Defrancesco
	Martha Defrancesco
51	Christine Boermeester
	Kenneth Boermeester
52	Serhiy Kovbasa
53	Felicity Ho
	Troi Dip
54	Michelle Araujo
	Michelle Ferreira
55	Allan McCombs
	Iveta Dolansky
56	Brian Wilshusen
	Eric Wilshusen
	Kelly Wilshusen
	Mark Wilshusen
	Stewart Nash
58	Corrie Curtice
	Eric Curtice
60	Alicia Doble
	Dennis Doble
	Gregory Doble
	Lenora Doble
62	Chander Patil
	Gaurav Patil
	Poonam Patil
	Reshma Patil
64	Cassandra Papas
	John Papas
	Matthew Papas

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 2014

91	SCOTT, CAROL
174	GULIANI, ABHINAV
176	SNYDER, JAY
177	WHEELER, HAROLD E
178	NAGRAJ, DINESH S
179	VILLANDRY, JOAN F
180	SPYROPOULOS, GREGORY J
181	TORRE, FREDDY D
182	MELLO, DJ
184	DINITTO, COSMOS
185	PATEL, DHIRU K
186	CLARK, DENISE
187	WEISS, ARTHUR R
189	LEWIS, ERIC M
190	ROMAGNA, PETER R
191	SCOTT, DAVID R
192	SCHISSLER, STEPHEN M
193	MAGRANE, BYRON M
194	LAU, KIM E
195	WALTON, JAMES J
196	COTE, SHAWN
200	LAJOIE, PHILIP C
202	TUCKER, EMANUEL J
204	COLLINS, JOHN P
206	MCGOWAN, DONALD A
207	MOLLICA, RONALD A
208	ABRAMO, PHILIP J
209	HUDSON, RAYMOND A
210	MANCINI, TODD M
211	EDWARDS, MICHAEL M
212	RILEY, THOMAS L
213	BOIVIN, WILLIAM F
214	COCHRAN, MARY L
216	OCCUPANT UNKNOWN,
218	FLYNN, PAUL J
220	BUONOPANE, MICHAEL
222	CASEY, KATHLEEN M
224	FREDA, ANTHONY E
226	AARONSON, BENJAMIN S
228	SHEEHAN, KEVIN M
229	NIEDERMEIER, PATRICK J
230	SPINAZOLA, JOSEPH E
231	HEALY, JAMES A
232	SAVAGE, MARK D
233	SHERIDAN, MARY C
234	LAMB, JOANM M
235	PANAGIOTIS, WILLIAM W
236	OLEY, EDWIN J
237	PORTER, JOHN F
238	MACDONALD, ROBERT A

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 2014 (Cont'd)

239	PERDICHIZZI, RICHARD F
240	SOOHOO, LYNNA Y
243	VITA, KRISTIN M
245	PATTI, ANTHONY R
246	ZAMANIAN, BERJ
247	BURKE, RICHARD M
248	HUMPHREYS, CARL S
249	ROTH, PAUL F
250	OCCUPANT UNKNOWN,
251	FOSTER, BRUCE D

Target Street	Cross Street	Source
-	✓	Cole Information

WESTWOOD ST 2014

1	SULLIVAN, JOSEPH J
2	CAYON, SCOTT M
3	OCCUPANT UNKNOWN,
4	CARNELL, CHARLES E
5	ANTON, MICHAEL J
7	LAMB, GREGORY L
9	TAUR, JAN S
11	GORMAN, JOHN F
12	CURTIN, KEVIN
14	KOTHAPALLI, ARUNA
15	SONI, MAULESH
16	KRONER, TODD P
17	OCCUPANT UNKNOWN,
18	CORSI, CLAUDIO
19	PATEL, RAJESH K
21	LIN, HING D
22	BALDI, PAUL R
23	KRAFT, CHRISTOPHER K
24	MUNRO, KENNETH J
25	SHIODA, TOSHI
26	CHIANG, PIJIAN
27	WASHIKO, JON C
28	BHALLA, VIJAY M
29	SEREMETIS, JOHN J
32	YU, KEN C
33	FATAL, FRANCIS J
34	LEE, ALAN T
35	GRANDI, GLORIA L
37	NICHOLS, MICHAEL B
39	TOLPA, STEVEN J
40	GRANT, MARION L
41	TURNBULL, THOMAS E
43	MULLEN, EDWARD B
44	FITCH, HILBERT E
45	MENDES, ELLEN R
46	MCCARTHY, MICHAEL J
47	BRANDT, MARGARET
48	WILLIAMS, PAM M
49	ROSS, HARVEY B
50	DEFRANCESCO, JOHN A
51	BOERMEESTER, KENNETH J
52	KOVBASA, SERHIY
53	LY, MICHAEL
54	OCCUPANT UNKNOWN,
55	MCCOMBS, ALLAN W
56	WILSHUSEN, ERIC J
58	CURTICE, JOAN A
62	PATIL, GAURAV C
64	PAPAS, CASSANDRA M

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 2010

176	IYER, GANESH K
177	ANDERSON, MATTHEW
178	NAGRAJ, DIN
179	VILLANDRY, JOAN F
180	SPYROPOULOS, GREGORY J
181	TORRE, FREDDY D
182	MELLO, DANIEL J
184	DI, NITTO
185	PATEL, DHIRU K
186	CLARK, DENISE J
187	WEISS, ARTHUR R
189	LEWIS, ERIC M
190	ROMAGNA, PETER R
192	SCHISSLER, STEPHEN M
193	MAGRANE, BYRON M
194	LAU, KIM E
196	KELLY, STEVE M
200	LAJOIE, PHILIP C
202	TUCKER, EMANUEL J
204	COLLINS, JOHN P
206	MCGOWAN, DONALD A
207	MOLLICA, RONALD A
208	ABRAMO, PHILIP J
209	HUDSON, RAYMOND A
210	PHILLIPS, LILLIAN B
211	EDWARDS, MICHAEL M
212	MCSHEFFREY, JILL
213	BOIVIN, WILLIAM F
214	COCHRAN, MARY L
216	BUTLER, RICHARD
220	BUONOPANE, MICHAEL
224	TRABUCCO, ROSE
226	AARONSON, BENJAMIN S
228	RUSSO, CHARLES
229	NIEDERMEIER, PATRICK J
231	HEALY, JAMES A
232	SAVAGE, MARK D
233	SHERIDAN, THOMAS F
234	LAMB, JOANM M
235	BURGOMASTER, JOAN E
236	OLEY, EDWIN J
237	PORTER, LORE A
238	MACDONALD, ROBERT J
239	PERDICHIZZI, RICHARD F
241	SULLIVAN, THERESA A
243	VITA, KRISTIN M
245	PATTI, ANTHONY R
246	ZAMANIAN, BERJ
247	BURKE, RICHARD M
248	HUMPHREYS, CARL S

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 2010 (Cont'd)

249	ROTH, PAUL F
250	VIAPIANO, ANTHONY J
251	FOSTER, BRUCE D

Target Street	Cross Street	Source
-	✓	Cole Information

WESTWOOD ST 2010

1	SHIELDS, ELWOOD N
2	MCLAUGHLIN, RICHARD B
3	COTE, JOSEPH G
4	CARNELL, CHARLES E
5	ANTON, PAULA A
7	LAMB, GREGORY L
9	TAUR, JAN S
11	GORMAN, JOHN F
12	CURTIN, EILEEN
13	ANDERSON, ARTHUR L
14	NEGROTTI, KEVIN H
15	GAILIUS, STANLEY
16	KRONER, TODD P
17	MELESCHUK, EDWARD L
18	CORSI, CLAUDIO
19	PATEL, RAMBHAI
21	LIN, HING D
22	BALDI, PAUL R
23	KRAFT, CHRISTOPHER K
24	MUNRO, KENNETH J
25	SHIODA, TOSHIHIRO
26	CHIANG, PIJIAN
27	WASHIKO, JON C
28	BHALLA, J K
29	SEREMETIS, JOHN J
32	YU, KEN C
33	FATAL, FRANCIS J
34	LIND, MAYNARD M
35	GRANDI, ALBERTO D
37	NICHOLS, RICHARD D
39	JAKED, R A
40	GRANT, MARION
41	TURNBULL, THOMAS E
43	MULLEN, EDWARD B
44	FITCH, HILBERT E
45	GILMAN, LOUIS
46	MCCARTHY, MICHAEL J
47	GOLDSTEIN, NUKE
48	DUFFY, THOMAS W
49	ROSS, HARVEY B
50	DEFRANCESCO, JOHN A
51	BOERMEESTER, KENNETH J
52	KOVBASA, SERHIY
53	LY, MICHAEL
56	WILSHUSEN, ERIC J
58	CURTICE, JOAN A
60	DOBLE, DENNIS S
62	PATIL, CHANDER P
64	PAPAS, CASSANDRA

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 2005

176	FULCHER, ALAN R
177	ANDERSON, LYNDA S
178	NAGRAJ, DINESH S
179	CALAUTTI, JOAN F
180	CATANESE, GARY L
181	TORRE, FREDDY D
182	MCCANN, WILLIAM F
184	DINITTO, COSMO
186	CLARK, DENISE J
187	WEISS, ARTHUR R
189	LEWIS, ERIC M
190	ROMAGNA, PETER R
191	SCOTT, DAVID R
192	SCHISSLER, STEPHEN M
193	RUBIN, LAWRENCE I
194	LAU, KIM E
195	WALTON, JAMES J
196	COHEN, BOB N
200	GULLA, DAVID R
202	TUCKER, EMANUEL J
204	COLLINS, JOHN P
206	MCGOWAN, DONALD A
207	MOLLICA, ROBERT J
208	GILL, DAVINDER S
209	HUDSON, RAYMOND A
210	PHILLIPS, LILLIAN B
211	ESPIN, OLIVA
212	SPANGLER, JAY E
213	BOIVIN, WILLIAM S
214	COCHRAN, MARY L
216	BUTLER, RICHARD
218	FLYNN, PAUL J
220	BUONOPANE, MICHAEL
224	FREDA, ANTHONY E
226	JONES, ROBERT E
228	SHEEHAN, KEVIN M
229	MARY, ROSE S
230	SPINAZOLA, JOSEPH E
231	HEALY, JAMES A
232	MARK D SAVAGE CPA
	SAVAGE, MARK D
233	SHERIDAN, THOMAS F
234	LAMB, JOANM M
235	BURGOMASTER, JOAN E
236	OLEY, EDWIN J
237	PORTER, LORE A
238	MACDONALD, ROBERT M
239	PERDICHIZZI, RICHARD F
241	SULLIVAN, ROBERT L
243	MCCARRON, DENNIS E

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 2005 (Cont'd)

245	PATTI, ANTHONY R
246	ZAMANIAN, BERJ
247	DELOREY, DENNIS E
	KELLY A DELOREY D C INC
248	KERR, MICHAEL J
249	BENJAMIN, PAUL E
250	VIAPIANO, ANTHONY J
251	PHELAN, RICHARD J

Target Street	Cross Street	Source
-	✓	Cole Information

WESTWOOD ST 2005

1	SHIELDS, ELWOOD N
2	MCLAUGHLIN, RICHARD B
3	COTE, JOSEPH G
4	CARNELL, CHARLES E
5	SHUTAN, MICHAEL J
7	LAMB, GREGORY L
9	WANG, CHIN
11	GORMAN, JOHN F
13	ROCCA, CHRISTOPHER A
14	KOTHAPALLI, PRASAD S
16	ALLEGRETTO, ROBERT J
	CONTINENTAL ARMORER
18	POITRAS, JAMES P
19	PATEL, RAJESH K
21	GAUTHIER, PAUL A
22	BALDI, PAUL R
23	KRAFT, CHRISTOPHER K
24	MUNRO, KENNETH J
25	SHIODA, TOSHIHIRO
26	CHIANG, PIJIAN
27	WASHISKO, JON C
28	LI, SICHU
29	WAGER, STACEY L
32	YU, GARY K
33	FATAL, FRANCIS J
34	LIND, MAYNARD M
35	GRANDI, ALBERTO D
37	NICHOLS, RICHARD D
39	SCAVEZZE, DANIEL C
40	DAY, CLARA E
41	TURNBULL, THOMAS E
43	MULLEN, EDWARD B
44	FITCH, HILBERT E
46	MCCARTHY, MICHAEL J
47	CARBON PROJECT INC
	GOLDSTEIN, HANOCH
48	DEVITO, PAMELA M
49	ROSS, HARVEY B
50	DEFRANCESCO, JOHN A
51	DIRUSSO, RAYMOND A
52	DIANA, RALPH L
53	LY, MICHAEL
56	WILSHUSEN, ERIC J
58	CURTICE, JOAN A
60	DOBLE, GREGORY J
62	PATIL, CHANDER B
64	PAPAS, JOHN M

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 2000

174	ROBERTS, PETER
176	FULCHER, ALAN
177	ANDERSON, LYNDA S
178	LI, RENNY
180	CATANESE, GARY J
182	MCCANN, WILLIAM
186	CLARK, DENISE
187	WEISS, ARTHUR
190	ROMAGNA, PETER P
191	SCOTT, DAVID
192	SCHISSLER, STEPHEN M
193	RUBIN, JOSHUA
194	LAU, KIM E
195	WALTON, JAMES J
196	COHEN, JEFF
202	TUCKER, EMANUEL J
204	COLLINS, JOHN P
206	MCGOWAN, DONALD A
207	MOORE, ARTHUR R
208	NARAYAN, KUSUM
209	HUDSON, RAYMOND A
210	PHILLIPS, LILLIAN B
213	BOIVIN, WILLIAM
214	COCHRAN, PAUL M
216	BUTLER, RICHARD
218	FLYNN, PAUL J
220	SWAIN, ROBERT E
222	MORGANELLI, STEVEN
224	TRABUCCO, PAUL G
228	SHEEHAN, KEVIN
229	SOLOSKI, MARY R
230	CASEY, K M
	SPINAZOLA, JOSEPH E
231	RUD, E
232	SAVAGE, MARK
233	SHERIDAN, THOMAS F
234	LAMB, RONALD
236	OLEY, EDWIN J
237	PORTER, JOHN F
238	MACDONALD, ROBERT J
239	PERDICHIZZI, RICHARD
243	MCCARRON, DENNIS
245	PATTI, ANTHONY
246	ZAMANIAN, BERJ
247	DELOREY, DENNIS
248	KERR, MICHAEL
249	BENJAMIN, PAUL E
	ROTH PAUL ATTORNEY
	ROTH, PAUL F

Target Street	Cross Street	Source
-	✓	Cole Information

WESTWOOD ST 2000

2	JONES, WALTER E
	MAUCHAN, P
	MCLAUGHLIN, RICHARD
3	SARKODIEMENSAH, E
4	CARNELL, CHARLES E
5	SHUTAN, MICHAEL J
7	LAMB, GREGORY
9	ROCKWELL, K M
11	GORMAN, JOHN F
12	CHAPMAN, DOUGLAS C
13	ROCCA, CHRIS
14	KOTHAPALLI, PRASAD
15	GAILIUS, S V
	GAILUS, STANLEY
16	ALLEGRETTO, ROBERT S
17	MELESCHUK, EDWARD
21	OPPEDISANO, PAUL J
23	KRAFT, GEORGIA
24	MUNRO, KENNETH J
25	SHIODA, T
27	WASHISKO, JON
28	WALDEN, DEBORAH
29	OHALLERAN, PATRICK
32	YU, K
33	FATAL, ANNE E
34	LIND, MAYNARD M
35	GRANDI, GLORIA
37	NICHOLS, RICHARD D
39	YIN, MARK
40	DAY, EUGENE L
41	TURNBULL, THOMAS E
43	MULLEN, EDWARD
44	FITCH, HILBERT E
45	GILMAN, CHARLES S
46	MCCARTHY, MICHAEL J
47	CHIUVE, ROBERT J
48	DEVITO, P M
49	ROSS, HARVEY B
51	DIRUSSO, RAYMOND
52	DIANA, LORENZO
53	CADOTTE, ARIC
55	LEVINE, DAVID
56	NASH, STEWART
58	CURTICE, JOAN
60	DOBLE, DENNIS M
64	PAPAS, JOHN

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 1995

174	ROBERTS, PETER DR & BETHAN
177	ANDERSON, CHRISTOPHER & LYNDA
178	LIMBACHIYA, PRAVEEN
	LIMBACHIYA, PRAVEEN & NISHTHA
179	CALAUTTI, J
185	GOLDIE, JAS
186	CLARK, D
187	WEISS, ARTHUR
189	LAWSON, JAS
190	ROMAGNA, PETER R
191	SCOTT, DAVID & CAROL
	SIMPSON, RICHARD & SUSAN
193	RUBIN, LAWRENCE I
	RUBIN, MICHELLE & JOSHUA
194	LAU, K
195	WALTON, JAS J & NANCY
202	TUCKER, EMANUEL J
204	COLLINS, JOHN P
206	MC GOWAN, DONALD A
	MCGOWAN, STEPHEN
208	DELUCA, MICHAEL & EMILY
209	HUDSON, RAYMOND A & MARIA
212	SPANGLER, STANLEY L
213	BOIVIN, BILL & JANE
214	COCHRAN, PAUL M
216	BUTLER, RICHARD
218	FLYNN, PAUL J & DEBRA L
220	SWAIN, ROBT E
222	MORGANELLI, STEVEN & DEBRA
224	TRABUCCO, L
	TRABUCCO, PAUL G
226	CARROLL, ROBT A
229	SOLOSKI, M R
230	CASEY, KATHLEEN M
	SPINAZOLA, JOS E
232	SAVAGE, MARK & PAULETTE
233	SHERIDAN, THOS F
234	LAMB, RONALD
236	OLEY, EDWIN J
237	O'CONNELL, MICHAEL & LAUREL
238	MACDONALD, ROBT J
239	PERDICHIZZI, R F
246	ZAMANIAN, BERJ
247	DELOREY, DENNIS
248	KING, NEIL
249	BENJAMIN, PAUL E
	ROTH, PAUL F
	ROTH, PAUL, ATTY

Target Street	Cross Street	Source
-	✓	Cole Information

WESTWOOD ST 1995

1	SHIELDS, AL N
2	MAUCHAN, JOS F
	MCLAUGHLIN, RICHARD
3	ULTSCH, IRENE
	ULTSCH, TAMMY
4	CARNELL, CHAS E
5	SHUTAN, MICHAEL JAY
7	LAMB, GREGORY & ANDREA
11	GORMAN, JOHN F
12	CHAPMAN, DOUGLAS C
13	ROCCA, CHRIS & SUSAN
14	KOTHAPALLI, PRASAD & RAJANA
15	GAILUS, STANLEY
16	ALLEGRETTO, R S & M J
17	GEAR, WM L
19	SARENDRAM, FARAVAMA & POO
23	KRAFT, G
24	MUNRO, K J
25	NICHOLS, M I
27	GEAR, ROBT C
29	LEE, LIZ & DONNA
	LEE, WILLIAM R, III
32	YU, K
33	FATAL, A & J
34	LIND, MAYNARD M
35	GRANDI, GLORIA
37	NICHOLS, RICHARD D & JOYCE E
39	FONG, WAYNE M
40	DAY, EUGENE L
41	VOLPE, C C
43	MULLEN, EDW & JEAN
44	FITCH, HILBERT E
45	GILMAN, CHAS S
46	MCCARTHY, MICHAEL J
47	CHIUVE, ROBT J
49	ROSS, H B
51	DIRUSSO, RAYMOND JR & DONNA
52	DIANA, L
53	CADOTTE, ARIC
	CADOTTE, RYAN
54	NAG, SUMIT & SUMITRA
	NAG, SUMITRA & SUMIT
55	LEVINE, DAVID & ROSALYN
56	NASH, STEWART
58	BLAIS, M
	CURTICE, J
64	HARRIGAN, THOS & SUSAN

Target Street	Cross Street	Source
✓	-	Cole Information

FOX HILL RD 1992

177	ANDERSON, CHRISTOPHER & LYNDA
178	BEER, S & N
179	CALAUTTI, ROBT
180	COUGHLIN, PAUL
185	GOLDIE, JAS
187	WEISS, ARTHUR
189	LAWSON, JAS
190	TABALDI, JUNE
191	SCOTT, DAVID & CAROL
	SIMPSON, RICHARD & SUSAN
193	RUBIN, LAWRENCE I
	RUBIN, MICHELLE & JOSHUA
194	LAU, K
195	WALTON, JAS J & NANCY
202	TUCKER, EMANUEL J
204	COLLINS, JOHN P
206	MC GOWAN, DONALD A
208	DELUCA, MICHAEL & EMILY
209	HUDSON, RAYMOND A & MARIA
210	PHILLIPS, L B
212	SPANGLER, STANLEY L
213	MORRIS, JOHN
214	COCHRAN, PAUL M
216	BUTLER, RICHARD
218	FLYNN, PAUL J & DEBRA L
	SHANLEY, DONALD J & ESTELLE
220	SWAIN, ROBT E
222	MORGANELLI, STEVEN & DEBRA
224	TRABUCCO, PAUL G
226	CARROLL, ROBT A
229	SOLOSKI, M R
230	CASEY, KATHLEEN M
	SPINAZOLA, JOS E
231	HUNTER, MARK
	RUD, MATTHEW J
233	SHERIDAN, THOS F
234	LAMB, GREGORY & ANDREA
	LAMB, RONALD
236	OLEY, EDWIN J
237	O'CONNELL, MICHAEL & LAUREL
238	MACDONALD, DOUGLAS
	MACDONALD, ROBT J
239	PERDICHIZZI, R F
246	ZAMANIAN, BERJ
247	DELOREY, DENNIS
248	KING, NEIL
249	MEA, A

Target Street	Cross Street	Source
-	✓	Cole Information

WESTWOOD ST 1992

1	SHIELDS, AL N
2	MAUCHAN, JOS F
	MCLAUGHLIN, RICHARD
3	ULTSCH, IRENE
	ULTSCH, TAMMY
4	CARNELL, CHAS E
5	SHUTAN, MICHAEL JAY
7	CANNING, KENNETH JR & DONNA
9	KEAVY, ALBERT & MARIE
12	CHAPMAN, DOUGLAS C
13	SEFCIK, SUSAN
15	GAILUS, STANLEY
19	SARENDRAM, FARAVAMA & POO
23	KRAFT, G
24	MUNRO, K J
25	NICHOLS, M I
27	GEAR, ROBT C
29	LEE, WILLIAM R, III
32	YU, K
33	FATAL, A & J
34	LIND, MAYNARD M
37	NICHOLS, RICHARD D & JOYCE E
39	FONG, CONRAD
40	DAY, EUGENE L
41	CHAMBERLAIN, JOHN J, JR
43	MULLEN, EDW & JEAN
44	FITCH, HILBERT E
45	MAKRIS, MILTON I
46	MCCARTHY, MICHAEL J
47	CHIUVE, ROBT J
49	ROSS, H B
51	DIRUSSO, RAYMOND JR & DONNA
53	CADOTTE, RACHELLE
54	NAG, SUMITRA & SUMIT
55	LEVINE, DAVID & ROSALYN
56	JOHNSON, TOM F & J A
58	CURTICE, J
	MCPHERSON, MICHAEL & CHERYL
64	HARRIGAN, THOS & SUSAN

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

FOX HILL RD 1989

* * * * * * * * * * 01803

25 NP
26 Peter E McCafferty .81 273-0169
28 Howard W Schaejbe .75 272-2548
32 Richard F Steadman .72 273-2082
34 Daniel McCarthy .86 272-7062
31 RESIDENCE

● FOREST RD 01803
Begins Pathwood Ave To Dead End
1- 99 CT3323 $B..G16
2 John E Woodbury Jr .84 229-2330
3 Samuel Shukri .80 273-2847
4 Ronald Gengo .86 272-7745
5 Ralph F Coveno Jr .68 272-2712
6 Larry Keirstein .82 272-6912
7 Russell L Petersen .64 272-0786
8 John O Stanley .64 272-5597
9 Paul R SCola .86 272-1487
NO # Frank A Gengo .73 272-3414
9 RESIDENCE

● FOSTER RD 01803
From Francis Wyman Rd To Dead End
1- 99 CT3323 $B..G16
2 Roger C Plaisted .62 272-3781
3 Victor P Oliver .65 272-4915
4 Kenneth P Ray .60 272-1551
5 Ronald P Marchand .84 229-2079
6 Richd T Francis Jr .58 272-3455
7 Kevin R Jones .82 229-2928
8 Kenneth J Bondeson .62 272-4442
9 Audrey E Taub .85 273-9383
11 Ross Vickself .62 272-0321
Ross Vickself .62 272-2049
13 E C Sickler .86 229-6530
S Willard .86 229-6530
14 Eugene Shvartsman .83 272-0085
15 Maxwell Higden .83 272-6586
Wayne Higden .81 272-1069
17 Frank G Bausch .59 272-1186
19 NP
21 Kevin Carr .80 272-2391
18 RESIDENCE

● FOUR ACRE DR 01803
From Cambridge Street To Dead End
1- 99 CT3323 $B..G16
1 W Thomas Curry .68 272-5473
2 Arthur E Smith .67 270-6759
A Stanley W Anderson .65 272-0309
3 NP
4 Kevin M Mills .83 229-6792
5 Louis C Nocca .75 272-5894
6 Angelo A Murgo .62 272-0736
R Murgo .73 273-1664
7 NP
9 RESIDENCE

● FOWLER TERR 01803
Begins Terrace Hill Avenue Runs To Dead End
1- 99 CT3324 $A..H16
1 N A Cirillo Jr .68 272-3380
Michael J Petrino - 272-9390
3 John Sousa .65 273-1150
4 NP
5 Herbert B Wollman .70 272-2994
6 Louise E Donovan .77 272-3162
7★ **Burlington Trophy** .79 273-2100
Ronald W Doig .74 272-5188
8 G W Davidson .83 229-2761
9 James Liapis .73 272-5720
10 David L Smith .75 272-7622
11 John A Centorino .71 272-2308
13 Robert G Dunn Jr .77 273-1782
12 RESIDENCE 1 BUSINESS

● FOX HILL RD 01803
Begins Beaver Brook To Dead End
1- 299 CT3321 $A..F17
177 C Anderson .84 272-4913
178 S Beer .82 229-2320
179 Robert Calautti .79 273-3118
180 Paul Coughlin .68 272-0822
184 NP
185 James Goldie .86 229-2560
186 NP
187 Arthur Weiss .87 229-2408
189 James Lawson .87 229-4822
190★ **Dr Ashok Chatwani** .86 273-3189
191 J Giampa .87 270-9735
Richard Simpson .80 272-6046
192 NP
193 Lawrence I Rubin .79 272-1312
194 K Lau .84 272-6595
195 James J Walton .86 273-3809
196 NP
202 Emanuel J Tucker .72 272-7294
204 John P Collins .62 272-0986
206 Donald A McGowan .67 272-0529
207 NP
208 P Decristo .86 273-0237
209 Raymond A Hudson .85 229-2964
210 L B Phillips .84 272-4148
212 Stanley L Spangler .70 272-5367
213 John Morris .68 272-0832
John Morris .68 272-0098
214 Paul M Cochran .62 272-5523
216 Richard Butler .66 272-3651
218 Paul J Flynn .85 272-1332
Donald J Shanley .62 272-2095
220 Buddha Swain ¤ 273-3753
Robert E Swain .62 272-5374
222 Steven Morganelli .85 273-5588
224 Paul G Trabucco .62 272-1830
226 Robert A Carroll .66 272-4246
229 M R Soloski .69 272-4971
230 Albert J Schmider .65 272-9582
231 David Rud .78 273-0625
232 NP
233 Thomas F Sheridan .62 272-5099
234 Ronald Lamb .65 272-5591
236 Cheryl Oley .87 229-8090
Edwin J Oley .65 272-1536
237 Michael Tenore .65 272-5466
238 Robert J MacDonald .65 272-0212
239 R F Perdichizzi .74 272-5942
241 NP
246 Berj Zamanian .71 272-8159
247 Dennis Delorey .82 272-5342
248 Neil King .82 272-4696
249 A Mea .62 272-5494
250 NP

NO # John E Burgomaster .73 272-5123
NO # Agostin R Gulla .73 272-4896
NO # Joseph F Hayes .73 272-5061
NO # William F McGarry .73 272-5241
NO # Richard J Phelan .73 272-1627
57 RESIDENCE 1 BUSINESS

● FRANCIS RD 01803
From 12 Newbridge Ave Stops 68 Winn Street
1- 99 CT3322 $B..H17
1 Daniel O'Brien .77 272-5812
M P OBrien .87 229-1872
2 M Bussell .58 272-0389
3 Bruce A Whitney .85 272-2266
4 Edw S Hutchinson .68 272-1584
5 Gordon C Thomson .60 272-2338
6 Michael Penta .59 272-2294
7 James F Kelleher .68 272-4589
Linda M Kelleher .75 273-4452
9★ **Dencon Sturct Svce** .87 229-0200
Dennis Ferry .85 273-0752
11 Vito Costa .84 272-1364
Raymond A Papagno .71 272-6637
13★
REAR Bartley Joyce .83 273-3381
15 NP
14 RESIDENCE 1 BUSINESS

● FRANCIS WYMAN RD 01803
From 381 Cambridge St To 104 Bedford Street
1- 199 CT3323 $B..G16
0 Reid Brathwaite .85 273-2742
1 Robert D MacLean - 272-8619
2 Michael Bova .77 272-9281
4 Robert Gillingham - 272-4162
5 Christopher W Rees .77 272-6378
6 Berj Nercessian .79 273-4058
7 George Mosnicka .59 272-3562
9 James J Battcock .83 272-1305
Maryalyce Battcock .83 272-6341
10 NP
11 Rose M Carroll .68 272-5579
13 Stella H Bielasz .67 272-6095
14 Dani L Joyce III ¤ 229-7848
15 John A Crosby .74 273-1628
16 Robert G Watkins .67 272-0497
17 John E Waters .87 272-4756
John E Waters Jr .87 272-2460
19 Frank T Scutellaro .60 272-3864
21 22 24 NP
25★ **Dr Walter M Wing** 272-3883
28 Leroy J Davis .62 272-0387
30 NP
31 Joseph V Olivey .58 272-3645
32 Richard A Morse .85 272-6844
33 F M Seymour .74 272-7745
34 35 NP
36 Carmen Lewis .84 229-6479
37 Luis Quinones .76 272-9332
38 Robert J Woods .75 272-0931
40 Irene Paresky ¤ 272-7758
Paul Paresky .85 229-7726
Paul Paresky .87 229-7727
Paul Paresky ¤ 277-8954
41 George W Creamer .59 272-3276
42 NP
43 Leo B Towle .87 270-9704
44 Walter G Decost - 272-4557
45 Alfred A Chaput .80 272-1181
46 Wm B Hurynowicz - 272-2230
47 Miller G Tsotsi .62 272-4387
49 Robert P Bennett .85 273-2830
50 Edward C Papski .72 272-1599
51 Donald E Roberts .73 272-7615
52 J Arnold Lundquist .62 272-0238
53 Michael Minichino .74 272-0190
54 Robert E Anderson .78 272-0119
55 Francis R Rais .62 272-0148
P Rais .62 272-2122
56 Richard Stewart ¤ 273-5074
58 Joseph L Reardon .84 273-4048
59 William F Dillon .65 272-1930
61 Jeremiah OShea .86 270-0217
62★ **D M Lovering Sgn** 272-2284
★ **Lovering Signs** ¤ 272-2284
63 W H Sherbourne .85 229-7785
64 Janet E Craven .71 272-8477
C K McElwain .72 272-1031
65 G K Drinkwater .81 272-6058
66 King Ruby .87 272-7759
67 John D Steele .87 272-4495
68 Robert E Lee .65 272-4267
69★ **Aic Inc** ¤ 272-2320
70 Robert J Lochiatto .62 272-2839
72 Peter Carlo Jr ¤ 273-4149
73 NP
74 David Tait .87 229-4981
75 Frank L Cook .65 272-2621
76 Scott Ferguson .87 272-5204
M A Proulx .86 273-2576
77 Kevin M Lewis .76 272-2042
78 Arthur L Proulx .62 272-0483
79 R E Knowles .62 272-0873
80 James G Walker .76 272-0696
81 Donna A Austin .87 229-2785
Paula J Hennessy .87 229-2785
82 Gunnar Hemmingson .71 272-9413
83 Meryl Galaid .86 229-2796
M Sokolski .86 229-2796
84 James Miller .86 270-0113
86 William J Holland - 272-9214
87 H B Flom .65 272-5649
88 John A Nicoli .77 272-3482
90 Karl A Klausen .79 272-1654
91 R A Brophy .72 272-1166
92 James Boughman .87 229-1869
93 Donald W Ganley Sr .74 272-1132
95 NP
97 William L Flaherty .63 272-1734
98 W A Strickland .73 272-2155
99 William Lyons .78 272-4508
100 William Flaherty .72 272-2556
101 Joseph S Galiazzo .71 272-1492
102 Chris Murphy ¤ 272-0788
104 Louis Ippolito .86 272-0926
105 Michael Simmons .87 272-8178
106 NP
107 Douglas Sperry .85 272-8069
108 Steven Carroll .87 270-6952
109 Chas W Carruthers .72 272-9760
110 NP
111 A L Santagate .72 272-5217
112 John J Connors .62 272-1720

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

WESTWOOD ST 1989

WESTWOOD ST **01803**

Off Wilmington Road To Dead End

1- 99 CT3321 $A..F17

1	Al N Shields	65	272-5512
2	Joseph F Mauchan	85	272-4087
	Richard McLaughlin	62	272-4991
3	Irene Ultsch	73	272-7104
4	Charles E Carnell	86	273-4486
5	Michael Jay Shutan	86	229-6277
7	Kenneth Canning Jr	¤	272-3636
9	Albert Keavy	84	272-5198
12	Douglas C Chapman	62	272-9033
15	Stanley Gailus	71	272-5847
19	21	NP	
23	G Kraft	80	273-2932
24	K J Munro	76	273-1592
25	Alan Fairfax	¤	273-4727
27	Robt C Gear	87	272-8354
28		NP	
32	K Yu	83	272-7093
33	Wayne Hyam	86	229-2102
34	Maynard M Lind	71	272-0454
35	Maria H Grandi	84	229-8949
37	Richard D Nichols	74	272-6647
39	Conrad Fong	84	229-6558
40	Eugene L Day	78	272-7193
41	J J Chamberlain Jr	79	272-6796
43	Edward Mullen	74	272-8780
44	Hilbert E Fitch	62	272-1904
45	Milton I Makris	83	272-0943
46	Michael J McCarthy	83	273-0176
47	Robert J Chiuve	85	273-1198
48	C Caetano	82	273-0725
49	H B Ross	79	272-5563
51	Raymond Dirusso Jr	85	229-0015
52	C Diana	83	229-6343
55	David Levine	87	229-6202
56	Tom F Johnson	78	272-4197
58	J Curtice	78	273-0248
	Scott Curtice	¤	273-1303
62	Chander Patil	87	229-8144
64	Jas Franey	87	272-3099
	40 RESIDENCE		

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

FOX HILL RD 1984

FOX HILL RD **BURLGTN**

Begins Beaver
Brook To Dead End

. . . . . **01803**

019310

177	I-Kang Huang	.82	229-2045
178	S Beer	.82	229-2320
179	Robert Calautti	.79	273-3118
180	Paul Coughlin	.68	272-0822
184		.NP	
185	Joseph Pimentel Jr	.79	272-4095
186	Ralph W Hosey	.80	273-1492
187	Howard H Ma	.80	273-1733
189		.NP	
190	P Raghuraman	.79	272-8059
191	Richard Simpson	.80	272-6046
192	Alec A Vlahos Jr	.78	272-4114
193	Lawrence I Rubin	.79	272-1312
194		.NP	
196	Bob Cohen	.80	272-7442
202	Emanuel J Tucker	.72	272-7294
204	John P Collins	.62	272-0986
207	Deborah Ann Moore	.80	273-3148
209	Albert J Dubois	.¤	272-2040
210	Lillian B Phillips	.62	272-4148
212	Stanley L Spangler	.70	272-5367
213	John Morris	.68	272-0098
214	Paul M Cochran	.62	272-5523
216	Richard Butler	.66	272-3651
218	Donald J Shanley	.62	272-2095
220	Robert E Swain	.62	272-5374
222	Alan G Hirst	.81	273-1523
224	Paul G Trabucco	.62	272-1830
226	Robert A Carroll	.66	272-4246
229	Richard E Soloski	.69	272-4971
230	Albert J Schmider	.65	272-9582
231	David Rud	.78	273-0625
232	Andrew Johnson	.72	272-7845
233	Thomas F Sheridan	.62	272-5099
234	Ronald Lamb	.65	272-5591
236	Edwin J Oley	.65	272-1536
237	Michael Tenore	.65	272-5466
238	Robert J MacDonald	.65	272-0212
239	R F Perdichizzi	.74	272-5942
241		.NP	
246	Berj Zamanian	.71	272-8159
247	Dennis Delorey	.82	272-5342
248	Neil King	.82	272-4696
249	A Mea	.62	272-5494
	M Mea	.62	272-8347
250	Edward D Crosby	.73	272-8827
No #	John E Burgomaster		272-5123
No #	M G Geragosian	.78	272-5117
No #	Agostin R Gulla		272-4896
No #	Joseph F Hayes		272-5061
No #	William F McGarry		272-5241
No #	Richard J Phelan		272-1627

52 Residence

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

WESTWOOD ST 1984

25 Robert B Bradbury 75 664-6327
26 Philip Maguire 76 664-2335
27 Anthony M Moretti 80 664-5242
28 William J Murphy 77 664-2851
29 Angelo Petrosino 79 664-2030
31 Robert P Cuozzo 76 664-5183
32 Anthony Moda 76 664-4770
34 Michael W Forrest 76 664-6630
38 Peter A Wheeler 79 664-5438
40 Wesley F Ladd 78 664-3880
No # D W Bergamasco 75 664-2251
No # Richard A Trojano 75 664-4894
30 Residence 2 Business

WESTWOOD RD MEDFORD
From 30 Sherwood Road To Massachusetts Ave
..... 02155
1- 198 TZ3391 SA..
054740
16 J Harrington Jr 81 391-7976
22 E A Scalzilli 63 395-6283
26 Anthony F Mercurio 63 395-1006
30 M J Harris 65 395-5386
34 Anthony L Klempa 70 396-6118
39 .....NP
40 Joseph A Finn 71 395-1637
41 Samuel Alosso 78 396-6281
50 .....NP
53 Gordon J Cocks 63 396-0291
★J Gordon Cocks 391-6807
Thomas Cocks .....c 391-3055
Mrs P Jos Colingan 63 396-0291
54 C E Lacouture 63 396-4186
57 Peter L Kearin 76 391-1379
61 L S Kloppenburg 63 396-4197
65 Gino Tonzillo 76 395-6260
68 G A Iannacone 72 391-9106
71 Karl A Niemi 72 391-7493
72 P Towne 74 391-6262
76 James Gardner 396-1416
Paul V Gardner 72 395-7734
80 Robert F Finigan 63 396-0830
81 W Alessandrini 63 391-2761
85 Albert E Crease Jr 67 396-6473
86 Joseph Ronchetti 63 396-1326
92 Daniel Autell 79 391-1694
96 Jerry Cirio 68 395-0756
B Duncan .....c 391-1607
97 G Rudzinski 63 396-5697
100 John F Dipietro 78 391-5649
106 Peter Hendrickson 80 396-5155
116 Alfred Dipietro 63 396-5311
130 Charles P Landry 63 396-6033
133 Anthony J Previti 63 396-3762
139 Philip W Towne 74 395-5323
143 Dennis F Leidah 75 396-8196
145 Joseph Desimone 81 395-6126
148 .....NP
152 A M Laporta 72 395-5023
39 Residence 1 Business

WESTWOOD RD STONEHM
From 12 Governor Road To 9 Sherwood St
..... 02180
1- 125 TZ3372 SA..
054750
19 James Reynolds Jr .....c 438-5396
25 .....NP
36 Patrick J Connolly 70 438-1181
39 Stephen MacLeod 82 438-5510
42 Francis T Demarchi 63 438-1626
43 Raymond P Johnson 63 438-0310
51 Eugene R Cremins 63 438-2615
52 C Walter Scott 63 438-0462
57 Francis J Burns 63 438-4143
58 Frank J Bird Jr 63 438-3266
63 Philip A Pantano 70 438-4055
64 Bernard S Lebiecki 63 438-1109
67 Stephen T Burnham 80 438-3241
70 Peter K Fong .....c 438-6144
73 James R Pallotta 68 438-9271
78 Nicholas P Armato 65 438-1652
79 Roy Phelps 78 438-6416
84 Peter Nelson 82 438-4817
Waldo Nelson 79 438-5325
NORTH GATE RD
89 Richard Kalustian 81 438-1316
92 C S Cleveland 81 438-3210
94 William J Leonard 63 438-2939
95 John J Santosuosso 63 438-0267
106 George E Phelps 71 438-3196
114 Robert H Bullen 79 438-4219
115 George W Cushman 68 438-4199
26 Residence

WESTWOOD ST BURLGTN
Off Wilmington Road To Dead End
..... 01803
054760
1 Al N Shields 65 272-5512
2 Richard McLaughlin 62 272-4991
3 Irene Ultsch 73 272-7104
K E Ultsch 73 273-2499
4 Arthur G McIntosh 65 272-2038
5 John T Turner 79 272-2477
12 Douglas C Chapman 62 272-9033
15 Stanley Gallus 71 272-5847
19 J G Walsh .....c 272-2865
21 M Gilberti Jr 80 272-5458
23 G Kraft 80 273-2932
24 K J Munro 76 273-1592
25 John E Rice .....c 273-4727
27 .....NP
28 William E White 81 272-7641
32 K Yu .....c 272-7093
33 .....NP
34 Maynard M Lind 71 272-0454
35 .....NP
37 Richard D Nichols 74 272-6647
38 Richard F Beckham 70 272-5358
40 Eugene L Day 78 272-7193
41 J J Chamberlain Jr 79 272-6796
43 Edward B Mullen 74 272-8780
44 Hilbert E Fitch 62 272-0699
45 Milton I Makris .....c 272-0943
46 Michael J McCarthy .....c 273-0176
47 Philip Hsieh 79 273-4057
48 C Casiano 82 273-0725
49 H B Ross 79 272-5563
51 .....NP
52 C Diana .....c 229-6343
56 Tom F Johnson 78 272-4197
58 J Curtice 78 273-0248
62 V M Sacchetti 78 272-1713
64 Thomas J McGlynn 78 272-4191
36 Residence

WHARTON PK WAKEFLD
Begins 509 Lowell St To 266 Salem Street
..... 01880
1- 99 TZ3353 SB..
054770
1 M I Leavitt Jr 70 245-9398
5 John H Johnson 80 245-1446
6 Harry C Pebley 74 245-7671
Mark Pebley 82 246-0807
11 James J Callanan 56 245-4040
James J Callanan 246-0112
13 Jean C Hanshorne 78 245-1920
15 John F Maguire Jr 56 245-5665
17 Orlando J Frattis 71 245-5536
18 John C Comeford 63 245-3502
19 Jas J Callanan Jr .....c 246-4131
21 Gaston E Loutons 56 245-3147
24 Everett E Packard 56 245-0265
30 John J Hurton Jr 72 245-1265
35 Robert M Kimball 56 245-5430
36 Robert R Jones 72 245-4078
16 Residence

WHEATLAND ST BURLGTN
Off Wilmington Road To Dead End
..... 01803
054780
1 Ralph H Segel 73 272-1063
4 W H Koutrouba 65 272-2148
6 Robert Mottolo 72 272-8194
9 Carole Scotto .....c 229-6344
10 Paul V Miele 82 272-4691
11 John F Kenney 76 272-6581
12 Frank J Melanson 62 272-0508
13 Robert J Johnson 72 273-1047
15 H Shannon 76 272-8292
17 John E Gogolinski 68 272-1410
18 Charles N Elliott 65 272-0149
24 Jon Scanlon 78 272-4409
25 .....NP
26 Mark Heminway .....c 272-6351
28 George A Skelton 70 272-6635
29 Sudershan Taneja .....c 272-4418
33 Rakesh K Aggarwal .....c 273-0203
34 Chen Hsi Lin 82 273-0395
35 Jamie Dostou .....c 272-0232
37 James P Dunphy .....c 229-6633
40 Nicholas Lanni Jr .....c 229-2986
No # John MacDonnell .....c 229-2161
22 Residence

WHEELER AVE MEDFORD
Begins 70 Medford St Stops 21 Bow Street
..... 02155
1- 99 TZ3396 SD..
054790
7 Dennis P Creamer 68 395-3678
Mrs Mary Harris 68 395-3678
8 Shirley F Young 81 396-7920
10 William P Todd 65 395-7644
14 James Sicuso 71 395-8359
15 D Leclerc 81 396-9367
K Leonard 81 396-9367
Tracy Richardson .....c 396-7141
M F Teahan 77 396-2166
16 .....NP
17 Laura M Fasano 71 396-8159
19 Cosmo Develis 73 391-7071
20 Joseph Mazzola 63 395-6155
Rev Joseph Mazzola 79 396-6491
14 Residence

WHEELER AVE MELROSE
379 Swains Pond Ave Stops At Grove Street
..... 02176
1- 199 TZ3363 SB..
054800
1 Kenneth W Ross Jr 78 665-9428
7 Carl I Aspland 63 665-0332
9 John R Sousa 72 662-7237
17 W William Ungar 63 665-4897
21 .....NP
25 Roy H Davis 63 665-6948
30 Nicholas Hammoomis 77 665-8336
32 Anthony Dambrosio .....c 662-4834
66★Dr Leslie S Rodney 665-6419
67 Ted Distaso 63 662-9692
70 George Tula 63 665-4355
71 Charles A O'Dowd 82 665-6188
76 James I Burke 73 665-4271
80 .....NP
81 W M Puddister 79 662-9078
87 Peter C Tula 78 665-5937
90 L A Spence 78 665-5912
91 Edward Priestley 79 665-3634
94 Robert E Snow 63 665-2165
95 Stephen G Leone 78 662-6367
97 Paul B Delaney 63 665-4939
98 Peter Mastrangelo 70 662-9347
103 Robert Borisselle 78 665-4250
110 Donato Ventresca 68 662-6883
111 Albert Brandano 63 665-7456
24 Residence 1 Business

WHEELER RD BURLGTN
From Blanchard Road Stops Lexington Line
..... 01803
054810
0 Brian E Smith .....c 272-8065
2 Karen Downer 79 272-4644
★Frost & Higgins Co 272-4257
Richard E Silvia 82 272-6368
Michael Woodward 81 273-2534
128★Dustin Engineering 273-4180
★Shah Construction 273-5560
160★US Windpower 273-4502
★U S Windpower 273-4502

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

FOX HILL RD 1975

```
FOX HILL RD                                BURLGTN
.............................................
STARTS BEAVER BRK
       ....................                  01803
...          1-  END T 3321               $A..E 3
  158 PAULINE ARTHUR      9 2721365
      PERLEY J ARTHUR     9 2724470
  160 BRUCE K BARNARD     8 2720143
  163 LEONARD J EGAN      3 2731908
  164 GEORGE W RYAN       8 2724333
  165 ROGER J LAVOIE        2723389
  170                   NP
  171 MICHAEL H BERLOW      2722625
      MICHAEL H BERLOW      2731192
  172 BERNARD B HURWITCH
                          8 2722748
  174                   NP
  175 THOMAS L GENTRY      -2726590
  176 CARLOS R DOWNER     5 2725138
  178 NEVILLE J BAIA        2725292
  180 MARILYN COUGHLIN    8 2720822
  182*DR MUKTI DAS          2731808
  202 EMANUEL J TUCKER    2 2727294
  204 JOHN P COLLINS        2720986
  206                   NP
  207                   NP
  209                   NP
  210 LILLIAN B PHILLIPS    2724148
  211                   NP
  212 STANLEY L SPANGLER
                          0 2725367
  213 JOHN MORRIS         8 2720098
  214 PAUL M COCHRAN        2725523
  216 RICHARD BUTLER      6 2723651
  218 DONALD J SHANLEY      2722095
  220 ROBERT E SWAIN        2725374
  222 HANS P IKLER        2 2727274
      HANS P IKIER          2731909
  224 PAUL G TRABUCCO       2721830
  226 ROBERT A CARROLL    6 2724246
  228                   NP
  229 JOHN R SOLOSKI      9 2724485
      RICHARD E SOLOSKI     2724971
  230 ALBERT J SCHMIDER5    2729582
  231 REV WARREN W WEST3    2731625
  232 ANDREW JOHNSON      2 2727845
      E ANDREW JOHNSON    1 2727845
  233 THOMAS F SHERIDAN     2725099
  234 RONALD LAMB         5 2725591
  236 EDWIN J OLEY        5 2721536
  237 MICHAEL TENORE      5 2725466
```

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

FOX HILL RD 1975

```
FOX HILL RD                          1975 BOSTO

        ..................              01803
  238   ROBERT J MACDONALD
                                     5 2720212
  239   R F PERDICHIZZI             ¤2725942
  241   ROBERT L SULLIVAN 1         2725979
  245                            NP
  246   BERJ ZAMANIAN             1 2728159
  247   MARTIN G STAUSS           8 2720068
  248   GEORGE W SNELL              ¤2721883
  249   THOMAS E MEA                2725494
  250   EDWARD D CROSBY           3 2728827
NO  #   VITO ASARO                3 2725359
NO  #   JOHN E BURGOMASTER          2725123
NO  #*FOX HILL SCHOOL               2726156
NO  #   AGOSTIN R GULLA             2724896
NO  #   JOSEPH F HAYES              2725061
NO  #   B J MCGAFFIGAN JR           2721717
NO  #   WILLIAM F MCGARRY           2725241
NO  #   RICHARD J PHELAN            2721627
NO  #   HENRY A SUBRIZIO            2725036
 ..     DEAD END                      ..
     60 RESIDENCE              2 BUSINESS
```

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

WESTWOOD ST 1975

```
WESTWOOD ST                                BURLGTN
••••••••••••••••••••••••••••••••••••••••••••••••••
STARTS OFF WILMINGTON RD
          ••••••••••••••••••••                01803
•••            1-  END T 3321              $A..E 3
     1  AL N SHIELDS          5            2725512
     2  RICHARD MCLAUGHLIN                 2724991
     3  IRENE ULTSCH          3            2727104
     9  WILLIAM A KINSLEY3                 2731845
    11                        NP
    12  DOUGLAS C CHAPMAN                  2729033
    13  ALBERT T KEAVY                     2722031
    19  STANLEY GAILIUS       1            2725847
    22                        NP
    23  B BALCHUNAS           2            2727778
    24  RICHARD T HOLMES 3                 2728451
    25  CHARLES D NEVILLE2                 2727082
    27  WILLIAM L GEAR        9            2726639
    28  O J DEROSA                         2720548
    29                        NP
    32                        NP
    33  BARBARA A MCCLEERY-                2730154
    37  RICHD D NICHOLS JR-                2726647
    39  RICHARD F BECKHAMO                 2725358
    40  CHARLES A ROSSIER2                 2720134
    41  JOHN J CHAMBERLAIN□                2726796
    43  EDWARD B MULLEN    □               2728780
    44  HILBERT E FITCH                    2720699
    46  JAMES MASCETTA                     2723023
    48  M GUNNING             9            2725792
        CAPT B E JORDAN       5            2725792
NO  #   JOHN F GORMAN                      2723359
NO  #   MAYNARD M LIND                     2720454
NO  #   ARTHUR G MCINTOSH                  2722038
 ••     DEAD END                             ••
      29 RESIDENCE
```

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

FOX HILL RD 1970

```
 83          N.T.I.A.
 86          N.T.I.A.
..  ENDS 237 RICE AV      ..
    25 RESIDENCE

FOWLER RD                 BURLGTN

    STARTS 58
    TERRCE HL AV
    ..................    01803
.....   1-  END T 3323 $B..G 2
  4 A B FOWLER            2720442
..  DEAD END              ..
    1 RESIDENCE

FOWLER TERR               BURLGTN

    STARTS
    TERRACE HILL AVE
    ..................    01803
.....   1-  END T 3324 $B..H 2
  1 N A CIRILLO JR    8 2723380
  3 WILLIAM H EDGAR   8 2721086
  4          N.T.I.A.
  5 DON HUMPHREY        2726844
  6 MRS L E DONOVAN   8 2720039
  7 RONALD W DOIG      ¤2725188
  8 JOHN DIFRANZA     8 2723124
  9 DANIEL A ALPERIN  8 2724689
 10 DAVID L SMITH     8 2726267
 13 ROY H RENN         ¤2722297
..  DEAD END            ..
    10 RESIDENCE

FOXCROFT RD               WNCHSTR

    STARTS 41
    OXFORD ST
    ..................    01890
.....   1-  END T 3383 $A..J 5
  3 JACK SCHNEPS       ¤7294559
  4 GEORGE A DEMARS     7293931
  9 WILLIAM H FINCKE  8 7298947
 15 ARTHUR T ROGDE      7292671
 20 ANDRE W TERMEULEN7 7297078
 21 CHARLES G GILL      7292407
..  YALE ST             ..
 25 CHAS F BUCKINGHAM   7293508
    G S PACETTI         7293508
..  WEDGEMERE AV        ..
 32 DR GEORGE A MARKS4 7292249
..  SALISBURY ST        ..
 35 P I BLUMBERG      8 7294075
 36 JOHN J SHANAHAN     7293944
 37 E OBER PRIDE        7291007
 40 DR M J BUCKLEY      7297895
 41 BERRY L REECE JR   ¤7298473

 43 WM B WOODBRIDGE     7295526
..  ENDS 141            ..
..  CAMBRIDGE ST        ..
    15 RESIDENCE

FOX HILL RD               BURLGTN

    STARTS BEAVER BRK
    ..................    01803
.....   1-  END T 3321 $B..E 3
158 PERLEY J ARTHUR    -2724470
160 BRUCE K BARNARD   8 2720143
163 ROBERT R SNOOK      2723227
164 GEORGE W RYAN     8 2724333
165 ROGER J LAVOIE      2723389
170          N.T.I.A.
172 BERNARD B HURWITCH
                      8 2722748
174          N.T.I.A.
175 JOHN K FLAHERTY   8 2726824
176 CARLOS R DOWNER   5 2725138
178 NEVILLE J BAIA      2725292
180 MARILYN COUGHLIN 8 2720822
202 FREDRICK A MOSELEY 2724841
204 JOHN P COLLINS      2720986
206          N.T.I.A.
207          N.T.I.A.
209          N.T.I.A.
210 LILLIAN B PHILLIPS 2724148
211          N.T.I.A.
212          N.T.I.A.
213 JOHN MORRIS       8 2720098
214 PAUL M COCHRAN      2722080
216 RICHARD BUTLER    6 2723651
218 DONALD J SHANLEY    2722095
220 ROBERT E SWAIN      2725374
222 JOHN P KEEFE JR   8 2729192
224 PAUL G TRABUCCO     2721830
226 ROBERT A CARROLL 6 2724246
228 ALEXANDER J GICHUN
                      8 2725725
229 JOHN R SOLOSKI     ¤2724485
230 ALBERT J SCHMIDER5 2729582
231          N.T.I.A.
232 ALLEN K STARK     5 2721807
233 THOMAS F SHERIDAN   2725099
234 RONALD LAMB       5 2725591
236 EDWIN J OLEY      5 2721536
237 MICHAEL TENDRE    5 2725466
238 ROBERT J MACDONALD
                      5 2720212
239 LT CHAS N CALVAND7 2724522
245 ANTHONY R PATTI   5 2725896
246          N.T.I.A.
247 MARTIN G STAUSS   8 2720068
248 JOSEPH D MCGONAGLE 2725140
249 THOMAS E MEA        2725494
250 DAVID W BOHY      6 2725354
NO # MICHAEL H BERLOW   2722625
NO # JOHN E BURGOMASTER 2725123
NO #*FOX HILL SCHOOL    2726156
NO # AGOSTIN R GULLA   2724896
NO # JOSEPH F HAYES     2725061
NO # B J MCGAFFIGAN JR 2721717
NO # WILLIAM F MCGARRY 2725241
NO # RICHARD J PHELAN  2721627
NO # RICHARD E SOLOSKI 2724971
NO # HENRY A SUBRIZIO  2725036
NO # ROBERT L SULLIVAN 2725979
..  DEAD END            ..
    55 RESIDENCE    1 BUSINESS

FOX HUNT LN               WNCHSTR

  1 DAVID EWART         ¤7298124
    1 RESIDENCE

FOX RD                    WAKEFLD

    STARTS 14
    NEWELL RD
    ..................    01880
.....   1-  END T 3352 $A..G 8
  1 MRS AGNES C CRONIN 2451756
  7 FREDK J MERCURIO  -2458137
  8 MRS P LARICCIA      2453328
 10 PAUL CAVALIERE      2451808
 11 JOHN F LEDOUX       2451254
    SIDNEY S THOMPSON   2451254
 13 PAUL A RICHARD      2453714
 15 MARION E WALKER   4 2453706
 19 JAMES A FOX         2455205
 23 W H FAYLE         6 2453716
 27 GEORGE V ZAHAREAS7 2456524
 28 DOMENICO A DEVITA   2454653
 29 JOSEPH BOWEN        2451888
 30 JOHN S ADAMS        2452220
 33 JOSEPH BASILESCO    2453449
 38 A J CICCARELLI      2454696
 40 HENRY F DUNN        2450617
 41 VINCENT COLLINS   5 2455332
    DENNIS HOGAN      5 2455332
..  ENDS 45 JORDAN AV   ..
    19 RESIDENCE

FRANCES RD                WOBURN

    STARTS SENDRICK RD
    ..................    01801
.....   1-  END T 3335 $C..H 5
  2 LEONARD J PEARLESS 9352896
  4 EDW W RICHARDSON    9332518
  6          N.T.I.A.
  8 JOHN R MCLAUGHLIN   9351897
  9 WM G MCCLOSKEY      9334618
 10 LOUIS C BUTLER JR8 9353676
 11 FRANCIS T CAHALAN  9350233
 12 WALTER G JOHNSON   9351457
 13 DANIEL P PETINGE   9336680
 14 CONRAD J GIROUARD  9332704
 15 MRS RUTH SPINNEY   9334993
 16 FRANCIS S NOLAN    9332269
 17 MERLE D COLLIER    9352679
 18 JOHN P BYKENS     ¤9331153
 19 THOMAS E ONEILL    9352037
 20 RAYMOND P BELANGER 9337587
 21 E W RICHARDSON JR4 9335605
 22          N.T.I.A.
 24 FRANK P CAMPBELL 8 9332979
    FRANK P CAPPELLO 8 9332979
    M S CAPPELLO      8 9336885
..  ENDS ELLEN RD       ..
    21 RESIDENCE

FRANCES ST                MELROSE

    STARTS 366
    PLEASANT ST
    ..................    02176
.....   1-  END T 3364 $B..J 9
 12 ANTONIO ANTONUCCI   6651838
 13 DOMENIC DEANGELIS   6629516
 16 EARL R WELDON JR 6 6651304
 21 IRENE LEARY         6656628
 22          N.T.I.A.
 30 MRS ELEANOR CLUKEY 6657754
 34          N.T.I.A.
 35 LAWRENCE L SHEA     6659301
    LOUISE E SHEA       6629021
..  BARTLETT ST         ..
 38 JOSEPH A AMICONE    6629643
 42 ANDREW G SIMPSON    6656056
 45 GLADYS E DODGE    7 6653849
    WILLARD C DECKER    6651911
```

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

WESTWOOD ST 1970

```
WESTWOOD ST                                  BURLGTN

        STARTS OFF
        WILMINGTON RD
        ....................                 01803
.....        1-   END T 3321 $8..E 3
    1 AL N SHIELDS        5 2725512
    2 RICHARD MCLAUGHLIN    2724991
    3 FRANK J NEWARK      5 2725685
    9 RUSSELL H CARLSON     2722044
   11 GEORGE M RUZZO        2729316
   12 DOUGLAS C CHAPMAN     2729033
   13 ALBERT T KEAVY        2722031
   22 MRS LOUISA BALDI      2720189
```

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

WESTWOOD ST 1970

WESTWOOD ST

24	LAWRENCE DRISCOLL	□	2726485
27	WILLIAM L GEAR	□	2726639
28	O J DEROSA		2720548
29	WALTER J PINGREE	7	2720505
32	KIN YU	□	2724369
37	MERRILL CRAMER	□	2724626
44	HILBERT E FITCH		2720699
46	JAMES MASCETTA		2723023
48	CAPT B E JORDAN	5	2725792
	M GUNNING	□	2725792
115	STANLEY GAILIUS	5	2725847
NO #	JOHN F GORMAN		2723359
NO #	MAYNARO M LIND		2720454
NO #	ARTHUR G MCINTOSH		2722038
..	DEAD END		..
	22 RESIDENCE		

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

FOX HILL RD 1968

```
.....     77-  END T 3334 $C..H 6
 ..  GARFIELD AV            ..
  86 CHARLES L WHITE JR 9336461
 ..  MT PLEASANT ST         ..
  88 JAMES H DONOVAN      9335679
  92 WARREN GRAHAM        9336325
     WARREN GRAHAM        9334648
  94 WILLIAM W FARRAR     9352633
  96          N.T.I.A.
  98 CHARLES J SMITH      9333531
 100          N.T.I.A.
 102 STEPHEN PATTALENA    9333657
NO #*MCGARR SCHOOL        9333810
 ..  ENDS FULTON ST         ..
     40 RESIDENCE  11 BUSINESS
FOWLER AVE                REVERE
     STARTS 28 RICE AV
     ..................     02151
.....     1-  END T 1705 $D..L13
   5          N.T.I.A.
   9 SEYMOUR GOLDFARB 5 2841490
  22          N.T.I.A.
  28 JOHN J SHIVICK    7 2845136
  35 LEONARD S BODNER 3 2849156
  36 WILLIAM P DICARLO7 2845234
     SAUL WEINTHROB     2891158
  43 ROSALIE J ALPERT   2893809
     BETTE P ALPERT    #2848333
  44 JACK P HIGGINS    #2895275
  47 FRANK H MCCOY      2891827
  48 JOSEPH E MULLEN  4 2840010
  55          N.T.I.A.
  56 CHARLES J EPSIMOS  2893225
  60          N.T.I.A.
  65 GEORGE A MOSHER    2845492
  70 PHILIP MARCUS    6 2891209
  72 FRANCIS E HANEY    2845117
  73 WM H MCLAUGHLIN    2841492
  76 CARL ASTRACHAN     2844122
  80 SAUL J DORFMAN   7 2895072
  81          N.T.I.A.
  83          N.T.I.A.
  86 ANNIBLE POLCARI    2890613
 ..  ENDS 237 RICE AV       ..
     24 RESIDENCE
FOWLER RD                 BURLGTN
     STARTS 58
     TERRCE HL AV
     ..................     01803
.....     1-  END T 3323 $B..G 2
   4 A B FOWLER          2720442
 ..  DEAD END               ..
     1 RESIDENCE
FOWLER TERR               BURLGTN
     STARTS
     TERRACE HILL AVE
     ..................     01803
.....     1-  END T 3324 $B..H 2
   1 N A CIRILLO JR     #2723380
   3 WILLIAM H EDGAR    #2721086
   4 MRS L E DONOVAN    #2720039
   5 DON HUMPHREY        2726844
     *BURLNGTN CH CHRIST#2726844
   8 JOHN DIFRANZA      -2723124
   9 DANIEL A ALPERIN   #2724689
  10 DAVID L SMITH      #2726267
  13 JAMES D RICHARDSON#2722297
 ..  DEAD END               ..
     8 RESIDENCE   1 BUSINESS
FOXCROFT RD               WNCHSTR
     STARTS 41
     OXFORD ST
     ..................     01890
.....     1-  END T 3383 $A..J 5
   4 GEORGE A DEMARS     7293931
   9 WILLIAM H FINCKE   #7298947
  15 ARTHUR T ROGOE      7292671
  20 ANDRE W TERMEULEN7 7297078
     J ARCHAMBAUD       #7298312
  21 CHARLES G GILL      7292407
 ..  YALE ST                 ..
  25 CHAS F BUCKINGHAM  7293508
     G S PACETTI        7293508
 ..  WEDGEMERE AV            ..
  32 DR GEORGE A MARKS4 7292249
 ..  SALISBURY ST            ..
  35 P I BLUMBERG      #7294075
  36 JOHN J SHANAHAN     7293944
  37 E OBER PRIDE        7291007
  40 DR M J BUCKLEY      7297895
  41 BERTON F HILL     7 7292296
  43 WM B WOODBRIDGE     7295526
 ..  ENDS 141                ..
 ..  CAMBRIDGE ST            ..
     15 RESIDENCE
FOX HILL RD               BURLGTN
     STARTS BEAVER BRK
     ..................     01803
.....     1-  END T 3321 $B..E 3
 160 BRUCE K BARNARD     #2720143
 163 ROBERT R SNOOK       2723227
 164 GEORGE W RYAN       -2724333
 165 ROGER J LAVOIE       2723389
 170 PATRICK A MORENO     2725375
 172 B B HURWITCH        #2722748
 174          N.T.I.A.
 175 JOHN K FLAHERTY     #2726824
 176 CARLOS R DOWNER   5 2725138
 178 NEVILLE J BAIA       2725292
 180 MARILYN COUGHLIN    #2720822
 202 FREDRICK A MOSELEY 2724841
 204 JOHN P COLLINS       2720986
 206          N.T.I.A.
 207 ARTHUR R MOORE    6 2720035
 209          N.T.I.A.
 210 LILLIAN B PHILLIPS 2724148
 211          N.T.I.A.
 212          N.T.I.A.
 213 JOSEPH J FARINELLO
                      7 2722555
     JOHN MORRIS         #2722444
 214 PAUL M COCHRAN       2722080
 216 RICHARD BUTLER    6 2723651
 218 DONALD J SHANLEY     2722095
 220 ROBERT E SWAIN       2725374
 222 JOHN P KEEFE JR     #2729192
 224 PAUL G TRABUCCO      2721830
 226 ROBERT A CARROLL 6 2724246
 228 ALEXANDER J GICHUN-2725725
 230 ALBERT J SCHMIDER5 2729582
 231          N.T.I.A.
 232 ALLEN K STARK     5 2721807
 234 RONALD LAMB       5 2725591
 236 EDWIN J OLEY      5 2721536
 237 MICHAEL TENORE    5 2725466
 238 ROBERT J MACDONALD
                       5 2720212
 239 LT CHAS N CALVANO7 2724522
 245 ANTHONY R PATTI   5 2725896
 246          N.T.I.A.
 247 MARTIN G STAUSS   -2720068
 248 JOSEPH D MCGONAGLE 2725140
 249 THOMAS E MEA         2725494
 250 DAVID W BOHY      6 2725354
NO # MICHAEL H BERLOW     2722625
NO # J E BURGOMASTER      2725123
NO #*FOX HILL SCHOOL      2726156
NO # AGOSTIN R GULLA      2724896
NO # JOSEPH F HAYES       2725061
NO # B J MCGAFFIGAN JR   2721717
NO # WILLIAM F MCGARRY   2725241
NO # RICHARD J PHELAN     2721627
NO # RICHARD E SOLOSKI    2724971
NO # THOMAS F SHERIDAN   2725099
NO # HENRY A SUBRIZIO     2725036
NO # ROBERT L SULLIVAN   2725979
 ..  DEAD END               ..
     54 RESIDENCE   1 BUSINESS
FOX RD                    WAKEFLD
     STARTS 14
     NEWELL RD
     ..................     01880
.....     1-  END T 3352 $A..G 8
   1 MRS AGNES C CRONIN 2451756
   8 MRS P LARICCIA     2453328
  10 PAUL CAVALIERE     2451808
  11 JOHN F LEDOUX      2451254
     SIDNEY S THOMPSON  2451254
  13 PAUL A RICHARD     2453714
  15 MARION E WALKER  4 2453706
  19 JAMES A FOX        2455205
  23 W H FAYLE        6 2453716
  27 GEORGE ZAHAREAS  7 2456524
  28 DOMENICO DEVITA    2454653
  29 JOSEPH BOWEN       2451888
  30 JOHN S ADAMS       2452220
  33 JOSEPH BASILESCO   2453449
  38 A J CICCARELLI     2454696
  40 HENRY F DUNN       2450617
  41 DENNIS HOGAN     5 2455332
     VINCENT COLLINS  5 2455332
 ..  ENDS 45 JORDAN AV       ..
     18 RESIDENCE
FRANCES RD                WOBURN
     STARTS SENDRICK RD
     ..................     01801
.....     1-  END T 3335 $C..H 5
   2 LEONARD J PEARLESS 9352896
   4 EDW W RICHARDSON   9332518
   6          N.T.I.A.
   8 JOHN R MCLAUGHLIN  9351897
   9 WM G MCCLOSKEY     9334618
  10 LOUIS C BUTLER JR #9332447
  11 FRANCIS T CAHALAN  9350233
  12 WALTER G JOHNSON   9351457
  13 DANIEL P PETINGE   9336680
  14 CONRAD J GIROUARD  9332704
  15 MRS RUTH SPINNEY   9334993
  16 FRANCIS S NOLAN    9332269
  17 MERLE D COLLIER    9352679
  18 LAWRENCE J KIRK  5 9350191
  19 THOMAS E ONEILL    9352037
  20 RAYMOND P BELANGER 9337587
  21 E W RICHARDSON JR4 9335605
  22          N.T.I.A.
```

Target Street	Cross Street	Source
-	✓	Cole Criss-Cross Directory

WESTWOOD ST 1968

```
WESTWOOD ST                    BURLGTN
     STARTS OFF
     WILMINGTON RD
     ....................        01803
.....      1-  END T 3321  $B..E 3
    1 AL N SHIELDS       5 2725512
    2 RICHARD MCLAUGHLIN   2724991
    3 FRANK J NEWARK     5 2725685
    9 RUSSELL H CARLSON    2722044
   11 GEORGE M RUZZO       2729316
   12 DOUGLAS C CHAPMAN    2729033
   13 ALBERT T KEAVY       2722031
   22 MRS LOUISA BALDI     2720189
   24            N.T.I.A.
   27 HENRY A MARCHI    5 2722653
   28 O J DEROSA           2720548
   29 WALTER J PINGREE  7 2720505
   44 HILBERT E FITCH      2720699
   46 JAMES MASCETTA       2723023
   48 CAPT B E JORDAN   5 2725792
  115 STANLEY GAILIUS   5 2725847
 NO # JOHN F GORMAN        2723359
 NO # MAYNARD M LIND       2720454
 NO # L J MCCONNELL        2721089
 NO # ARTHUR G MCINTOSH    2722038
  ..  DEAD END                ..
       20 RESIDENCE
```

Fox Hill Elementary School

252 Fox Hill Road

Burlington, MA 01803

Inquiry Number: 7295798.3

March 31, 2023

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

03/31/23

Site Name:	Client Name:
Fox Hill Elementary School	ECMS, Inc.
252 Fox Hill Road	288 Grove Street #391
Burlington, MA 01803	Braintree, MA 02184
EDR Inquiry # 7295798.3	Contact: Cheryl Cambria

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by ECMS, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # C85A-495F-B321

PO # NA

Project Fox Hill Elementary School

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: C85A-495F-B321

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

ECMS, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT. Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

Fox Hill Elementary School

252 Fox Hill Road

Burlington, MA 01803

Inquiry Number: 7295798.4

March 31, 2023

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

03/31/23

Site Name:	Client Name:
Fox Hill Elementary School	ECMS, Inc.
252 Fox Hill Road	288 Grove Street #391
Burlington, MA 01803	Braintree, MA 02184
EDR Inquiry # 7295798.4	Contact: Cheryl Cambria

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by ECMS, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA

Project: Fox Hill Elementary School

Coordinates:

Latitude:	42.529052 42° 31' 45" North
Longitude:	-71.188461 -71° 11' 18" West
UTM Zone:	Zone 19 North
UTM X Meters:	320262.05
UTM Y Meters:	4710839.90
Elevation:	172.78' above sea level

Maps Provided:

2018	1947
2015	1944
2012	1943
1987	1918
1979	1915
1977	1893
1965	1888
1950	

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT. Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets

Wilmington
2018
7.5-minute, 24000

2015 Source Sheets

Wilmington
2015
7.5-minute, 24000

2012 Source Sheets

Wilmington
2012
7.5-minute, 24000

1987 Source Sheets

Reading
1987
7.5-minute, 25000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1979 Source Sheets

Wilmington
1979
7.5-minute, 25000
Aerial Photo Revised 1977

1977 Source Sheets

Wilmington
1977
7.5-minute, 25000
Aerial Photo Revised 1977

1965 Source Sheets

Wilmington
1965
7.5-minute, 24000
Aerial Photo Revised 1939

1950 Source Sheets

Wilmington
1950
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1947 Source Sheets

WILMINGTON
1947
7.5-minute, 25000

1944 Source Sheets

Wilmington
1944
7.5-minute, 31680

1943 Source Sheets

Lowell
1943
30-minute, 125000

1918 Source Sheets

Lawrence
1918
15-minute, 62500

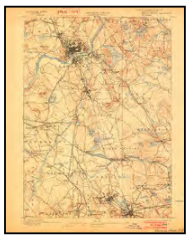
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1915 Source Sheets

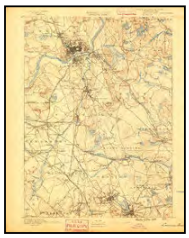
LAWRENCE
1915
15-minute, 62500

1893 Source Sheets



Lawrence
1893
15-minute, 62500

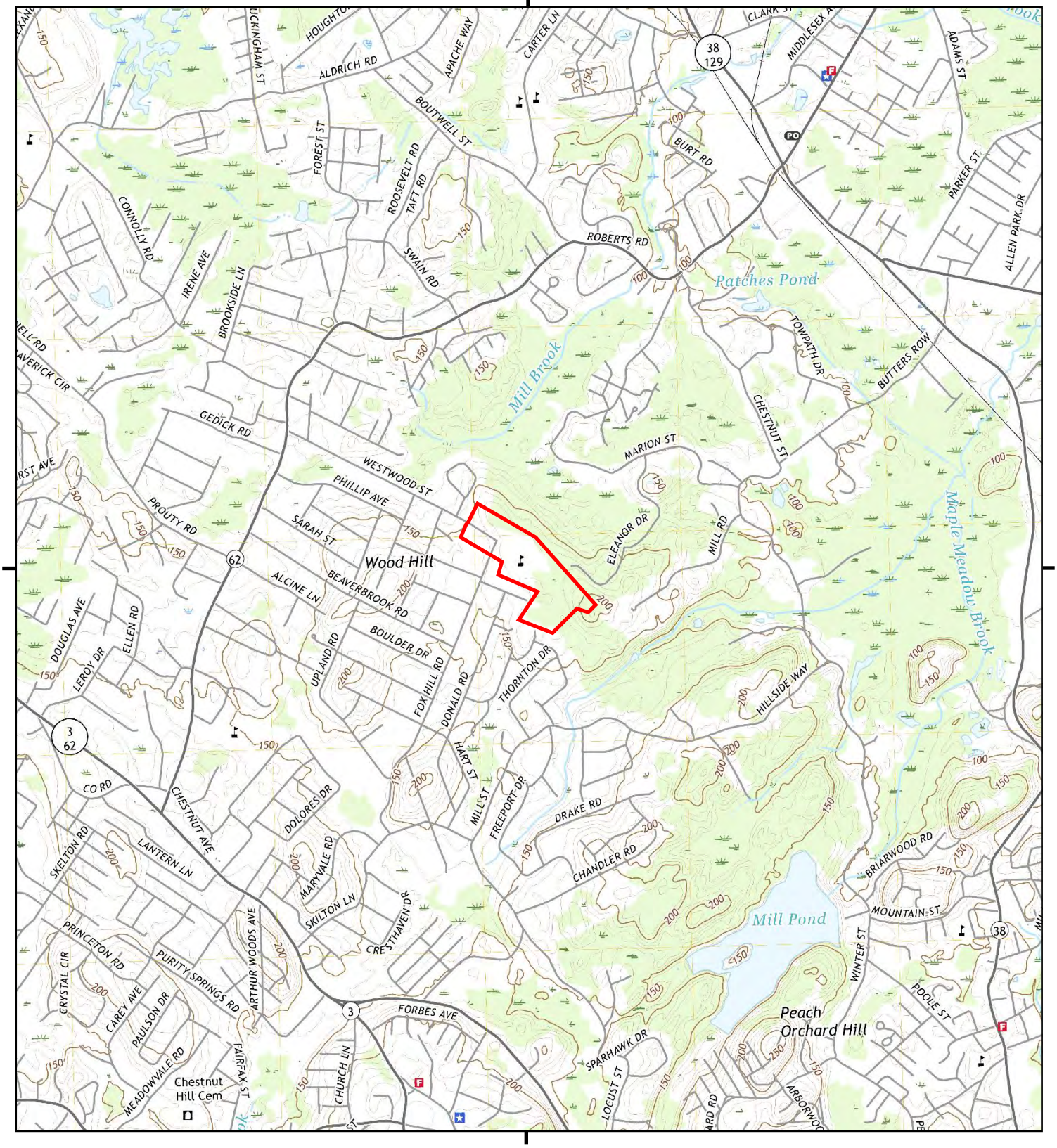
1888 Source Sheets



Lawrence
1888
15-minute, 62500

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

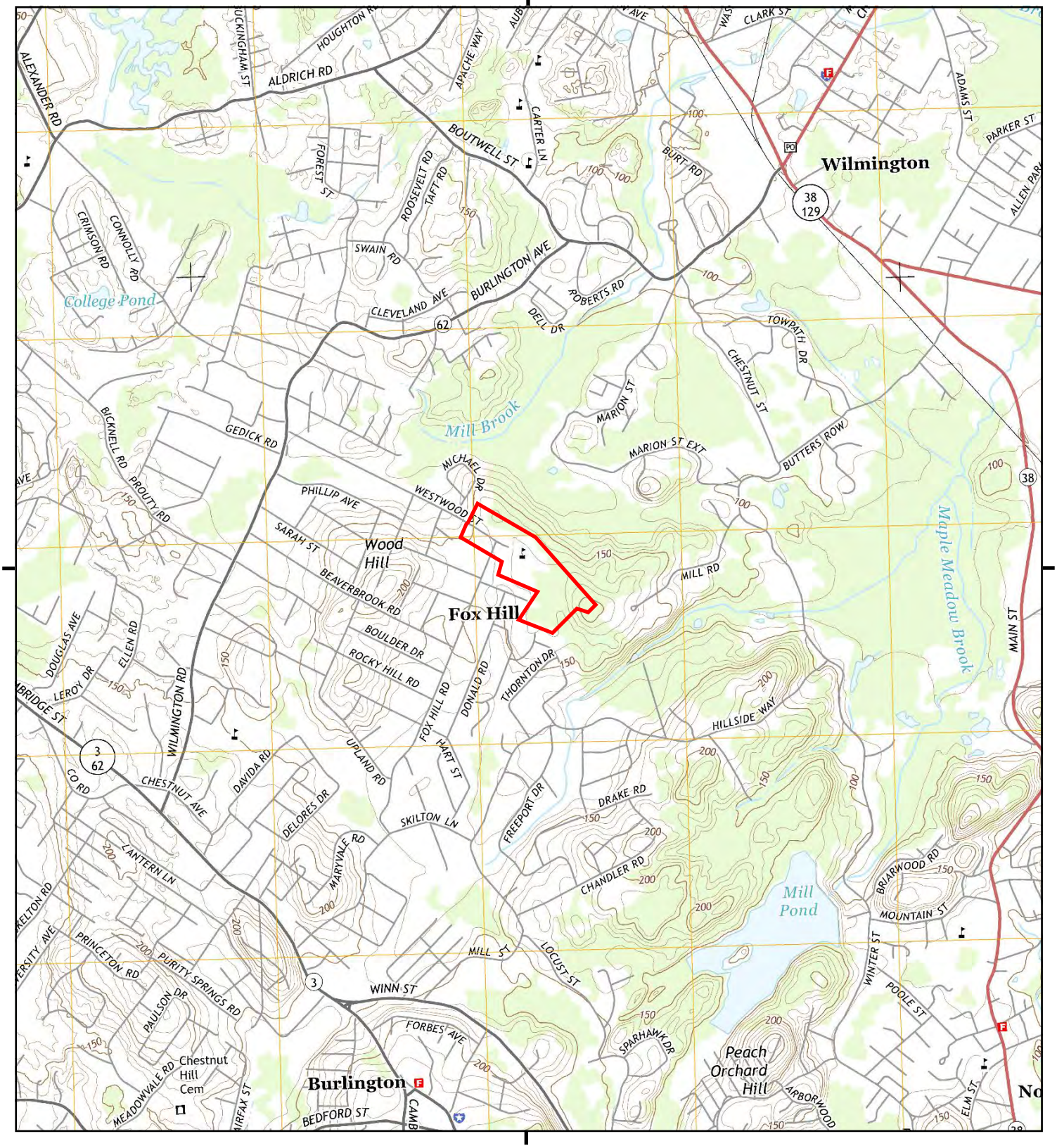
TP, Wilmington, 2018, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

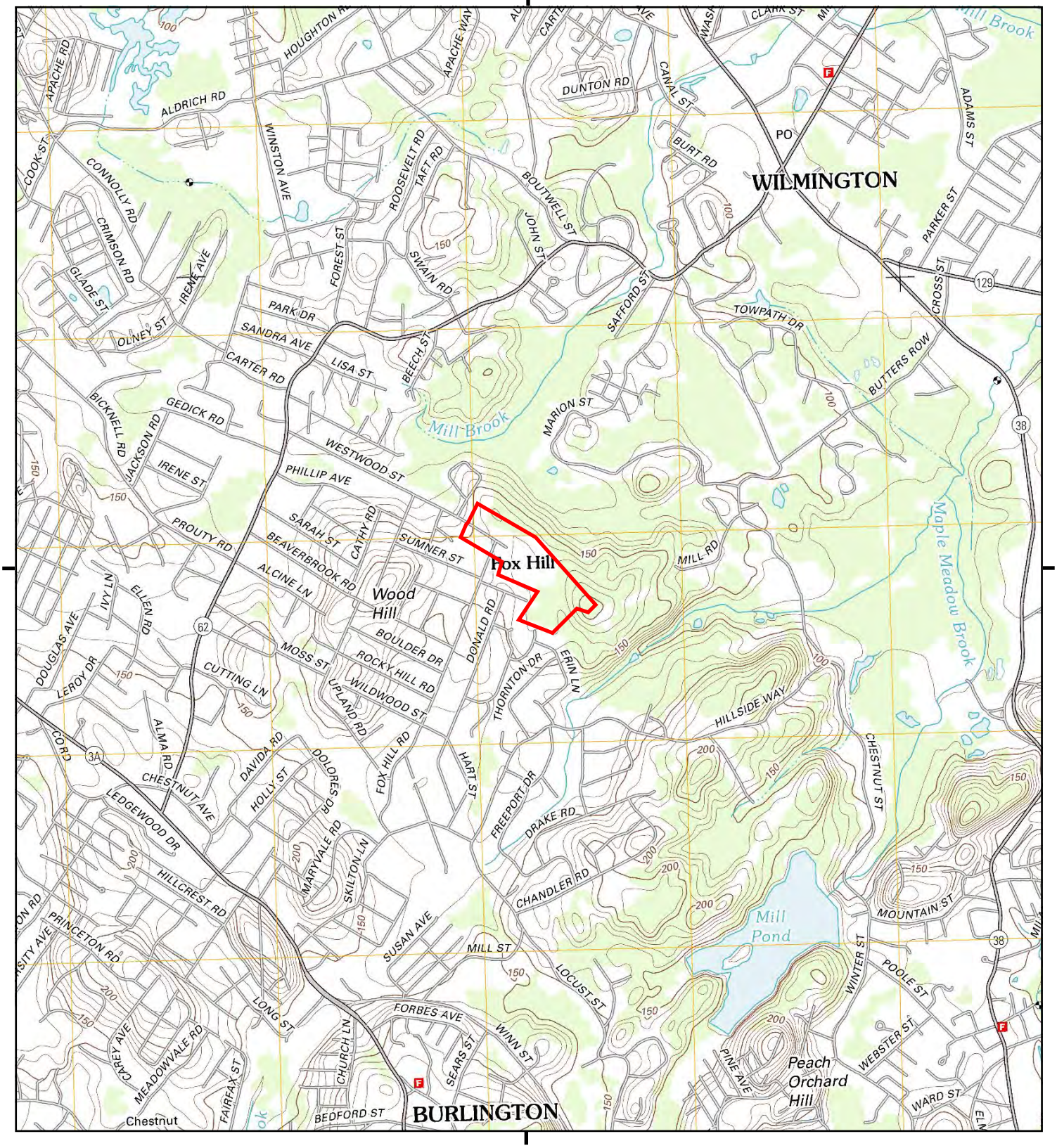
TP, Wilmington, 2015, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

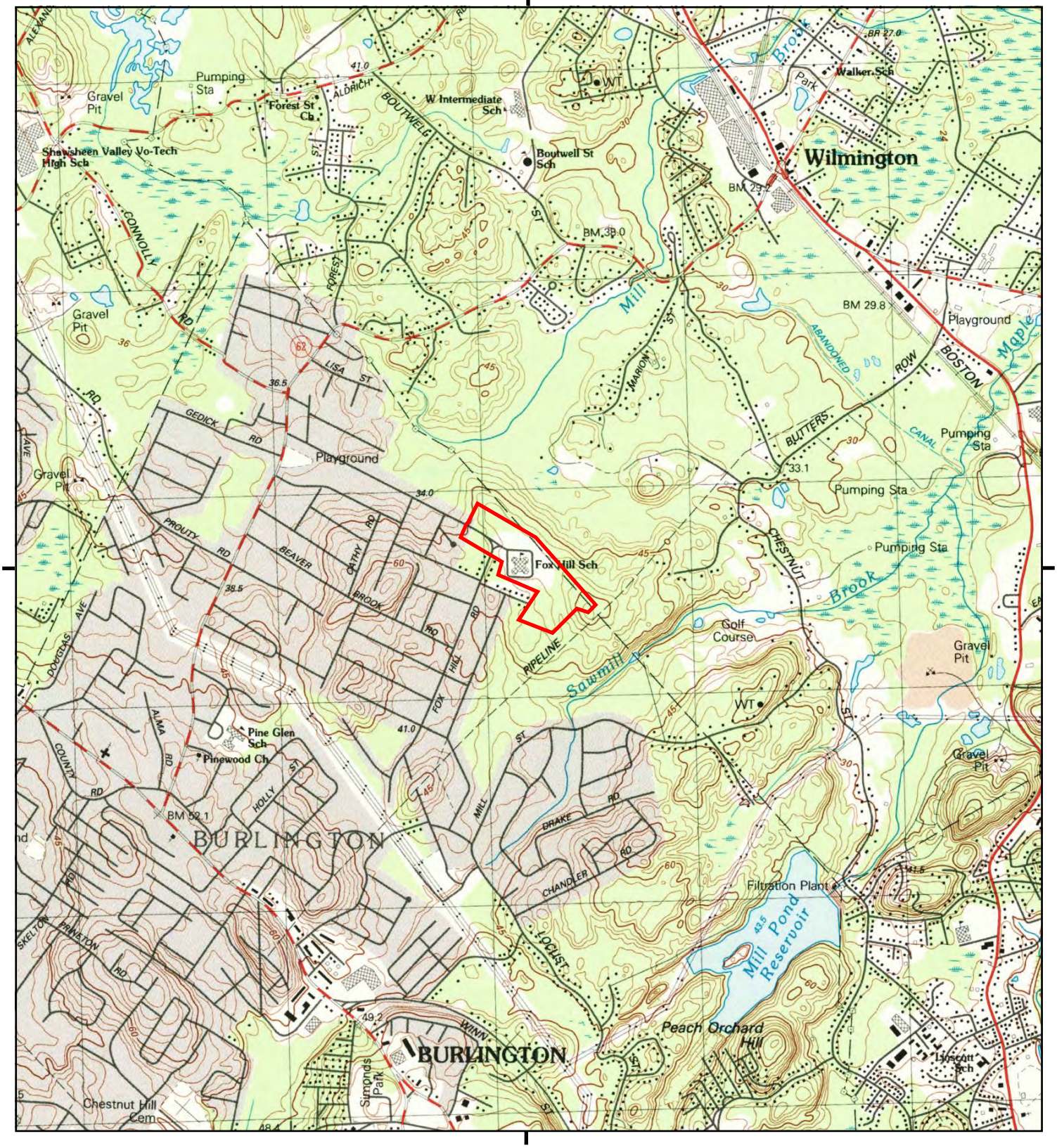
TP, Wilmington, 2012, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1987



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

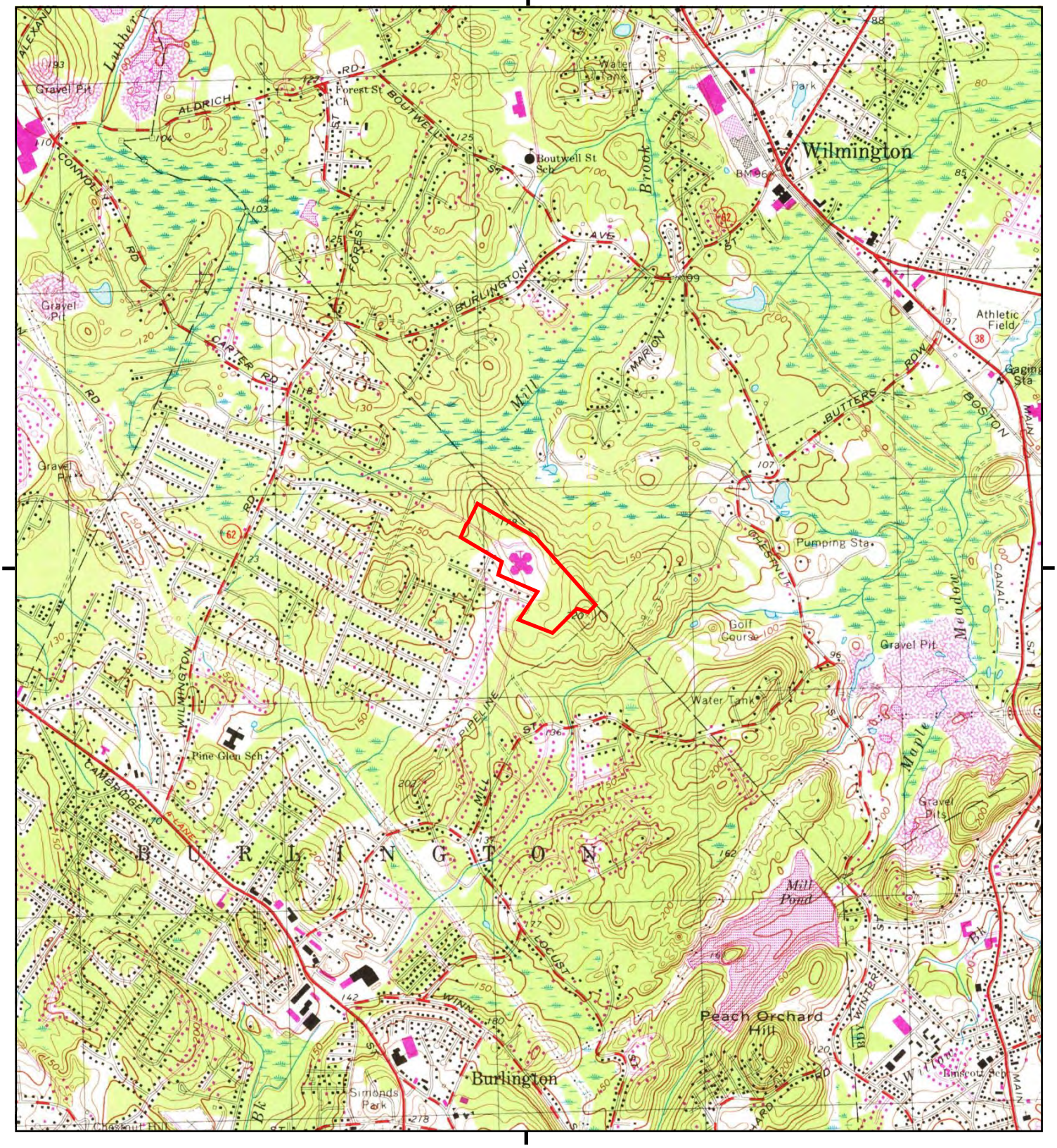
TP, Reading, 1987, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1979



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Wilmington, 1979, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1977

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

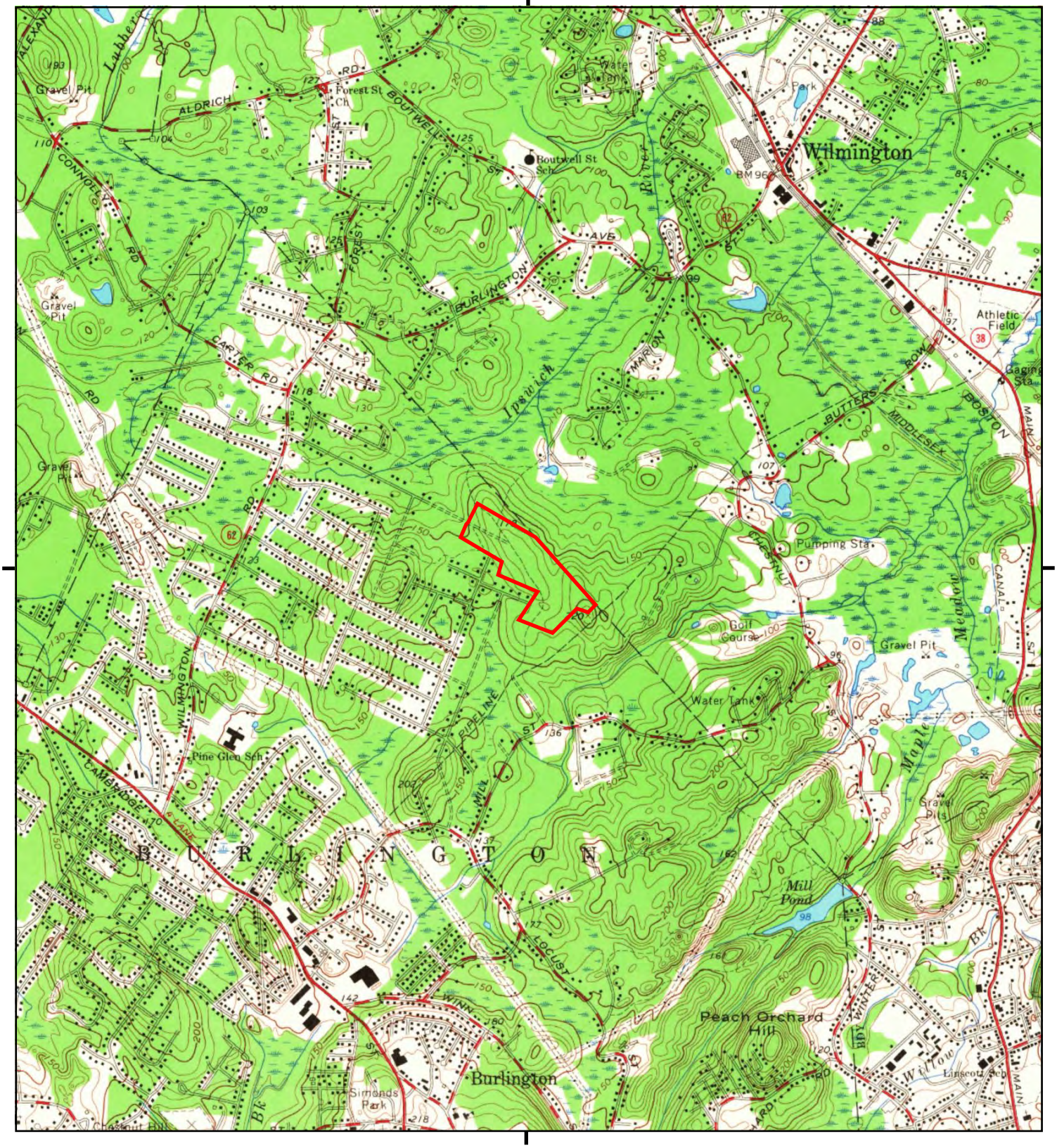
TP, Wilmington, 1977, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1965



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

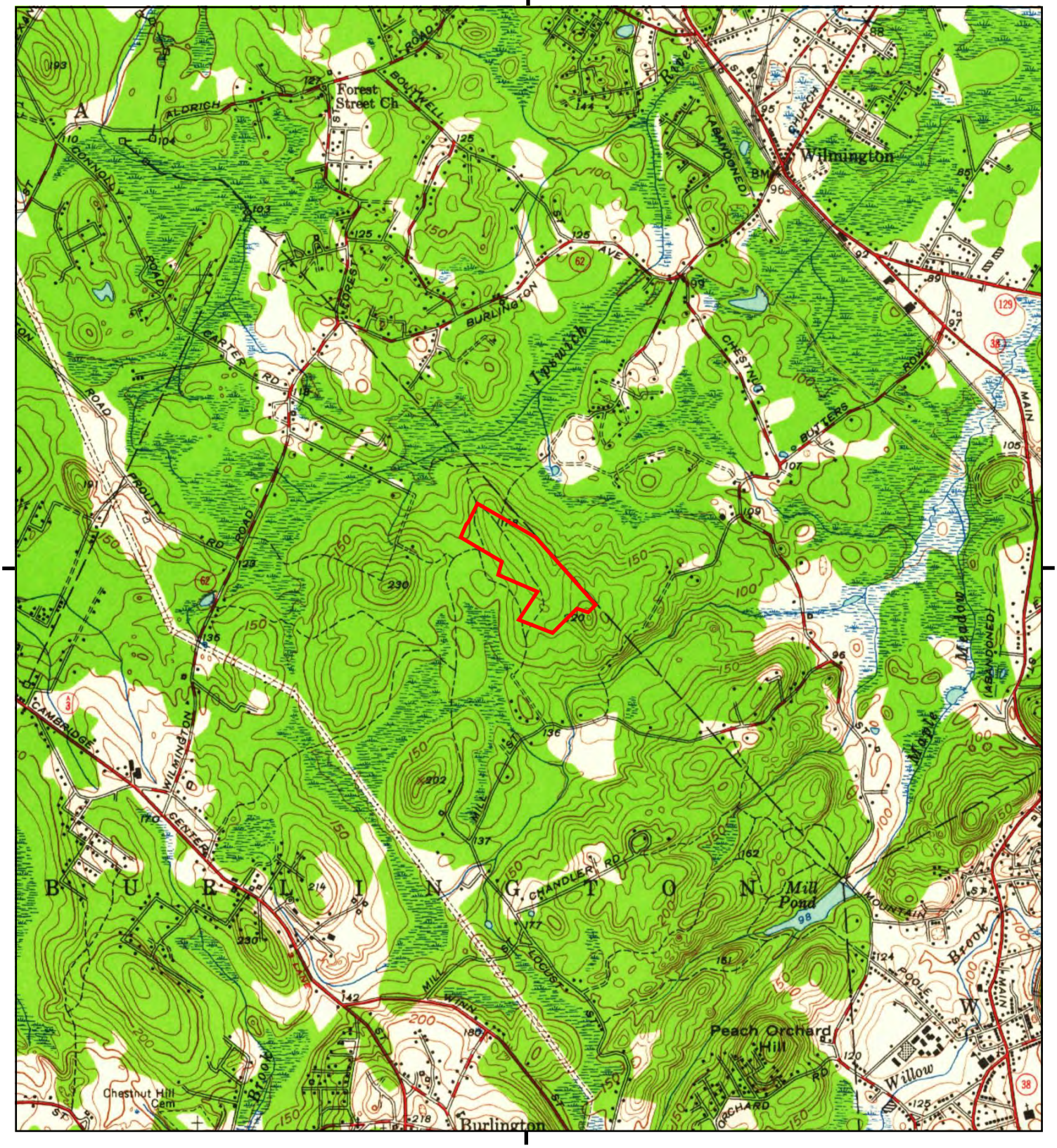
TP, Wilmington, 1965, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1950



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

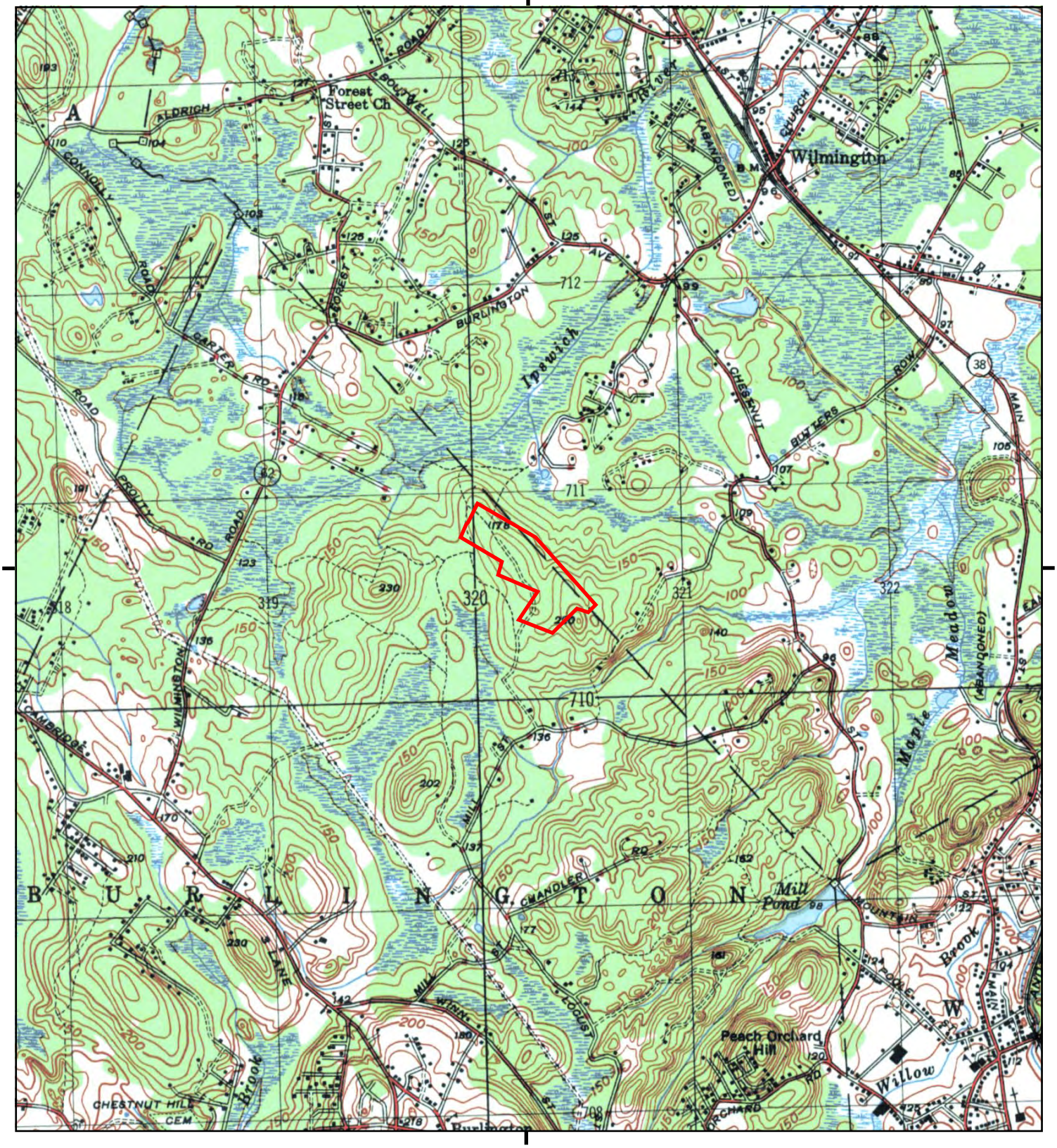
TP, Wilmington, 1950, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1947



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, WILMINGTON, 1947, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

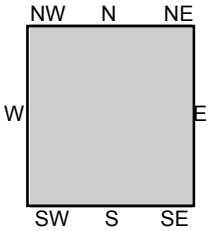
N

Historical Topo Map

1944

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



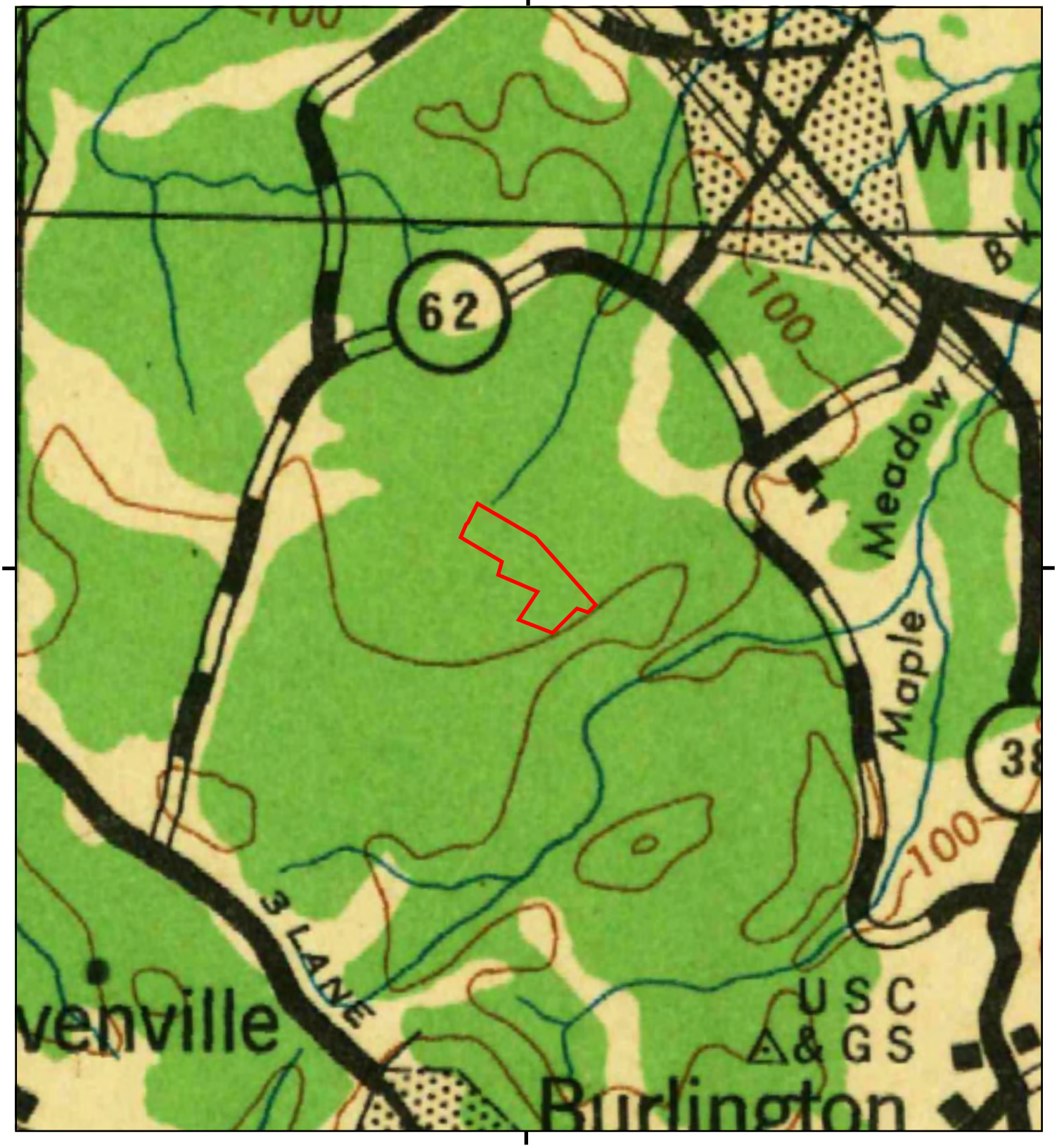
TP, Wilmington, 1944, 7.5-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1943



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

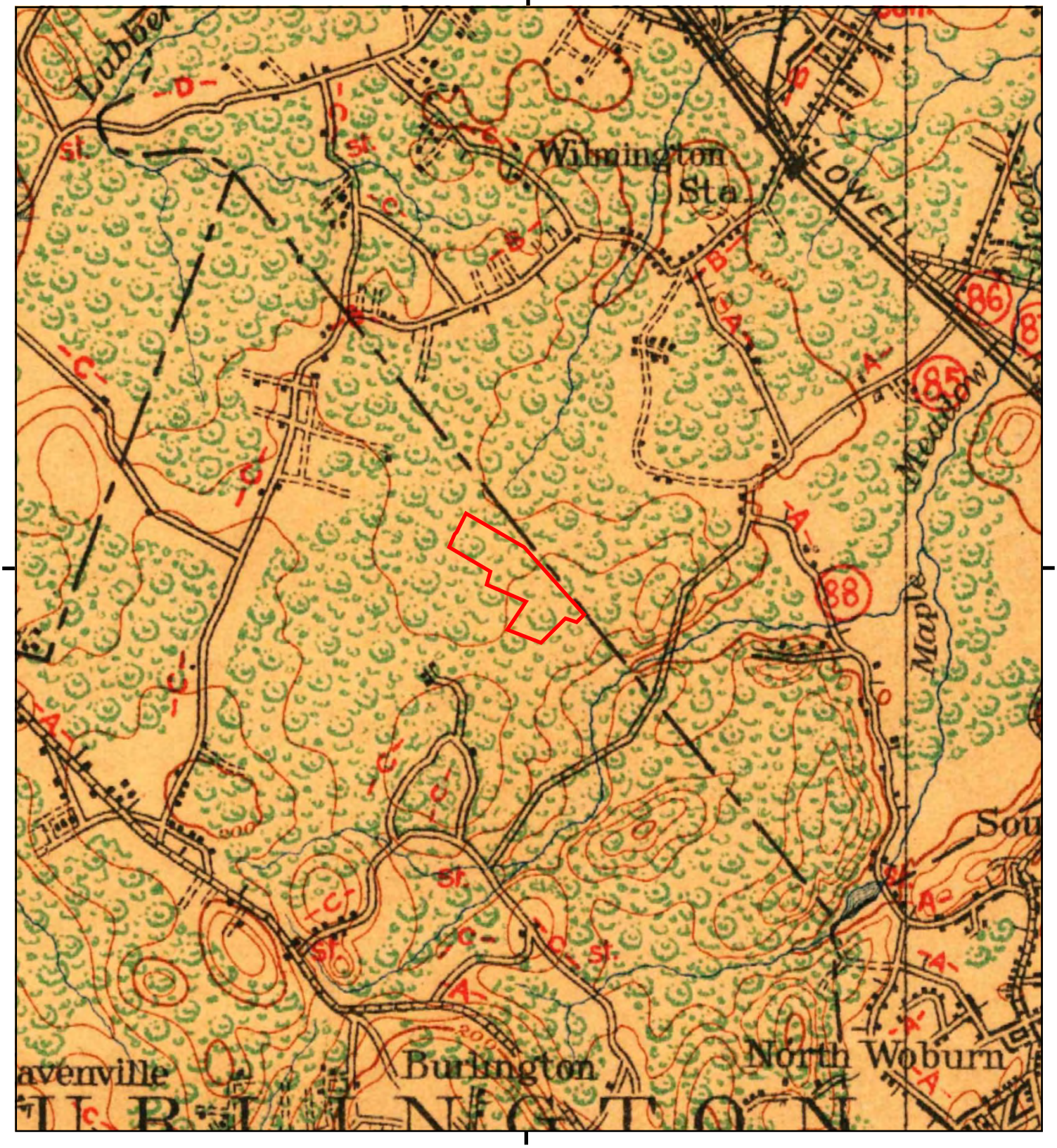
TP, Lowell, 1943, 30-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1918



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

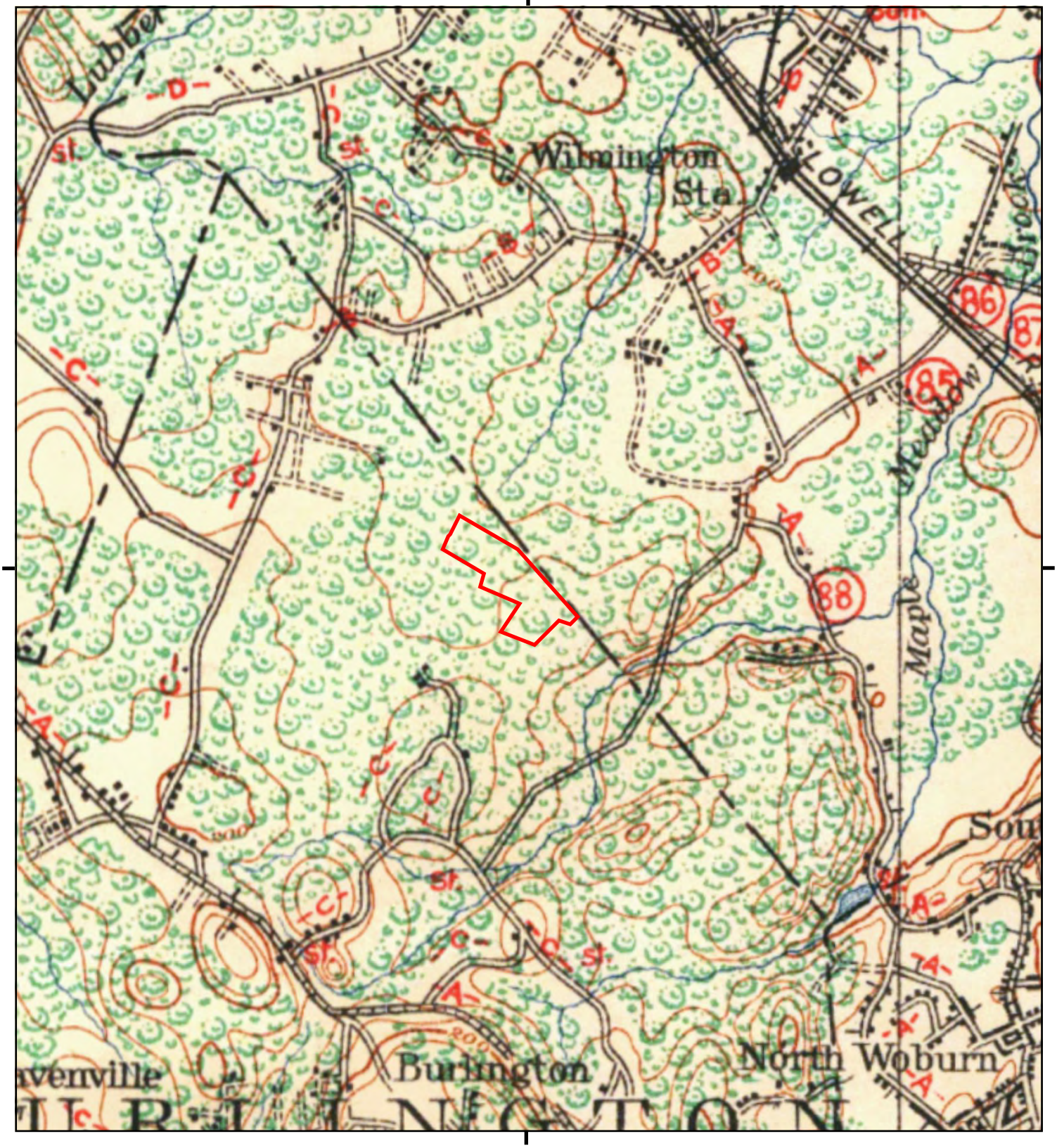
TP, Lawrence, 1918, 15-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1915



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

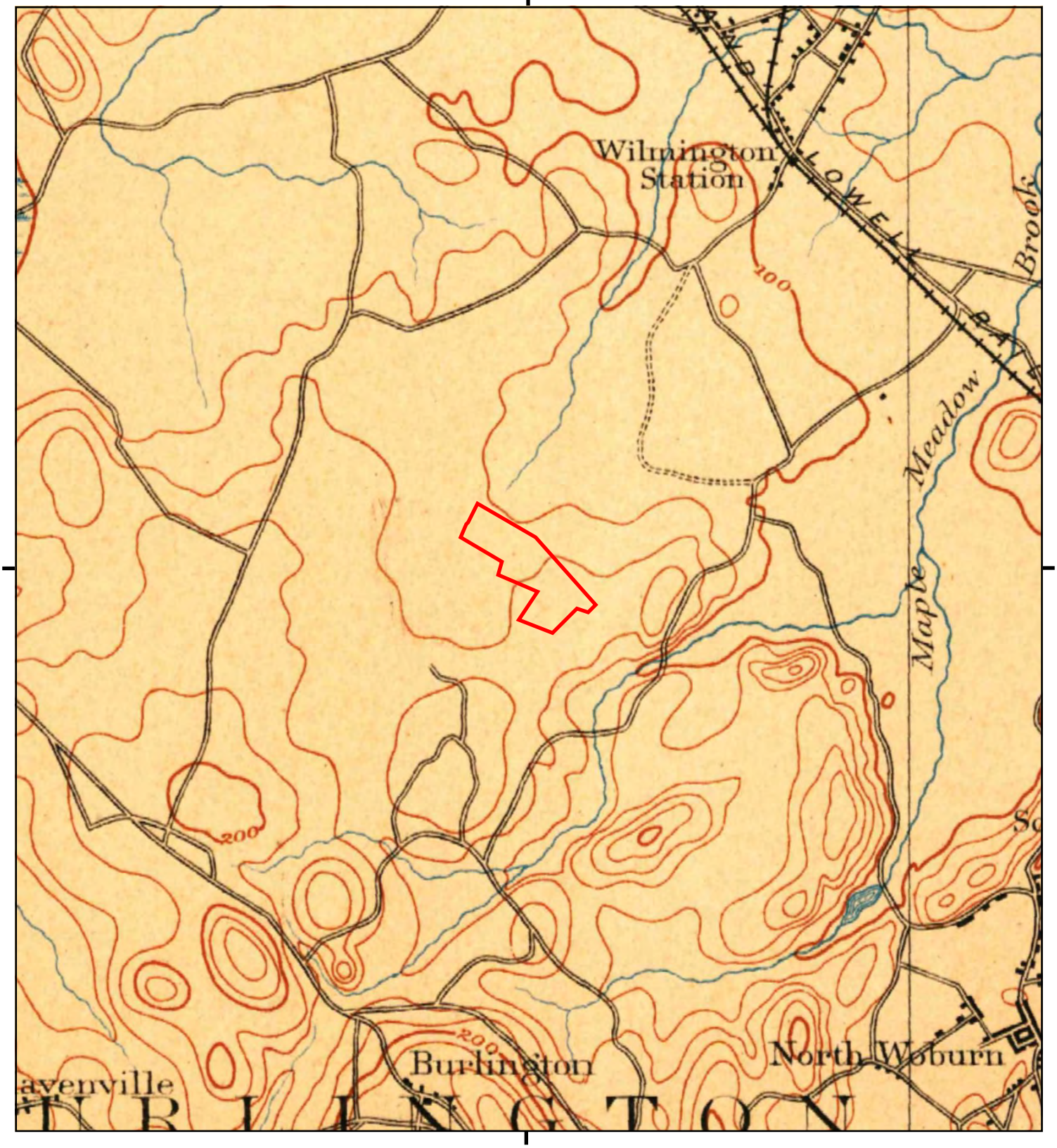
TP, LAWRENCE, 1915, 15-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1893



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

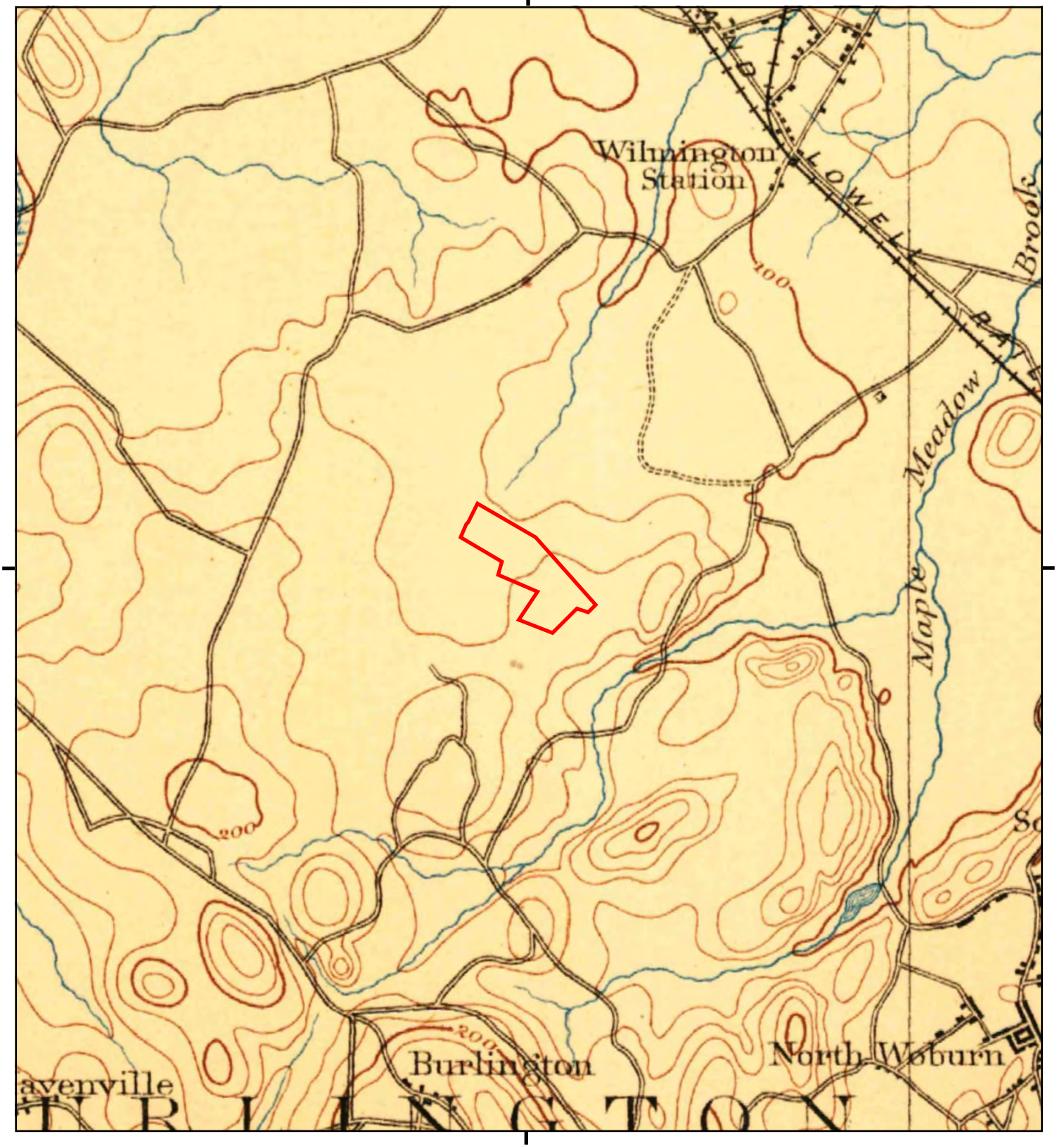
TP, Lawrence, 1893, 15-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Historical Topo Map

1888



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lawrence, 1888, 15-minute

SITE NAME: Fox Hill Elementary School
ADDRESS: 252 Fox Hill Road
Burlington, MA 01803
CLIENT: ECMS, Inc.

N

Fox Hill Elementary School

252 Fox Hill Road

Burlington, MA 01803

Inquiry Number: 7295798.8

March 31, 2023

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

03/31/23

Site Name:

Fox Hill Elementary School
252 Fox Hill Road
Burlington, MA 01803
EDR Inquiry # 7295798.8

Client Name:

ECMS, Inc.
288 Grove Street #391
Braintree, MA 02184
Contact: Cheryl Cambria

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2018	1"=500'	Flight Year: 2018	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
1995	1"=500'	Acquisition Date: March 29, 1995	USGS/DOQQ
1986	1"=500'	Flight Date: March 30, 1986	USDA
1980	1"=500'	Flight Date: September 19, 1980	USDA
1978	1"=500'	Flight Date: April 23, 1978	USGS
1965	1"=500'	Flight Date: April 06, 1965	USGS
1963	1"=500'	Flight Date: April 27, 1963	USGS
1938	1"=500'	Flight Date: December 21, 1938	USGS

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

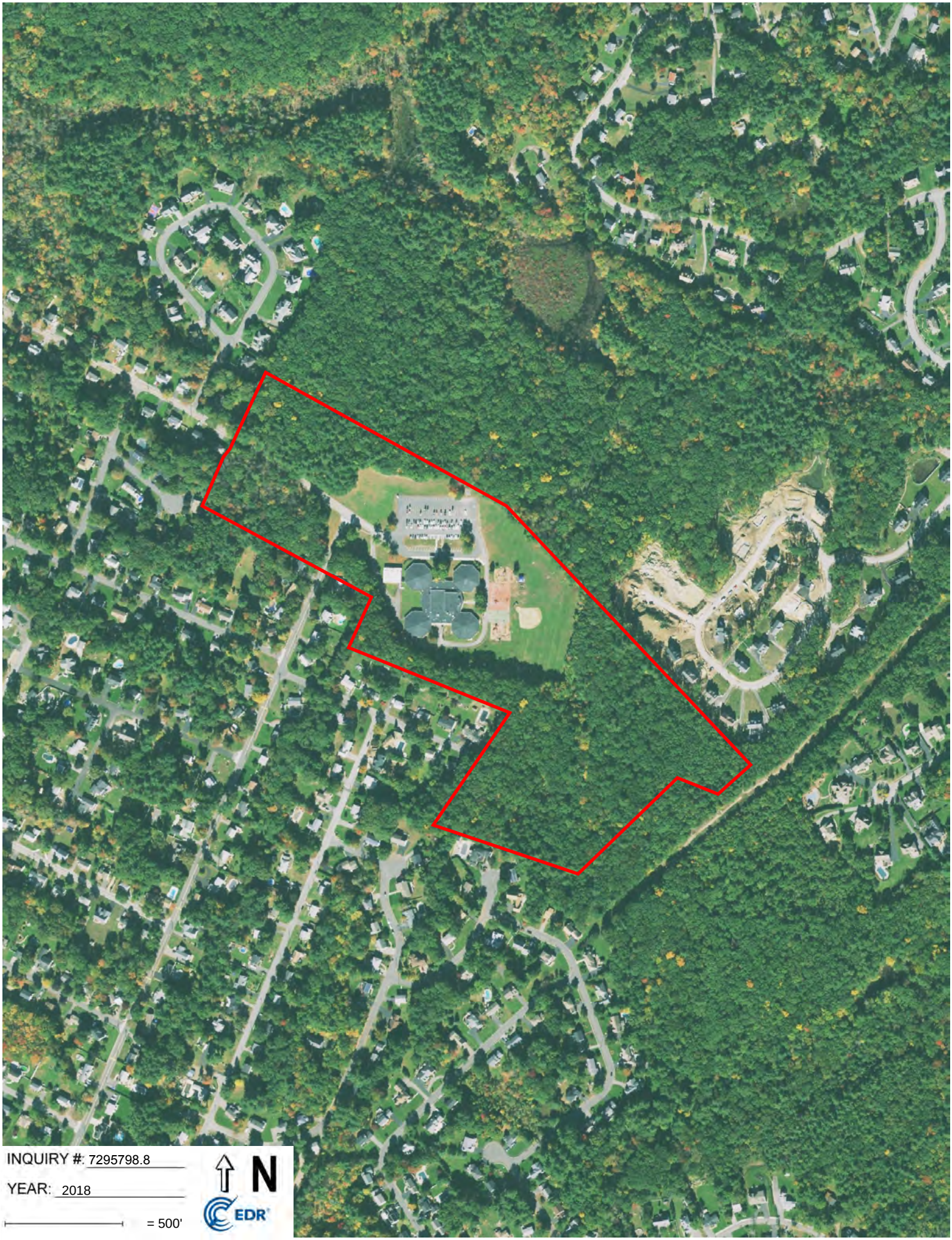
Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA), ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT.

Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.


INQUIRY #: 7295798.8
YEAR: 2018
= 500'
N
EDR

INQUIRY #: 7295798.8
YEAR: 2014
= 500'
N
EDR

INQUIRY #: 7295798.8
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 7295798.8

YEAR: 1995

= 500'

N

EDR

INQUIRY #: 7295798.8
YEAR: 1986
= 500'
N
EDR

INQUIRY #: 7295798.8

YEAR: 1980

= 500'

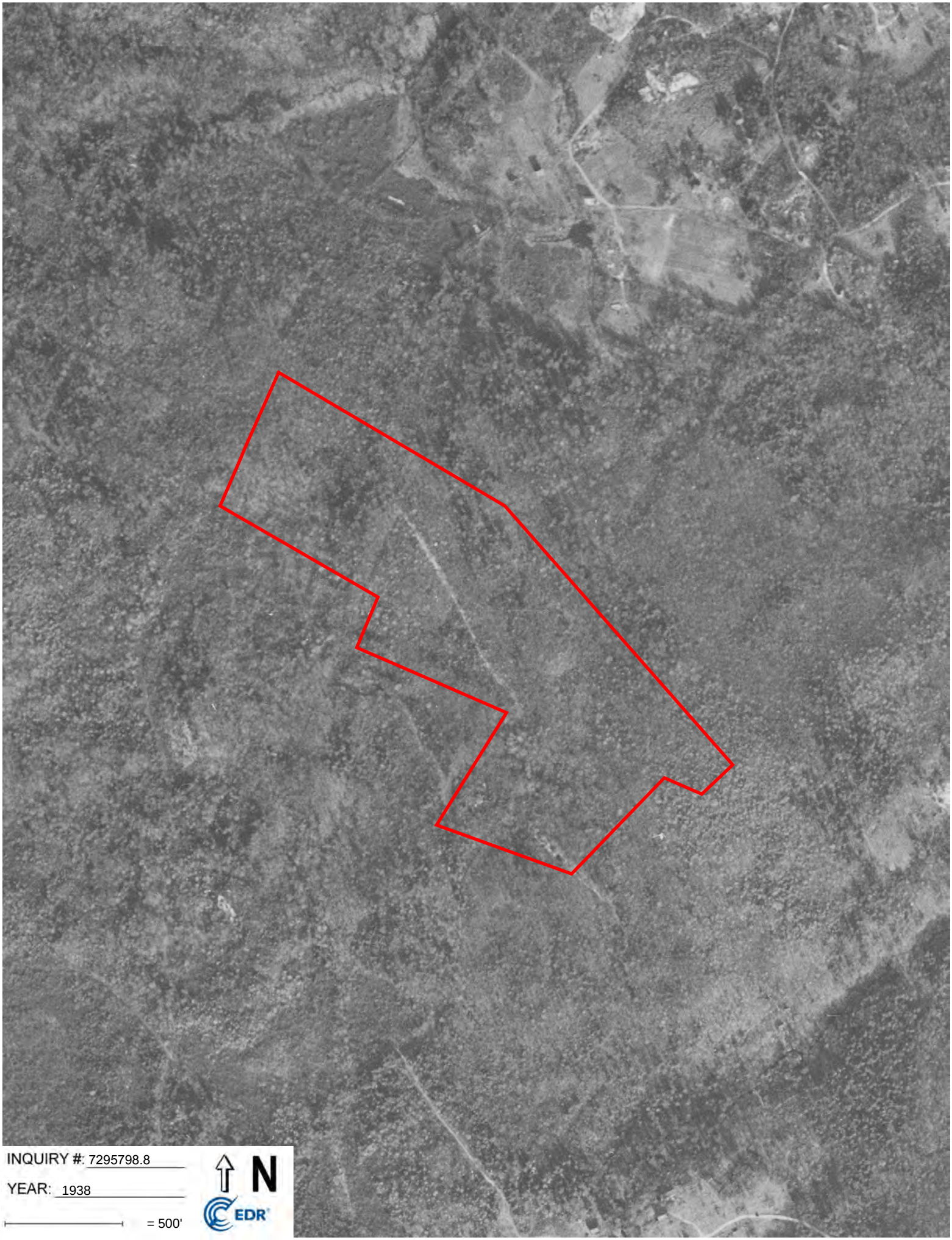
N

EDR

INQUIRY #: 7295798.8
YEAR: 1978
= 500'
N
EDR

INQUIRY #: 7295798.8
YEAR: 1965
= 500'
N
EDR

INQUIRY #: 7295798.8
YEAR: 1963
= 500'
N
EDR


INQUIRY #: 7295798.8
YEAR: 1938
= 500'
N
EDR

APPENDIX B

QUALIFICATIONS/LIMITATIONS

QUALIFICATIONS/LIMITATIONS

Environmental & Construction Management Services, Inc. (ECMS) professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This warranty is in lieu of all other warranties either expressed or implied. *ECMS* is not responsible for the independent conclusions, opinions or recommendations made by others based on the records review, site inspection, field exploration, and laboratory test data presented in this report.

Factual information regarding on-site business operations, conditions, and historical data provided to *ECMS* is assumed to be correct and complete. *ECMS* assumes no responsibility for hidden or latent conditions or misrepresentation by the property owner, its representatives, public information officials or any authority consulted in connection with the compilation of this report.

The findings set forth in the attached Site assessment report are strictly limited in time and scope to the date of the evaluation(s). The conclusions presented in the Report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed upon services or the time and budgeting restraints imposed by the client.

The purpose of this report was to assess the physical characteristics of the subject Site with respect to the presence in the environment of hazardous material or oil. No specific attempt was made to check on the compliance of present or past owners or operators or of the Site with Federal, State or local laws and regulations, environmental, or otherwise.

Partial findings of this investigation are based on data provided by others. No warranty is expressed or implied with the usage of such data. Much of the information provided in this report is based upon personal interviews and research of all available documents, records and maps held by the appropriate government and private agencies. This is subject to the limitations of historical documentation, availability and accuracy of pertinent records, and the personal recollection of those persons contacted by *ECMS* personnel. *ECMS* is not a professional title insurance firm and makes no guarantee, explicit or implied that the listing, which was reviewed, represented a comprehensive delineation of past Site ownership or tenancy for legal purposes.

Observations were made of the Site and of structures on the Site as indicated within the Report. Where access to portions of the Site or to structures on the Site was unavailable or limited, *ECMS* is unable to render an opinion as to the presence of hazardous material or oil, or to the presence if indirect evidence relating to hazardous material or oil, in that portion of the Site or structure. In addition, *ECMS* renders no opinion as to the presence of hazardous material or oil, where direct observation of the interior walls, floor, or ceiling of a structure on a Site was obstructed by objects or coverings on or over these surfaces.

The initial site investigation took into account the natural and man-made features of the Site, including any unusual or suspect phenomenon. These factors combined with the Site's geology, hydrology, topography, and past and present land uses served as a basis for choosing a methodology and location for subsurface exploration as well as ground water and subsurface sampling, if done. The subsurface data, if provided, is meant as a representative overview of the Site.

The conclusions and recommendations contained in this report may be based in part upon various types of chemical data and are contingent upon their validity. As indicated within the Report, some

of these data are preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary. It should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional data or variations of current data become available in the future, these data should be reviewed, and the conclusions and recommendations presented herein modified accordingly.

Chemical analyses may have been performed for specific parameters during the course of this Site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study might be present in soil and/or ground water at the Site.

APPENDIX C

QUALIFICATIONS OF THE ENVIRONMENTAL PROFESSIONALS

CHERYL A. CAMBRIA

Senior Environmental Geologist

Cheryl has over 25 years of environmental site assessment experience. Responsibilities have included a wide variety of activities involving proposal generation, historical research, site visits, soil boring and monitoring well installation, soil screening and sampling, groundwater sampling, analysis of laboratory analytical results, and all aspects of report writing.

Cheryl served as staff environmental scientist for several New England environmental consulting firms including Hygienetics Environmental Services and Rizzo Associates, Inc.

Some highlights of Cheryl's experience include:

- Performed numerous environmental site assessments throughout New England, New York, New Jersey, Kentucky, Utah and Indiana. Properties investigated have included residential properties, office buildings, gasoline filling stations, chemical companies, and manufacturing facilities.

- Provided field support for large projects including the Massachusetts Turnpike Authority facilities throughout Massachusetts and the Central Artery Project in Charlestown, Massachusetts. Responsibilities included groundwater sampling and soil screening.

- Performed project managing of a quarterly sampling event at General Electric Silicone Products Division in Waterford, New York. Duties included project monitoring and organization, depths to groundwater measurements and the generation of groundwater contour maps, groundwater sampling, and analysis of laboratory results.

- Performed a soil vapor survey in a landfill at General Electric Silicone Products Division in Waterford, New York as part of an effort to determine health and safety measures for personnel conducting sampling activities at this landfill.

- Provided support for a hazardous materials survey as part of a Material Safety Data Sheet program at United States Postal Service facilities.

Technical Specialties:

Phase I & II Environmental Site Assessments

Detailed Historical Research Investigations

Education:

B.S., Geology and Natural Sciences, Castleton State College, 1988

KEVIN J. KAVANAUGH, L.S.P., CHMM

Principal Environmental Engineer

Kevin has 37 years of engineering/hydrogeological consulting, environmental site assessment and site remediation experience. In addition to his fiscal and marketing duties as a Principal Environmental Engineer and Chief Executive Officer (CEO) at *Environmental & Construction Management Services, Inc.* (*ECMS*) for the last 20 years, he oversees the environmental staff, coordinates business and professional development of staff, provides technical QA/QC, and offers specialized corporate technical support in accordance with state and federal regulatory agencies.

Prior to co-founding *ECMS*, Kevin was the National Accounts Director for Hygienetics Environmental Services, Inc. (Hygienetics) in Boston, Massachusetts. As the National Account Director he managed the nationwide environmental due diligence and consulting services for Hygienetics National Accounts including GE Capital Real Estate, Archon Group LP, Finova Realty Capital, American General Realty Advisors, Metropolitan Life Insurance and State Teachers Retirement System of Ohio for all of Hygienetics 14 Offices throughout the Continental United States.

Kevin is a Massachusetts Licensed Site Professional (LSP) since May 1994 and Certified Hazardous Materials Manager (CHMM) since 1998 with extensive experience with preparation and submission of every aspect of the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000 including; Phase I through Phase V reports, Downgradient Property Status (DPS), Activity and Use Limitations (AULs), Method 1 and 3 Risk Characterizations, Class A, B and C Response Action Outcome (RAO) and Permanent Solutions, Numerical Site Ranking, Immediate Response Action (IRA) Plans and Release Abatement Measure (RAM) Plans, status and completion reports, Tier I Permit Applications, Major Permit Modifications and vapor intrusion assessments. He also provided LSP technical report review and provided cost estimates for various lending institutions, insurance companies, law offices and other property acquisition/development corporations. In addition to his extensive experience in Massachusetts, he has personally performed either environmental site assessments and/or site remediation in New Hampshire, Georgia, Rhode Island, New Jersey, Texas, Kansas, California, Florida, Michigan and Pennsylvania.

Prior to joining Hygienetics in 1996, Kevin worked as a Site Operation's Manager/Senior Environmental Engineer responsible for all technical and business activities for a 13-person branch office for Groundwater & Environmental Services, Inc. (a full-service environmental consulting/remediation firm).

Some of his accomplishments include:

Technical Specialties:

Phase I and II Environmental Site Assessments

Soil and Groundwater Investigations

Risk-Based Closure Assessments

UST Management/Closure

Soil and Groundwater Remediation

Education:

B.S., Civil Engineering, University of Maine at Orono, 1985

Certifications:

Massachusetts Licensed Site Professional (LSP) License No. 7610

Certified Hazardous Materials Manager (CHMM) License No. 9287

OSHA Standard 29 CFR 1920 and SARA Section 126(d) (HAZWOPER)

Professional Affiliations:

Massachusetts Licensed Site Professionals Association (LSPA)

KEVIN J. KAVANAUGH, L.S.P., CHMM

Principal Environmental Engineer

- National Account Director as the primary contact for the Hygienetics National Account's Program. A partial client list includes: GE Capital Real Estate, Archon Group LP, Finova Realty Capital, American General Realty Advisors, Storage USA, Metropolitan Life Insurance and State Teachers Retirement System of Ohio.

- Performed and/or supervised the performance of over 2,000 due diligence environmental assessment reports throughout the country. A partial list of local and nationwide client includes: Princeton Properties Management, Jones Lang LaSalle, John Hancock, Trammell Crow Company, Starwood Lodging, Equitable Real Estate, Northwestern Mutual Life Insurance, Insignia/ESG, Cornerstone Properties, Equity Office Properties, Prudential Real Estate and Marriott/Claris Corporation.

- Supervised a technical staff of 13 and was New England Regional Account Manager for a $1 million/year major oil corporation client.

- Designed or redesigned and directed the installation of over 50 remedial treatment systems including dual phase extraction (high vacuum extraction), soil vacuum extraction, air sparging and product/ groundwater recovery and treatment.

- Developed New England regional LSP risk-based closure program for existing client base.

- Performed all phases of environmental project development and management including: groundwater modeling, hydrogeologic studies, physical and chemical interpretation of field data, preparation and review of initial and complex site assessments, and remedial action reports in accordance with MGL21E, MCP, RCRA and other regulations.

- Performed other technical activities including a variety of pilot tests (aquifer, hydraulic conductivity, vacuum extraction and air sparging), the preparing of Wetlands Notice of Intents, air and groundwater discharge permitting and supervision of UST removals/closures.

- Directed the operation and maintenance of over 125 active soil and groundwater organic contamination recovery and treatment systems. Remedial treatment systems included soil vacuum extraction, air sparging, UV peroxidation, hydrogen peroxide Injection and product/groundwater recovery and treatment.

- Completed over 300 MCP Method 1, Method 2 and Method 3 Risk Characterizations and Class A, B and C Response Action Outcomes (RAOs)/Permanent Solutions (regulatory site closures).

- Managed and completed a 40 property real estate due diligence Phase I ESA nationwide portfolio for a large National Account Real Estate Client in an expedited timeframe.

Technical Specialties:

Phase I and II Environmental Site Assessments

Soil and Groundwater Investigations

Risk-Based Closure Assessments

UST Management/Closure

Soil and Groundwater Remediation

Education:

B.S., Civil Engineering, University of Maine at Orono, 1985

Certifications:

Massachusetts Licensed Site Professional (LSP) License No. 7610

Certified Hazardous Materials Manager (CHMM) License No. 9287

OSHA Standard 29 CFR 1920 and SARA Section 126(d) (HAZWOPER)

Professional Affiliations:

Massachusetts Licensed Site Professionals Association (LSPA)

The Commonwealth of Massachusetts

BOARD OF REGISTRATION OF HAZARDOUS WASTE SITE CLEANUP PROFESSIONALS

This is to Certify That

Kevin J Kavanaugh

has been duly registered by this Board as a qualified Licensed Site Professional, as provided by the laws of the Commonwealth.

Boston, Massachusetts **August 14, 2020**

/s/ *Millie Garcia-Serrano*

Chairperson of the Board

7610 **July 30, 2023**

License Number *Expiration Date*

APPENDIX D

ASSESSOR PROPERTY RECORD CARDS

Unofficial Property Record Card - Burlington, MA

General Property Data

Parcel ID	9-47-0	Account Number	0
Prior Parcel ID	000009 --		
Property Owner	TOWN OF BURLINGTON FOX HILL SCHOOL	Property Location	252 FOX HILL RD
		Property Use	Improved, Ed
Mailing Address	29 CENTER ST	Most Recent Sale Date	1/1/1955
		Legal Reference	10963-296
City	BURLINGTON	Grantor	
Mailing State	MA Zip 01803	Sale Price	0
ParcelZoning	RO	Land Area	37.900 acres

Current Property Assessment

Card 1 Value	Building Value 8,237,200	Xtra Features Value 49,100	Land Value 2,810,900	Total Value 11,097,200
Total Parcel Value	Building Value 9,220,100	Xtra Features Value 49,100	Land Value 2,810,900	Total Value 12,080,100

Building Description

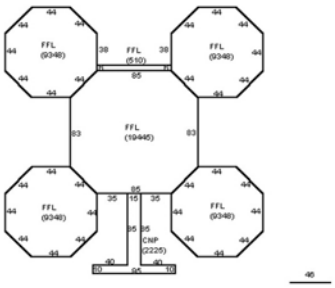
Building Style	School	Foundation Type	Slab	Flooring Type	Asphalt Tile
# of Living Units	1	Frame Type	Concrete	Basement Floor	N/A
Year Built	1960	Roof Structure	Hip	Heating Type	Steam
Building Grade	Good	Roof Cover	Membrane	Heating Fuel	Gas
Building Condition	Good	Siding	Brick Veneer	Air Conditioning	0%
Finished Area (SF)	57347	Interior Walls	Minimal	# of Bsmt Garages	0
Number Rooms	0	# of Bedrooms	0	# of Full Baths	0
# of 3/4 Baths	0	# of 1/2 Baths	0	# of Other Fixtures	86

Legal Description

Narrative Description of Property

This property contains 37.900 acres of land mainly classified as Improved, Ed with a(n) School style building, built about 1960 , having Brick Veneer exterior and Membrane roof cover, with 1 unit(s), 0 room(s), 0 bedroom(s), 0 bath(s), 0 half bath(s).

Property Images



Disclaimer: This information is believed to be correct but is subject to change and is not warranteed.

Unofficial Property Record Card - Burlington, MA

General Property Data

Parcel ID	9-47-0	Account Number	0
Prior Parcel ID	000009 --		
Property Owner	TOWN OF BURLINGTON FOX HILL SCHOOL	Property Location	252 FOX HILL RD
		Property Use	Improved, Ed
Mailing Address	29 CENTER ST	Most Recent Sale Date	1/1/1955
		Legal Reference	10963-296
City	BURLINGTON	Grantor	
Mailing State	MA Zip 01803	Sale Price	0
ParcelZoning	RO	Land Area	0.000 acres

Current Property Assessment

Card 2 Value	Building Value 982,900	Xtra Features Value 0	Land Value 0	Total Value 982,900
Total Parcel Value	Building Value 9,220,100	Xtra Features Value 49,100	Land Value 2,810,900	Total Value 12,080,100

Building Description

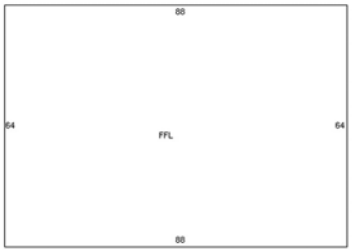
Building Style	School	Foundation Type	Piers	Flooring Type	Carpet
# of Living Units	1	Frame Type	Wood	Basement Floor	N/A
Year Built	2006	Roof Structure	Flat	Heating Type	Elec Base/B
Building Grade	Average. (-)	Roof Cover	Membrane	Heating Fuel	Electric
Building Condition	N/A	Siding	Vinyl	Air Conditioning	100%
Finished Area (SF)	5632	Interior Walls	Drywall	# of Bsmt Garages	0
Number Rooms	0	# of Bedrooms	0	# of Full Baths	0
# of 3/4 Baths	0	# of 1/2 Baths	0	# of Other Fixtures	0

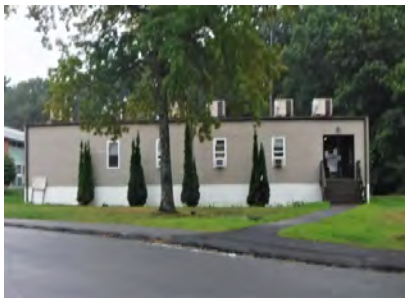
Legal Description

Narrative Description of Property

This property contains 0.000 acres of land mainly classified as Improved, Ed with a(n) School style building, built about 2006 , having Vinyl exterior and Membrane roof cover, with 1 unit(s), 0 room(s), 0 bedroom(s), 0 bath(s), 0 half bath(s).

Property Images





Disclaimer: This information is believed to be correct but is subject to change and is not warranteed.

APPENDIX E

SITE PHOTOGRAPHS

Fox Hill Elementary School, 252 Fox Hill Road, Burlington, Massachusetts

Photo 1 – View of north side of Site building.

Photo 2 – View of west side of Site building.

Environmental & Construction Management Services, Inc.

Photo 3 – View of south side of Site building.

Photo 4 – View of east side of Site building, playground and athletic field.

Photo 5 – View of wooded area in southeastern portion of Site.

Photo 6 – View of pad-mounted transformer.

Photo 7 – View of modular addition at west side of Site building.

Photo 8 – View of entrance and lobby.

Photo 9 – View of typical hallway.

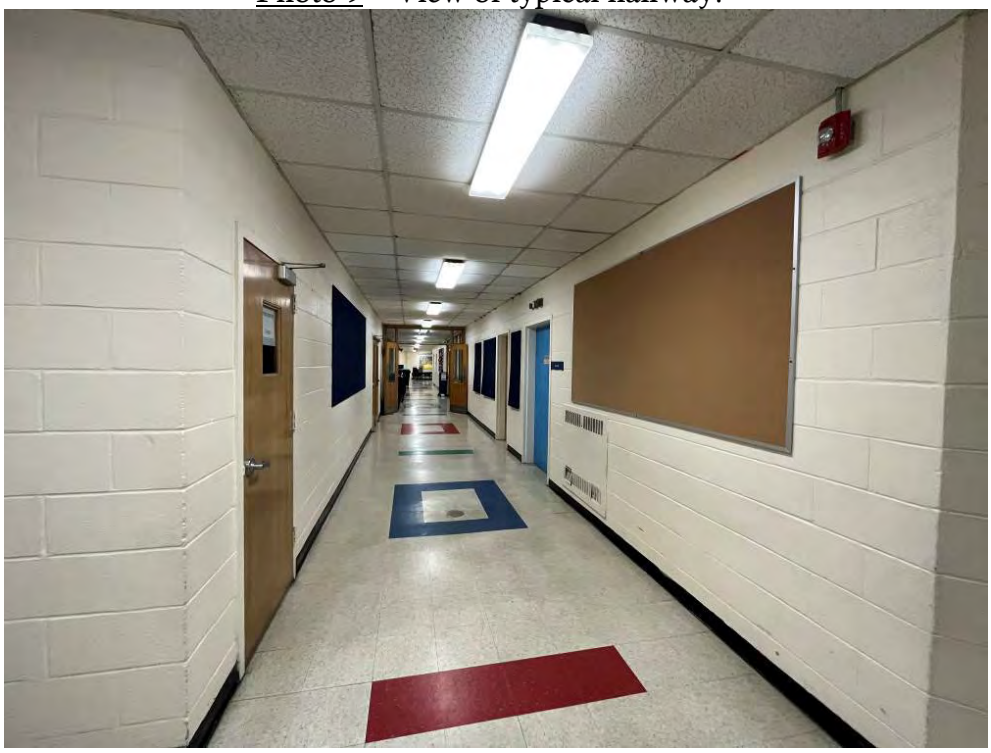


Photo 10 – View of typical classroom.

Photo 11 – View of natural gas-fired emergency generator.

Photo 12 – View of teachers lounge.

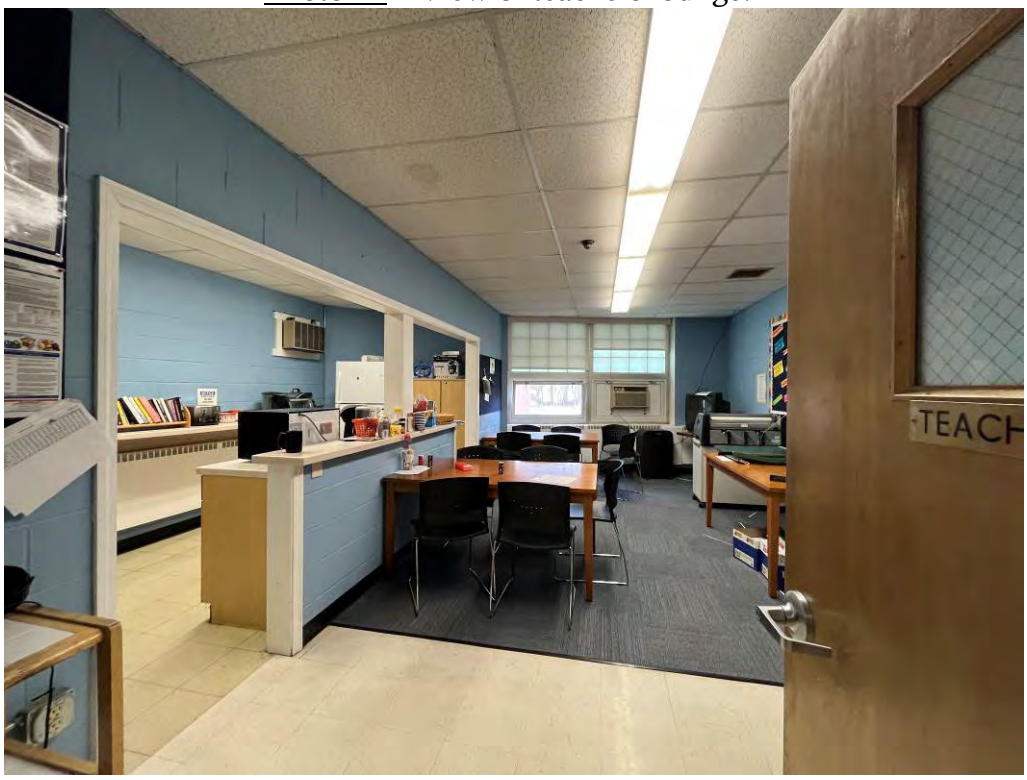


Photo 13 – View of kitchen area.

Photo 14 – View of grease trap location in kitchen.

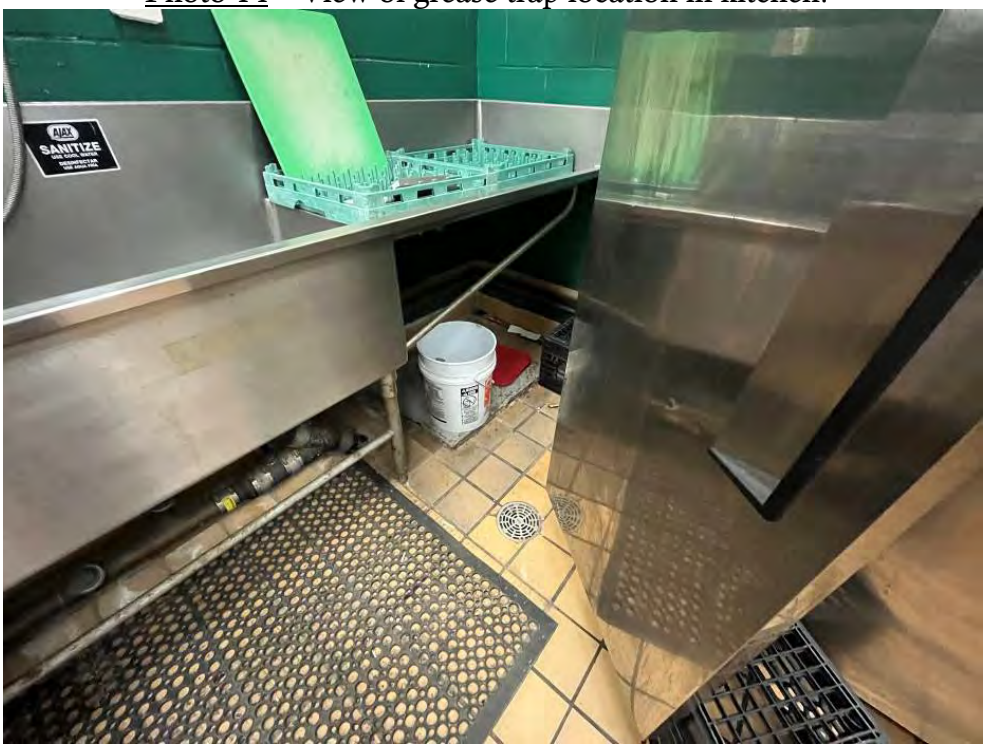


Photo 15 – View of cleaning supply storage.

Photo 16 – View of boilers.

Photo 17 – View of hot water heater and ACM labeled pipes.

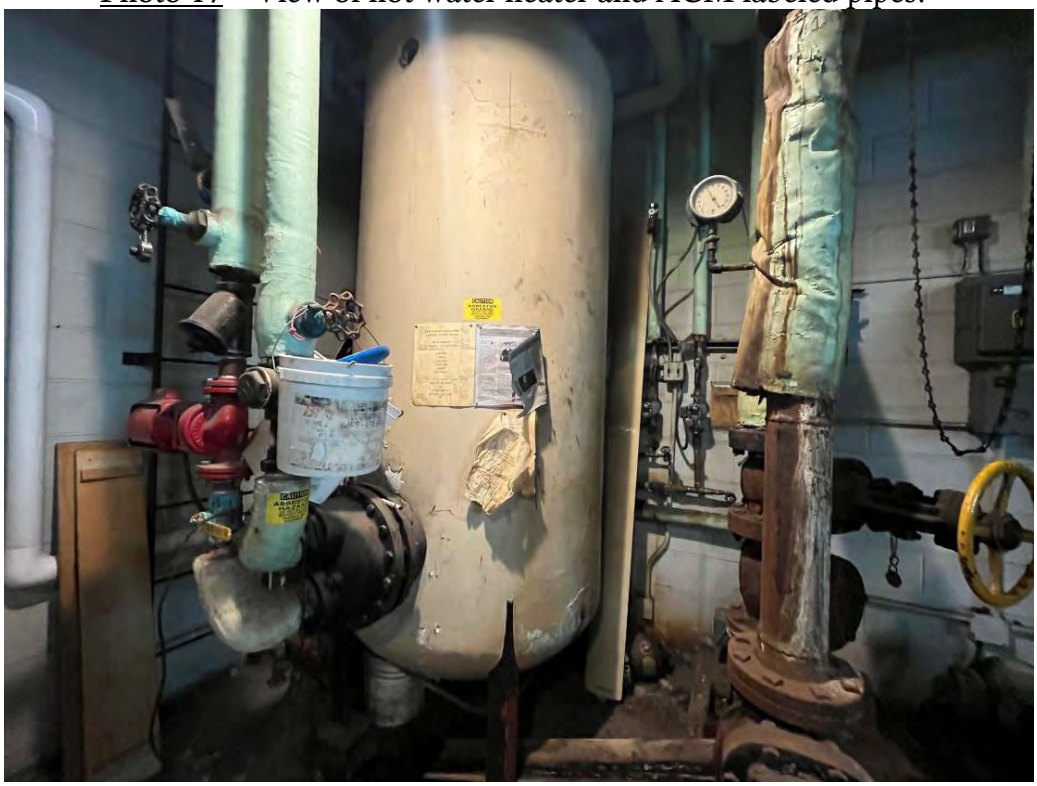


Photo 18 – View of west adjacent residential properties.

Photo 19 – View of north adjacent residential properties.

Photo 20 – View of north adjacent residential properties.

APPENDIX F

ENVIRONMENTAL DATA RESOURCES, INC. (EDR) RADIUS MAP REPORT WITH GEOCHECK DATED MARCH 31, 2023

Fox Hill Elementary School
252 Fox Hill Road
Burlington, MA 01803

Inquiry Number: 7295798.2s
March 31, 2023

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	83
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-7
Physical Setting Source Map Findings	A-8
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, LLC. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. This Report is provided on an "AS IS", "AS AVAILABLE" basis. **NO WARRANTY EXPRESS OR IMPLIED IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, LLC AND ITS SUBSIDIARIES, AFFILIATES AND THIRD PARTY SUPPLIERS DISCLAIM ALL WARRANTIES, OF ANY KIND OR NATURE, EXPRESS OR IMPLIED, ARISING OUT OF OR RELATED TO THIS REPORT OR ANY OF THE DATA AND INFORMATION PROVIDED IN THIS REPORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES REGARDING ACCURACY, QUALITY, CORRECTNESS, COMPLETENESS, COMPREHENSIVENESS, SUITABILITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, MISAPPROPRIATION, OR OTHERWISE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, LLC OR ITS SUBSIDIARIES, AFFILIATES OR THIRD PARTY SUPPLIERS BE LIABLE TO ANYONE FOR ANY DIRECT, INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY TYPE OR KIND (INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, LOSS OF USE, OR LOSS OF DATA) INFORMATION PROVIDED IN THIS REPORT.** Any analyses, estimates, ratings, environmental risk levels, or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only an assessment performed by a qualified environmental professional can provide findings, opinions or conclusions regarding the environmental risk or conditions in, on or at any property.

Copyright 2023 by Environmental Data Resources, LLC. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, LLC, or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, LLC or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

252 FOX HILL ROAD
BURLINGTON, MA 01803

COORDINATES

Latitude (North):	42.5290520 - 42˚ 31' 44.58''
Longitude (West):	71.1884610 - 71˚ 11' 18.45''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	320257.0
UTM Y (Meters):	4710625.5
Elevation:	173 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	11762185 WILMINGTON, MA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140712
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
252 FOX HILL ROAD
BURLINGTON, MA 01803

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	FOX HILL ELEMENTARY	FOX HILL RD.	MA ASBESTOS		TP
A2	FOX HILL SCHOOL	250 FOX HILL ROAD	MA ASBESTOS		TP
A3	FOX HILL SCHOOL	250 FOX HILL ROAD	MA ASBESTOS		TP
A4	FOX HILL SCHOOL	250 FOX HILL ROAD	MA ASBESTOS		TP
Reg	OLIN CHEMICAL	51 EAMES ST	NPL, SEMS, MA SHWS, MA SWF/LF, MA BROWNFIELDS, MA.	Same	3108, 0.589, East
5	NO LOCATION AID	25 ROCKY HILL RD	MA SHWS, MA RELEASE	Lower	2098, 0.397, SW
6	RESIDENCE	120 WILMINGTON ROAD	MA SHWS, MA LUST, MA RELEASE, MA ASBESTOS, MA ENF	Lower	3270, 0.619, WNW
7	NO LOCATION AID	96 CHESTNUT ST	MA SHWS, MA RELEASE	Lower	3907, 0.740, ENE
8	SCHILL RESIDENCE	15 CUTTING LANE	MA SHWS, MA RELEASE	Lower	4204, 0.796, WSW
9	WILMINGTON GEO RES A		FUDS	Lower	4253, 0.805, NE
B10	RESIDENTIAL PROPERTY	19 SKILTON LN	MA SHWS, MA LUST, MA RELEASE, MA ENF	Lower	4868, 0.922, SSW
11	CORNER OF CLINTON AN	2 CLINTON ST	MA SHWS, MA RELEASE	Lower	4992, 0.945, NNW
B12	NO LOCATION AID	4 BROOKFIELD RD	MA SHWS, MA RELEASE	Lower	5072, 0.961, SSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
FOX HILL ELEMENTARY FOX HILL RD. BURLINGTON, MA	MA ASBESTOS	N/A
FOX HILL SCHOOL 250 FOX HILL ROAD BURLINGTON, MA	MA ASBESTOS	N/A
FOX HILL SCHOOL 250 FOX HILL ROAD BURLINGTON, MA	MA ASBESTOS	N/A
FOX HILL SCHOOL 250 FOX HILL ROAD BURLINGTON, MA 01803	MA ASBESTOS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL..... National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY..... Federal Facility Site Information listing

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

EXECUTIVE SUMMARY

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ..... Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators
RCRA-VSQG ..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROLS ..... Institutional Controls Sites List

Federal ERNS list

ERNS ..... Emergency Response Notification System

Lists of state and tribal leaking storage tanks

MA LAST ..... Leaking Aboveground Storage Tank Sites
INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST ..... Underground Storage Tank Listing
MA UST ..... Summary Listing of all the Tanks Registered in the State of Massachusetts
MA AST ..... Aboveground Storage Tank Database
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

MA INST CONTROL ..... Sites With Activity and Use Limitation

Lists of state and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

EXECUTIVE SUMMARY

ODI	Open Dump Inventory
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS	Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
US CDL	National Clandestine Laboratory Register

Local Land Records

MA LIENS	Liens Information Listing
LIENS 2	CERCLA Lien Information

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
MA SPILLS 90	SPILLS 90 data from FirstSearch
MA SPILLS 80	SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PADS	PCB Activity Database System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS FEDERAL SITES	Federal Sites PFAS Information

EXECUTIVE SUMMARY

PFAS TSCA ..... PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST ..... PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR ..... PFAS Contamination Site Location Listing
PFAS WQP ..... Ambient Environmental Sampling for PFAS
PFAS NPDES ..... Clean Water Act Discharge Monitoring Information
PFAS ECHO ..... Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAINING Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT ... All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC ..... Aqueous Foam Related Incidents Listing
MA PFAS ..... PFAS Contaminated Sites Listing
MA AIRS ..... Permitted Facilities Listing
MA DRYCLEANERS ..... Regulated Drycleaning Facilities
MA GWDP ..... Ground Water Discharge Permits
MA MERCURY ..... Mercury Product Recyling Drop-Off Locations Listing
MA NPDES ..... NPDES Permit Listing
MA TIER 2 ..... Tier 2 Information Listing
MA TSD ..... TSD Facility
MA UIC ..... Underground Injection Control Listing
MINES MRDS ..... Mineral Resources Data System
PFAS TRIS ..... List of PFAS Added to the TRI

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ..... EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

MA RGA HWS ..... Recovered Government Archive State Hazardous Waste Facilities List
MA RGA LUST ..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 01/25/2023 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OLIN CHEMICAL Cerclis ID:: 100438 EPA Id: MAD001403104	***51 EAMES ST***	***E 1/2 - 1 (0.589 mi.)***	***0***	***12***

Lists of state- and tribal hazardous waste facilities

MA SHWS: Contains information on releases of oil and hazardous materials that have been reported to DEP.

A review of the MA SHWS list, as provided by EDR, and dated 01/08/2023 has revealed that there are 8 MA SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OLIN CHEMICAL Release Tracking Number: 3-0011816 Release Tracking Number: 3-0000471 Current Status: RAONR Current Status: ADQREG	***51 EAMES ST***	***E 1/2 - 1 (0.589 mi.)***	***0***	***12***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NO LOCATION AID Release Tracking Number: 3-0021081 Current Status: RAO	***25 ROCKY HILL RD***	***SW 1/4 - 1/2 (0.397 mi.)***	***5***	***57***
RESIDENCE Release Tracking Number: 3-0031611 Current Status: RAO	***120 WILMINGTON ROAD***	***WNW 1/2 - 1 (0.619 mi.)***	***6***	***59***
NO LOCATION AID Release Tracking Number: 3-0019045 Current Status: RAO	***96 CHESTNUT ST***	***ENE 1/2 - 1 (0.740 mi.)***	***7***	***65***
SCHILL RESIDENCE Release Tracking Number: 3-0031971 Current Status: RAO	***15 CUTTING LANE***	***WSW 1/2 - 1 (0.796 mi.)***	***8***	***67***
RESIDENTIAL PROPERTY Release Tracking Number: 3-0025779 Current Status: RAO	***19 SKILTON LN***	***SSW 1/2 - 1 (0.922 mi.)***	***B10***	***69***
CORNER OF CLINTON AN	***2 CLINTON ST***	***NNW 1/2 - 1 (0.945 mi.)***	***11***	***78***

Release Tracking Number: 3-0023625
Current Status: RAO

NO LOCATION AID	***4 BROOKFIELD RD***	***SSW 1/2 - 1 (0.961 mi.)***	***B12***	***81***

Release Tracking Number: 3-0011228
Current Status: RAO

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 11/01/2022 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WILMINGTON GEO RES A		NE 1/2 - 1 (0.805 mi.)	9	69

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 01/25/2023 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

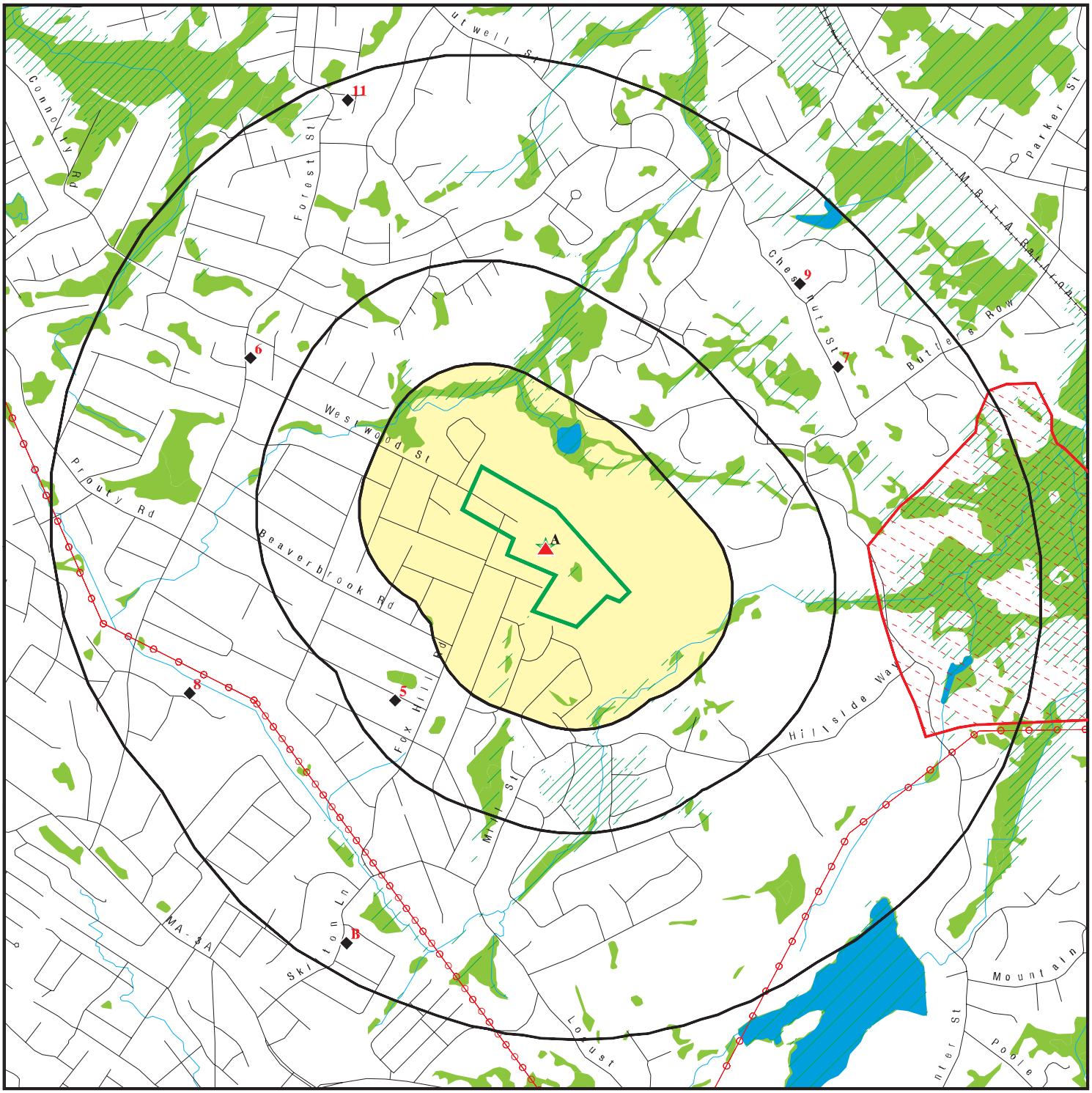
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OLIN CHEMICAL	***51 EAMES ST***	***E 1/2 - 1 (0.589 mi.)***	***0***	***12***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

Site Name	Database(s)
7 NEW ENGLAND EXECUTIVE PARK	MA SHWS, MA RELEASE
SUMNER STREET @ FOXHILL ROAD	MA SHWS, MA RELEASE
COMMUTER RAILROAD LINE	MA SHWS, MA RELEASE

OVERVIEW MAP - 7295798.2S



0 1/4 1/2 1 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Fox Hill Elementary School	CLIENT: ECMS, Inc.
ADDRESS: 252 Fox Hill Road Burlington MA 01803	CONTACT: Cheryl Cambria
LAT/LONG: 42.529052 / 71.188461	INQUIRY #: 7295798.2s DATE: March 31, 2023 2:57 pm

Copyright © 2023 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 7295798.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Fox Hill Elementary School	CLIENT: ECMS, Inc.
ADDRESS: 252 Fox Hill Road Burlington MA 01803	CONTACT: Cheryl Cambria INQUIRY #: 7295798.2s
LAT/LONG: 42.529052 / 71.188461	DATE: March 31, 2023 2:57 pm

Copyright © 2023 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	1	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal hazardous waste facilities								
MA SHWS	1.000		0	0	1	7	NR	8
Lists of state and tribal landfills and solid waste disposal facilities								
MA SWF/LF	0.500		0	0	0	NR	NR	0
Lists of state and tribal leaking storage tanks								
MA LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MA LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
MA UST	0.250		0	0	NR	NR	NR	0
MA AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
MA INST CONTROL	0.500		0	0	0	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
MA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
MA LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
MA SPILLS	TP		NR	NR	NR	NR	NR	0
MA RELEASE	TP		NR	NR	NR	NR	NR	0
MA SPILLS 90	TP		NR	NR	NR	NR	NR	0
MA SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	1	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	1	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
MA PFAS	0.250		0	0	NR	NR	NR	0
MA AIRS	TP		NR	NR	NR	NR	NR	0
MA ASBESTOS	TP	4	NR	NR	NR	NR	NR	4
MA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MA ENF	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MA Financial Assurance	TP		NR	NR	NR	NR	NR	0
MA GWDP	TP		NR	NR	NR	NR	NR	0
MA HW GEN	0.250		0	0	NR	NR	NR	0
PA MANIFEST	0.250		0	0	NR	NR	NR	0
MA MERCURY	0.500		0	0	0	NR	NR	0
MA NPDES	TP		NR	NR	NR	NR	NR	0
MA TIER 2	TP		NR	NR	NR	NR	NR	0
MA TSD	0.500		0	0	0	NR	NR	0
MA UIC	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
MA RGA HWS	TP		NR	NR	NR	NR	NR	0
MA RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		4	0	0	1	10	0	15

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 Target Property | **FOX HILL ELEMENTARY SCHOOL**
FOX HILL RD.
BURLINGTON, MA | **MA ASBESTOS** | **S119882427**
N/A

Site 1 of 4 in cluster A

Actual: 173 ft.

ASBESTOS:

Name:	FOX HILL ELEMENTARY SCHOOL
Address:	FOX HILL RD.
City,State,Zip:	BURLINGTON, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	07/24/2013
End Date:	07/26/2013
Date Entered:	Not reported
Entry Date:	07/20/2013
Quantity Materical Removed SF:	600.00
Quantity Material Removed LF:	.00
Project Description:	Trns
AR Tracking ID:	176384
Super Lic Number:	AS001587
Monitor Lic Number:	AA000177
Lab Lic Number:	Not reported
Year:	2013
Sticker Number:	100181814
Form Type:	ANF-001
Fee Status:	Exempt
Facility Phone:	7812701791
Sub Town:	Not reported
Worksite:	THROUGHOUT
Occupied:	0
Contractor:	AC000669
Contract Type:	VERBAL
Hours:	Week days: 7AM-5:30PM Week end: N/A
Project Type:	Renv
Abatement Process:	Fcontain
Location:	Indoors
Decon Process:	3 CHAMBER DECON
Disposal Methods:	WET REMOVAL,DOUBLE BAG,FIBER DRUMS
Facility Usage:	EDUCATIONAL
Waiver Given:	Not reported
DEP Waiver Number:	1307925
DLWD Waiver Number:	7008-2013
Small Owner Occ:	5
Owner Name:	BURLINGTON PUBLIC SCHOOLS
Owner Address:	123 CAMBRIDGE ST
Owner City:	BURLINGTON
Owner State:	MA
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	PREMIER ABATEMENT & LABOR SERVICES
Transporter Address:	10 FALCON ST
Transporter City:	METHUEN
Transporter State:	Not reported

FOX HILL ELEMENTARY SCHOOL (Continued) **S119882427**

Final Site:	39
Certified Name:	RAMON TEJADA
Cert Sign Date:	07/20/2013
Certified Company:	PREMIER ABATEMENT
Certified Phone:	9782087163
Entered_by:	Not reported

A2 Target Property **FOX HILL SCHOOL** **MA ASBESTOS** **S122914096**
250 FOX HILL ROAD **N/A**
BURLINGTON, MA

Site 2 of 4 in cluster A

Actual: 173 ft.

ASBESTOS:

Name:	FOX HILL SCHOOL
Address:	250 FOX HILL ROAD
City,State,Zip:	BURLINGTON, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	04/19/2016
End Date:	04/19/2016
Date Entered:	Not reported
Entry Date:	03/23/2016
Quantity Materical Removed SF:	10.00
Quantity Material Removed LF:	.00
Project Description:	BOILER
AR Tracking ID:	234524
Super Lic Number:	AS033140
Monitor Lic Number:	AA000007
Lab Lic Number:	AA000007
Year:	2016
Sticker Number:	100239242R
Form Type:	ANF-001
Fee Status:	EXEMPT
Facility Phone:	7812701791
Sub Town:	Not reported
Worksite:	BOILER ROOM
Occupied:	-1
Contractor:	AC000319
Contract Type:	WRITTEN
Hours:	7AM-4PM
Project Type:	Renv
Abatement Process:	Fcontain
Location:	INDOORS
Decon Process:	THREE CHAMBER DECONTAMINATION CHAMBER WITH SHOWER
Disposal Methods:	ALL MATERIAL WILL BE WETTED THOROUGHLY, DOUBLE BAGGED AND LABLELED
Facility Usage:	SCHOOL
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	0
Owner Name:	SUPERINTENDENT OF SCHOOLS
Owner Address:	123 CAMBRIDGE STREET
Owner City:	BURLINGTON
Owner State:	MA
On Site Manager Name:	ROD BUTCHER
On Site Manager Phone:	6173206876

FOX HILL SCHOOL (Continued) **S122914096**

Ins Comp:	GREAT DIVIDE
Policy Number:	WCA200774210
EXP Date:	8/1/2016
Facility Size:	150000
Transporter Name:	ABS,INC
Transporter Address:	PO BOX 9
Transporter City:	SALEM
Transporter State:	NH
Final Site:	Not reported
Certified Name:	WILLIAM SHEA
Cert Sign Date:	03/23/2016
Certified Company:	ABS,INC
Certified Phone:	6038930380
Entered_by:	ABS,INC.

A3 Target Property **FOX HILL SCHOOL** **MA ASBESTOS** **S119923019**
250 FOX HILL ROAD **N/A**
BURLINGTON, MA

Site 3 of 4 in cluster A

Actual: 173 ft.

ASBESTOS:

Name:	FOX HILL SCHOOL
Address:	250 FOX HILL ROAD
City,State,Zip:	BURLINGTON, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	04/20/2016
End Date:	04/20/2016
Date Entered:	Not reported
Entry Date:	03/17/2016
Quantity Materical Removed SF:	10.00
Quantity Material Removed LF:	.00
Project Description:	BOILER
AR Tracking ID:	234156
Super Lic Number:	AS033140
Monitor Lic Number:	AA000007
Lab Lic Number:	AA000007
Year:	2016
Sticker Number:	100239242
Form Type:	ANF-001
Fee Status:	EXEMPT
Facility Phone:	7812701791
Sub Town:	Not reported
Worksite:	BOILER ROOM
Occupied:	-1
Contractor:	AC000319
Contract Type:	WRITTEN
Hours:	7AM-4PM
Project Type:	Renv
Abatement Process:	Fcontain
Location:	INDOORS
Decon Process:	THREE CHAMBER DECONTAMINATION CHAMBER WITH SHOWER
Disposal Methods:	ALL MATERIAL WILL BE WETTED THOROUGHLY, DOUBLE BAGGED AND LABLELED
Facility Usage:	SCHOOL
Waiver Given:	Not reported
DEP Waiver Number:	Not reported

FOX HILL SCHOOL (Continued) **S119923019**

DLWD Waiver Number:	Not reported
Small Owner Occ:	0
Owner Name:	SUPERINTENDENT OF SCHOOLS
Owner Address:	123 CAMBRIDGE STREET
Owner City:	BURLINGTON
Owner State:	MA
On Site Manager Name:	ROD BUTCHER
On Site Manager Phone:	6173206876
Ins Comp:	GREAT DIVIDE
Policy Number:	WCA200774210
EXP Date:	8/1/2016
Facility Size:	150000
Transporter Name:	ABS,INC
Transporter Address:	PO BOX 9
Transporter City:	SALEM
Transporter State:	NH
Final Site:	Not reported
Certified Name:	WILLIAM SHEA
Cert Sign Date:	03/17/2016
Certified Company:	ABS,INC
Certified Phone:	6038930380
Entered_by:	ABS,INC.

A4 Target Property **FOX HILL SCHOOL**
250 FOX HILL ROAD
BURLINGTON, MA 01803

MA ASBESTOS **S119923020**
N/A

Site 4 of 4 in cluster A

Actual: 173 ft.

ASBESTOS:

Name:	FOX HILL SCHOOL
Address:	250 FOX HILL ROAD
City,State,Zip:	BURLINGTON, MA 01803
Notification:	100239242R1
DEP Region:	NE
Notifiers Name:	ADVANCED BUILDING SYSTEMS INC
Start Date:	04/19/2016
End Date:	04/19/2016
Date Entered:	23/03/2016
Entry Date:	03/23/2016
Quantity Materical Removed SF:	10
Quantity Material Removed LF:	0
Project Description:	BOILER
AR Tracking ID:	Not reported
Super Lic Number:	Not reported
Monitor Lic Number:	Not reported
Lab Lic Number:	Not reported
Year:	2016
Sticker Number:	Not reported
Form Type:	Not reported
Fee Status:	Not reported
Facility Phone:	Not reported
Sub Town:	Not reported
Worksite:	Not reported
Occupied:	Not reported
Contractor:	Not reported
Contract Type:	Not reported
Hours:	Not reported

FOX HILL SCHOOL (Continued) **S119923020**

Project Type:	Not reported
Abatement Process:	Not reported
Location:	Not reported
Decon Process:	Not reported
Disposal Methods:	Not reported
Facility Usage:	Not reported
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City:	Not reported
Owner State:	Not reported
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	Not reported
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	Not reported
Final Site:	Not reported
Certified Name:	Not reported
Cert Sign Date:	Not reported
Certified Company:	Not reported
Certified Phone:	Not reported
Entered_by:	Not reported

NPL **OLIN CHEMICAL** **NPL** **1000304514**
Region **51 EAMES ST** **SEMS** **MAD001403104**
East **WILMINGTON, MA 01887** **MA SHWS**
1/2-1 **MA SWF/LF**
3108 ft. **MA BROWNFIELDS**
MA RELEASE
MA SPILLS
ROD
PRP
ICIS
FINDS
ECHO
PFAS NPL
MA ASBESTOS
MA Financial Assurance
MA HW GEN
PA MANIFEST

NPL:

EPA Region:	1
EPA ID:	MAD001403104
Site ID:	100438
Name:	OLIN CHEMICAL
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 01887
Federal:	N
Final Date:	2006-04-19 00:00:00

OLIN CHEMICAL (Continued) **1000304514**

Latitude: 42.528056
Longitude: -71.153889
Site Score: 50
NAI: Not reported
Native American Entity: Not reported

Substance as of 08/2019:
NPL Status: Currently on the Final NPL
Substance ID: Not reported
CAS Number: Not reported
Substance: Not reported
Pathway: Not reported
Scoring: Not reported

Site as of 08/2019:
EPA Region: 01
Site ID: 0100438
Site Status: F
Federal Site: N
Date Deleted: Not reported
Date Finalized: 04/19/06
Date Proposed: 09/14/05

Narr:
Site Name: Olin Chemical
Site EPA ID: MAD001403104
Listing Date: 4/19/2006
Site Score: 50
Federal Facility Indicator: No
Site List URL: https://semspub.epa.gov/src/document/01/75001025
Site Progress URL: https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0100438
Federal Register URL: http://www.gpo.gov/fdsys/pkg/FR-2006-04-19/pdf/06-3666.pdf
Site Location URL: https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1&query=Superfund_National_Priorities_List__NPL__Sites_with_Status_Information_7557,SITE_EPA_ID=%27MAD001403104%27

SEMS:
Site ID: 0100438
EPA ID: MAD001403104
Name: OLIN CHEMICAL
Address: 51 EAMES ST
Address 2: Not reported
City,State,Zip: WILMINGTON, MA 01887
Cong District: 06
FIPS Code: 25017
Latitude: +42.528056
Longitude: -071.153889
FF: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 01
Site ID: 0100438
EPA ID: MAD001403104

OLIN CHEMICAL (Continued) **1000304514**

Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	2005-09-14 04:00:00
Finish Date:	2005-09-14 04:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	2004-08-23 04:00:00
Finish Date:	2005-09-01 04:00:00
Qual:	O
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	NF
Action Name:	NPL FINL
SEQ:	1
Start Date:	2006-04-19 04:00:00
Finish Date:	2006-04-19 04:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	1981-10-01 04:00:00
Finish Date:	1981-10-01 04:00:00
Qual:	L
Current Action Lead:	EPA Perf

OLIN CHEMICAL (Continued) **1000304514**

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1980-06-01 04:00:00
Finish Date:	1980-06-01 04:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	TG
Action Name:	TA GRANT
SEQ:	1
Start Date:	2008-01-08 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	01
Action Code:	RO
Action Name:	ROD
SEQ:	1
Start Date:	2021-03-30 05:00:00
Finish Date:	2021-03-30 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	03
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	2011-06-06 05:00:00
Finish Date:	2011-06-10 05:00:00

OLIN CHEMICAL (Continued) **1000304514**

Qual:	V
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	AS
Action Name:	AIR SRVY
SEQ:	1
Start Date:	2009-02-26 05:00:00
Finish Date:	2009-09-30 04:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	1
Start Date:	2007-07-18 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	3
Start Date:	2020-08-10 05:00:00
Finish Date:	2020-08-10 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	MA
Action Name:	ST COOP

OLIN CHEMICAL (Continued) **1000304514**

SEQ:	1
Start Date:	2005-08-22 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	4
Start Date:	2021-04-01 05:00:00
Finish Date:	2021-04-01 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	5
Start Date:	2021-03-25 05:00:00
Finish Date:	2021-03-25 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1980-10-01 04:00:00
Finish Date:	1980-10-01 04:00:00
Qual:	H
Current Action Lead:	Other
Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N

OLIN CHEMICAL (Continued) **1000304514**

OU:	00
Action Code:	VA
Action Name:	OTHR CLEANUP
SEQ:	1
Start Date:	2000-10-25 04:00:00
Finish Date:	2004-08-23 04:00:00
Qual:	H
Current Action Lead:	St Ovrsght

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	01
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	1
Start Date:	2007-06-28 04:00:00
Finish Date:	2021-03-30 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	02
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	2
Start Date:	2007-06-28 04:00:00
Finish Date:	2021-03-30 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104
Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	03
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	3
Start Date:	2007-06-28 04:00:00
Finish Date:	2021-03-30 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	01
Site ID:	0100438
EPA ID:	MAD001403104

OLIN CHEMICAL (Continued) **1000304514**

Site Name:	OLIN CHEMICAL
NPL:	F
FF:	N
OU:	03
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	4
Start Date:	2020-03-12 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

SHWS:

Name:	NO LOCATION AID
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 018870000
Facility ID:	3-0011816
Source Type:	DRUMS
Release Town:	WILMINGTON
Notification Date:	11/03/1994
Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAONR
Status Date:	10/27/1995
Phase:	Not reported
Response Action Outcome:	Not reported
Oil Or Haz Material:	Hazardous Material

Name:	OLIN CORPORATION FACILITY
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 018870000
Facility ID:	3-0000471
Source Type:	LAGOON
Release Town:	WILMINGTON
Notification Date:	01/15/1987
Category:	NONE
Associated ID:	3-0000471
Current Status:	ADQREG
Status Date:	04/18/2006
Phase:	PHASE IV
Response Action Outcome:	Not reported
Oil Or Haz Material:	Oil

Name:	OLIN CORPORATION FACILITY
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 018870000
Facility ID:	3-0000471
Source Type:	UNCONTAIN
Release Town:	WILMINGTON
Notification Date:	01/15/1987
Category:	NONE
Associated ID:	3-0000471
Current Status:	ADQREG
Status Date:	04/18/2006
Phase:	PHASE IV
Response Action Outcome:	Not reported

OLIN CHEMICAL (Continued) **1000304514**

Oil Or Haz Material: Oil

LF:

Name:	OLIN CORP
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 01887
Facility Phone:	(781)933-4240
Annual Tons for 1995:	Not reported
Annual Tons for 1996:	Not reported
Annual Tons for 1997:	Not reported
Annual Tons for 1998:	Not reported
Annual Tons for 1999:	Not reported
Annual Tons for 2000:	Not reported
Annual Tons for 2001:	Not reported
Annual Tons for 2002:	Not reported
Annual Tons for 2003:	Not reported
Annual Tons for 2004:	Not reported
Annual Tons for 2005:	Not reported
Annual Tons for 2006:	Not reported
Annual Tons for 2007:	Not reported
Annual Tons for 2008:	Not reported
Annual Tons for 2009:	Not reported
Annual Tons for 2010:	Not reported
Annual Tons for 2011:	Not reported
Annual Tons for 2012:	Not reported
Annual Tons for 2013:	Not reported
Annual Tons for 2014:	Not reported
Annual Tons for 2015:	Not reported
Reg Obj Acct ID Num For Each Solid Waste Operation:	313063
Days of Operation:	Not reported
Note On The Physical Location Of The Site:	Not reported
Acres:	Not reported
Active Year:	1975
Classification Group:	Land Disposal
Current Or Most Recent Closed Classification:	CLF
Description Of The Last Classification:	Closed Landfill with Env Monitoring Required
Close Year:	1998
Name Of The Organization:	OLIN CHEMICAL
Contacts Organization Type:	Private
Contact Persons Name And Title:	DAVID VAUGHN, REG.ENVIRO. MAN.
Contact Phone Including Extension:	Not reported
Contact Mailing Street Address:	PO BOX 248
Contacts Mailing City, State, Zip:	CHARLESTOWN, TN 37310
Inactive Year:	1988
Land Disposal Closure Status:	Capped
Land Disposal Only, Category Waste Disposed:	SLUDGE
Landfills Liner:	Not Lined
Municipality That The Operation Is Located In:	WILMINGTON
Alpha-Numeric Identification Code:	SL0342.004
Numeric-Only Portion Of The Identification Code:	0342.004
Region:	Northeast (Wilmington)
Org That Pays Any Annual Compliance Fee And/Or Permittee:	OLIN CORPORATION
Responsible Party Organization Type:	Private
Responsible Party Mailing Street Address Line 1:	51 EAMES ST
Responsible Party Mailing Street Address Line 2:	Not reported
Responsible Party Mailing City, State, Zip:	NORTH BILLERICA, MA 01862
Responsible Party Telephone Inc Extension:	Not reported

OLIN CHEMICAL (Continued) **1000304514**

Maximum Permitted Tons Per Day: Not reported
Current Operational Status: Closed

LF PROFILES:

Site Type Code:	SLUDGE
Site Type Desc:	Residual from treatment of gasses or fluids, includes industrial & water treatment sludges
Status:	Closed
Owner Type:	Private
Stat Active Yr:	0:00
Stat Inactive Yr:	1988
Stat Close Yr:	11/13/1998
Lined?:	Not Lined
Cap Status:	Capped
Cap Cert Date:	Not reported
Post Closure Permit:	Not reported
Post Closure Use:	Not reported
LF Gas Energy:	Not reported
Acres:	2.15
Acres Doc:	UNK
Acres Doc Desc:	Unknown
Electrical Provider:	Municipal
Dist To Trans Miles:	0.14
Wind Speed 30m:	4.7567
Wind Speed 50m:	5.3089
Wind Speed 100m:	6.2033
Wind Speed 70m:	5.7048
Mass DEP FMF DB Id:	315269

BROWNFIELDS 2:

Name:	OLIN CORPORATION FACILITY
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA
RTN:	3-0000471
RAO Class:	Not reported
Other RTNs:	3-0011816
Current Owner:	Olin Chemicals and Alkali Inc
MCP Status:	ADEQUATE REG
AUL:	No
COCs:	Waste Water Discharge
Former Use:	Manufacture
Current Use:	Manufacture
Total Acreage:	49.78
Fact Sheet:	Not reported

Release:

Name:	OLIN CORPORATION FACILITY
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 018870000
Release Tracking Number/Current Status:	3-0000471 / ADQREG
Primary ID:	3-0000471
Official City:	WILMINGTON
Notification:	01/15/1987
Category:	NONE
Status Date:	04/18/2006
Phase:	PHASE IV
Response Action Outcome:	-

OLIN CHEMICAL (Continued) **1000304514**

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 1/10/2003
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 1/13/2006
Response Action Outcome: Not reported

Action Type: Release Disposition
Action Status: Valid Transition Site
Action Date: 1/15/1987
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 1/16/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 1/16/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 1/17/2006
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 1/20/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 1/22/1999
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 1/22/2004
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Imminent Hazard Evaluation Received
Action Date: 1/22/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 1/27/2000
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 1/31/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 1/31/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 1/5/2000
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 1/7/1998
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 1/7/2004
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 1/8/1998
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 1/9/1997
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 1/9/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 10/1/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 10/1/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Imminent Hazard Evaluation Received
Action Date: 10/1/2003
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 10/10/2000
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 10/10/2001
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 10/11/1996
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 10/11/2005
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 10/12/1999
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Revised Statement or Transmittal Received
Action Date: 10/12/1999
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 10/12/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 10/12/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 10/12/2001
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 10/12/2003
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 10/13/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 10/13/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 10/13/2004
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: RFI
Action Date: 10/14/1994
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 10/15/2003
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: RFI
Action Date: 10/17/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: RFI
Action Date: 10/18/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 10/18/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 10/18/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 10/24/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 10/25/2005
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: RTN Linked to TCLASS Via Tier Classification Submittal
Action Date: 10/27/1995
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 10/28/2002
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Immediate Response Action
Action Status: Modified Revised or Updated Plan Received
Action Date: 10/28/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 10/30/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 10/5/2001
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 10/7/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 10/8/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 11/12/1998
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 11/13/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 11/15/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 11/18/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 11/18/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 11/18/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 11/19/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 11/2/2000
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 11/22/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 11/23/2001
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 11/24/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 11/29/1996
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 11/3/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 11/3/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 11/6/1997
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 11/7/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 11/9/2000
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/1/1997
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 12/1/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 12/10/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 12/12/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 12/15/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 12/17/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 12/2/2002
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 12/2/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 12/21/1998
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 12/22/1998
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 12/22/2003
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 12/22/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 12/28/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 12/28/1999
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 12/29/2004
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/29/2004
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 12/31/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 12/5/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 12/6/2001
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received
Action Date: 12/6/2001
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 12/7/2001
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 2/1/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 2/10/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 2/14/2002
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 2/14/2006
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 2/17/1999
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 2/19/1999
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 2/19/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 2/20/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 2/22/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 2/23/2006
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 2/24/2005
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 2/26/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 2/27/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 2/27/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 2/27/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 2/3/1998
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 2/4/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Delay in Meeting RA Deadline Ordered or Approved
Action Date: 2/5/2004
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 2/5/2004
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 2/7/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 2/8/1999
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVREC
Action Date: 3/1/1989
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/1/1999
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 3/1/1999
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 3/1/1999
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 3/10/1994
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 3/10/1994
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/16/1998
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/16/1999
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 3/2/2006
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 3/2/2006
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 3/22/1996
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 3/25/2004
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 3/27/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 3/28/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 3/28/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/3/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 3/3/2005
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 3/31/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 3/31/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 3/31/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 3/4/1998
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 4/10/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 4/11/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 4/11/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 4/11/2003
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/12/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 4/12/1994
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 4/16/1996
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/18/2006
Response Action Outcome: Not reported

Action Type: RAO Not Required
Action Status: Adequately Regulated
Action Date: 4/18/2006
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 4/22/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 4/23/2001
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 4/25/2005
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 4/26/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 4/5/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 4/6/2000
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Completion Statement Received
Action Date: 5/10/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 5/13/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 5/14/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 5/15/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 5/16/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 5/17/2002
Response Action Outcome: Not reported

Action Type: Phase 3
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 5/19/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 5/2/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 5/2/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 5/2/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 5/20/2004
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 5/24/1994
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 5/28/1999
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDRUN
Action Date: 5/3/1996
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 5/31/2002
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 5/6/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 5/8/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 5/8/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 5/9/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 5/9/2003
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 6/1/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/1/2005
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 6/13/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 6/15/2005
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 6/16/2004
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 6/16/2009
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 6/18/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Notice of Delay in Meeting RA Deadline Received
Action Date: 6/21/2001
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 6/21/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 6/22/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 6/23/1997
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 6/23/1998
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 6/23/1999
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 6/24/1999
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 6/26/2000
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 6/26/2008
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 6/28/1996
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 6/28/2005
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 6/6/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 6/6/2002
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Written Approval of Plan
Action Date: 6/8/2001
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 6/8/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 7/12/1999
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 7/13/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 7/13/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 7/13/2001
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 7/15/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 7/17/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 7/17/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 7/2/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 7/2/2003
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 7/2/2004
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 7/20/2004
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 7/25/2005
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVSIG
Action Date: 7/26/1989
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 7/28/2005
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: WAVACC
Action Date: 7/31/1989
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Revised Statement or Transmittal Received
Action Date: 7/31/1998
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 7/31/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Completion Statement Received
Action Date: 7/5/2005
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 7/9/2001
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 8/11/2005
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/13/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 8/16/2005
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 8/17/2005
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/20/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Plan Received
Action Date: 8/20/2004
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 8/26/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 8/26/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 8/26/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 8/28/1996
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 8/29/2001
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received

OLIN CHEMICAL (Continued) **1000304514**

Action Date: 8/29/2001
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Modified Revised or Updated Plan Received
Action Date: 8/29/2003
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/29/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 8/30/1996
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/31/2005
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 8/5/2002
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 8/5/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Status or Interim Report Received
Action Date: 8/5/2005
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Imminent Hazard Evaluation Received
Action Date: 8/6/2004
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 8/6/2004
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan
Action Date: 8/9/2000
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 9/11/2003
Response Action Outcome: Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received
Action Date: 9/15/2003
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 9/16/1996
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Scope of Work Received
Action Date: 9/18/1997
Response Action Outcome: Not reported

Action Type: PIP
Action Status: Public Involvement Petition Received
Action Date: 9/18/2002
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 9/19/2002
Response Action Outcome: Not reported

Action Type: TREGS
Action Status: BWSC04
Action Date: 9/20/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1A Classification
Action Date: 9/20/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 9/20/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 9/20/1994
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Tier 1A or Priority Submittal Approved
Action Date: 9/23/1996
Response Action Outcome: Not reported

Action Type: Phase 2
Action Status: Completion Statement Received
Action Date: 9/24/2002
Response Action Outcome: Not reported

Action Type: Release Abatement Measure
Action Status: Written Approval of Plan

OLIN CHEMICAL (Continued) **1000304514**

Action Date:	9/28/2000
Response Action Outcome:	Not reported
Action Type:	Compliance and Enforcement Action
Action Status:	Interim Deadline Letter Issued
Action Date:	9/5/2002
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Status or Interim Report Received
Action Date:	9/7/2004
Response Action Outcome:	Not reported
Action Type:	Phase 2
Action Status:	Status or Interim Report Received
Action Date:	9/7/2005
Response Action Outcome:	Not reported
Action Type:	Release Abatement Measure
Action Status:	Written Approval of Plan
Action Date:	9/8/1999
Response Action Outcome:	Not reported
Action Type:	Phase 2
Action Status:	Scope of Work Received
Action Date:	9/9/2004
Response Action Outcome:	Not reported
Action Type:	BWS20
Action Status:	APPROV
Action Date:	Not reported
Response Action Outcome:	Not reported

Chemicals:

Chemical:	UNKNOWN
Quantity:	Not reported
Chemical:	WASTEWATER DISCHARGE
Quantity:	Not reported
Location Type:	MANUFACT
Location Type:	WASTE TRMT
Source:	LAGOON
Source:	UNCONTAIN
Name:	NO LOCATION AID
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 018870000
Release Tracking Number/Current Status:	3-0011816 / RAONR
Primary ID:	Not reported
Official City:	WILMINGTON
Notification:	11/03/1994
Category:	TWO HR
Status Date:	10/27/1995
Phase:	Not reported
Response Action Outcome:	-
Oil / Haz Material Type:	Hazardous Material

OLIN CHEMICAL (Continued) **1000304514**

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Written Approval of Plan
Action Date:	1/17/1995
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Revised Statement or Transmittal Received
Action Date:	10/12/1999
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Permit Effective Date
Action Date:	10/12/1999
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Permit Extension Received
Action Date:	10/12/2003
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	Permit Extension Received
Action Date:	10/13/2003
Response Action Outcome:	Not reported
Action Type:	RAO Not Required
Action Status:	Linked to a Tier Classified Site
Action Date:	10/27/1995
Response Action Outcome:	Not reported
Action Type:	Tier Classification
Action Status:	RTN Linked to TCLASS Via Tier Classification Submittal
Action Date:	10/27/1995
Response Action Outcome:	Not reported
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	11/17/1994
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	IRA Assessment Only
Action Date:	11/3/1994
Response Action Outcome:	Not reported
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	11/3/1994
Response Action Outcome:	Not reported
Action Type:	Immediate Response Action
Action Status:	Status or Interim Report Received
Action Date:	12/15/1995
Response Action Outcome:	Not reported

OLIN CHEMICAL (Continued) **1000304514**

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 12/29/1994
Response Action Outcome: Not reported

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 12/29/1994
Response Action Outcome: Not reported

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 12/7/1994
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 12/7/1994
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 5/1/1995
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Extension Received
Action Date: 6/23/1999
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Permit Effective Date
Action Date: 9/20/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 1A Classification
Action Date: 9/20/1994
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Transmittal, Notice, or Notification Received
Action Date: 9/20/1994
Response Action Outcome: Not reported

Chemicals:
Chemical: UNKNOWN CHEMICAL OF TYPE - HAZARDOUS MATERIAL
Quantity: Not reported
Location Type: INDUSTRIAL
Source: DRUMS

MA Spills:

Facility ID:	3-0471	Spill ID:	N91-0595
Staff Lead:	FONKEM, V	Date Entered:	19911001
Last Entered:	19930825	First Response:	19910502
Spill Date:	19910502	Spill Time:	Not reported

OLIN CHEMICAL (Continued) **1000304514**

Report Date:	19910502	Report Time:	03:30PM
Case Closed:	YES	Mat Type:	PETROLEUM
Virgin Waste:	VIRGIN	Contam Soil:	Not reported
Env Impact:	----------	Other Impact:	Not reported
Material:	#2 FUEL OIL	Other Material:	Not reported
Qty Reported:	UNKNOWN	Qty Actual:	----------
Qty Reported:	----------	Qty Actual:	----------
CAS No:	Not reported	PCB Lev (ppm):	----------
Source:	U.S.T.	Other Source:	Not reported
Incident:	TANK REMOVAL	Other Incdnt:	Not reported
Cleanup Type:	---	Contractor:	NOT USED
Referral:	SA	LUST Elig:	---
Report Prep:	Not reported	Category:	2
Notifier:	C NELSON/OLIN CHEMICAL CORP		
Notif Tel:	Not reported		
Days/Close:	0		

ROD:
No Details: No Details

PRP:
PRP Name:
4TH WATCH LLC
AMERICAN BILTRITE INC.
AMERICAN BILTRITE INC.
AMERICAN BILTRITE INC.
AMERICAN BILTRITE INC.
BILTRITE CORP
BILTRITE CORP
BILTRITE CORP
FISONS LIMITED
FISONS LIMITED
NOR-AM AGRO LLC
NOR-AM AGRO LLC
OLIN CORPORATION
OLIN CORPORATION
OLIN CORPORATION
OLIN CORPORATION
STEPAN CHEMICAL CORP.
STEPAN CHEMICAL CORP.
STEPAN CHEMICAL CORP.
STEPAN CHEMICAL CORP.

Click this hyperlink while viewing on your computer to access additional PRP: detail in the EDR Site Report.

ICIS:

Enforcement Action ID:	01-N00000283
FRS ID:	110000759796
Action Name:	OLIN CORPORATION (Permit MA0005304) Qncr Comment
Facility Name:	OLIN CORPORATION
Facility Address:	51 EAMES ST WILMINGTON, MA 01887
Enforcement Action Type:	Under Review
Facility County:	MIDDLESEX
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	UNDREV
Facility SIC Code:	2869

OLIN CHEMICAL (Continued) **1000304514**

Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	42.528611
Longitude in Decimal Degrees:	-71.153611
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	MA0005304
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	01-N00000248
FRS ID:	110000759796
Action Name:	OLIN CORPORATION (Permit MA0005304) Qncr Comment
Facility Name:	OLIN CORPORATION
Facility Address:	51 EAMES ST WILMINGTON, MA 01887
Enforcement Action Type:	Under Review
Facility County:	MIDDLESEX
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	UNDREV
Facility SIC Code:	2869
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	42.528611
Longitude in Decimal Degrees:	-71.153611
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	MA0005304
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	01-2015-0006
FRS ID:	110000759796
Action Name:	OLIN CHEMICAL SUPERFUND SITE
Facility Name:	OLIN CHEMICAL SITE
Facility Address:	51 EAMES ST WILMINGTON, MA 01887
Enforcement Action Type:	CERCLA 107L Filing Of Lien
Facility County:	MIDDLESEX
Program System Acronym:	CERCLIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	107L
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	42.528056
Longitude in Decimal Degrees:	-71.153889
Permit Type Desc:	Not reported
Program System Acronym:	MAD001403104
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	01-2007-0003
FRS ID:	110000759796
Action Name:	OLIN CORP
Facility Name:	OLIN CHEMICAL SITE
Facility Address:	51 EAMES ST WILMINGTON, MA 01887
Enforcement Action Type:	CERCLA 122A/104A Agrmt For RI/FS
Facility County:	MIDDLESEX
Program System Acronym:	CERCLIS

OLIN CHEMICAL (Continued) **1000304514**

Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	122/104
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	42.528056
Longitude in Decimal Degrees:	-71.153889
Permit Type Desc:	Not reported
Program System Acronym:	MAD001403104
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	01-2004-9038
FRS ID:	110000759796
Action Name:	OLIN CORPORATION
Facility Name:	OLIN CORPORATION
Facility Address:	51 EAMES ST WILMINGTON, MA 01887
Enforcement Action Type:	CWA 309G2A AO For Class I Penalties
Facility County:	MIDDLESEX
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	309G2A
Facility SIC Code:	2869
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	42.528611
Longitude in Decimal Degrees:	-71.153611
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	MA0005304
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Facility Name:	OLIN CHEMICAL SITE
Address:	51 EAMES ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	OLIN CHEMICAL SITE
Address:	51 EAMES ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	OLIN CHEMICAL SITE
Address:	51 EAMES ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	OLIN CHEMICAL SITE
Address:	51 EAMES ST
Tribal Indicator:	N
Fed Facility:	No

OLIN CHEMICAL (Continued) **1000304514**

NAIC Code: Not reported
SIC Code: Not reported

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported

OLIN CHEMICAL (Continued) **1000304514**

SIC Code: 2869

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

Facility Name: OLIN CHEMICAL SITE
Address: 51 EAMES ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: 2869

FINDS:
Registry ID: 110000759796

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
AIR EMISSIONS CLASSIFICATION UNKNOWN
SUPERFUND NPL
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.
HAZARDOUS WASTE BIENNIAL REPORTER
MA-EPICS - Massachussetts Environmental Protection Integrated Computer System

OLIN CHEMICAL (Continued) **1000304514**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000304514
Registry ID:	110000759796
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110000759796
Name:	OLIN CHEMICAL SITE
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 01887

PFAS NPL:

EPA Region:	01
Name:	OLIN CHEMICAL
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 01887
EPAID:	MAD001403104
Superfund Link:	https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0100438&msspp=med
Data Systems:	SEMS
Last Updated:	2020-06-08 00:00:00
Programs:	Superfund
Location Type:	Private
NPL Site:	Y
NPL Status:	Final
Media Detected:	GW
Health Advisory:	N
DW Response:	-
Latitude:	42.528056
Longitude:	-71.153889
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-71.153889,%22y%22:42.528056,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

ASBESTOS:

Name:	OLIN CORPORATION
Address:	51 EAMES STREET
City,State,Zip:	WILMINGTON, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	10/14/2014
End Date:	10/24/2014
Date Entered:	Not reported
Entry Date:	09/26/2014
Quantity Materical Removed SF:	2400.00
Quantity Material Removed LF:	.00
Project Description:	Trwl
AR Tracking ID:	198986
Super Lic Number:	AS032488
Monitor Lic Number:	Not reported
Lab Lic Number:	AA000145
Year:	2014
Sticker Number:	100208395
Form Type:	ANF-001

OLIN CHEMICAL (Continued) **1000304514**

Fee Status:	HUNDRED
Facility Phone:	9786586121
Sub Town:	Not reported
Worksite:	EXTERIOR TANK
Occupied:	-1
Contractor:	AC000392
Contract Type:	WRITTEN
Hours:	7AM-3PM
Project Type:	Renv
Abatement Process:	Fcontain
Location:	OUTDOORS
Decon Process:	3 STAGE DECON WITH SHOWER STATION.
Disposal Methods:	DOUBLE BAGGED AND/OR FIBER DRUM; CONSOLIDATED AT PREMISES, FINAL DISPOSAL.
Facility Usage:	MANUFACTURING
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	0
Owner Name:	OLIN CORPORATION
Owner Address:	3855 NORTH OCOEE STREET
Owner City:	CLEVELAND
Owner State:	MA
On Site Manager Name:	BRIAN GUICHARD
On Site Manager Phone:	9786586121
Ins Comp:	CHARTIS
Policy Number:	WC06771270
EXP Date:	7/1/2015
Facility Size:	0
Transporter Name:	NORTHEAST REMEDIATION
Transporter Address:	25 STOREY AVENUE # 256
Transporter City:	NEWBURYPORT
Transporter State:	MA
Final Site:	Not reported
Certified Name:	WENDY CARIAS
Cert Sign Date:	09/26/2014
Certified Company:	NER
Certified Phone:	6173899188
Entered_by:	NORTHEAST

Financial Assurance 3:

Name:	OLIN CORP
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA
Facility ID:	131605
Region:	3
Region Area:	NE
Facility Name:	OLIN CORP
FAM Infomation:	Not reported
FAM Information Note:	Not reported
Class Type:	CLF
Class Description:	Closed Landfill with Env Monitoring Required
ACF Amount:	1400
Exempt:	N
RO #:	313063

OLIN CHEMICAL (Continued) **1000304514**

HW GEN:

Name:	OLIN CHEMICAL SUPERFUND SITE
Address:	51 EAMES ST
City,State,Zip:	WILMINGTON, MA 01887
EPA Id:	MAD001403104
RCRA Generator Status:	LQG
State Generator Status:	VQG-MA

Manifest Details:

Year:	2008
Manifest Number:	002762846JJK
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	01/08/2008
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	508-658-6121
TSD EPA Id:	PAD000736942
TSD Date:	Not reported
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE ROAD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1
Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2008
Manifest Number:	002762849JJK
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	11/12/2008
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	508-658-6121
TSD EPA Id:	PAD000736942
TSD Date:	Not reported
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE ROAD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1

OLIN CHEMICAL (Continued) **1000304514**

Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2006
Manifest Number:	PAG454455
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	04/25/2006
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD EPA Id:	PAD000736942
TSD Date:	Not reported
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE ROAD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	508-658-6121
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1
Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2006
Manifest Number:	PAG454445
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	06/21/2006
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD EPA Id:	PAD000736942
TSD Date:	Not reported
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE ROAD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	508-658-6121
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1
Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds

OLIN CHEMICAL (Continued) **1000304514**

Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2006
Manifest Number:	PAG454444
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	01/31/2006
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD EPA Id:	PAD000736942
TSD Date:	Not reported
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE ROAD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	508-658-6121
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1
Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

Year:	2006
Manifest Number:	PAG454448
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	08/22/2006
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Contact Name:	Not reported
Contact Phone:	Not reported
TSD EPA Id:	PAD000736942
TSD Date:	Not reported
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE ROAD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	508-658-6121
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1
Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	Not reported
Date TSP Sig:	Not reported

OLIN CHEMICAL (Continued) **1000304514**

Year:	2005
Manifest Number:	PAG454457
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	03/11/2005
Mailing Address:	51 EAMES ST
Mailing City,St,Zip:	WILMINGTON, MA 01887
Contact Name:	DONALD W CAMERON
Contact Phone:	508-658-6121
TSD EPA Id:	PAD000736942
TSD Date:	03/15/2005
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE RD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1
Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	NYD980769947
Date TSP Sig:	03/11/2005

Year:	2005
Manifest Number:	PAG454458
Manifest Type:	TSD Copy
Generator EPA Id:	MAD001403104
Generator Date:	01/10/2005
Mailing Address:	51 EAMES ST
Mailing City,St,Zip:	WILMINGTON, MA 01887
Contact Name:	DONALD W CAMERON
Contact Phone:	508-658-6121
TSD EPA Id:	PAD000736942
TSD Date:	01/12/2005
TSD Facility Name:	CALGON CARBON CORP
TSD Facility Address:	200 NEVILLE RD
TSD Facility City:	NEVILLE ISLAND
TSD Facility State:	PA
Facility Telephone:	Not reported
Page Number:	1
Line Number:	1
Waste Number:	U028
Container Number:	1
Container Type:	Portable tanks
Waste Quantity:	4000
Unit:	Pounds
Handling Code:	Not reported
TSP EPA Id:	NYD980769947
Date TSP Sig:	01/10/2005

5 SW 1/4-1/2 0.397 mi. 2098 ft. | **NO LOCATION AID**
25 ROCKY HILL RD
BURLINGTON, MA 01803 | **MA SHWS**
MA RELEASE | **S105200029**
N/A

Relative: Lower

Actual: 135 ft.

SHWS:

Name:	NO LOCATION AID
Address:	25 ROCKY HILL RD
City,State,Zip:	BURLINGTON, MA 018030000
Facility ID:	3-0021081
Source Type:	CONTAINERS
Release Town:	BURLINGTON
Notification Date:	09/13/2001
Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	01/11/2002
Phase:	Not reported
Response Action Outcome:	A1
Oil Or Haz Material:	Hazardous Material

Release:

Name:	NO LOCATION AID
Address:	25 ROCKY HILL RD
City,State,Zip:	BURLINGTON, MA 018030000
Release Tracking Number/Current Status:	3-0021081 / RAO
Primary ID:	Not reported
Official City:	BURLINGTON
Notification:	09/13/2001
Category:	TWO HR
Status Date:	01/11/2002
Phase:	Not reported
Response Action Outcome:	A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type:	Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Immediate Response Action
Action Status:	Completion Statement Received
Action Date:	1/11/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	1/11/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	1/11/2002
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

NO LOCATION AID (Continued) **S105200029**

Action Type: Immediate Response Action
Action Status: Imminent Hazard Evaluation Received
Action Date: 1/11/2002
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 11/13/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/13/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 11/6/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: IRA Conducted Prior to Notification
Action Date: 9/13/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 9/13/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 9/14/2001
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:
Chemical: SODIUM HYPOCHLORITE
Quantity: 50 pounds
Chemical: CALCIUM HYPOCHLORITE
Quantity: 9 pounds
Location Type: COMMERCIAL
Location Type: MUNICIPAL
Source: CONTAINERS

6 WNW 1/2-1 0.619 mi. 3270 ft. | **RESIDENCE**
120 WILMINGTON ROAD
BURLINGTON, MA 01803 | **MA SHWS**
MA LUST
MA RELEASE
MA ASBESTOS
MA ENF | **S113805117**
N/A

Relative: Lower

Actual: 114 ft.

SHWS:

Name:	RESIDENCE
Address:	120 WILMINGTON ROAD
City,State,Zip:	BURLINGTON, MA 018030000
Facility ID:	3-0031611
Source Type:	TANK
Release Town:	BURLINGTON
Notification Date:	06/27/2013
Category:	72 HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	09/17/2013
Phase:	Not reported
Response Action Outcome:	B1
Oil Or Haz Material:	Oil

LUST:

Facility:

Name:	RESIDENCE
Address:	120 WILMINGTON ROAD
City,State,Zip:	BURLINGTON, MA 018030000
Current Status:	**Response Action Outcome**
Release Tracking Number/Current Status:	3-0031611 / RAO
Status Date:	09/17/2013
Source Type:	UST
Release Town:	BURLINGTON
Notification Date:	06/27/2013
Category:	72 HR
Associated ID:	Not reported
Phase:	Not reported
Response Action Outcome:	B1 - Remedial actions have not been conducted because a level of No Significant Risk exists.
Oil Or Haz Material:	Oil
Location Type:	RESIDNTIAL
Source:	TANK
Source:	UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	GASOLINE
Quantity:	1207 parts per million

Actions:

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	6/27/2013
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

RESIDENCE (Continued) **S113805117**

Action Type:	Immediate Response Action
Action Status:	IRA Assessment Only
Action Date:	6/27/2013
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	7/11/2013
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type:	Compliance and Enforcement Action
Action Status:	Interim Deadline Letter Issued
Action Date:	7/11/2013
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	9/17/2013
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	9/4/2013
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	9/4/2013
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

Release:

Name:	RESIDENCE
Address:	120 WILMINGTON ROAD
City,State,Zip:	BURLINGTON, MA 018030000
Release Tracking Number/Current Status:	3-0031611 / RAO
Primary ID:	Not reported
Official City:	BURLINGTON
Notification:	06/27/2013
Category:	72 HR
Status Date:	09/17/2013
Phase:	Not reported
Response Action Outcome:	B1 - Remedial actions have not been conducted because a level of No Significant Risk exists.
Oil / Haz Material Type:	Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition

RESIDENCE (Continued) **S113805117**

Action Status: Reportable Release under MGL 21E
Action Date: 6/27/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Immediate Response Action
Action Status: IRA Assessment Only
Action Date: 6/27/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 7/11/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 7/11/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 9/17/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 9/4/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Action Type: RNFE
Action Status: Transmittal, Notice, or Notification Received
Action Date: 9/4/2013
Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists.

Chemicals:
Chemical: GASOLINE
Quantity: 1207 parts per million
Location Type: RESIDNTIAL
Source: TANK
Source: UST

ASBESTOS:
Name: VACANT RESIDENCE
Address: 120 WILMINGTON ROAD
City,State,Zip: BURLINGTON, MA
Notification: Not reported
DEP Region: Not reported
Notifiers Name: Not reported
Start Date: 06/05/2012

RESIDENCE (Continued) **S113805117**

End Date:	06/05/2012
Date Entered:	Not reported
Entry Date:	05/17/2012
Quantity Materical Removed SF:	800.00
Quantity Material Removed LF:	.00
Project Description:	Insl,Trns
AR Tracking ID:	157743
Super Lic Number:	AS030091
Monitor Lic Number:	AM061044
Lab Lic Number:	AA000144
Year:	2012
Sticker Number:	100148579
Form Type:	ANF-001
Fee Status:	Fifty
Facility Phone:	9787499844
Sub Town:	Not reported
Worksite:	RESIDENCE
Occupied:	0
Contractor:	AC000197
Contract Type:	WRITTEN
Hours:	Week days: 7AM-3:30PM Week end:
Project Type:	Renv
Abatement Process:	Fcontain
Location:	Indoors
Decon Process:	3 CHAMBER DECON
Disposal Methods:	ALL METHODS WILL COMPLY
Facility Usage:	RESIDENCE
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	5
Owner Name:	KEVIN O'BRIEN
Owner Address:	18 CASSIMERE STREET
Owner City:	ANDOVER, MA
Owner State:	MA
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	A-BEST ABATEMENT INC
Transporter Address:	24 KEEWAYDIN DRIVE
Transporter City:	SALEM, NH
Transporter State:	Not reported
Final Site:	39
Certified Name:	SAM HOMSEY
Cert Sign Date:	05/17/2012
Certified Company:	A-BEST ABATEMENT
Certified Phone:	6038934696
Entered_by:	Not reported
Name:	JACKIE AMPOLOS
Address:	120 WILMINGTON ROAD
City,State,Zip:	BURLINGTON, MA
Notification:	Not reported
DEP Region:	Not reported

RESIDENCE (Continued) **S113805117**

Notifiers Name:	Not reported
Start Date:	03/26/2013
End Date:	03/26/2013
Date Entered:	Not reported
Entry Date:	03/20/2013
Quantity Materical Removed SF:	400.00
Quantity Material Removed LF:	.00
Project Description:	Trns
AR Tracking ID:	170737
Super Lic Number:	AS032802
Monitor Lic Number:	AM060297
Lab Lic Number:	AA000131
Year:	2013
Sticker Number:	100174170
Form Type:	ANF-001
Fee Status:	Exempt
Facility Phone:	Not reported
Sub Town:	Not reported
Worksite:	2 BEDROOMS ON FIRST FLOOR
Occupied:	-1
Contractor:	AC000112
Contract Type:	WRITTEN
Hours:	Week days: 8AM-5PM Week end:
Project Type:	Renv
Abatement Process:	Fcontain
Location:	Indoors
Decon Process:	CONTAINMENT BARRIER WITH CLEAN ROOM USING NEGATIVE AIR SYSTEM AND HEPA
Disposal Methods:	WET ASBESTOS PROPERLY SEALED IN SIX MIL POLY BAGS PLACARDED FOR ASBESTOS
Facility Usage:	RESIDENTIAL DWELLING
Waiver Given:	Not reported
DEP Waiver Number:	1303926
DLWD Waiver Number:	5992-2013
Small Owner Occ:	4
Owner Name:	SAME
Owner Address:	Not reported
Owner City:	Not reported
Owner State:	MA
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	Not reported
Transporter Address:	Not reported
Transporter City:	Not reported
Transporter State:	Not reported
Final Site:	18
Certified Name:	SAM NIGRO
Cert Sign Date:	03/20/2013
Certified Company:	DUDLEY SERVICES INC.
Certified Phone:	Not reported
Entered_by:	Not reported
Name:	VACANT RESIDENCE
Address:	120 WILMINGTON ROAD

RESIDENCE (Continued) **S113805117**

City,State,Zip:	BURLINGTON, MA
Notification:	Not reported
DEP Region:	Not reported
Notifiers Name:	Not reported
Start Date:	03/19/2012
End Date:	03/27/2012
Date Entered:	Not reported
Entry Date:	03/02/2012
Quantity Materical Removed SF:	800.00
Quantity Material Removed LF:	.00
Project Description:	Insl,Trns
AR Tracking ID:	154574
Super Lic Number:	AS030091
Monitor Lic Number:	AM061044
Lab Lic Number:	AA000144
Year:	2012
Sticker Number:	100143666
Form Type:	ANF-001
Fee Status:	Fifty
Facility Phone:	9787499844
Sub Town:	Not reported
Worksite:	RESIDENCE
Occupied:	0
Contractor:	AC000197
Contract Type:	WRITTEN
Hours:	Week days: 7AM-3:30PM Week end:
Project Type:	Renv
Abatement Process:	Fcontain
Location:	Indoors
Decon Process:	3 CHAMBER DECON
Disposal Methods:	ALL METHODS WILL COMPLY
Facility Usage:	RESIDENCE
Waiver Given:	Not reported
DEP Waiver Number:	Not reported
DLWD Waiver Number:	Not reported
Small Owner Occ:	5
Owner Name:	VACANT RESIDENCE
Owner Address:	120 WILMINGTON ROAD
Owner City:	BURLINGTON, MA
Owner State:	MA
On Site Manager Name:	Not reported
On Site Manager Phone:	Not reported
Ins Comp:	Not reported
Policy Number:	Not reported
EXP Date:	Not reported
Facility Size:	Not reported
Transporter Name:	A-BEST ABATEMENT INC
Transporter Address:	24 KEEWAYDIN DRIVE
Transporter City:	SALEM, NH
Transporter State:	Not reported
Final Site:	39
Certified Name:	SAM HOMSEY
Cert Sign Date:	03/02/2012
Certified Company:	A-BEST ABATEMENT
Certified Phone:	6038934696
Entered_by:	Not reported

RESIDENCE (Continued) **S113805117**

ENFORCEMENT:

Name:	AMPOLOS, JACKIE
Address:	120 WILMINGTON ROAD
City,State,Zip:	BURLINGTON, MA 018030000
Region:	NERO
DEP Region:	NERO
DEP Program:	3c
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0031611
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	BURLINGTON
Date Executed:	07/11/2013
ENF #:	Faux Enf- 2251
Document Type:	IDL
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	Not reported
EJ Community (Y/N):	YES
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Individually Owned

7
ENE
1/2-1
0.740 mi.
3907 ft.

NO LOCATION AID
96 CHESTNUT ST
WILMINGTON, MA 01887

MA SHWS **S104482426**
MA RELEASE **N/A**

Relative:
Lower

Actual:
111 ft.

SHWS:

Name:	NO LOCATION AID
Address:	96 CHESTNUT ST
City,State,Zip:	WILMINGTON, MA 018870000
Facility ID:	3-0019045
Source Type:	PIPE
Release Town:	WILMINGTON
Notification Date:	12/07/1999
Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	11/15/2000
Phase:	Not reported
Response Action Outcome:	A2
Oil Or Haz Material:	Oil

Release:

Name:	NO LOCATION AID
Address:	96 CHESTNUT ST
City,State,Zip:	WILMINGTON, MA 018870000

NO LOCATION AID (Continued) **S104482426**

Release Tracking Number/Current Status: 3-0019045 / RAO
Primary ID: Not reported
Official City: WILMINGTON
Notification: 12/07/1999
Category: TWO HR
Status Date: 11/15/2000
Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 1/14/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 11/15/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only
Action Date: 11/16/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 12/10/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 12/13/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 12/7/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: FLDISS
Action Date: 12/7/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action

NO LOCATION AID (Continued) **S104482426**

Action Status: Oral Approval of Plan or Action
Action Date: 12/7/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FLDD1A
Action Date: 12/7/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 12/7/1999
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 2/25/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 2/25/2000
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: FUEL OIL #2
Quantity: Not reported
Chemical: FUEL OIL #2
Quantity: 11 gallons
Location Type: RESIDNTIAL
Source: PIPE

8
WSW
1/2-1
0.796 mi.
4204 ft.

SCHILL RESIDENCE
15 CUTTING LANE
BURLINGTON, MA 01803

MA SHWS **S116358018**
MA RELEASE **N/A**

Relative:
Lower

Actual:
162 ft.

SHWS:
Name: SCHILL RESIDENCE
Address: 15 CUTTING LANE
City,State,Zip: BURLINGTON, MA 018030000
Facility ID: 3-0031971
Source Type: UNKNOWN
Release Town: BURLINGTON
Notification Date: 01/31/2014
Category: 120 DY
Associated ID: Not reported
Current Status: RAO
Status Date: 03/28/2014
Phase: Not reported
Response Action Outcome: B1

SCHILL RESIDENCE (Continued) **S116358018**

Oil Or Haz Material: Oil and Hazardous Material

Release:

Name:	SCHILL RESIDENCE
Address:	15 CUTTING LANE
City,State,Zip:	BURLINGTON, MA 018030000
Release Tracking Number/Current Status:	3-0031971 / RAO
Primary ID:	Not reported
Official City:	BURLINGTON
Notification:	01/31/2014
Category:	120 DY
Status Date:	03/28/2014
Phase:	Not reported
Response Action Outcome:	B1 - Remedial actions have not been conducted because a level of No Significant Risk exists.
Oil / Haz Material Type:	Oil and Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	1/31/2014
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.
Action Type:	RNF
Action Status:	Reportable Release under MGL 21E
Action Date:	1/31/2014
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.
Action Type:	RNFE
Action Status:	Transmittal, Notice, or Notification Received
Action Date:	1/31/2014
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.
Action Type:	A Notice sent to a Potentially Responsible Party (PRP)
Action Status:	A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date:	2/21/2014
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.
Action Type:	Response Action Outcome - RAO
Action Status:	RAO Statement Received
Action Date:	3/28/2014
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.
Action Type:	Response Action Outcome - RAO
Action Status:	Level I - Technical Screen Audit
Action Date:	7/30/2014
Response Action Outcome:	Remedial actions have not been conducted because a level of No Significant Risk exists.

SCHILL RESIDENCE (Continued) **S116358018**

Chemicals:

Chemical:	C9-C18 ALIPHATIC HYDROCARBONS
Quantity:	2900 milligrams per kilogram
Chemical:	2-METHYLNAPHTHALENE
Quantity:	2.7 milligrams per kilogram
Chemical:	C11 THRU C22 AROMATIC HYDROCARBONS
Quantity:	1300 milligrams per kilogram
Source:	UNKNOWN

---

9 NE 1/2-1 0.805 mi. 4253 ft. **WILMINGTON GEO RES AX** **FUDS** **1024899880**
WILMINGTON, MA **N/A**

Relative: Lower
Actual: 115 ft.

FUDS:

EPA Region:	01
Installation ID:	MA19799F192100
Congressional District Number:	6
Name:	WILMINGTON GEO RES AX
FUDS Number:	D01MA0293
City:	WILMINGTON
State:	MA
County:	MIDDLESEX
Object ID:	9438
USACE Division:	NAD
USACE District:	New England District (NAE)
Status:	Properties without projects
Current Owner:	LOCAL: CITY MUNICIPALITY
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map?id=56854
Eligibility:	Eligible
Has Projects:	No
NPL Status:	Not reported
Project Required:	No
Feature Description:	A map of military origin confirms DOD use. The property consists of 0.59 acres, and was used by the Air Force for meteorological field studies. The Air Force installed 1,000 feet of pipe and a 4ft square instrument shelter on the site. Electrical and telephone utilities were also provided. As of the 1994 FDE, the property was owned by the Town of Wilmington for use as a town pumping station.
Latitude:	42.53833333
Longitude:	-71.17638889

B10 SSW 1/2-1 0.922 mi. 4868 ft. **RESIDENTIAL PROPERTY** **MA SHWS** **S107678245**
19 SKILTON LN **MA LUST** **N/A**
BURLINGTON, MA 01803 **MA RELEASE**
MA ENF

Site 1 of 2 in cluster B

Relative: Lower
Actual: 141 ft.

SHWS:

Name:	RESIDENTIAL PROPERTY
Address:	19 SKILTON LN
City,State,Zip:	BURLINGTON, MA 018030000
Facility ID:	3-0025779
Source Type:	PIPE
Release Town:	BURLINGTON

RESIDENTIAL PROPERTY (Continued) **S107678245**

Notification Date:	03/30/2006
Category:	72 HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	12/19/2012
Phase:	Not reported
Response Action Outcome:	A2
Oil Or Haz Material:	Oil

LUST:

Facility:

Name:	RESIDENTIAL PROPERTY
Address:	19 SKILTON LN
City,State,Zip:	BURLINGTON, MA 018030000
Current Status:	**Response Action Outcome**
Release Tracking Number/Current Status:	3-0025779 / RAO
Status Date:	12/19/2012
Source Type:	UST
Release Town:	BURLINGTON
Notification Date:	03/30/2006
Category:	72 HR
Associated ID:	Not reported
Phase:	Not reported
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil Or Haz Material:	Oil
Location Type:	RESIDNTIAL
Source:	PIPE
Source:	UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical:	#2 FUEL OIL
Quantity:	298 parts per million
Chemical:	FUEL OIL #2
Quantity:	100 parts per million

Actions:

Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Enforcement Conference
Action Date:	1/24/2011
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Compliance and Enforcement Action
Action Status:	CILS
Action Date:	1/8/2008
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Compliance and Enforcement Action
Action Status:	Interim Deadline Letter Issued

RESIDENTIAL PROPERTY (Continued) **S107678245**

Action Date: 1/8/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 11/8/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action - DEP Lead
Action Status: Completion Statement Received
Action Date: 12/19/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RAO - DEP Lead
Action Status: RAO Statement Received
Action Date: 12/19/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 2/12/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 2/21/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: APPREC
Action Date: 3/23/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 3/30/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action
Action Date: 3/30/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/14/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

RESIDENTIAL PROPERTY (Continued) **S107678245**

Action Type: FTLI
Action Status: APPACC
Action Date: 4/20/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 4/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: Action Status or AUL Terminated
Action Date: 4/30/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 5/5/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: APPREC
Action Date: 6/11/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 6/8/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: APPACC
Action Date: 7/11/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 7/13/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 7/13/2006

RESIDENTIAL PROPERTY (Continued) **S107678245**

Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 7/18/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 7/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: NOFENF
Action Date: 8/1/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 8/1/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Enforcement Conference
Action Date: 8/1/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Release:
Name: RESIDENTIAL PROPERTY
Address: 19 SKILTON LN
City,State,Zip: BURLINGTON, MA 018030000
Release Tracking Number/Current Status: 3-0025779 / RAO
Primary ID: Not reported
Official City: BURLINGTON
Notification: 03/30/2006
Category: 72 HR
Status Date: 12/19/2012
Phase: Not reported
Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:
Action Type: Compliance and Enforcement Action
Action Status: Notice of Enforcement Conference
Action Date: 1/24/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

RESIDENTIAL PROPERTY (Continued) **S107678245**

reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: CILS
Action Date: 1/8/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Interim Deadline Letter Issued
Action Date: 1/8/2008
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 11/8/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action - DEP Lead
Action Status: Completion Statement Received
Action Date: 12/19/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RAO - DEP Lead
Action Status: RAO Statement Received
Action Date: 12/19/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: ALSENT
Action Date: 2/12/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received
Action Date: 2/21/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: APPREC
Action Date: 3/23/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 3/30/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action

RESIDENTIAL PROPERTY (Continued) **S107678245**

Action Status: Oral Approval of Plan or Action
Action Date: 3/30/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/14/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: APPACC
Action Date: 4/20/2011
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 4/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: Action Status or AUL Terminated
Action Date: 4/30/2013
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 5/5/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: APPREC
Action Date: 6/11/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Non-Compliance Issued
Action Date: 6/8/2010
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: FTLI
Action Status: APPACC
Action Date: 7/11/2012
Response Action Outcome: A permanent solution has been achieved. Contamination has not been

RESIDENTIAL PROPERTY (Continued) **S107678245**

reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 7/13/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Written Plan Received
Action Date: 7/13/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of a Modified Plan
Action Date: 7/18/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 7/26/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: NOFENF
Action Date: 8/1/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 8/1/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Compliance and Enforcement Action
Action Status: Notice of Enforcement Conference
Action Date: 8/1/2007
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: #2 FUEL OIL
Quantity: 298 parts per million
Chemical: FUEL OIL #2
Quantity: 100 parts per million
Location Type: RESIDNTIAL
Source: PIPE
Source: UST

ENFORCEMENT:
Name: CUSTANCE, PHILIP
Address: 19 SKILTON LN

RESIDENTIAL PROPERTY (Continued) **S107678245**

City,State,Zip:	BURLINGTON, MA 018030000
Region:	NERO
DEP Region:	NERO
DEP Program:	3a
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0025779
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	Not reported
Date Executed:	06/08/2010
ENF #:	NON-NE-10-3A051
Document Type:	NON
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	Not reported
EJ Community (Y/N):	Not reported
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Individually Owned

Name:	CUSTANCE, PHILIP
Address:	19 SKILTON LN
City,State,Zip:	BURLINGTON, MA 018030000
Region:	NERO
DEP Region:	NERO
DEP Program:	3c
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0025779
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	Not reported
Date Executed:	01/08/2008
ENF #:	Faux Enf- 0504
Document Type:	IDL
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	Not reported
EJ Community (Y/N):	Not reported
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Individually Owned

RESIDENTIAL PROPERTY (Continued) **S107678245**

Name:	CUSTANCE, PHILIP
Address:	19 SKILTON LN
City,State,Zip:	BURLINGTON, MA 018030000
Region:	NERO
DEP Region:	NERO
DEP Program:	3a
DEP Bureau:	BWSC
Program:	BWSC
Program Id:	3-0025779
High Or Low Level Enforcement:	LLE
FMF #:	0
Town Where Violation Occurred:	Not reported
Date Executed:	05/05/2007
ENF #:	NON-NE-07-3A057
Document Type:	NON
AG Ref (Y/N):	Not reported
Doc Archived (Y/N):	Not reported
EJ Community (Y/N):	Not reported
Regional Comment:	Not reported
Final Payment Due Date:	Not reported
ACOP $:	Not reported
PAN $:	Not reported
EMS (Y/N):	Not reported
EMS$:	Not reported
SEP (Y/N):	Not reported
SEP $:	Not reported
Demand $:	Not reported
Suspended $:	Not reported
Ownership:	Individually Owned

11
NNW
1/2-1
0.945 mi.
4992 ft.

CORNER OF CLINTON AND LINCOLN STS
2 CLINTON ST
WILMINGTON, MA 01887

MA SHWS **S106344040**
MA RELEASE **N/A**

Relative:
Lower

Actual:
116 ft.

SHWS:

Name:	CORNER OF CLINTON AND LINCOLN STS
Address:	2 CLINTON ST
City,State,Zip:	WILMINGTON, MA 018870000
Facility ID:	3-0023625
Source Type:	UNKNOWN
Release Town:	WILMINGTON
Notification Date:	02/22/2004
Category:	TWO HR
Associated ID:	Not reported
Current Status:	RAO
Status Date:	03/20/2006
Phase:	Not reported
Response Action Outcome:	A1
Oil Or Haz Material:	Oil

Release:

Name:	CORNER OF CLINTON AND LINCOLN STS
Address:	2 CLINTON ST
City,State,Zip:	WILMINGTON, MA 018870000
Release Tracking Number/Current Status:	3-0023625 / RAO

CORNER OF CLINTON AND LINCOLN STS (Continued) **S106344040**

Primary ID:	Not reported
Official City:	WILMINGTON
Notification:	02/22/2004
Category:	TWO HR
Status Date:	03/20/2006
Phase:	Not reported
Response Action Outcome:	A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Oil / Haz Material Type:	Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	RLFA
Action Status:	FLDDO
Action Date:	2/22/2004
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	2/22/2004
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	RLFA
Action Status:	FOLFLD
Action Date:	2/23/2004
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	Immediate Response Action - DEP Lead
Action Status:	Oral Approval of Plan or Action
Action Date:	2/23/2004
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	3/15/2004
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	RLFA
Action Status:	FOLOFF
Action Date:	3/20/2006
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	RAO - DEP Lead
Action Status:	RAO Statement Received
Action Date:	3/20/2006
Response Action Outcome:	A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E

CORNER OF CLINTON AND LINCOLN STS (Continued) **S106344040**

Action Date: 3/20/2006
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLFLD
Action Date: 4/1/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLFLD
Action Date: 4/16/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 4/2/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 4/26/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: DEPRET
Action Date: 5/24/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLFLD
Action Date: 5/4/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FLDDO
Action Date: 6/25/2004
Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Chemicals:
Chemical: #2 FUEL OIL
Quantity: 30 gallons
Location Type: RESIDNTIAL
Source: UNKNOWN

B12 SSW 1/2-1 0.961 mi. 5072 ft. | **NO LOCATION AID**
4 BROOKFIELD RD
BURLINGTON, MA 01803 | **MA SHWS** | **S104545200**
MA RELEASE | **N/A**

Site 2 of 2 in cluster B

Relative: Lower

Actual: 142 ft.

SHWS:

Name:	NO LOCATION AID
Address:	4 BROOKFIELD RD
City,State,Zip:	BURLINGTON, MA 01803
Facility ID:	3-0011228
Source Type:	Not reported
Release Town:	BURLINGTON
Notification Date:	07/01/1994
Category:	120 DY
Associated ID:	Not reported
Current Status:	RAO
Status Date:	06/21/2005
Phase:	Not reported
Response Action Outcome:	A2
Oil Or Haz Material:	Oil

Release:

Name:	NO LOCATION AID
Address:	4 BROOKFIELD RD
City,State,Zip:	BURLINGTON, MA 01803
Release Tracking Number/Current Status:	3-0011228 / RAO
Primary ID:	Not reported
Official City:	BURLINGTON
Notification:	07/01/1994
Category:	120 DY
Status Date:	06/21/2005
Phase:	Not reported
Response Action Outcome:	A2 - A permanent solution has been achieved. Contamination has not been reduced to background.
Oil / Haz Material Type:	Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Non-Compliance Issued
Action Date:	1/15/2004
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Compliance and Enforcement Action
Action Status:	Notice of Non-Compliance Issued
Action Date:	11/28/2003
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.
Action Type:	Release Disposition
Action Status:	Reportable Release under MGL 21E
Action Date:	4/28/1997
Response Action Outcome:	A permanent solution has been achieved. Contamination has not been reduced to background.

NO LOCATION AID (Continued) **S104545200**

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received
Action Date: 6/21/2005
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: RNF
Action Status: Reportable Release under MGL 21E
Action Date: 7/1/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: Release Disposition
Action Status: Reportable Release under MGL 21E
Action Date: 7/1/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)
Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.
Action Date: 7/18/1994
Response Action Outcome: A permanent solution has been achieved. Contamination has not been reduced to background.

Chemicals:
Chemical: #2 FUEL OIL
Quantity: Not reported
Location Type: RESIDNTIAL

Count: 3 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BURLINGTON	S113805029	7 NEW ENGLAND EXECUTIVE PARK	BURLINGTON MALL RD		MA SHWS, MA RELEASE
BURLINGTON	S126024752	SUMNER STREET @ FOXHILL ROAD	SUMNER STREET	01803	MA SHWS, MA RELEASE
WILMINGTON	S117405657	COMMUTER RAILROAD LINE	BUTTERS ROW & MAIN STREET ADJ		MA SHWS, MA RELEASE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 25

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 04/10/2023
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 04/10/2023
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 04/10/2023
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/20/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/28/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/02/2022
Date Data Arrived at EDR: 11/08/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 63

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/03/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/27/2022
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/21/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/27/2022
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/21/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/12/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 12/19/2022
Number of Days to Update: 5

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

SHWS: Site Transition List

Contains information on releases of oil and hazardous materials that have been reported to DEP.

Date of Government Version: 01/08/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 01/19/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

LF PROFILES: Landfill Profiles Listing

This spreadsheet describes landfills that have actively accepted waste or have closed under MassDEP Solid Waste Regulations first adopted in 1971 (310 CMR 16.00 and 310 CMR 19.00). The list does not include landfills that closed before 1971 (and which never had a MassDEP permit or approval), or for which agency data is incomplete.

Date of Government Version: 07/01/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 12/14/2015
Number of Days to Update: 48

Source: Department of Environmental Protection
Telephone: 617-292-5868
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

SWF/LF: Solid Waste Facility Database/Transfer Stations

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/02/2022
Date Data Arrived at EDR: 05/03/2022
Date Made Active in Reports: 07/22/2022
Number of Days to Update: 80

Source: Department of Environmental Protection
Telephone: 617-292-5989
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Annually

Lists of state and tribal leaking storage tanks

LAST: Leaking Aboveground Storage Tank Sites

Sites within the Releases Database that have a AST listed as its source.

Date of Government Version: 01/08/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 617-292-5500
Last EDR Contact: 01/19/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Storage Tank Listing
Sites within the Leaking Underground Storage Tank Listing that have a UST listed as its source.

Date of Government Version: 01/08/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 01/19/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/19/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/26/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

UST: Summary Listing of all the Tanks Registered in the State of Massachusetts
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 01/11/2023
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/06/2023
Number of Days to Update: 53

Source: Department of Fire Services, Office of the Public Safety
Telephone: 617-556-1035
Last EDR Contact: 03/10/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Quarterly

AST: Aboveground Storage Tank Database
Registered Aboveground Storage Tanks.

Date of Government Version: 12/16/2022
Date Data Arrived at EDR: 01/10/2023
Date Made Active in Reports: 03/06/2023
Number of Days to Update: 55

Source: Department of Public Safety
Telephone: 617-556-1035
Last EDR Contact: 01/10/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: No Update Planned

AST 2: Aboveground Storage Tanks
Aboveground storage tanks

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/30/2023
Number of Days to Update: 77

Source: Department of Fire Services
Telephone: 978-567-3181
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/19/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Sites With Activity and Use Limitation

Activity and Use Limitations establish limits and conditions on the future use of contaminated property, and therefore allow cleanups to be tailored to these uses.

Date of Government Version: 01/08/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 01/19/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Quarterly

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/17/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS 2: Potential Brownfields Listing

A listing of potential brownfields site locations in the state.

Date of Government Version: 12/03/2019
Date Data Arrived at EDR: 01/29/2021
Date Made Active in Reports: 04/21/2021
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 617-556-1007
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

BROWNFIELDS: Completed Brownfields Covenants Listing

Under Massachusetts law, M.G.L. c. 21E is the statute that governs the cleanup of releases of oil and/or hazardous material to the environment. The Brownfields Act of 1998 amended M.G.L. c. 21E by establishing significant liability relief and financial incentives to spur the redevelopment of brownfields, while ensuring that the Commonwealth's environmental standards are met. Most brownfields are redeveloped with the benefit of liability protections that operate automatically under M.G.L. c. 21E.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 10/10/2017
Number of Days to Update: 68

Source: Office of the Attorney General
Telephone: 617-963-2423
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Annually

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/14/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/20/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 8

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/02/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 8

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/02/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Quarterly

Local Land Records

LIENS: Liens Information Listing
A listing of environmental liens.

Date of Government Version: 03/07/2018
Date Data Arrived at EDR: 03/09/2018
Date Made Active in Reports: 06/21/2018
Number of Days to Update: 104

Source: Department of Environmental Protection
Telephone: 617-292-5628
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 04/10/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 86

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

MA SPILLS: Historical Spill List
The Spills Database was the release notification tracking system for spills that occurred prior to October 1, 1993. This information should be considered to be primarily of historical interest since all of the listed spills have either been cleaned up or assigned new tracking numbers and moved to the Reportable Releases or Sites Transition List databases.

Date of Government Version: 09/30/1993
Date Data Arrived at EDR: 12/03/2003
Date Made Active in Reports: 12/31/2003
Number of Days to Update: 28

Source: Department of Environmental Protection
Telephone: 617-292-5720
Last EDR Contact: 12/03/2003
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

RELEASE: Reportable Releases
Contains information on all releases of oil and hazardous materials that have been reported to DEP

Date of Government Version: 01/08/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 61

Source: Department of Environmental Protection
Telephone: 617-292-5990
Last EDR Contact: 01/19/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/11/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/08/2013
Number of Days to Update: 36

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch
Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 03/10/1998
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/05/2013
Number of Days to Update: 61

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/01/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 91

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 01/03/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/02/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 01/30/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/03/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/13/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 11/01/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 100

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/16/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/17/2022
Date Data Arrived at EDR: 10/18/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 84

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/18/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/27/2022
Date Data Arrived at EDR: 11/01/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 14

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/04/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/26/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 12/05/2022
Number of Days to Update: 13

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/03/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/27/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/03/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/23/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/24/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2022
Date Data Arrived at EDR: 10/21/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 81

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/03/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/30/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/13/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 03/01/2023
Next Scheduled EDR Contact: 04/10/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 11/17/2022
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/22/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 03/01/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 23

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/20/2022
Date Data Arrived at EDR: 12/20/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 80

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/02/2023
Date Data Arrived at EDR: 02/28/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 24

Source: EPA
Telephone: (617) 918-1111
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/09/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/25/2022
Date Data Arrived at EDR: 09/30/2022
Date Made Active in Reports: 12/22/2022
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 01/04/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/24/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/10/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 91

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 07/08/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 123

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 01/10/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/23/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 08/22/2018
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 08/22/2018
Date Data Arrived at EDR: 10/26/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS: PFAS Contaminated Sites Listing

Detection of Per- and Polyfluoroalkyl Substances (PFAS) in drinking water.

Date of Government Version: 12/09/2022
Date Data Arrived at EDR: 12/12/2022
Date Made Active in Reports: 03/06/2023
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 617-292-6770
Last EDR Contact: 03/23/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

AIRS: Permitted Facilities Listing

A listing of Air Quality permit applications.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 01/13/2023
Date Made Active in Reports: 03/30/2023
Number of Days to Update: 76

Source: Department of Environmental Protection
Telephone: 617-292-5789
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/17/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 88

Source: Department of Environmental Protection
Telephone: 617-292-5982
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

DRYCLEANERS: Regulated Drycleaning Facilities

A listing of Department of Environmental Protection regulated drycleaning facilities that use perchloroethylene under the Environmental Results Program.

Date of Government Version: 12/07/2022
Date Data Arrived at EDR: 12/13/2022
Date Made Active in Reports: 01/12/2023
Number of Days to Update: 30

Source: Department of Environmental Protection
Telephone: 617-292-5633
Last EDR Contact: 02/22/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

ENFORCEMENT: Enforcement Action Cases

A listing of enforcement action cases tracked by Department of Environmental Protection programs, including Solid Waste and Hazardous Waste.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/10/2023
Date Made Active in Reports: 01/12/2023
Number of Days to Update: 2

Source: Department of Environmental Quality
Telephone: 617-292-5979
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/01/2010
Date Data Arrived at EDR: 12/23/2010
Date Made Active in Reports: 02/03/2011
Number of Days to Update: 42

Source: Department of Environmental Protection
Telephone: 617-292-5970
Last EDR Contact: 03/02/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tanks. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 01/11/2023
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/06/2023
Number of Days to Update: 53

Source: Office of State Fire Marshal
Telephone: 978-567-3100
Last EDR Contact: 03/10/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 10/24/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/07/2023
Number of Days to Update: 54

Source: Department of Environmental Protection
Telephone: 617-292-5970
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Varies

GWDP: Ground Water Discharge Permits

The Ground Water Discharge Permits datalayer (formerly known as Groundwater Discharge Points) is a statewide point dataset containing approximate locations of permitted discharges to groundwater.

Date of Government Version: 12/29/2021
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/18/2022
Number of Days to Update: 83

Source: MassGIS
Telephone: 617-556-1150
Last EDR Contact: 01/24/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

HW GEN: List of Massachusetts Hazardous Waste Generators
Permanent generator identification numbers for all Massachusetts generators of hazardous waste and waste oil that have registered with or notified MassDEP of their hazardous waste activities.

Date of Government Version: 11/18/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/06/2023
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 617-292-5500
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Semi-Annually

MERCURY: Mercury Product Recyling Drop-Off Locations Listing
A listing of locations, collecting and recycling for mercury-added products. Mercury is toxic to the human nervous system, as well as fish and animals. Mercury can enter the body either through skin absorption or through inhalation of mercury vapors. At room temperature, small beads of mercury will vaporize.

Date of Government Version: 09/26/2022
Date Data Arrived at EDR: 09/26/2022
Date Made Active in Reports: 12/09/2022
Number of Days to Update: 74

Source: Department of Environmental Protection
Telephone: 617-292-5632
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

NPDES: NPDES Permit Listing
Listing of treatment plants in Massachusetts that hold permits to discharge to groundwater.

Date of Government Version: 12/16/2022
Date Data Arrived at EDR: 02/07/2023
Date Made Active in Reports: 02/14/2023
Number of Days to Update: 7

Source: Department of Environmental Protection
Telephone: 508-767-2781
Last EDR Contact: 02/07/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing
A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 07/19/2021
Date Made Active in Reports: 08/17/2021
Number of Days to Update: 29

Source: Massachusetts Emergency Management Agency
Telephone: 508-820-2019
Last EDR Contact: 01/23/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Annually

TSD: TSD Facility
List of Licensed Hazardous Waste Treatment, Storage Disposal Facilities (TSDFs) in Massachusetts.

Date of Government Version: 11/18/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/06/2023
Number of Days to Update: 82

Source: Department of Environmental Protection
Telephone: 617-292-5580
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

UIC: Underground Injection Control Listing
A list of UIC registration data and their locations

Date of Government Version: 03/10/2022
Date Data Arrived at EDR: 03/15/2022
Date Made Active in Reports: 06/10/2022
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 617-566-1172
Last EDR Contact: 02/03/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/24/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI
Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 03/07/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/06/2023
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/10/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/13/2022
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/09/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/06/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: MassDEP
Telephone: 617-292-5907

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

FOX HILL ELEMENTARY SCHOOL
252 FOX HILL ROAD
BURLINGTON, MA 01803

TARGET PROPERTY COORDINATES

Latitude (North):	42.529052 - 42˚ 31’ 44.59’’
Longitude (West):	71.188461 - 71˚ 11’ 18.46’’
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	320257.0
UTM Y (Meters):	4710625.5
Elevation:	173 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	11762185 WILMINGTON, MA
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

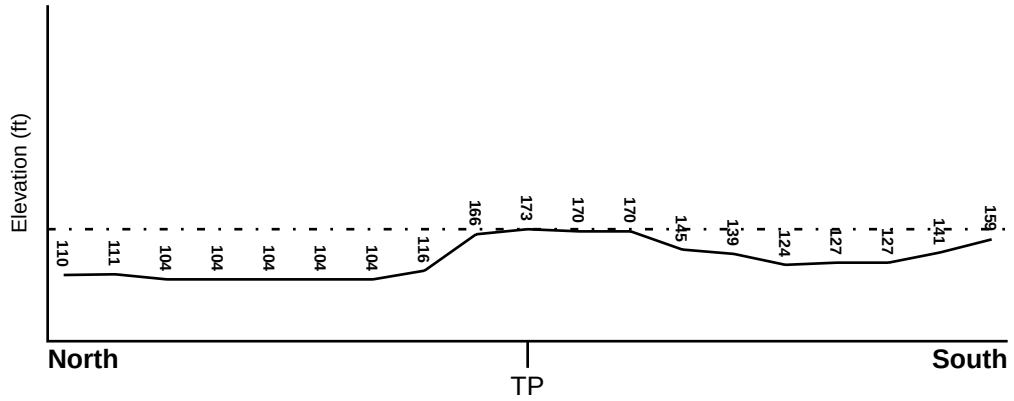
TOPOGRAPHIC INFORMATION

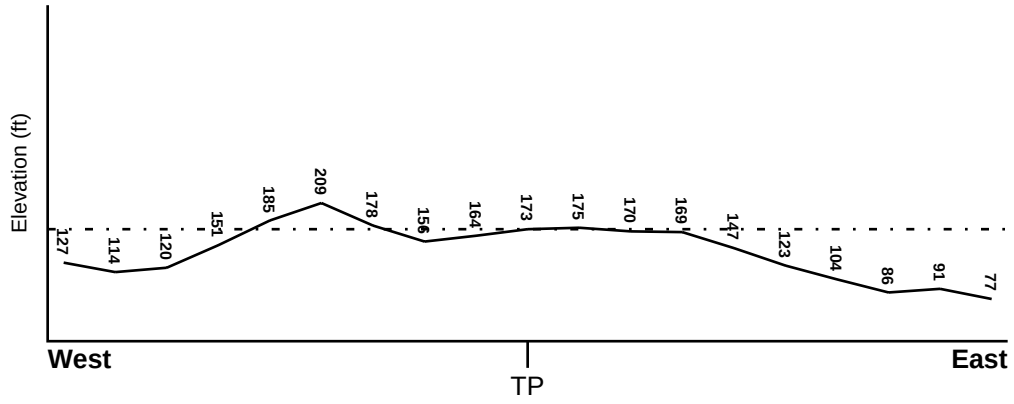
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 173 ft.

0 1/2 1 Miles

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
25017C0289E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
25017C0287E	FEMA FIRM Flood data
25017C0291E	FEMA FIRM Flood data
25017C0293E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WILMINGTON	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Ordovian
Series:	Lower Paleozoic granitic rocks
Code:	Pzg1 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	MONTAUK
Soil Surface Texture:	extremely stony - sandy loam
Hydrologic Group:	Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	LOW
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	2 inches	extremely stony - sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 0.60	Max: 6.00 Min: 3.60
2	2 inches	27 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 0.60	Max: 6.00 Min: 3.60
3	27 inches	72 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 0.60 Min: 0.06	Max: 6.00 Min: 3.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: extremely stony - fine sandy loam
muck
unweathered bedrock
very stony - fine sandy loam
sandy loam

Surficial Soil Types: extremely stony - fine sandy loam
muck
unweathered bedrock
very stony - fine sandy loam
sandy loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: gravelly - loamy sand
loamy sand
sand
unweathered bedrock
sapric material
very gravelly - loamy coarse sand
fine sandy loam
stratified

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS40000476871	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

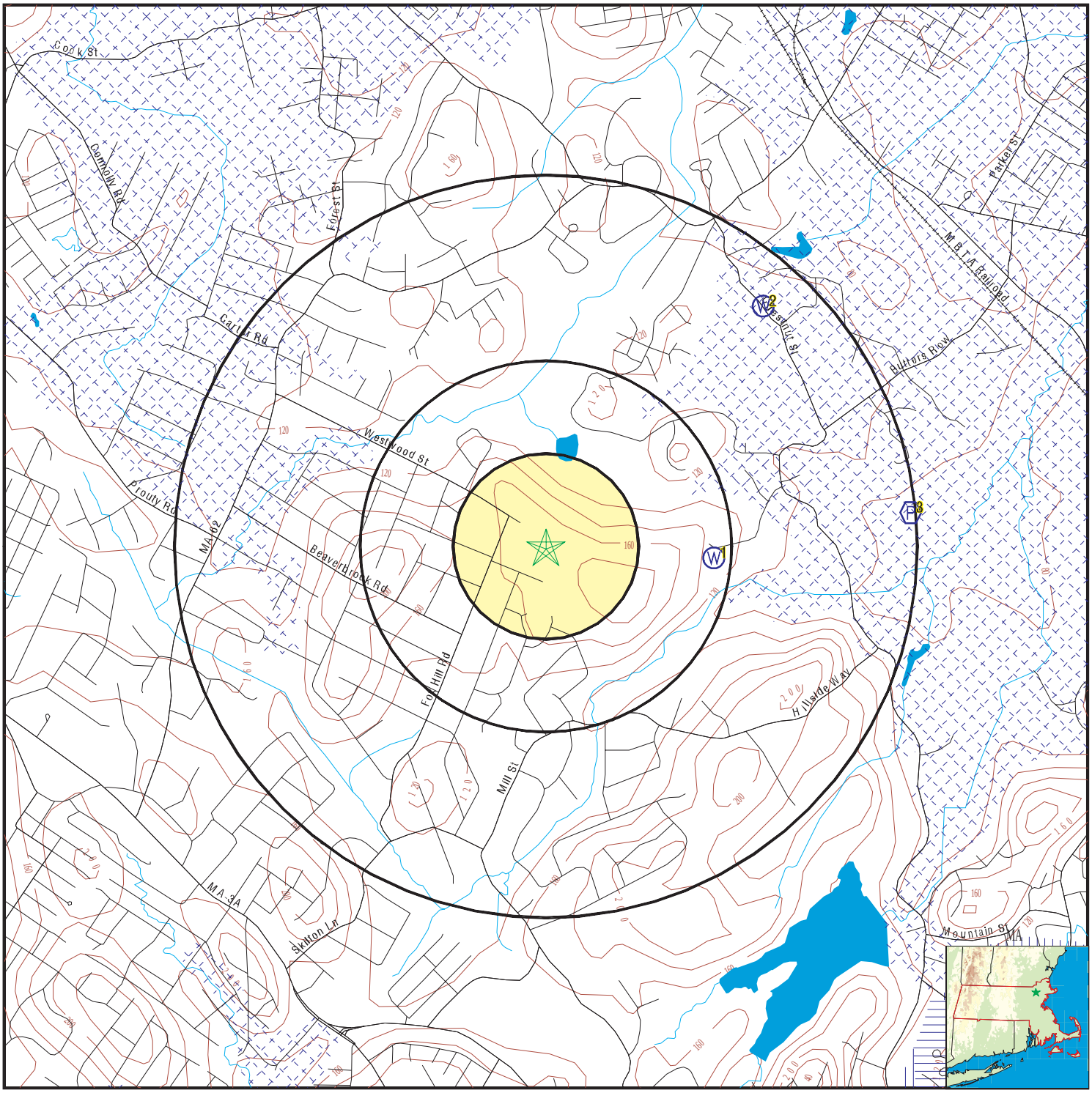
MAP ID	WELL ID	LOCATION FROM TP
3	MA3342000	1/2 - 1 Mile East

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	MA9000000003712	1/4 - 1/2 Mile East

PHYSICAL SETTING SOURCE MAP - 7295798.2s



0 1/4 1/2 1 Miles

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

Groundwater Flow Direction
Indeterminate Groundwater Flow at Location
Groundwater Flow Varies at Location

Potentially Productive Aquifers
Not Potentially Productive Aquifers
DEP Approved Zone IIs
EPA Designated Sole Src. Aq.

SITE NAME: Fox Hill Elementary School	CLIENT: ECMS, Inc.
ADDRESS: 252 Fox Hill Road Burlington MA 01803	CONTACT: Cheryl Cambria INQUIRY #: 7295798.2s
LAT/LONG: 42.529052 / 71.188461	DATE: March 31, 2023 2:57 pm

Copyright © 2023 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
1 **East** **1/4 - 1/2 Mile** **Lower**	**MA WELLS**	**MA9000000003712**

PWS ID:	3342001	Site Name:	MILLBROOK COUNTRY DAY SCH INC
Type:	Transient Non-Community	Facility Name:	Not Reported
SubBasin:	IPSWICH		
Basemap:	NA	Accuracy Estimate (ft):	100
Feature Type:	GW	Location Method:	GP_6
Primary Location Source:	SV	Secondary Location Source:	Not Reported
Tertiary Location Source:	Not Reported		
Source ID:	3342001-01G	PWS Name:	MILLBROOK COUNTRY DAY SCH INC
Source Name:	MILLBROOK WELL 1	PWS Status:	A
Source Status:	A	PWS Class:	NC
Source Availability:	ACTIVE		

---

2 **NE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000476871**	

Organization ID:	USGS-MA		
Organization Name:	USGS Massachusetts Water Science Center		
Monitor Location:	MA-XMW 19	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	9	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

---

3 **East** **1/2 - 1 Mile** **Lower**	**FRDS PWS**	**MA3342000**	

Epa region:	01	State:	MA
Pwsid:	MA3342000	Pwsname:	WILMINGTON WATER DEPT
Cityserved:	Not Reported	Stateserved:	MA
Zipserved:	Not Reported	Fipscounty:	25017
Status:	Active	Retpopsrvd:	22250
Pwssvcconn:	7516	Psource longname:	Purch_surface_water
Pwstype:	CWS	Owner:	Local_Govt
Contact:	MICHAEL J WOODS	Contactorgname:	WILMINGTON WATER DEPT
Contactphone:	9786584711	Contactaddress1:	121 GLEN ROAD
Contactaddress2:	Not Reported	Contactcity:	WILMINGTON
Contactstate:	MA	Contactzip:	01887
Pwsactivitycode:	A		
Pwsid:	MA3342000	Facid:	11

Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	corrosion control	Trtprocess:	ph adjustment
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	filtration, rapid sand
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	taste / odor control	Trtprocess:	activated carbon, granular
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	gaseous chlorination, post
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	iron removal	Trtprocess:	permanganate
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	hypochlorination, post
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection by-products control		
Trtprocess:	chloramines	Factypecode:	TP
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	iron removal	Trtprocess:	sedimentation
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	organics removal	Trtprocess:	aeration, diffused
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	organics removal	Trtprocess:	activated carbon, granular
Factypecode:	TP		
Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A

Trtobjective:	particulate removal	Trtprocess:	coagulation
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	flocculation
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	11
Facname:	BUTTERS ROW WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	sedimentation
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	corrosion control	Trtprocess:	ph adjustment
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	gaseous chlorination, post
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	iron removal	Trtprocess:	permanganate
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	iron removal	Trtprocess:	sedimentation
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	organics removal	Trtprocess:	aeration, diffused
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	organics removal	Trtprocess:	activated carbon, granular
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	coagulation
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	sedimentation
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	flocculation
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	particulate removal	Trtprocess:	filtration, rapid sand
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	taste / odor control	Trtprocess:	activated carbon, granular
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection by-products control		
Trtprocess:	chloramines	Factypecode:	TP

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	hypochlorination, post
Factypecode:	TP		

Pwsid:	MA3342000	Facid:	12
Facname:	E H SARGENT WATER TREATMENT PLANT		
Factype:	Treatment_plant	Facactivitycode:	A
Trtobjective:	disinfection	Trtprocess:	not reported
Factypecode:	TP		

PWS ID:	MA3342000	PWS name:	WILMINGTON WATER DEPT
Address:	Not Reported	Care of:	115 ANDOVER ST - BROWN'S CROSS
City:	WILMINGTON	State:	MA
Zip:	018870000	Owner:	WILMINGTON WATER DEPT
Source code:	Ground water	Population:	20886

PWS ID:	MA3342000	PWS type:	Mailing
PWS name:	WILMINGTON WATER DEPT	PWS address:	121 GLEN ROAD
PWS city:	WILMINGTON	PWS state:	MA
PWS zip:	018870000	PWS name:	WILMINGTON WATER DEPT
PWS type code:	C	Retail population served:	22666
Contact:	MICHAEL J WOODS	Contact address:	121 GLEN ROAD
Contact address:	WILMINGTON	Contact city:	MA
Contact state:	01	Contact zip:	9786584711
Contact telephone:	Not Reported		

County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	CORROSION CONTROL	Process:	PH ADJUSTMENT, POST
Population:	20886		

County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	DISINFECTION	Process:	GASEOUS CHLORINATION, POST
Population:	20886		

County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	DISINFECTION	Process:	GASEOUS CHLORINATION, PRE

Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	IRON REMOVAL	Process:	PERMANGANATE
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	IRON REMOVAL	Process:	SEDIMENTATION
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	ORGANICS REMOVAL	Process:	ACTIVATED CARBON, GRANULAR
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	ORGANICS REMOVAL	Process:	AERATION, DIFFUSED
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	PARTICULATE REMOVAL	Process:	COAGULATION
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	PARTICULATE REMOVAL	Process:	FILTRATION, RAPID SAND
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	PARTICULATE REMOVAL	Process:	FLOCCULATION
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	PARTICULATE REMOVAL	Process:	SEDIMENTATION
Population:	20886		
County:	MIDDLESEX	Source:	Ground water
Treatment Objective:	TASTE / ODOR CONTROL	Process:	ACTIVATED CARBON, GRANULAR
Population:	20886		
PWS ID:	MA3342000	Activity status:	Active
Date system activated:	9003	Date system deactivated:	Not Reported
Retail population:	00018000	System name:	WILMINGTON WATER DEPT
System address:	BROWN'S CROSSING PUMP STATION		
System city:	WILMINGTON	System state:	MA
System zip:	018870000		
Population served:	10,001 - 50,000 Persons	Treatment:	Mixed (treated and untreated)
Latitude:	423149	Longitude:	0711008
Latitude:	423200	Longitude:	0710955
Latitude:	423442	Longitude:	0710801
Latitude:	423104	Longitude:	0710959
Latitude:	423302	Longitude:	0711228
Latitude:	423330	Longitude:	0711128
Latitude:	423304	Longitude:	0710941
Latitude:	423158	Longitude:	0710957

Latitude:	423420	Longitude:	0710839
Latitude:	423456	Longitude:	0710843
State:	MA	Latitude degrees:	42
Latitude minutes:	31	Latitude seconds:	49.0000
Longitude degrees:	71	Longitude minutes:	10
Longitude seconds:	8.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	31	Latitude seconds:	49.0000
Longitude degrees:	71	Longitude minutes:	10
Longitude seconds:	11.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	31	Latitude seconds:	58.0000
Longitude degrees:	71	Longitude minutes:	10
Longitude seconds:	2.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	32	Latitude seconds:	1.0000
Longitude degrees:	71	Longitude minutes:	9
Longitude seconds:	54.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	32	Latitude seconds:	5.0000
Longitude degrees:	71	Longitude minutes:	9
Longitude seconds:	44.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	33	Latitude seconds:	2.0000
Longitude degrees:	71	Longitude minutes:	12
Longitude seconds:	28.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	33	Latitude seconds:	31.0000
Longitude degrees:	71	Longitude minutes:	11
Longitude seconds:	29.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	34	Latitude seconds:	25.0000
Longitude degrees:	71	Longitude minutes:	8
Longitude seconds:	41.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	34	Latitude seconds:	42.0000
Longitude degrees:	71	Longitude minutes:	8
Longitude seconds:	2.0000		
State:	MA	Latitude degrees:	42
Latitude minutes:	34	Latitude seconds:	56.0000
Longitude degrees:	71	Longitude minutes:	8
Longitude seconds:	52.0000		
Violation id:	03V0001	Orig code:	S
State:	MA	Violation Year:	2002
Contamination code:	1041	Contamination Name:	Nitrite
Violation code:	02	Violation name:	MCL, Average
Rule code:	331	Rule name:	Nitrates
Violation measur:	1.2	Unit of measure:	MG/L
State mcl:	1	Cmp bdt:	10/01/2002
Cmp edt:	12/31/2002		

Violation id:	10	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2976	Contamination Name:	Vinyl chloride
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	11	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2989	Contamination Name:	CHLOROBENZENE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	12	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2968	Contamination Name:	o-Dichlorobenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	13	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2979	Contamination Name:	trans-1,2-Dichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	14	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2380	Contamination Name:	cis-1,2-Dichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	15	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2983	Contamination Name:	1,2-Dichloropropane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	16	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2992	Contamination Name:	Ethylbenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	17	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2996	Contamination Name:	Styrene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	18	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2987	Contamination Name:	Tetrachloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	19	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2991	Contamination Name:	Toluene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	2	Orig code:	S
State:	MA	Violation Year:	2007
Contamination code:	1041	Contamination Name:	Nitrite
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	331	Rule name:	Nitrates
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	07/01/2007
Cmp edt:	09/30/2007		

Violation id:	20	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2969	Contamination Name:	p-Dichlorobenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	21	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2955	Contamination Name:	Xylenes, Total
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	22	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2964	Contamination Name:	DICHLOROMETHANE
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	23	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2962	Contamination Name:	p-Xylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	500	Rule name:	Not Regulated
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	24	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2985	Contamination Name:	1,1,2-Trichloroethane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	25	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2251	Contamination Name:	METHYL TERT-BUTYL ETHER
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	500	Rule name:	Not Regulated
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	26	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2378	Contamination Name:	1,2,4-Trichlorobenzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	27	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	1039	Contamination Name:	Perchlorate
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	500	Rule name:	Not Regulated
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	28	Orig code:	S
State:	MA	Violation Year:	2013
Contamination code:	5000	Contamination Name:	Lead and Copper Rule
Violation code:	52	Violation name:	Follow-up Or Routine LCR Tap M/R
Rule code:	350	Rule name:	LCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	01/01/2013
Cmp edt:	Not Reported		

Violation id:	3	Orig code:	S
State:	MA	Violation Year:	2008
Contamination code:	3100	Contamination Name:	Coliform (TCR)
Violation code:	23	Violation name:	Monitoring, Routine Major (TCR)
Rule code:	110	Rule name:	TCR
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	10/01/2008
Cmp edt:	10/31/2008		

Violation id:	4	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2990	Contamination Name:	Benzene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	5	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2982	Contamination Name:	Carbon tetrachloride
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	6	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2977	Contamination Name:	1,1-Dichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	7	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2980	Contamination Name:	1,2-Dichloroethane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	8	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2984	Contamination Name:	Trichloroethylene
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation id:	9	Orig code:	S
State:	MA	Violation Year:	2010
Contamination code:	2981	Contamination Name:	1,1,1-Trichloroethane
Violation code:	03	Violation name:	Monitoring, Regular
Rule code:	310	Rule name:	VOC
Violation measur:	Not Reported	Unit of measure:	Not Reported
State mcl:	Not Reported	Cmp bdt:	06/01/2010
Cmp edt:	09/30/2010		

Violation ID:	03V0001	Orig Code:	S
Enforcemnt FY:	2003	Enforcement Action:	10/24/2002
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		

Violation ID:	10	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		

Enforcement Category: Formal

Violation ID: 11 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 12 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 13 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 14 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 15 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 16 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 17 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 18 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 19 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 2 Orig Code: S
Enforcemnt FY: 2008 Enforcement Action: 10/23/2007
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 20 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID: 21 Orig Code: S
Enforcemnt FY: 2011 Enforcement Action: 11/09/2010
Enforcement Detail: St AO (w/o penalty) issued
Enforcement Category: Formal

Violation ID:	22	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	23	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	24	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	25	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	26	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	27	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	3	Orig Code:	S
Enforcemnt FY:	2009	Enforcement Action:	12/05/2008
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	4	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	5	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	6	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	7	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	8	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	9	Orig Code:	S
Enforcemnt FY:	2011	Enforcement Action:	11/09/2010

Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Formal		
Violation ID:	Not Reported	Orig Code:	S
Enforcemnt FY:	2002	Enforcement Action:	09/25/2002
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Not Reported		
Violation ID:	Not Reported	Orig Code:	S
Enforcemnt FY:	2009	Enforcement Action:	07/28/2009
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Not Reported		
Violation ID:	Not Reported	Orig Code:	S
Enforcemnt FY:	2004	Enforcement Action:	08/16/2004
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Not Reported		
Violation ID:	Not Reported	Orig Code:	S
Enforcemnt FY:	2007	Enforcement Action:	05/02/2007
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Not Reported		
Violation ID:	Not Reported	Orig Code:	S
Enforcemnt FY:	2008	Enforcement Action:	05/06/2008
Enforcement Detail:	St AO (w/o penalty) issued		
Enforcement Category:	Not Reported		
PWS name:	WILMINGTON WATER DEPT	Population served:	22666
PWS type code:	C	Violation ID:	03V0001
Contaminant:	NITRITE	Violation type:	2
Compliance start date:	10/1/2002 0:00:00	Compliance end date:	12/31/2002 0:00:00
Enforcement date:	10/24/2002 0:00:00	Enforcement action:	State BCA Signed
Violation measurement:	1.2		
PWS name:	WILMINGTON WATER DEPT	Population served:	22666
PWS type code:	C	Violation ID:	2
Contaminant:	NITRITE	Violation type:	3
Compliance start date:	7/1/2007 0:00:00	Compliance end date:	9/30/2007 0:00:00
Enforcement date:	10/23/2007 0:00:00	Enforcement action:	State Formal NOV Issued
Violation measurement:	Not Reported		
PWS name:	WILMINGTON WATER DEPT	Population served:	22666
PWS type code:	C	Violation ID:	3
Contaminant:	COLIFORM (TCR)	Violation type:	Monitoring, Routine Major (TCR)
Compliance start date:	10/1/2008 0:00:00	Compliance end date:	10/31/2008 0:00:00
Enforcement date:	12/5/2008 0:00:00	Enforcement action:	State Formal NOV Issued
Violation measurement:	Not Reported		
PWS name:	WILMINGTON WATER DEPT	Population served:	22666
PWS type code:	C	Violation ID:	94V0002
Contaminant:	LEAD & COPPER RULE	Violation type:	OCCT Study Recommendation
Compliance start date:	7/1/1993 0:00:00	Compliance end date:	12/31/2025 0:00:00
Enforcement date:	No Enf Action as of	Enforcement action:	7/8/2009 0:00:00
Violation measurement:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: MA Radon

Radon Test Results

County	% of sites>4 pCi/L	Median
MIDDLESEX	26	2.2

Federal EPA Radon Zone for MIDDLESEX County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 01803

Number of sites tested: 8

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.575 pCi/L	88%	12%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: MassDEP
Telephone: 617-292-5907

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Massachusetts Geographic Information System (MassGIS) Datalayers
Source: Executive Office of Environmental Affairs
Telephone:

Public Water Supply Database

Telephone:
The Public Water Supply datalayer contains the locations of public community surface and groundwater supply sources and public non-community supply sources as defined in 310 CMR 22.00.

Areas of Critical Environmental Concern

Telephone:
The Areas of Critical Environmental Concern (ACEC) datalayer shows the location of areas that have been designated ACECs by the Secretary of Environmental Affairs. ACEC designation requires greater environmental review of certain kinds of proposed development under state jurisdiction within the ACEC boundaries. The ACEC Program is administered by the Department of Environmental Management (DEM) on behalf of the Secretary of Environmental Affairs. The Massachusetts Coastal Zone Management (MCZM) Office managed the original Coastal ACEC Program from 1978 to 1993, and continues to play a key role in monitoring coastal ACECs. Procedures for ACEC designation and the general policies governing the effects of designation are contained in the ACEC regulations (301 CMR 12.00). The ACEC datalayer has been compiled by MCZM and DEM and includes both coastal and inland areas.

EPA Designated Sole Source Aquifers

Telephone:
The Sole Source Aquifer datalayer was compiled by the Department of Environmental Protection (DEP) Division of Water Supply (DWS). Seven Sole Source Aquifers have been designated by the US Environmental Protection Agency (EPA) for Massachusetts. A Sole Source Aquifer (SSA) is an aquifer designated by US EPA as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should that aquifer become contaminated. The aquifers were defined by an EPA hydrogeologist.

Aquifers

Telephone:
MassGIS produced an aquifer datalayer composed of 20 individual panels, generally based on the boundaries of the major drainage basins. Areas of high and medium yield were mapped. This datalayer includes polygon attribute coding to help in the identification of areas in which cleanup of hazardous waste sites must meet drinking water standards, as defined in the Massachusetts Contingency Plan (MCP) (310 CMR 40.00000).

Non-Potential Drinking Water Source Areas

Telephone:
Non-Potential Drinking Water Source Areas (NPDWSA) are regulatory in nature representing one of many considerations used in determining the standards to which ground water must be cleaned in the event of a release of oil or hazardous material. NPDWSAs are not based on existing water quality and do not indicate poor ambient conditions.

DEP Approved Zone IIs

Telephone:
The Department of Environmental Protection (DEP) approved Zone IIs datalayer was compiled by the DEP Division of Water Supply (DWS). The database contains 281 approved Zone IIs statewide. As stated in 310 CMR 22.02, a Zone II is 'that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield, with no recharge from precipitation.) It is bounded by the groundwater divides which result from pumping the well and by the contact of the aquifer with less permeable materials such as till or bedrock. In some cases, streams or lakes may act as recharge boundaries. In all cases, Zone IIs shall extend up gradient to its point of intersection with prevailing hydrogeologic boundaries (a groundwater flow divide, a contact with till or bedrock, or a recharge boundary).' These data are used in association with the Public Water Supplies datalayer. The following describes certain unique features of this association.\n - Any proposed new well which will pump at least 100,000 gallons per day must have a Zone II delineation completed and approved by DEP prior to the well coming on line. \n- Additionally, a new source may not be on-line yet, but other, older wells may fall within its Zone II boundary.\n - Further, existing wells must have a Zone II delineated as a condition of receiving a water withdrawal permit under the Water Management Act.

OTHER STATE DATABASE INFORMATION

RADON

State Database: MA Radon
Source: Department of Health
Telephone: 413-586-7525
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX G

ENVIRONMENTAL DATA RESOURCES, INC. (EDR) VAPOR ENCROACHMENT REPORT DATED APRIL 18, 2023

Fox Hill Elementary School
252 Fox Hill Road
Burlington, MA 01803

Inquiry Number: 7295798.2s
April 18, 2023

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	**ES1**
Primary Map	**2**
Secondary Map	**3**
Map Findings	**4**
Record Sources and Currency	**GR-1**

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

The EDR Vapor Encroachment Worksheet enables EDR's customers to make certain online modifications that effects maps, text and calculations contained in this Report. As a result, maps, text and calculations contained in this Report may have been so modified. EDR has not taken any action to verify any such modifications, and this report and the findings set forth herein must be read in light of this fact. Environmental Data Resources shall not be responsible for any customer's decision to include or not include in any final report any records determined to be within the relevant minimum search distances.

This report contains information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANYSUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES.ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this report "AS IS". Any analyses, estimates, ratings, or risk codes provided in this report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can produce information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2023 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Default Area of Concern (Miles)*	property	1/10	> 1/10
Lists of Federal NPL (Superfund) sites	1.0	0	0	0
Lists of Federal Delisted NPL sites	1.0	0	0	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders	0.5	0	0	0
Lists of Federal CERCLA sites with NFRAP	0.5	0	0	0
Lists of Federal RCRA facilities undergoing Corrective Action	1.0	0	0	0
Lists of Federal RCRA TSD facilities	0.5	0	0	0
Lists of Federal RCRA generators	0.25	0	0	0
Federal institutional controls / engineering controls registries	0.5	0	0	0
Federal ERNS list	property	0	-	-
Lists of state- and tribal (Superfund) equivalent sites	not searched	-	-	-
Lists of state- and tribal hazardous waste facilities	1.0	0	0	0
Lists of state and tribal landfills and solid waste disposal facilities	0.5	0	0	0
Lists of state and tribal leaking storage tanks	0.5	0	0	0
Lists of state and tribal registered storage tanks	0.25	0	0	0
State and tribal institutional control / engineering control registries	0.5	0	0	0
Lists of state and tribal voluntary cleanup sites	0.5	0	0	0
Lists of state and tribal brownfield sites	0.5	0	0	0

ADDITIONAL ENVIRONMENTAL RECORDS				
Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	property	0	-	-
Local Lists of Registered Storage Tanks	not searched	-	-	-
Local Land Records	property	0	-	-
Records of Emergency Release Reports	property	0	-	-
Other Ascertainable Records	1.0	0	0	0

EDR HIGH RISK HISTORICAL RECORDS				
EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	property	0	-	-

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	property	0	-	-

*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

FOX HILL ELEMENTARY SCHOOL
252 FOX HILL ROAD
BURLINGTON, MA 01803

COORDINATES

Latitude (North):	42.529052 - 42° 31′ 44.589844″
Longitude (West):	71.188461 - 71° 11′ 18.460693″
Elevation:	173 ft. above sea level

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records.

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

ADDITIONAL ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

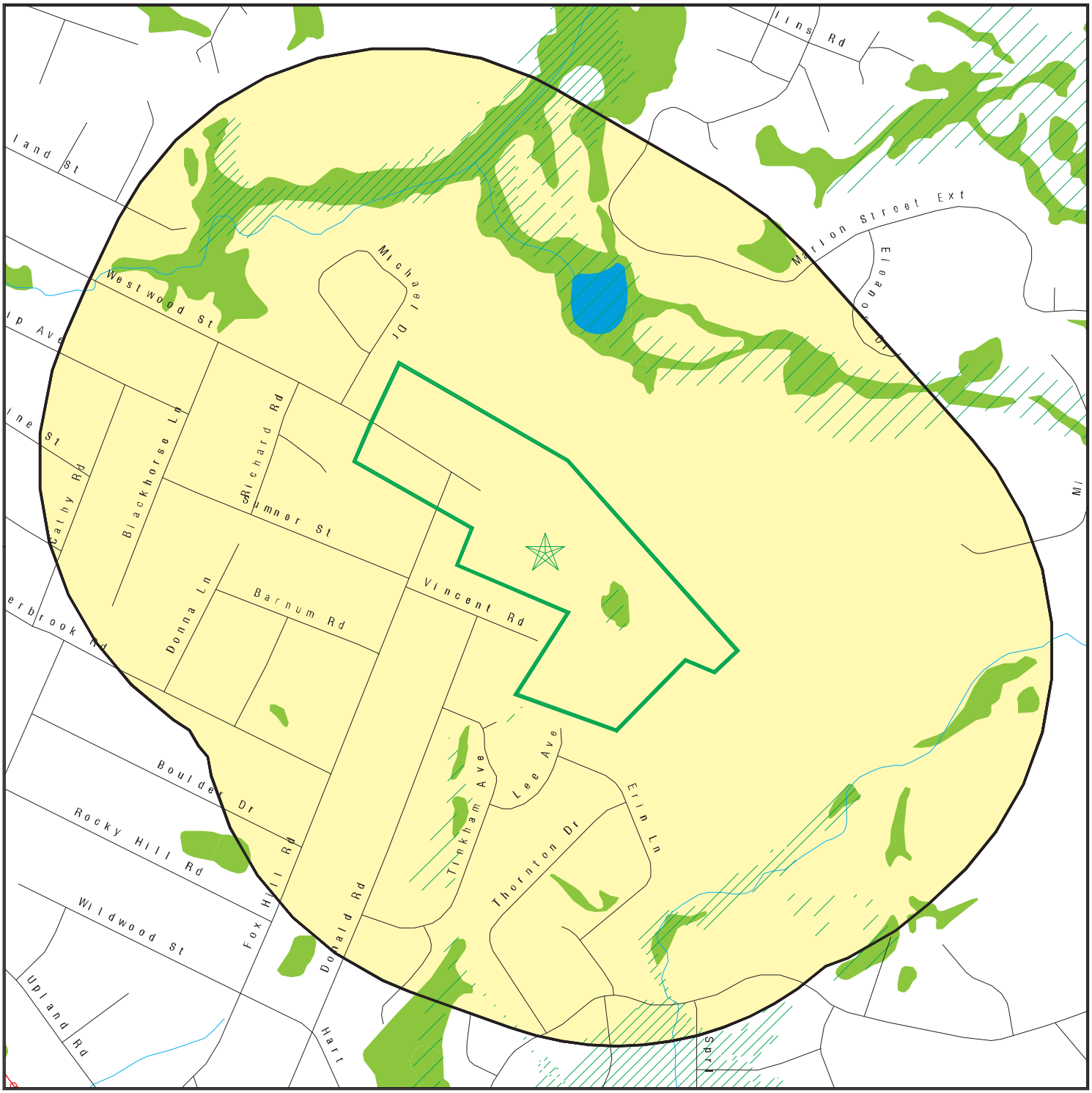
EDR HIGH RISK HISTORICAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

EDR RECOVERED GOVERNMENT ARCHIVES

Name	Address	Dist/Dir	Map ID	Page
Not Reported				

PRIMARY MAP - 7295798.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 300 1/3 1/2 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

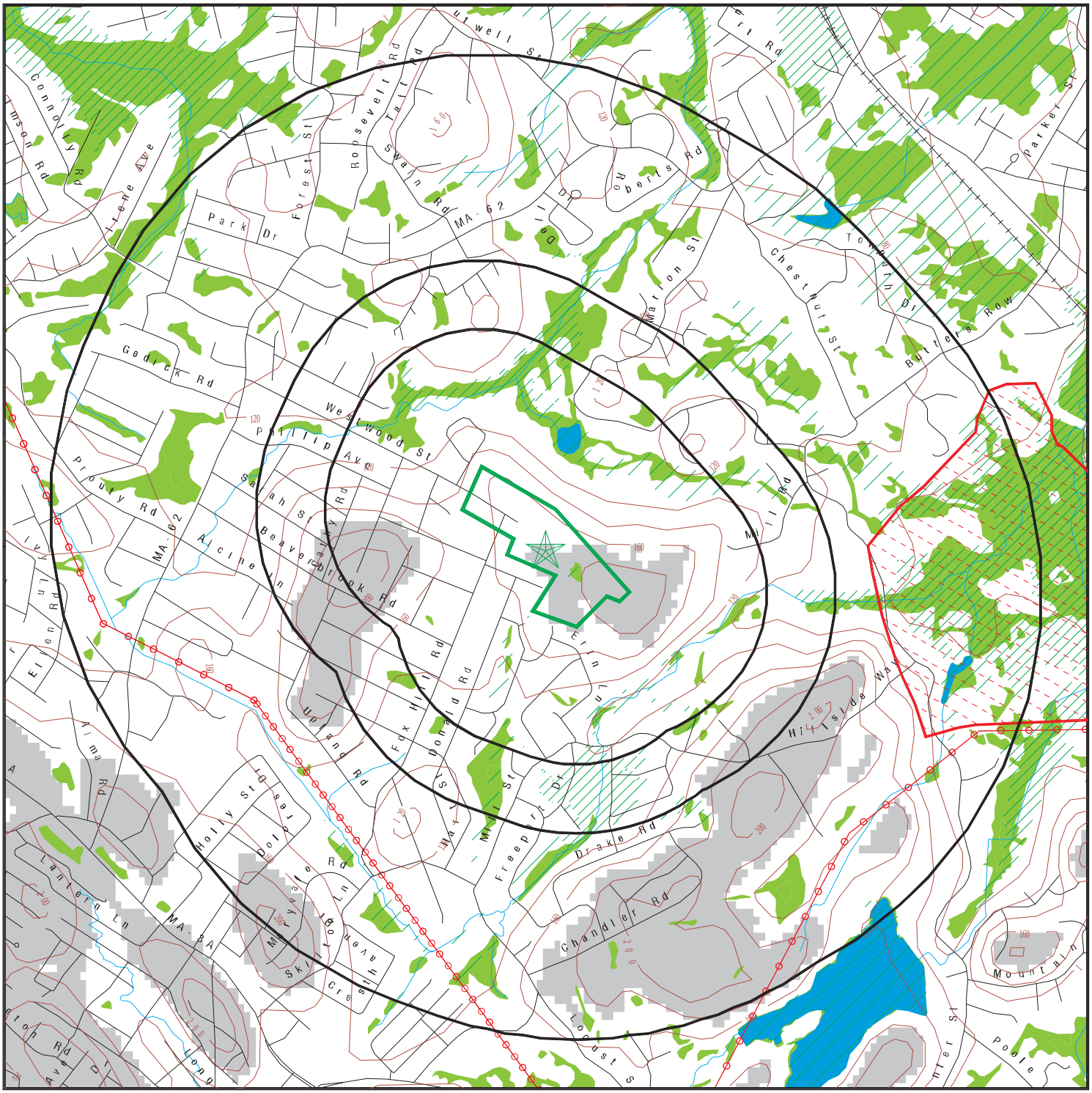
Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Fox Hill Elementary School	CLIENT: ECMS, Inc.
ADDRESS: 252 Fox Hill Road Burlington MA 01803	CONTACT: Cheryl Cambria INQUIRY #: 7295798.2s
LAT/LONG: 42.529052 / 71.188461	DATE: March 31, 2023 2:57 pm

Copyright © 2023 EDR, Inc. © 2015 TomTom Rel. 2015.

SECONDARY MAP - 7295798.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Upgradient Area

Areas of Critical Environmental Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Fox Hill Elementary School	CLIENT: ECMS, Inc.
ADDRESS: 252 Fox Hill Road Burlington MA 01803	CONTACT: Cheryl Cambria INQUIRY #: 7295798.2s
LAT/LONG: 42.529052 / 71.188461	DATE: March 31, 2023 2:57 pm

Copyright © 2023 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS

LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**			EDR SITE ID NUMBER
◆ **MAP ID#**	Direction Distance Range Relative Elevation	(Distance feet / miles) Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.
Worksheet: **Comments:** Comments may be added on the online Vapor Encroachment Worksheet.			

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
ENVIRONMENTAL RECORDS						
Federal NPL site list						
US	NPL	National Priority List	EPA	01/25/2023	02/03/2023	02/28/2023
US	Proposed NPL	Proposed National Priority List Sites	EPA	01/25/2023	02/02/2023	02/28/2023
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
Federal CERCLIS list						
US	SEMS	Superfund Enterprise Management System	EPA	01/25/2023	02/02/2023	02/28/2023
Federal RCRA CORRACTS facilities list						
US	CORRACTS	Corrective Action Report	EPA	03/06/2023	03/09/2023	03/20/2023
Federal RCRA TSD facilities list						
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/06/2023	03/09/2023	03/20/2023
Federal RCRA generators list						
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/06/2023	03/09/2023	03/20/2023
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/06/2023	03/09/2023	03/20/2023
US	RCRA-VSQG	RCRA - Very Small Quantity Generators (Formerly Conditionall	Environmental Protection Agency	03/06/2023	03/09/2023	03/20/2023
Federal institutional controls / engineering controls registries						
US	LUCIS	Land Use Control Information System	Department of the Navy	11/02/2022	11/08/2022	01/10/2023
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	10/27/2022	11/16/2022	02/09/2023
US	US INST CONTROLS	Institutional Controls Sites List	Environmental Protection Agency	10/27/2022	11/16/2022	02/09/2023
Federal ERNS list						
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	12/12/2022	12/14/2022	12/19/2022
State and tribal - equivalent CERCLIS						
MA	SHWS	Site Transition List	Department of Environmental Protection	01/08/2023	01/19/2023	03/21/2023
State and tribal landfill / solid waste disposal						
MA	SWF/LF	Solid Waste Facility Database/Transfer Stations	Department of Environmental Protection	05/02/2022	05/03/2022	07/22/2022
MA	LF PROFILES	Landfill Profiles Listing	Department of Environmental Protection	07/01/2015	10/27/2015	12/14/2015
State and tribal leaking storage tank lists						
MA	LUST	Leaking Underground Storage Tank Listing	Department of Environmental Protection	01/08/2023	01/19/2023	03/21/2023
MA	LAST	Leaking Aboveground Storage Tank Sites	Department of Environmental Protection	01/08/2023	01/19/2023	03/21/2023
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	10/19/2022	12/06/2022	03/03/2023
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	11/26/2022	12/06/2022	03/03/2023
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	11/23/2022	12/06/2022	03/03/2023
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	11/23/2022	12/06/2022	03/03/2023
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	10/14/2022	12/06/2022	03/03/2023
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	11/23/2022	12/06/2022	03/03/2023
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/20/2022	06/13/2022	08/16/2022

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	10/14/2022	12/06/2022	03/03/2023
State and tribal registered storage tank lists						
MA	UST	Summary Listing of all the Tanks Registered in the State of	Department of Fire Services, Office of the Pu	01/11/2023	01/12/2023	03/06/2023
MA	AST	Aboveground Storage Tank Database	Department of Public Safety	12/16/2022	01/10/2023	03/06/2023
MA	AST 2	Aboveground Storage Tanks	Department of Fire Services	01/09/2023	01/12/2023	03/30/2023
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/20/2022	06/13/2022	08/16/2022
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	10/14/2022	12/06/2022	03/03/2023
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	11/23/2022	12/06/2022	03/03/2023
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	11/23/2022	12/06/2022	03/03/2023
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	10/19/2022	12/06/2022	03/03/2023
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	10/14/2022	12/06/2022	03/03/2023
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	11/23/2022	12/06/2022	03/03/2023
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	11/23/2022	12/06/2022	03/03/2023
US	FEMA UST	Underground Storage Tank Listing	FEMA	10/14/2021	11/05/2021	02/01/2022
State and tribal institutional control / engineering control registries						
MA	INST CONTROL	Sites With Activity and Use Limitation	Department of Environmental Protection	01/08/2023	01/19/2023	03/21/2023
State and tribal voluntary cleanup sites						
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
State and tribal Brownfields sites						
MA	BROWNFIELDS 2	Potential Brownfields Listing	Department of Environmental Protection	12/03/2019	01/29/2021	04/21/2021
MA	BROWNFIELDS	Completed Brownfields Covenants Listing	Office of the Attorney General	04/05/2017	08/03/2017	10/10/2017
Other Records						
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	09/30/2022	10/21/2022	01/10/2023
US	ROD	Records Of Decision	EPA	01/25/2023	02/02/2023	02/28/2023
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	01/25/2023	02/02/2023	02/28/2023
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	09/13/2019	11/06/2019	02/10/2020
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	01/12/2017	03/05/2019	11/11/2019
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	01/25/2023	02/02/2023	02/28/2023
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	12/13/2022	12/14/2022	03/10/2023
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	01/06/2023	02/02/2023	02/10/2023
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	07/26/2021	07/27/2021	10/22/2021
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2020	11/30/2021	02/22/2022
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	07/30/2021	02/03/2023	02/10/2023
US	Delisted NPL	National Priority List Deletions	EPA	01/25/2023	02/02/2023	02/28/2023
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	01/25/2023	02/02/2023	02/28/2023

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/06/2023	03/09/2023	03/20/2023
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/13/2022	12/14/2022	03/10/2023
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	01/02/2020	01/28/2020	04/17/2020
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	01/06/2023	02/02/2023	02/10/2023
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	02/23/2022	03/10/2022	03/10/2022
US	DOD	Department of Defense Sites	USGS	06/07/2021	07/13/2021	03/09/2022
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	04/02/2018	04/11/2018	11/06/2019
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	11/01/2022	11/10/2022	02/09/2023
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	08/30/2019	11/15/2019	01/28/2020
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	11/07/2022	11/17/2022	02/10/2023
US	MINES VIOLATIONS	MSHA Violation Assessment Data	DOL, Mine Safety & Health Admi	02/27/2023	03/01/2023	03/24/2023
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	05/06/2020	05/27/2020	08/13/2020
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	PRP	Potentially Responsible Parties	EPA	10/27/2022	11/01/2022	11/15/2022
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2021	11/01/2022	02/09/2023
US	TSCA	Toxic Substances Control Act	EPA	12/31/2020	06/14/2022	03/24/2023
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	SSTS	Section 7 Tracking Systems	EPA	10/17/2022	10/18/2022	01/10/2023
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	PADS	PCB Activity Database System	EPA	01/20/2022	01/20/2022	03/25/2022
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	10/26/2022	11/22/2022	12/05/2022
US	RADINFO	Radiation Information Database	Environmental Protection Agency	07/01/2019	07/01/2019	09/23/2019
US	FINDS	Facility Index System/Facility Registry System	EPA	02/02/2023	02/28/2023	03/24/2023
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RMP	Risk Management Plans	Environmental Protection Agency	04/27/2022	05/04/2022	05/10/2022
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2021	03/09/2023	03/20/2023
US	PWS	Public Water System Data	EPA	12/17/2013	01/09/2014	10/15/2014
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
US	ABANDONED MINES	Abandoned Mines	Department of Interior	12/20/2022	12/20/2022	03/10/2023
MA	AIRS	Permitted Facilities Listing	Department of Environmental Protection	01/12/2023	01/13/2023	03/30/2023
MA	ASBESTOS	Asbestos Notification Listing	Department of Environmental Protection	11/16/2022	11/17/2022	02/13/2023
MA	DRYCLEANERS	Regulated Drycleaning Facilities	Department of Environmental Protection	12/07/2022	12/13/2022	01/12/2023
MA	ENFORCEMENT	Enforcement Action Cases	Department of Environmental Quality	01/09/2023	01/10/2023	01/12/2023
MA	Financial Assurance 1	Financial Assurance Information Listing	Department of Environmental Protection	12/01/2010	12/23/2010	02/03/2011
MA	Financial Assurance 2	Financial Assurance Information Listing	Office of State Fire Marshal	01/11/2023	01/12/2023	03/06/2023
MA	Financial Assurance 3	Financial Assurance Information listing	Department of Environmental Protection	10/24/2022	01/12/2023	03/07/2023
MA	GWDP	Ground Water Discharge Permits	MassGIS	12/29/2021	01/25/2022	04/18/2022
MA	HW GEN	List of Massachusetts Hazardous Waste Generators	Department of Environmental Protection	11/18/2022	12/14/2022	03/06/2023
MA	LIENS	Liens Information Listing	Department of Environmental Protection	03/07/2018	03/09/2018	06/21/2018
MA	MA SPILLS	Historical Spill List	Department of Environmental Protection	09/30/1993	12/03/2003	12/31/2003
MA	MERCURY	Mercury Product Recyling Drop-Off Locations Listing	Department of Environmental Protection	09/26/2022	09/26/2022	12/09/2022

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
MA	NPDES	NPDES Permit Listing	Department of Environmental Protection	12/16/2022	02/07/2023	02/14/2023
MA	RELEASE	Reportable Releases	Department of Environmental Protection	01/08/2023	01/19/2023	03/21/2023
MA	SPILLS 80	SPILLS80 data from FirstSearch	FirstSearch	03/10/1998	01/03/2013	03/05/2013
MA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	12/11/2012	01/03/2013	02/08/2013
MA	TIER 2	Tier 2 Information Listing	Massachusetts Emergency Management Agency	12/31/2019	07/19/2021	08/17/2021
MA	TSD	TSD Facility	Department of Environmental Protection	11/18/2022	12/14/2022	03/06/2023
MA	UIC	Underground Injection Control Listing	Department of Environmental Protection	03/10/2022	03/15/2022	06/10/2022
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	11/10/2022	11/10/2022	02/09/2023
US	PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	PFAS FEDERAL SITES	Federal Sites PFAS Information	Environmental Protection Agency	02/23/2022	03/31/2022	11/08/2022
US	PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing	Environmental Protection Agency	08/22/2018	10/26/2022	11/08/2022
US	PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing	Environmental Protection Agency	08/22/2018	03/31/2022	11/08/2022
US	PFAS WQP	Ambient Environmental Sampling for PFAS	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	PFAS TSCA	PFAS Manufacture and Imports Information	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
MA	PFAS	PFAS Contaminated Sites Listing	Department of Environmental Protection	12/09/2022	12/12/2022	03/06/2023
US	PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing	Environmental Protection Agency	02/23/2022	03/31/2022	11/08/2022
US	UXO	Unexploded Ordnance Sites	Department of Defense	11/09/2021	10/20/2022	01/10/2023
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	12/20/2022	12/21/2022	03/10/2023
US	PFAS TRIS	List of PFAS Added to the TRI	Environmental Protection Agency	03/07/2023	03/07/2023	03/24/2023
US	PFAS NPDES	Clean Water Act Discharge Monitoring Information	Environmental Protection Agency	01/03/2022	03/31/2022	11/08/2022
US	PFAS ATSDR	PFAS Contamination Site Location Listing	Department of Health & Human Services	06/24/2020	03/17/2021	11/08/2022
US	MINES MRDS	Mineral Resources Data System	USGS	08/23/2022	11/22/2022	02/28/2023
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	09/25/2022	09/30/2022	12/22/2022
US	PFAS NPL	Superfund Sites with PFAS Detections Information	Environmental Protection Agency	02/23/2022	07/08/2022	11/08/2022
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/06/2021	05/21/2021	08/11/2021
HISTORICAL USE RECORDS						
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
MA	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Environmental Protection		07/01/2013	12/24/2013
MA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Environmental Protection		07/01/2013	12/24/2013

STREET AND ADDRESS INFORMATION

© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX H

ASTM 1527-13 USER QUESTIONNAIRE

ASTM E1527-13 USER QUESTIONNAIRE

When the "user" (the party for whom the assessment is being prepared) of the Phase I is required to help the environmental professional identify recognized environmental conditions at the property, a "User Questionnaire" is completed by the user to help gather information that may identify recognized environmental conditions at the property.

We ask that you answer the six questions below to the best of your knowledge. We understand that, in some circumstances, you may have little or no information. Still, we encourage you to complete and return the questionnaire as soon as possible. This will allow us to reflect the fact that the Questionnaire was completed when we issue our report as is required. Completion of the assessment to the new standard, when conducted in connection with the asset purchase of a real property, may entitle the user to certain federal liability protections that result from conducting "All Appropriate Inquiries" into the previous ownership and uses of a property.

On the second page of this form is a list of documentation. The E1527-13 Standard requires that the User will ensure that the consultant is made aware that any of these materials exist for a site, and if so, that these documents be provided for the consultant's review. Please indicate whether any of these documents are available, and ensure that Environmental Services Company will either receive copies or be provided an opportunity to review the relevant materials.

We appreciate your assistance. If you have any questions, feel free to contact us.

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
   No

2. Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?
   No

3. As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? No

4. Does the purchase price/loan amount for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? Yes

5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user, (a.) Do you know the past uses of the property? (b.) Do you know of specific chemicals that are present or once were present at the property? (c.) Do you know of spills or other chemical releases that have taken place at the property? (d.) Do you know of any environmental cleanups that have taken place at the property? All No

6. As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?
   No

ASTM E1527-13 USER QUESTIONNAIRE

As part of this study, which of the following are you providing?

1. Previous environmental site assessment reports ◯ Yes ◉ No
2. Environmental compliance audit reports ◯ Yes ◉ No
3. Environmental permits (including but not limited to solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits) ◯ Yes ◉ No
4. Registrations for underground and aboveground storage tanks ◯ Yes ◉ No
5. Registrations for underground injection systems ◯ Yes ◉ No
6. Material safety data sheets ◯ Yes ◉ No
7. Community Right-to-Know plan ◯ Yes ◉ No
8. Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc. ◯ Yes ◉ No
9. Reports regarding hydrogeologic conditions on the property or surrounding area ◯ Yes ◉ No
10. Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property ◯ Yes ◉ No
11. Hazardous waste generator notices or reports ◯ Yes ◉ No
12. Geotechnical studies ◯ Yes ◉ No
13. Risk assessments ◯ Yes ◉ No
14. Recorded Activity and Use Limitations (AULs). ◯ Yes ◉ No

Please contact us if you have any questions regarding these ASTM requirements.

Please Return to Environmental & Construction Management Services, Inc.
via email to kevin.kavanaugh@ecmsinc.com

Completed by: Robert Cunha

Signature: _____

Title: Director of Operations

Company: Burlington Public Schools

Relationship to site
(i.e. lender, purchaser,owner): Owner's Rep

Date: 4/24/23

UEC universal environmental consultants

February 6, 2023

Ms. Christina Dell Angelo
Dore & Whittier Architects
260 Merrimac Street
Newburyport, MA 01950

Reference: Hazardous Materials Determination Survey
Fox Hill Elementary School, Burlington, MA

Dear Ms. Angelo:

Thank you for the opportunity for Universal Environmental Consultants (UEC) to provide professional services.

Enclosed please find the report for hazardous materials determination survey at Fox Hill Elementary School, Burlington, MA.

Please do not hesitate to call should you have any questions.

Very truly yours,

Universal Environmental Consultants

Ammar M. Dieb
President

UEC:\223 030.00\Report.DOC

Enclosure

REPORT
FOR
HAZARDOUS MATERIALS DETERMINATION
SURVEY
AT THE
FOX HILL ELEMENTARY SCHOOL
BURLINGTON, MASSACHUSETTS

PROJECT NO: 223 030.00

Survey Date:
January 30, 2023

SURVEY CONDUCTED BY:

UNIVERSAL ENVIRONMENTAL CONSULTANTS
12 BREWSTER ROAD
FRAMINGHAM, MA 01702

INTRODUCTION:
UEC has been providing comprehensive asbestos services since 2001 and has completed projects throughout New England. We have completed projects for a variety of clients including commercial, industrial, municipal, and public and private schools. We maintain appropriate asbestos licenses and staff with a minimum of thirty-three years of experience.

UEC was contracted by Dore & Whittier Architects to conduct the following services at the Fox Hill Elementary School, Burlington, MA:

- Inspection and Testing for Asbestos Containing Materials (ACM).
- Inspection for Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures.
- Inspection for PCB's-Caulking.
- Inspection for Lead Based Paint (LBP).
- Airborne Mold inspection and sampling.
- Radon sampling.
- Mercury in Rubber Flooring inspection and sampling.

A comprehensive survey per the Environmental Protection Agency (EPA) NESHAP regulation would be required prior to any renovation or demolition activities.

The scope of work included the inspection of accessible ACM, collection of bulk samples from materials suspected to contain asbestos, determination of types of ACM found and cost estimates for remediation. Bulk samples analyses for asbestos were performed using the standard Polarized Light Microscopy (PLM) in accordance with EPA standard. Bulk samples were collected by a Massachusetts licensed asbestos inspector Mr. Jason Becotte (AI-034963) and analyzed by a Massachusetts licensed laboratory EMSL, Woburn, MA.

Airborne mold samples were analyzed by an EPA trained laboratory EMSL, Woburn, MA.

Radon samples were analyzed by an EPA licensed laboratory AccuStar, Ward Hill, MA.

Refer to samples results.

FINDINGS:
Asbestos Containing Materials (ACM):
The regulations for asbestos inspection are based on representative sampling. It would be impractical and costly to sample all materials in all areas. Therefore, representative samples of each homogenous area were collected and analyzed or assumed. All suspect materials were grouped into homogenous areas. By definition a homogenous area is one in which the materials are evenly mixed and similar in appearance and texture throughout. A homogeneous area shall be determined to be ACM based on findings that the results of at least one sample collected from that area shows that asbestos is present in an amount of 1 percent or greater in accordance with EPA regulations.

All suspect materials that contain any amount of asbestos must be considered asbestos if it is scheduled to be removed per the Department of Environmental Protection (DEP) regulations.

Number of Samples Collected
Sixty-four (64) bulk samples were collected from the following materials suspected of containing asbestos:

Type and Location of Material

1. Interior door glazing caulking at hallway
2. Interior door glazing caulking at room 22

3. Interior window glazing caulking at hallway
4. Interior window glazing caulking at hallway
5. Black sink coating at room 2
6. Black sink coating at room 20
7. Grey sink coating at library work room
8. Grey sink coating at library work room
9. 2’ x 4’ Suspended acoustical ceiling tile at generator room
10. 2’ x 4’ Suspended acoustical ceiling tile at teacher’s room
11. Grey 12” x 12” vinyl floor tile at Pod 3 storage
12. Grey 12” x 12” vinyl floor tile at Pod 3 storage
13. Mastic for grey 12” x 12” vinyl floor tile at Pod 3 storage
14. Mastic for grey 12” x 12” vinyl floor tile at Pod 3 storage
15. White/grey 12” x 12” vinyl floor tile at hallway
16. White/grey 12” x 12” vinyl floor tile at room 2
17. Mastic for white/grey 12” x 12” vinyl floor tile at hallway
18. Mastic for white/grey 12” x 12” vinyl floor tile at room 2
19. Off white/grey 12” x 12” vinyl floor tile at room 10
20. Off white/grey 12” x 12” vinyl floor tile at room 21
21. Mastic for off white/grey 12” x 12” vinyl floor tile at room 10
22. Mastic for off white/grey 12” x 12” vinyl floor tile at room 21
23. White/grey streaks 12” x 12” vinyl floor tile at work room
24. White/grey streaks 12” x 12” vinyl floor tile at room 20
25. Mastic for white/grey streaks 12” x 12” vinyl floor tile at work room
26. Mastic for white/grey streaks 12” x 12” vinyl floor tile at room 20
27. White/light brown 12” x 12” vinyl floor tile at hallway along gymnasium
28. White/light brown 12” x 12” vinyl floor tile at Pod 3
29. Mastic for white/light brown 12” x 12” vinyl floor tile at hallway along gymnasium
30. Mastic for white/light brown 12” x 12” vinyl floor tile at Pod 3
31. Tan/brown 12” x 12” vinyl floor tile at kitchen bathroom
32. Tan/brown 12” x 12” vinyl floor tile at teacher’s room
33. Mastic for tan/brown 12” x 12” vinyl floor tile at kitchen bathroom
34. Mastic for tan/brown 12” x 12” vinyl floor tile at teacher’s room
35. Lime 12” x 12” vinyl floor tile at room 9
36. Lime 12” x 12” vinyl floor tile at room 9
37. Mastic for lime 12” x 12” vinyl floor tile at room 9
38. Mastic for lime 12” x 12” vinyl floor tile at room 9
39. Hard joint insulation at boiler room
40. Hard joint insulation at boiler room
41. Hard joint insulation at boiler room
42. Tank insulation at boiler room
43. Tank insulation at boiler room
44. Tank insulation at boiler room
45. Boiler exhaust insulation at boiler room
46. Boiler exhaust insulation at boiler room
47. Boiler exhaust insulation at boiler room
48. Textured plaster at entry portico
49. Textured plaster at entry portico
50. Textured plaster at entry portico
51. Textured plaster at entry portico
52. Textured plaster at entry portico
53. Round light gasket at entry portico
54. Round light gasket at entry portico
55. Exterior window framing caulking
56. Exterior window framing caulking

57. Exterior window framing caulking
58. Exterior window framing caulking
59. Exterior door framing caulking
60. Exterior door framing caulking
61. Exterior door framing caulking
62. Exterior expansion joint caulking
63. Exterior expansion joint caulking
64. Exterior expansion joint caulking

Samples Results

Type and Location of Material	**Sample Result**
1. Interior door glazing caulking at hallway	2% Asbestos
2. Interior door glazing caulking at room 22	2% Asbestos
3. Interior window glazing caulking at hallway	2% Asbestos
4. Interior window glazing caulking at hallway	2% Asbestos
5. Black sink coating at room 2	3% Asbestos
6. Black sink coating at room 20	3% Asbestos
7. Grey sink coating at library work room	4% Asbestos
8. Grey sink coating at library work room	4% Asbestos
9. 2’ x 4’ Suspended acoustical ceiling tile at generator room	No Asbestos Detected
10. 2’ x 4’ Suspended acoustical ceiling tile at teacher’s room	No Asbestos Detected
11. Grey 12” x 12” vinyl floor tile at Pod 3 storage	5% Asbestos
12. Grey 12” x 12” vinyl floor tile at Pod 3 storage	5% Asbestos
13. Mastic for grey 12” x 12” vinyl floor tile at Pod 3 storage	10% Asbestos
14. Mastic for grey 12” x 12” vinyl floor tile at Pod 3 storage	10% Asbestos
15. White/grey 12” x 12” vinyl floor tile at hallway	No Asbestos Detected
16. White/grey 12” x 12” vinyl floor tile at room 2	No Asbestos Detected
17. Mastic for white/grey 12” x 12” vinyl floor tile at hallway	5% Asbestos
18. Mastic for white/grey 12” x 12” vinyl floor tile at room 2	5% Asbestos
19. Off white/grey 12” x 12” vinyl floor tile at room 10	8% Asbestos
20. Off white/grey 12” x 12” vinyl floor tile at room 21	7% Asbestos
21. Mastic for off white/grey 12” x 12” vinyl floor tile at room 10	10% Asbestos
22. Mastic for off white/grey 12” x 12” vinyl floor tile at room 21	10% Asbestos
23. White/grey streaks 12” x 12” vinyl floor tile at work room	4% Asbestos
24. White/grey streaks 12” x 12” vinyl floor tile at room 20	4% Asbestos
25. Mastic for white/grey streaks 12” x 12” vinyl floor tile at work room	8% Asbestos
26. Mastic for white/grey streaks 12” x 12” vinyl floor tile at room 20	7% Asbestos
27. White/light brown 12” x 12” vinyl floor tile at hallway along gymnasium	No Asbestos Detected
28. White/light brown 12” x 12” vinyl floor tile at Pod 3	No Asbestos Detected
29. Mastic for white/light brown 12” x 12” vinyl floor tile at hallway along gymnasium	3% Asbestos
30. Mastic for white/light brown 12” x 12” vinyl floor tile at Pod 3	3% Asbestos
31. Tan/brown 12” x 12” vinyl floor tile at kitchen bathroom	6% Asbestos
32. Tan/brown 12” x 12” vinyl floor tile at teacher’s room	6% Asbestos
33. Mastic for tan/brown 12” x 12” vinyl floor tile at kitchen bathroom	6% Asbestos
34. Mastic for tan/brown 12” x 12” vinyl floor tile at teacher’s room	7% Asbestos
35. Lime 12” x 12” vinyl floor tile at room 9	6% Asbestos
36. Lime 12” x 12” vinyl floor tile at room 9	6% Asbestos
37. Mastic for lime 12” x 12” vinyl floor tile at room 9	8% Asbestos
38. Mastic for lime 12” x 12” vinyl floor tile at room 9	7% Asbestos
39. Hard joint insulation at boiler room	2% Asbestos
40. Hard joint insulation at boiler room	2% Asbestos
41. Hard joint insulation at boiler room	3% Asbestos
42. Tank insulation at boiler room	65% Asbestos

43. Tank insulation at boiler room	65% Asbestos
44. Tank insulation at boiler room	65% Asbestos
45. Boiler exhaust insulation at boiler room	60% Asbestos
46. Boiler exhaust insulation at boiler room	60% Asbestos
47. Boiler exhaust insulation at boiler room	No Asbestos Detected
48. Textured plaster at entry portico	No Asbestos Detected
49. Textured plaster at entry portico	No Asbestos Detected
50. Textured plaster at entry portico	No Asbestos Detected
51. Textured plaster at entry portico	No Asbestos Detected
52. Textured plaster at entry portico	No Asbestos Detected
53. Round light gasket at entry portico	90% Asbestos
54. Round light gasket at entry portico	90% Asbestos
55. Exterior window framing caulking	4% Asbestos
56. Exterior window framing caulking	4% Asbestos
57. Exterior window framing caulking	3% Asbestos
58. Exterior window framing caulking	3% Asbestos
59. Exterior door framing caulking	No Asbestos Detected
60. Exterior door framing caulking	2% Asbestos
61. Exterior door framing caulking	2% Asbestos
62. Exterior expansion joint caulking	2% Asbestos
63. Exterior expansion joint caulking	3% Asbestos
64. Exterior expansion joint caulking	3% Asbestos

Observations and Conclusions:
The condition of ACM is very important. ACM in good condition does not present a health issue unless it is disturbed. Therefore, it is not necessary to remediate ACM in good condition unless it will be disturbed through renovation, demolition or other activity.

1. Interior door glazing caulking was found to contain asbestos.
2. Interior window glazing caulking was found to contain asbestos.
3. Black sink coating was found to contain asbestos.
4. Grey sink coating was found to contain asbestos.
5. Various types of 12” x 12” vinyl floor tiles were found to contain asbestos.
6. Mastic for various types of 12” x 12” vinyl floor tiles were found to contain asbestos.
7. Hard joint insulation was found to contain asbestos.
8. Tank insulation was found to contain asbestos.
9. Boiler exhaust insulation was found to contain asbestos.
10. Round light gasket was found to contain asbestos.
11. Exterior window framing caulking was found to contain asbestos.
12. Exterior door framing caulking was found to contain asbestos.
13. Exterior expansion joint caulking was found to contain asbestos.
14. Brick within kiln in the boiler room was assumed to contain asbestos.
15. Glue holding chalk/tack boards was assumed to contain asbestos.
16. Bedding/grout for ceramic tiles was assumed to contain asbestos.
17. Paper/mastic under hardwood flooring were assumed to contain asbestos.
18. Insulation inside boilers was assumed to contain asbestos.
19. Insulation inside incinerator was assumed to contain asbestos.
20. Roofing material was assumed to contain asbestos. Roofing material does not have to be removed by a licensed asbestos contractor. However, the Demolition/Roofing Contractor must comply with OSHA regulation during demolition and with state regulations for proper disposal. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval
21. Damproofing on exterior and foundation walls was assumed to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.

22. Underground sewer pipes were assumed to contain asbestos.
23. Thru-wall flashing was assumed to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
24. All other suspect materials were found not to contain asbestos. Hidden ACM may be found during demolition activities.

Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures:
Observations and Conclusions
Visual inspection of various equipment such as light fixtures, thermostats, exit signs and switches was performed for the presence of PCB's and mercury. Ballasts in light fixtures were assumed not to contain PCB's since there were labels indicating that "No PCB's" was found. Tubes in light fixtures, thermostats, signs and switches were assumed to contain mercury. It would be very costly to test those equipment and dismantling would be required to access. Therefore, the above-mentioned equipment should be disposed in an EPA approved landfill as part of the demolition project.

PCB's in Caulking:
Observations and Conclusions
Caulking was assumed to contain PCB's.

Lead Based Paint (LBP):
Observations and Conclusions
LBP was assumed to exit on painted surfaces. A school is not considered a regulated facility. All LBP activities performed, including waste disposal, should be in accordance with applicable Federal, State, or local laws, ordinances, codes, or regulations governing evaluation and hazard reduction. In the event of discrepancies, the most protective requirements prevail. These requirements can be found in OSHA 29 CFR 1926-Construction Industry Standards, 29 CFR 1926.62-Construction Industry Lead Standards, 29 CFR 1910.1200-Hazards Communication, 40 CFR 261-EPA Regulations. According to OSHA, any amount of LBP triggers compliance.

Airborne Mold:
Airborne mold testing was performed utilizing Zefon International Incorporated's Air-O-Cell® sampling device following all manufacturer supplied recommended sampling procedures.

The Air-O-Cell® is a direct read total particulate air sampling device. It works using the inertial impaction principle similar to other spore trap devices. It is designed for the rapid collection and analysis of airborne particulate including bioaerosols. The particulate includes fibers (e.g. asbestos, fiberglass, cellulose, clothing fibers) opaque particles (e.g. fly ash, combustion particles, copy toner, oil droplets, paint), and bioaerosols (e.g. mold spores, pollen, insect parts, skin cell fragments).[1]

The method involves drawing a known quantity of air through a sterile sampling cassette. Subsequent to sampling, the cassette is sealed and transferred to a microbiology laboratory under chain of custody protocol for microscopic analysis. This method counts both viable and nonviable mold spores.

AIRBORNE MOLD and PARTICULATE

Lab ID #	Location	Total Mold Counts/M^3	Pollen	Insect Fragment	Hyphal Fragments
132300629-0001	Room 6	140	ND	ND	ND
132300629-0002	Room 2	ND	ND	ND	ND

[1] Zefon International Inc. <www.zefon.com>

Lab ID #	Location	Total Mold Counts/M³	Pollen	Insect Fragment	Hyphal Fragments
132300629-0003	Room 16	100	20	ND	ND
132300629-0004	Room 20	20	ND	ND	40
132300629-0005	Room 27	ND	ND	ND	20
132300629-0006	Room 23	Present	ND	ND	Present
132300629-0007	Room 13	ND	ND	ND	ND
132300629-0008	Room 9	60	ND	ND	ND
132300629-0009	Library	80	ND	ND	ND
132300629-0010	Teacher's Room	100	ND	ND	ND
132300629-0011	Outside	140	ND	ND	20

AIRBORNE MOLD and PARTICULATE
(Subjective Scales)

Lab ID #	Location	Skin Fragment Density (SFD)	Fibrous Particulates (FP)	Total Background Particulate (TBP)
132300629-0001	Room 6	1	1	2
132300629-0002	Room 2	1	1	1
132300629-0003	Room 16	1	1	3
132300629-0004	Room 20	1	1	2
132300629-0005	Room 27	1	1	2
132300629-0006	Room 23	1	1	5
132300629-0007	Room 13	1	1	1
132300629-0008	Room 9	1	1	1
132300629-0009	Library	1	1	2
132300629-0010	Teacher's Room	1	1	3
132300629-0011	Outside	1	1	2

Legend:
ND - Not Detected

Observations:
There are currently no guidelines or standards promulgated by a government agency or widely recognized scientific organization for the interpretation of airborne mold spore levels. The most commonly employed tool used to assess if mold growth is occurring in a structure is to compare quantities and species of mold outdoors to indoor. If there were more mold indoor, and/or if species were present indoor which were not present outdoors, then growth is occurring, and remediation is recommended.

Based on comparisons with historical data from projects of similar type, building utilization, geographic location and season, the indoor airborne levels are considered average. Indoor mold spore counts in the winter are typically in the 500-1,500-spores/cubic meter range.

Pollen, insect fragments and Hyphal fragments were either not present or low in the samples. Hyphal fragment is a non-reproductive part of the mold.

Total background particulate on all samples was assessed as "1-5" on a scale of 1-5 where 1 is low and 5 is high. Skin fragment density on all samples was assessed as "1" on a scale of 1-4 where 1 is low and 4 is high. The total background levels are measured to determine airborne dust not related to airborne mold. Skin fragments are measured to determine proper housing cleaning.

Radon:
Number of Samples Collected
Ten (10) air samples were collected at the following locations:

Location of Sample

1. Room 6
2. Room 2
3. Room 16
4. Room 20
5. Room 27
6. Room 23
7. Room 13
8. Room 9
9. Library
10. Teacher's Room

Location of Sample	Sample Result
1. Room 6	0.8 pCi\L
2. Room 2	<0.4 pCi\L
3. Room 16	0.4 pCi\L
4. Room 20	0.4 pCi\L
5. Room 27	0.6 pCi\L
6. Room 23	<0.4 pCi\L
7. Room 13	0.6 pCi\L
8. Room 9	0.5 pCi\L
9. Library	1.1 pCi\L
10. Teacher's Room	0.5 pCi\L

Observations and Conclusions:
The measured radon concentrations of the samples were found to be much lower than the EPA guideline of 4 picoCuris of radon per liter of air (pCi/L). No further action is required based on the results.

Mercury in Rubber Flooring:
Observations and Conclusions:
No rubber flooring exists in the school.

COST ESTIMATES:
The cost includes removal and disposal of all accessible ACM, other hazardous materials and an allowance for removal and disposal of inaccessible or hidden ACM that may be found during the demolition project.

Location	Material	Approximate Quantity	Cost Estimate ($)
Various Locations	Flooring Materials and Mastic	37,000 SF	222,000.00
	Interior Windows/Doors	140 Total	42,000.00
	Sink Damproofing	30 Total	6,000.00
	Hard Joint Insulation	50 Total	4,500.00
	Chalkboards/Tackboards	65 Total	19,500.00
	Hidden Hard Joint Insulation	Unknown	25,000.00
	Miscellaneous Hazardous Materials	Unknown	15,000.00
	Light Fixtures	Unknown	37,500.00
Kitchen	Ceramic Tiles	1,600 SF	16,000.00
Gymnasium	Hardwood Flooring/Paper and Mastic	3,700 SF	37,000.00
Stage	Hardwood Flooring/Paper and Mastic	1,000 SF	10,000.00
Boiler Room	Hard Joint Insulation	60 Total	2,400.00
	Tank Insulation	110 SF	4,400.00
	Boiler Exhaust Insulation	250 SF	7,500.00
	Boilers	2 Total	18,000.00
	Incinerator	1 Total	11,500.00
	Kiln	1 Total	500.00
Exterior Portico	Round Light Gasket	25 Lights	7,500.00
Exterior	Windows	160 Total	64,000.00
	Doors	35 Total	7,000.00
	Expansion Joint	80 LF	2,400.00
	Transite Sewer Pipes	Unknown[1]	50,000.00
	Damproofing on Walls	2,000 Tons	400,000.00
	Roofing Materials	Unknown	80,000.00
PCB's Remediation[2]			50,000.00
Estimated costs for PCB's Testing and Abatement Plans Services[2]			10,000.00
Estimated costs for NESHAP Inspection and Testing Services			11,500.00
Estimated costs for Design, Construction Monitoring and Air Sampling Services			158,800.00
		Total:	**1,320,000.00**
		Total:	**1,500,000.00**[3]

[1]: Part of total demolition. [2]: Should results exceed EPA limit. [3]: Work to be Performed by a CM at Risk Contractor.

DESCRIPTION OF SURVEY METHODS AND LABORATORY ANALYSES:

Asbestos:

Asbestos samples were collected using a method that prevents fiber release. Homogeneous sample areas were determined by criteria outlined in EPA document 560/5-85-030a. Bulk material samples were analyzed using PLM and dispersion staining techniques with EPA /600/R-93/116 method.

Airborne Mold:

The samples were analyzed by an EPA approved laboratory EMSL, Woburn, MA.

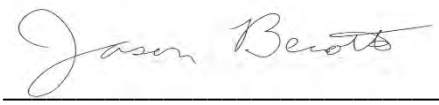
Radon:

Radon samples were analyzed by an EPA licensed laboratory AccuStar, Ward Hill, MA.

LIMITATIONS AND CONDITIONS:
This report has been completed based on visual and physical observations made and information available at the time of the site visits, as well as an interview with the Owner's representatives. This report is intended to be used as a summary of available information on existing conditions with conclusions based on a reasonable and knowledgeable review of evidence found in accordance with normally accepted industry standards, state and federal protocols, and within the scope and budget established by the client. Any additional data obtained by further review must be reviewed by UEC and the conclusions presented herein may be modified accordingly.

This report and attachments, prepared for the exclusive use of Owner for use in an environmental evaluation of the subject site, are an integral part of the inspections and opinions should not be formulated without reading the report in its entirety. No part of this report may be altered, used, copied or relied upon without prior written permission from UEC, except that this report may be conveyed in its entirety to parties associated with Owner for this subject study.

Inspected By:



Jason Becotte
Asbestos Inspector

OrderID: 132300631

132300631

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Burlington, MA Building Name: Fox Hill school

Sample	Description of Material	Sample Location
1	Interior door glass glaze	Hallway
2	" "	Room 22
3	Interior window glaze	Hallway
4	" "	" "
5	Black sink coating	Room 2
6	" "	Room 20
7	Gray sink coating	Library work Room
8	" "	" "
9	2x4 SAT	Generator Room
10	" "	Teachers Room
11	Gray 12x12 VFT	Pod 3 storage
12	" "	" "
13	Black mastic	" "
14	" "	" "
15	white/Gray 12x12 VFT	Hallway
16	" "	Room 2
17	mastic	on # 15
18	" "	on # 16
19	off white/gray 12x12 VFT	Room 10
20	" "	Room 21

Reported By: Jason Becotte Date: 1-30-23 Due Date: **24-Hours**

Received By: Date:

REC'D RHB 0832
EMSL-BOSTON JAN 31 2023
DRP BY

132300631

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM

Town/City: Burlington, MA Building Name Fox Hill school

Sample	Description of Material	Sample Location
21	Black mastic	on # 19
22	" "	on # 20
23	white w/gray streak 12x12	work Room
24	" "	Room 20
25	Black mastic	on # 23
26	" "	on # 24
27	white/Light Brown 12x12 VFT	Hallway along gym
28	" "	Pod- 3
29	mastic	on # 27
30	" "	on # 28
31	Tan/Brown 12x12 VFT	Kitchen Bathroom
32	" "	Teachers Room
33	Black mastic	on # 31
34	" "	on # 32
35	Lime 12x12 VFT	Room 9
36	" "	" "
37	Black mastic	" "
38	" "	" "
39	Hard Joint Pipe Insulation	Boiler Room
40	" "	" "

Reported By: Jason Becotte Date: 1-30-23 Due Date: **24-Hours**

Received By: Date:

REC'D RHB 0850
EMSL-BOSTON JAN 31 2023

132300631

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM

Town/City: Burlington, MA Building Name Fox Hill School

Sample	Description of Material	Sample Location
41	Hard Joint Pipe Insulation	Boiler Room
42	Tank Insulation	Boiler Room
43		
44		
45	Boiler exhaust Insulation	Boiler Room
46		
47		
48	Textured plaster	entry Portico
49		
50		
51		
52		
53	Round Light Gasket	entry Portico
54		
55	window Frame caulk	exterior window at Brick
56		
57		
58		
59	Door Frame Caulk	exterior door at Brick
60		

Reported By: Jason Becotte Date: 1-30-23 Due Date: **24-Hours**

Received By: Date:

REC'D RJB 0832
EMSL-BOSTON JAN 31 2023

132300631

CHAIN OF CUSTODY

PLM

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Burlington, MA Building Name Fox Hill School

Sample	Description of Material	Sample Location
61	Door frame caulk	exterior Door at Brick
62	expansion Joint caulk	exterior Brick Joints
63		
64		

Reported By: Jason Beaute Date: 1-30-23 Due Date: **24-Hours**

Received By: Date: REC'D RHB 0830 EMSL-BOSTON JAN 31 2023

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300631
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone: (617) 984-9772
Fax: (508) 628-5488
Received Date: 01/31/2023 8:30 AM
Analysis Date: 02/01/2023
Collected Date: 01/30/2023

Project: Fox Hill School; Burlington, MA

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
1 *132300631-0001*	Hallway - Interior Door Glass Glaze	Gray Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
2 *132300631-0002*	Room 22 - Interior Door Glass Glaze	Gray Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
3 *132300631-0003*	Hallway - Interior Window Glaze	Gray Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
4 *132300631-0004*	Hallway - Interior Window Glaze	Gray Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
5 *132300631-0005*	Room 2 - Black Sink Coating	Gray Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
6 *132300631-0006*	Room 20 - Black Sink Coating	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
7 *132300631-0007*	Library Work Room - Gray Sink Coating	Gray Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
8 *132300631-0008*	Library Work Room - Gray Sink Coating	Gray Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
9 *132300631-0009*	Generator Room - 2x4 SAT	Gray/White Fibrous Homogeneous	55% Cellulose 10% Min. Wool	35% Non-fibrous (Other)	None Detected
10 *132300631-0010*	Teachers Room - 2x4 SAT	Gray/White Fibrous Homogeneous	55% Cellulose 10% Min. Wool	35% Non-fibrous (Other)	None Detected
11 *132300631-0011*	Pod 3 Storage - 12x12 Gray VFT	Gray Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
12 *132300631-0012*	Pod 3 Storage - 12x12 Gray VFT	Gray Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
13 *132300631-0013*	Pod 3 Storage - Black Mastic	Black Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
14 *132300631-0014*	Pod 3 Storage - Black Mastic	Black Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
15 *132300631-0015*	Hallway - 12x12 White/Gray VFT	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16 *132300631-0016*	Room 2 - 12x12 White/Gray VFT	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 02/01/2023 09:52:34

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300631
Customer ID: UEC63
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
17 *132300631-0017*	on #15 - Mastic	Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
18 *132300631-0018*	on #16 - Mastic	Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
19 *132300631-0019*	Room 10 - 12x12 Off-White/Gray VFT	Gray Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
20 *132300631-0020*	Room 21 - 12x12 Off-White/Gray VFT	Gray Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
21 *132300631-0021*	on #19 - Black Mastic	Black Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
22 *132300631-0022*	on #20 - Black Mastic	Black Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
23 *132300631-0023*	Work Room - 12x12 White w. Gray Streak	Gray/White Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
24 *132300631-0024*	Room 20 - 12x12 White w. Gray Streak	Gray/White Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
25 *132300631-0025*	on #23 - Black Mastic	Black Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
26 *132300631-0026*	on #24 - Black Mastic	Black Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
27 *132300631-0027*	Hallway along Gym - 12x12 White/Light Brown VFT	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28 *132300631-0028*	Pod 3 - 12x12 White/Light Brown VFT	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29 *132300631-0029*	on #27 - Mastic	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
30 *132300631-0030*	on #28 - Mastic	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
31 *132300631-0031*	Kitchen Bathroom - 12x12 Tan/Brown VFT	Brown/Tan Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
32 *132300631-0032*	Teachers Room - 12x12 Tan/Brown VFT	Brown/Tan Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
33 *132300631-0033*	on #31 - Black Mastic	Black Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
34 *132300631-0034*	on #32 - Black Mastic	Black Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
35 *132300631-0035*	Room 9 - 12x12 Lime VFT	Gray Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile

Initial report from: 02/01/2023 09:52:34

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300631
Customer ID: UEC63
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
36 *132300631-0036*	Room 9 - 12x12 Lime VFT	Gray Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
37 *132300631-0037*	Room 9 - Black Mastic	Black Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
38 *132300631-0038*	Room 9 - Black Mastic	Black Fibrous Homogeneous		93% Non-fibrous (Other)	7% Chrysotile
39 *132300631-0039*	Boiler Room - Hard Joint Pipe Insulation	Gray Fibrous Homogeneous	18% Min. Wool	80% Non-fibrous (Other)	2% Chrysotile
40 *132300631-0040*	Boiler Room - Hard Joint Pipe Insulation	Gray Fibrous Homogeneous	18% Min. Wool	80% Non-fibrous (Other)	2% Chrysotile
41 *132300631-0041*	Boiler Room - Hard Joint Pipe Insulation	Gray Fibrous Homogeneous	15% Min. Wool	82% Non-fibrous (Other)	3% Chrysotile
42 *132300631-0042*	Boiler Room - Tank Insulation	Gray Fibrous Homogeneous		35% Non-fibrous (Other)	65% Chrysotile
43 *132300631-0043*	Boiler Room - Tank Insulation	Gray Fibrous Homogeneous		35% Non-fibrous (Other)	65% Chrysotile
44 *132300631-0044*	Boiler Room - Tank Insulation	Gray Fibrous Homogeneous		35% Non-fibrous (Other)	65% Chrysotile
45 *132300631-0045*	Boiler Room - Boiler Exhaust Insulation	Gray Fibrous Homogeneous		35% Non-fibrous (Other)	65% Chrysotile
46 *132300631-0046*	Boiler Room - Boiler Exhaust Insulation	Gray Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
47 *132300631-0047*	Boiler Room - Boiler Exhaust Insulation	Gray Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
48 *132300631-0048*	Entry Portico - Textured Plaster	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
49 *132300631-0049*	Entry Portico - Textured Plaster	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
50 *132300631-0050*	Entry Portico - Textured Plaster	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
51 *132300631-0051*	Entry Portico - Textured Plaster	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
52 *132300631-0052*	Entry Portico - Textured Plaster	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
53 *132300631-0053*	Entry Portico - Round Light Gasket	Gray Fibrous Homogeneous		10% Non-fibrous (Other)	90% Chrysotile
54 *132300631-0054*	Entry Portico - Round Light Gasket	Gray Fibrous Homogeneous		10% Non-fibrous (Other)	90% Chrysotile

Initial report from: 02/01/2023 09:52:34

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300631
Customer ID: UEC63
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
55 *132300631-0055*	Exterior Window at Brick - Window Frame Caulk	Gray Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
56 *132300631-0056*	Exterior Window at Brick - Window Frame Caulk	Gray Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
57 *132300631-0057*	Exterior Window at Brick - Window Frame Caulk	Gray Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
58 *132300631-0058*	Exterior Window at Brick - Window Frame Caulk	Gray Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
59 *132300631-0059*	Exterior Door at Brick - Door Frame Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
60 *132300631-0060*	Exterior Door at Brick - Door Frame Caulk	Gray Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
61 *132300631-0061*	Exterior Door at Brick - Door Frame Caulk	Gray Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
62 *132300631-0062*	Exterior Brick Joints - Expansion Joint Caulk	Gray Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
63 *132300631-0063*	Exterior Brick Joints - Expansion Joint Caulk	Gray Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
64 *132300631-0064*	Exterior Brick Joints - Expansion Joint Caulk	Gray Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile

Analyst(s)
Ramon Buenaventura (64)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 “Interim Method”) but augmented with procedures outlined in the 1993 (”final”) version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, ME LB-0039

Initial report from: 02/01/2023 09:52:34

131302977

131302977

UEC universal environmental consultants
12 Brewster Road
Framingham, MA 01702
Phone: 508.628.5486
Fax: 508.628.5488

CHAIN OF CUSTODY

BUILDING / SITE NAME: Foxhill school
WORK AREA: Office
TOWN / CITY: Burlington
STATE: MA

Analysis Type	Turnaround Time (x) 6-8 Hr	12 Hr	24 Hr	48 Hr	72 hr
TEM / AHERA					
TEM / Level II					
TEM / Dust					
TEM / Bulk					
TEM / Water					
PLM			X		
Mold					
Other:					

Specific Project Notes

SAMPLE ID	MATERIAL DESCRIPTION	SAMPLE LOCATION	START	STOP	TIME	L/MIN	VOLUME
1	white 12"x12" VAT	storge room					
2		" "					
3		under carpet					
4	white 12"x12" VAT	" "					
5	Black mastic	storage room					
6		" "					
7		under carpet					
8	Black mastic	" "					

SAMPLED BY: Jason Bero 7-16-13 DATE/TIME: RECEIVED BY: DATE/TIME:
RELINQUISHED BY: DATE/TIME: RECEIVED IN LAB BY: DATE/TIME:

RECEIVED JUL 16 2013 By SA 13:12 W-IN

EMSL Analytical, Inc.
7 Constitution Way, Suite 107, Woburn, MA 01801
Phone/Fax: (781) 933-8411 / (781) 933-8412
bostonlab@emsl.com

EMSL Order:	131302977
CustomerID:	UEC63
CustomerPO:	
ProjectID:	

Attn: **Jason Becotte**
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone:	(508) 628-5486
Fax:	(508) 628-5488
Received:	07/16/13 1:12 PM
Analysis Date:	7/16/2013
Collected:	7/16/2013

Project: **Fox Hill School Office; Burlington, MA**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
1 *131302977-0001*	Storage Room - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
2 *131302977-0002*	Storage Room - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
3 *131302977-0003*	Under Carpet - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
4 *131302977-0004*	Under Carpet - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
5 *131302977-0005*	Storage Room - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**
6 *131302977-0006*	Storage Room - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**
7 *131302977-0007*	Under Carpet - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**
8 *131302977-0008*	Under Carpet - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**

Analyst(s)
Kevin Pine (8)

Renaldo Drakes, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

Initial report from 07/16/2013 15:51:12

THIS IS THE LAST PAGE OF THE REPORT.

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Burlington, MA Building Name Fox Hill school

Sample	Result	Description of Material	Sample Location
1		sheetrock 2x4 SAT	Cafeteria Storage room
2		sheet rock 2x4 SAT	Cafeteria Storage room

Reported By: Jason Becotte Date: 7-24-17 Due Date:

Received By: [signature] Date: 7-24-17

Asbestos Identification Laboratory

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

Batch: 24416

NVLAP®
Lab Code: 200919-0

July 25, 2017

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Number:
Project Name: Fox Hill School, Burlington, MA

Date Sampled: 2017-07-24
Work Received: 2017-07-24
Work Analyzed: 2017-07-24

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project .

The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

July 25, 2017

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Number:
Project Name: Fox Hill School, Burlington, MA

Date Sampled: 2017-07-24
Work Received: 2017-07-24
Work Analyzed: 2017-07-24

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 / 275096	Sheetrcok 2x4 SAT	Cafeteria Storage Room	gray	Fiberglass 2 Cellulose 20 Non-Fibrous 78	None Detected
2 / 275097	Sheetrcok 2x4 SAT	Cafeteria Storage Room	gray	Fiberglass 2 Cellulose 30 Non-Fibrous 68	None Detected

Tuesday 25 July 2017
Analyzed by:

End of Report

Batch: 24416

OrderID: 131800703

131800703

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Burlington, MA Building Name Fox Hill School

Sample	Result	Description of Material	Sample Location
1		Plaster cement	walk-In freezer wall
2		" "	" "
3		" "	" "
4		Cork	walk-In freezer insulation
5		"	" "
6		"	" "
7		Black tar on cork	walk-In freezer insulation
8		" "	" "
9		" "	" "

Reported By: Jason Beaute Date: 2-2-18 Due Date:

Received By: Date:

REC'D 16:15 EST
EMSL-BOSTON FEB 02 2018

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 131800703
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone: (617) 984-9772
Fax: (508) 628-5488
Received Date: 02/02/2018 4:15 PM
Analysis Date: 02/05/2018
Collected Date: 02/02/2018

Project: Fox Hill School / Burlington, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
1 *131800703-0001*	Walk-In Freezer Wall - Plaster Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2 *131800703-0002*	Walk-In Freezer Wall - Plaster Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3 *131800703-0003*	Walk-In Freezer Wall - Plaster Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4 *131800703-0004*	Walk-In Freezer Insulation - Cork	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5 *131800703-0005*	Walk-In Freezer Insulation - Cork	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6 *131800703-0006*	Walk-In Freezer Insulation - Cork	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7 *131800703-0007*	Walk-In Freezer Insulation - Black Tar on Cork	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8 *131800703-0008*	Walk-In Freezer Insulation - Black Tar on Cork	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9 *131800703-0009*	Walk-In Freezer Insulation - Black Tar on Cork	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Elizabeth Stutts (9)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 02/05/2018 12:14:31

OrderID: 131808190

131808190

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
48-hour TAT

Town/City: Burlington, MA Building Name Fox Hill School

Sample	Result	Description of Material	Sample Location
1		Rough Ceiling Plaster	Boiler room
2			
3			
4		Smooth Plaster	Cafeteria
5			
6			
7			
8			
9		2x4 SAT	Hall along Gym
10			Pod A
11		Joint compound	Kitchen Storage
12			PE office
13		Sheet rock	Kitchen Storage
14			PE office

Reported By: Jason Beaupre Date: 10-23-18 Due Date:

Received By: Date:

REC'D 8:14 AM 8:35
EMSL-BOSTON OCT 23 2018

UNIVERSAL ENVIRONMENTAL CONSULTANTS

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 131808190
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project: Fox Hill School / Burlington MA

Phone: (617) 984-9772
Fax: (508) 628-5488
Received Date: 10/23/2018 2:35 PM
Analysis Date: 10/25/2018
Collected Date: 10/23/2018

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1 *131808190-0001*	Boiler Room - Rough Ceiling Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2 *131808190-0002*	Boiler Room - Rough Ceiling Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3 *131808190-0003*	Boiler Room - Rough Ceiling Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4 *131808190-0004*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5 *131808190-0005*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6 *131808190-0006*	Cafeteria - Smooth Plaster	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
7 *131808190-0007*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8 *131808190-0008*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9 *131808190-0009*	Hall Along Gym - 2x4 SAT	Gray/White Fibrous Homogeneous	45% Cellulose 40% Min. Wool	15% Non-fibrous (Other)	None Detected
10 *131808190-0010*	Pod 4 - 2x4 SAT	Gray/White Fibrous Homogeneous	45% Cellulose 40% Min. Wool	15% Non-fibrous (Other)	None Detected
11 *131808190-0011*	Kitchen Storage - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12 *131808190-0012*	PE Office - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13 *131808190-0013*	Kitchen Storage - Sheet Rock	Brown/Gray Non-Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
14 *131808190-0014*	PE Office - Sheet Rock	Brown/Gray Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected

Initial report from: 10/25/2018 18:02:48

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	131808190
Customer ID:	UEC63
Customer PO:	
Project ID:	

Analyst(s)
John McCarthy (14)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 10/25/2018 18:02:48

OrderID: 132300629

132300629

UEC universal environmental consultants

12 Brewster Road
Framingham, MA 01702
Phone: 508.628.5486
Fax: 508.628.5488

CHAIN OF CUSTODY

BUILDING / SITE NAME: Fox Hill School
WORK AREA:
TOWN / CITY: Burlington
STATE: MA

Analysis Type	Turnaround Time (x)				
	6-8 Hr	12 Hr	24 Hr	48 Hr	72 hr
TEM / AHERA					
TEM / Level II					
TEM / Dust					
TEM / Bulk					
TEM / Water					
PLM					
Mold			X		
Other:					

Specific Project Notes

SAMPLE ID	MATERIAL DESCRIPTION	SAMPLE LOCATION	START	STOP	TIME	L/MIN	VOLUME
1	3517 3805	Room 6	1504	1514	10	15	150
2	3426 4644	Room 2	1508	1518	10	15	150
3	3517 3803	Room 16	1515	1525	10	15	150
4	3426 9396	Room 20	1519	1529	10	15	150
5	3426 4643	Room 27	1526	1536	10	15	150
6	3426 4639	Room 23	1531	1541	10	15	150
7	3426 4651	Room 13	1537	1547	10	15	150
8	3426 4635	Room 9	1542	1552	10	15	150
9	3426 4637	Library	1548	1558	10	15	150
10	3426 4646	Teachers Room	1553	1603	10	15	150
11	3426 4602	outside	1558	1608	10	15	150

SAMPLED BY: Jason Beattie DATE/TIME: 1-30-23
RECEIVED BY: DATE/TIME:
RELINQUISHED BY: DATE/TIME:
RECEIVED IN LAB BY: KHB 0830 DATE/TIME:

REC'D EMSL-BOSTON JAN 31 2023

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300629
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project: Fox Hill School; Burlington, MA

Phone: (617) 984-9772
Fax: (508) 628-5488
Collected Date: 01/30/2023
Received Date: 01/31/2023 08:30 AM
Analyzed Date: 01/31/2023

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132300629-0001			132300629-0002			132300629-0003		
Client Sample ID:	1			2			3		
Volume (L):	150			150			150		
Sample Location:	Room 6			Room 2			Room 16		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	4	80	57.1	-	-	-	3	60	60
Basidiospores	1	20	14.3	-	-	-	2	40	40
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1	20	14.3	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	1	20	14.3	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**7**	**140**	**100**	**-**	**None Detect**	**-**	**5**	**100**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	1	20	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	1	-	-	3	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager
or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA LAP, LLC-EMLAP Accredited #180179

Initial report from: 02/01/2023 08:02 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300629
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project: Fox Hill School; Burlington, MA

Phone: (617) 984-9772
Fax: (508) 628-5488
Collected Date: 01/30/2023
Received Date: 01/31/2023 08:30 AM
Analyzed Date: 01/31/2023

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132300629-0004			132300629-0005			132300629-0006		
Client Sample ID:	4			5			6		
Volume (L):	150			150			150		
Sample Location:	Room 20			Room 27			Room 23		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	1	20	100	-	-	-	-	-	-
Basidiospores	-	-	-	-	-	-	Present	Present	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	Present	Present	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	Present	Present	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**1**	**20**	**100**	**-**	**None Detect**	**-**	**-**	**-**	**-**
Hyphal Fragment	2	40	-	1	20	-	Present	Present	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	2	-	-	2	-	-	5	-

132300629-0006 - Overloaded

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager
or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA LAP, LLC-EMLAP Accredited #180179

Initial report from: 02/01/2023 08:02 AM

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300629
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project: Fox Hill School; Burlington, MA

Phone: (617) 984-9772
Fax: (508) 628-5488
Collected Date: 01/30/2023
Received Date: 01/31/2023 08:30 AM
Analyzed Date: 01/31/2023

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132300629-0007			132300629-0008			132300629-0009		
Client Sample ID:	7			8			9		
Volume (L):	150			150			150		
Sample Location:	Room 13			Room 9			Library		
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	1	20	25
Aspergillus/Penicillium	-	-	-	3	60	100	-	-	-
Basidiospores	-	-	-	-	-	-	2	40	50
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	-	-	-	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	1	20	25
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**-**	**None Detect**	**-**	**3**	**60**	**100**	**4**	**80**	**100**
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	2	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager
or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA LAP, LLC-EMLAP Accredited #180179

Initial report from: 02/01/2023 08:02 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132300629
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project: Fox Hill School; Burlington, MA

Phone: (617) 984-9772
Fax: (508) 628-5488
Collected Date: 01/30/2023
Received Date: 01/31/2023 08:30 AM
Analyzed Date: 01/31/2023

Test Report:Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number:	132300629-0010			132300629-0011					
Client Sample ID:	10			11					
Volume (L):	150			150					
Sample Location:	Teacher's Room			Outside					
Spore Types	**Raw Count**	**Count/m³**	**% of Total**	**Raw Count**	**Count/m³**	**% of Total**	-	-	-
Alternaria (Ulocladium)	-	-	-	-	-	-	-	-	-
Ascospores	-	-	-	-	-	-	-	-	-
Aspergillus/Penicillium	-	-	-	4	80	57.1	-	-	-
Basidiospores	2	40	40	2	40	28.6	-	-	-
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium++	-	-	-	-	-	-	-	-	-
Cladosporium	-	-	-	1	20	14.3	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	1	20	20	-	-	-	-	-	-
Fusarium++	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	2	40	40	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	**5**	**100**	**100**	**7**	**140**	**100**	-	-	-
Hyphal Fragment	1	20	-	1	20	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	-	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	-	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	-	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	-	-
Background (1-5)	-	3	-	-	2	-	-	-	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager
or other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. Skin & Fibrous ratings: 1 (1-25%), 2 (26-50%), 3 (51-75%), 4 (76-100%) of the background particles.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA LAP, LLC-EMLAP Accredited #180179

Initial report from: 02/01/2023 08:02 AM

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com

AccuStar
Professional Radon Laboratory Services Since 1984

Radon in Air

NELAC NY 11769
NRPP 103216 AL
NRSB ARL0017

EPA Method #402-R-92-004
Liquid Scintillation
NRPP Device Code 8088
NRSB Device Code 12193

Laboratory Report for:

Universal Environmental Consultant
12 Brewster Road
Framingham MA 01702

Property Tested:

Fox Hill School
Fox Hill Road
Burlington MA 01803

Log Number	Device Number	Test Exposure Duration:				Area Tested	Result pCi/L
8294242	4794754	01/30/2023	3:05 pm	02/02/2023	10:02 am	First Floor Room 6	0.8
8294243	4794755	01/30/2023	3:07 pm	02/02/2023	10:02 am	First Floor Room 2	< 0.4
8294244	4775968	01/30/2023	3:16 pm	02/02/2023	10:04 am	First Floor Room 16	0.4
8294245	4794753	01/30/2023	3:20 pm	02/02/2023	10:04 am	First Floor Room 20	0.4
8294246	4768495	01/30/2023	3:27 pm	02/02/2023	10:06 am	First Floor Room 27	0.6
8294247	4794752	01/30/2023	3:31 pm	02/02/2023	10:06 am	First Floor Room 23	< 0.4
8294248	4775967	01/30/2023	3:38 pm	02/02/2023	10:10 am	First Floor Room 13	0.6
8294249	4775971	01/30/2023	3:43 pm	02/02/2023	10:10 am	First Floor Room 9	0.5
8294250	4775966	01/30/2023	3:48 pm	02/02/2023	10:08 am	First Floor Library	1.1
8294251	4794748	01/30/2023	3:54 pm	02/02/2023	10:08 am	First Floor Teachers Room	0.5

Comment: Universal Environmental Consultant was emailed a copy of this report.

Test Performed By: Placed: Jason Becotte Retrieved: Jason Becotte

Distributed by: Universal Environmental Consultant

Date Received: 02/03/2023 Date Logged: 02/03/2023 Date Analyzed: 02/04/2023 Date Reported: 02/06/2023

Report Reviewed By: _____ Report Approved By: _____

Shawn Price, Director of Laboratory Operations, AccuStar Labs

Disclaimer:

The counting uncertainty of this radon measurement is ~+/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

This report may only be transferred to a third party in its entirety. Laboratory personnel were not involved in the placement or retrieval of the samples. Analytical results relate to the samples as received by the laboratory. Results shown on this report represent levels of radon gas measured between the dates shown in the room or area of the site identified above as "Property Tested". Incorrect information will affect results. The results may not be construed as either predictive or supportive of measurements conducted in any area of this structure at any other time. AccuStar Labs, its employees and agents are not responsible for the consequences of any action taken or not taken based upon the results reported or any verbal or written interpretation of the results.

BURLINGTON PUBLIC SCHOOLS

2021
AHERA THREE-YEAR
RE-INSPECTION REPORT
FOX HILL SCHOOL

1 Fox Hill Road
Burlington, MA

UNIVERSAL ENVIRONMENTAL CONSULTANTS
12 Brewster Road
Framingham, MA 01702

TABLE OF CONTENTS

CERTIFIED PERSONNEL INFORMATION

DESIGNATED PERSON INFORMATION

1.0 INTRODUCTION

2.0 SUMMARY

3.0 GLOSSARY OF TERMS

4.0 RESOURCES REQUIRED FOR THE LEA

5.0 RESOURCES REQUIRED TO-COMPLETE RESPONSE ACTIONS

6.0 OBSERVATIONS and RECOMMENDATIONS

7.0 DATES FOR RECOMMENDED RESPONSE ACTIONS

8.0 MATERIALS FOUND NOT TO CONTAIN ASBESTOS

RECORD KEEPING FORM
NOTES

SECTION 1
Local Education Agency (LEA) Designated Person Responsibility

SECTION 2
Asbestos Hazard Emergency Response Act (AHERA) surveillance inspections forms and third year asbestos re-inspection assessment spreadsheets

SECTION 3
Operation and Maintenance Plan
EPA AHERA Regulation

SECTION 4
Bulk Sampling
Recommended Work Practices for Removal of Resilient Floor Coverings.

CERTIFIED PERSONNEL INFORMATION

INSPECTOR INFORMATION

INSPECTOR NAME: Jason Becotte

CONSULTING FIRM: Universal Environmental Consultants

STATE OF ACCREDITATION: Massachusetts

ACCREDITATION NUMBER: AI-034963

I certify as an inspector that I have re-inspected the said building in accordance with AHERA regulations 40 CFR Part 763 Section 763.88.

INSPECTOR SIGNATURE: Jason Becotte

DATE: December 16, 2021

MANAGEMENT PLANNER INFORMATION

MANAGEMENT PLANNER NAME: Leonard Busa

CONSULTING FIRM: Universal Environmental Consultants

STATE OF ACCREDITATION: Massachusetts

ACCREDITATION NUMBER: AP-030673

I certify as a Management Planner that I have reviewed this re-inspection report for the said building in accordance with AHERA regulations 40 CFR Part 763 Section 763.88.

MANAGEMENT PLANNER SIGNATURE: Leonard Busa

DATE: December 23, 2021

DESIGNATED PERSON INFORMATION

NAME:	Steve J. Zarba Sr.
ADDRESS:	123 Cambridge Street, Burlington, MA 01803
PHONE:	(781) 273-3597
TRAINING FACILITY:	IEE
DATE OF TRAINING:	February 12, 2018

_____

Signature of Designated Person

DESIGNATED PERSON (DP) ASSURANCES

In accordance with 40 CFR § 763.93(i) of the Environmental Protection Agency (EPA) Asbestos Containing Material (ACM) in Schools regulation, the undersigned Local Education Agency (LEA) Designated Person (DP) hereby certifies that the following general responsibilities of the LEA under 40 CFR § 763.84 have been or will be met:

1. Ensure that the activities of any person, who perform inspections, re- inspections, and periodic surveillance, develop, and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763, Subpart E.
2. Ensure that all custodial and maintenance employees are properly trained as required by Part 763, Subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
3. Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic re-inspection and surveillance activities that are planned or in progress.
4. Ensure that short-term workers (e.g., telephone repair workers, utility workers, or ex terminators) who may come in contact with asbestos in a school are provided information regarding the locations for ACM and suspected ACM assumed to be Asbestos Containing Materials (ACM).
5. Ensure that warning labels are posted in accordance with § 40 CFR 763.95.
6. Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under § 40 CFR 763.93(g).
7. Designate a person to ensure that requirements under § 763.84 are properly implemented and ensure that the designated person receives adequate training to perform duties assigned under § 763.84. Such training shall provide, as necessary, basic knowledge of health effects of asbestos; detection, identification, and assessment of ACM; options for controlling ACM; asbestos management programs; relevant Federal and State regulations concerning asbestos, including those in Part 763, Subpart E and those of the Occupational Safety and Health Administration and the U.S. Environmental Protection Agency.
8. Consider whether any conflict of interest may arise from the inter-relationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under Part 763, Subpart E.

1.0 INTRODUCTION:

On October 22, 1986**,** President Reagan signed into law an amendment to the Toxic Substance Control Act requiring schools to determine the presence of ACM in all school buildings. That amendment, called the Asbestos Hazard Emergency Response Act (AHERA) required that all school buildings be visually inspected by accredited inspectors and that bulk samples of suspected materials are taken where the material was not assumed to be asbestos. It further required that management plans be created for each individual building and that the maintenance and custodial personnel receive training. The plan must be implemented, and the training must be completed by July 9, 1989. This document is the Asbestos Management Plan, which provides the means and the methods to effectively deal with ACM.

The AHERA regulation also requires that each school building be re-inspected every three years encompassing the following actions:

1. Visually re-inspect, and reassess, under 40 CFR Part 763 Section 763.88, the condition of all friable known or assumed ACM.
2. Visually inspect material that was previously considered non-friable ACM and touch the material to determine whether it has become friable since the last inspection or re-inspection.
3. Identify any homogeneous areas with material that has become friable since the last inspection or re-inspection.
4. For each homogeneous area of newly friable material that is already assumed to be ACM, bulk samples may be collected and submitted for analysis in accordance with 40 CFR Part 763 Section 763.86 and 40 CFR Part 763 Section 763.87.
5. Assess, under 40 CFR Part 763 Section 763.88, the condition of the newly friable material in areas where samples are collected and newly friable materials in areas that are assumed to be ACM.
6. Reassess, under 40 CFR Part 763 Section 763.88, the condition of friable known or assumed ACM previously identified.

All findings in this re-inspection report must be included in the original AHERA Management Plan.

2.0 SUMMARY:

A. Inspection:

All known or assumed to be ACM homogeneous areas were taken from the existing Management Plans and previous re-inspection reports or obtained during the inspection. Each of the ACM homogeneous[1] areas found in the existing Management Plans were reviewed and reassessed by the accredited inspector licensed in the State of Massachusetts. The reassessment was conducted by physically examining the ACM or suspect materials to determine friability and level of damage. These assessments can be found in the Inspection Spread Sheets, which also includes ACM, which found to be physically damaged that might requires corrective actions.

B. Inspection Spread Sheets of Asbestos Containing Materials:

The assessment chart contains homogeneous areas,' type of material, location of material, classification of ACM, friability and AHERA Assessment as follows:

AHERA ASSESSMENT CATEGORIES

CATEGORY 1	Damaged or significantly damaged thermal system insulation ACM
CATEGORY 2	Damaged friable surfacing ACM
CATEGORY 3	Significantly damaged friable surfacing ACM
CATEGORY 4	Damaged or significantly damaged friable miscellaneous ACM
CATEGORY 5	ACM with potential for damage
CATEGORY 6	ACM with potential for significant damage
CATEGORY 7	Any remaining friable ACM or friable suspected ACM

C. LEA Responsibilities:

The following requirements must be implemented as part of the EPA AHERA regulations.

- The LEA must designate a person who will be responsible of all AHERA requirements. The DP must have the required training (8 hours) that has to be performed at an EPA approved training provider.
- All custodians must have required training (2 hours).
- Surveillance inspections of all Schools must be performed every six months by either a licensed asbestos inspector or the DP.
- All Schools must be inspected every three years and the Management Plans updated by a licensed asbestos inspector.
- Parents and teachers must be notified on a yearly basis of the presence of the AHERA Management Plans.
- Three year inspections of all Schools must be performed by a licensed asbestos inspector.

[1] Homogeneous Area: Classification type for materials of similar appearance and texture. That is, materials throughout the facility that appear to be the same are grouped as one homogeneous area.

3.0 GLOSSARY OF TERMS

ABIH	American Board of Industrial Hygiene
Abatement	Any work done to minimize asbestos hazards including removal, encapsulation, and enclosure
Acoustical Insulation	Insulation used for the control of sound
Acoustical Tile	A finishing material in a building usually found in the ceiling or walls for the purpose of noise control.
AIHA Accredited Laboratory	A certification given by the AIHA to an analytical laboratory that has successfully participated in the "Proficiency Analytical Testing" program for quality control as established by the National Institute for Occupational Safety and Health
Airborne Asbestos Analysis	Determination of the amount of asbestos fibers suspended in a given amount of air
Air Monitoring	The process of measuring the airborne fiber concentration of a specific quantity of air over a given amount of time
Air Plenum	Any space used to convey air in a building or structure, the space above a suspended ceiling is often used as an air plenum.
Air Sample	Sample of air taken for the purpose of determining a quantity of material found in the air.
Ambient Air	The surrounding air or atmosphere in a given area under normal conditions.
Approved Landfill	A site for the disposal of asbestos containing and other hazardous materials that are being removed
Asbestos	A generic name given to a number of naturally occurring hydrated mineral silicates that possess a unique crystalline structure, are incombustible in air, and are separable into fibers. Asbestos includes the Asbestiform varieties of Chrysotile (serpentine); Crocidolite (riebeckite); Amosite (cummingtonite-grunerite); Anthophyllite; and Actinolite.
Asbestos Abatement	Procedures to control fiber release from asbestos—containing materials in buildings.
Asbestos Exposure Assessment System	A decision tool which can be used to determine the extent of the asbestos hazard that exists in a building, and which can also be used to develop corrective actions.

Asbestos Fibers	Fibers greater than 5 microns long and a length to width ratio of at least 3:1, generated from an asbestos containing material.
Asbestos Standard	Refer to the OSHA requirements in the general industry standards regarding asbestos exposure (29 CFR 1910.1001), and EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) (40 CFR 61, subpart 14) or Asbestos Abatement Projects (40 CFR Part 763) applicable for public employees
Asbestosis	A non-malignant, progressive, irreversible lung disease caused by the inhalation of asbestos dust and characterized by diffuse fibrosis. This disease usually occurs after high level exposures.
Atmosphere Supplying Respirators	Respiratory protection devices which exclude workplace air altogether and provide clean air from some independent source.
Bid	A statement of the price at which a contractor will complete a given project
Bulk Sample	Physical sample of the material (i.e., piece of covering or ceiling material). This is in contrast to an air sample where the air itself is sampled for fibers. Bulk samples are taken to determine if a material contains asbestos
Cancer	A cellular tumor which normally leads to premature death of its host unless controlled.
Ceiling Concentration	The maximum allowable level of toxic material that can be present at any given point in time
CFM	Cubic feet per minute
Clean Area	The first stage of the decontamination enclosure system in which workers prepared to enter the work area.
Contract Specifications	A set of guidelines that a contractor must follow when conducting an asbestos abatement job.
DEP	Department of Environmental Protection
Dirty Area	Any area in which the concentration of airborne asbestos fibers exceeds 0.01-f/cc, or where there is visible asbestos residue.
DLS	Department of Labor Standards
Electron Microscopy	A method of asbestos sample analysis which utilizes an electron beam to differentiate between fibers.
EPA	Environmental Protection Agency (Federal Agency)

F/CC	Fibers per cubic centimeters of air (a cubic centimeter is about the size of a sugar cube).
Friable Asbestos	Any materials that contain more than 1% asbestos by weight and can be crumbled, pulverized, or reduced to powder by hand pressure (i.e., asbestos pipe coverings, boiler casings, I-beam spray-on).
Glove bag	Plastic bag-type enclosure placed around asbestos-containing pipe lagging so that it may be removed without generating airborne fibers into the atmosphere.
HEPA	High Efficiency Particulate Air (Filter)
MSDS	Material Safety Data Sheet
Negative Pressure	An atmosphere created in a work area enclosure such that airborne fibers will tend to be drawn through the filtration system rather than leak out into the surrounding areas. The air pressure inside the work area is less than that outside the work area.
Non-friable Asbestos	Materials which contain mostly binder and do not generate dust under normal conditions. Note: non friable materials can become friable if cut, ground, sanded, etc. (i.e., floor tiles).
Operations & Maintenance Plan	Specific procedures and practices developed for the interim control of asbestos containing materials in buildings until it is removed.
OSHA	The Occupational Safety and Health Administration which was created by the Occupational Safety and Health Act of 1970; serves as the enforcement agency for safety and health in .the workplace environment.
Transmission Electron Microscopy (TEM)	A method of microscopic analysis which utilizes an electron beam that is focused onto a thin sample. As the beam penetrates (transmits) through the sample, the difference in densities produces an image on a fluorescent screen from which samples can be identified and counted.

SOURCE:
Asbestos Policy & Procedure Manual, "Guidelines for Management and Maintenance Personnel" Massachusetts Division of Occupational Hygiene Asbestos Program.

4.0 RESOURCES REQUIRED FOR THE LEA

The following are estimated costs required to carry out re-inspections, operation and maintenance, periodic surveillance and training and all related costs.

The annual estimated cost is $2,500.00.

5.0 RESOURCES REQUIRED TO-COMPLETE RESPONSE ACTIONS:

The following are estimated costs to properly remove and dispose of all ACM, to properly remove or repair and dispose of damaged ACM in the building in accordance with federal and state regulations. All abatement activities will be performed by Massachusetts licensed asbestos abatement contractors under the supervision of Massachusetts licensed asbestos project monitor. All asbestos abatement activities must be designed by a Massachusetts licensed asbestos designer. The estimated costs do not include replacement.

An EPA NESHAP regulation inspection must be performed should renovations or demolitions takes place. The listed costs do not apply since additional ACM might be found on the exterior of the building and in concealed locations.

Various activities might be performed by in house trained personnel. Refer to the O&M Plan.

The estimated cost to remove and dispose of all accessible ACM in the building is $245,000.00. The estimated cost for design, construction monitoring and air sampling is $45,000.00.

The estimated cost to remove/or repair and dispose of damaged ACM in the building is $6,500.00. The estimated cost for design, construction monitoring and air sampling is $2,200.00

6.0 OBSERVATIONS AND RECOMMENDATIONS:

A Massachusetts licensed asbestos inspector was on site to perform the AHERA Third Year Re-Inspection. Please refer to this page in conjunction with the spreadsheets located in section two of this report for information regarding the location, condition, and recommended response actions for ACM located throughout the building. Refer to O&M Program for preventive measures.

- Off/white-grey 12” x 12” vinyl floor tile was assumed to contain asbestos. The ACM was found to be breaking loose at the classroom 12. The ACM should be removed. Refer to O&M Plan for recommended procedures. Approximately 2 square feet was found to be damaged.
- White/grey 12” x 12” vinyl floor tile was assumed to contain asbestos. The ACM was found to be damaged at the classrooms 23, 25, 26, 18, 19 and 20. The ACM should be removed. Refer to O&M Plan for recommended procedures. Approximately 60 square feet was found to be damaged.
- All remaining ACM was found to be in good condition.
- Refer to the original management plan and previous inspection reports for suspect materials previously sampled.

7.0 DATES FOR RECOMMENDED RESPONSE ACTIONS:

Most ACM in the building were found to be in good condition. Continue O&M activities and insure that no ACM is being disturbed. Remove ACM as needed. The damaged ACM should be either repaired or removed starting February 1, 2022 and completed by August 30, 2022.

8.0 MATERIALS FOUND NOT TO CONTAIN ASBESTOS

The following suspect materials were found not to contain asbestos:

2’ x 4’ Acoustical ceiling tile.
Wall joint compound.
Wall sheetrock.
Smooth wall plaster.
Smooth ceiling plaster.
Rough wall plaster.
Walk-in freezer glue and paper.

INSTITUTE FOR ENVIRONMENTAL EDUCATION

This is to certify that

Steve J. Zarba Sr.

has attended the 8-hour course

Asbestos Coordinator/ LEA Designated Person

Course Location

Institute for Environmental Education
16 Upton Drive Wilmington, MA 01887

February 12, 2018
Course Dates

18-1109-107-269835
Certificate Number

1991

Training Director

Record Keeping Review

	LEA (Yes/No)	UEC (Yes/No)	Comments
Designated Person Statement: Is the report signed and also includes the LEA Designated Person information and training documentations.	_____	No	
Training Documentation: Have all custodial and maintenance personnel received two-hour awareness training.	_____	No	LEA was informed that training is required.
Annual Notifications: Has the LEA posted or provided the annual notifications. If so, how.	_____	No	LEA was informed that Notifications is required. Copy is attached.
Periodic Surveillance: Are dated copies in the plan for each 6-month surveillance inspection.	_____	No	UEC will be performing all future surveillance inspections.
Outside Contractors: Does the LEA notify outside vendors that asbestos is present? Method used.	_____	No	LEA Shall use form found in the O&M Plan for Notifications.
Response Action Records: For any asbestos abatement in the last 3 years, are response action records included in the plan (Refer to the checklist or record).	_____	No	LEA shall keep all logs within the AHERA Plan.
Bulk Sample Reports: Are laboratory reports included for any suspect ACM that is not assumed ACM? Does the chain of custody list type and location of the suspect material sampled?	Yes	Yes	
Management Plan/Third Year Re-Inspection Report: Is a copy located in each school office and the LEA office.	_____	No	LEA shall place one copy at the office of the principal.
Warning Signs: Are warning signs posted in routine maintenance and storage areas where ACM is present.	_____	No	
Architect Statement: Is the architect statement present for any new construction, renovation or addition.	N/A	N/A	

Comments:

_____

_____

LEA DESIGNATED PERSON RESPONSIBILITY

The LEA shall be responsible for the following:

1. Arranging and coordinating training for all faculty and staff with annual updates for new personnel.
2. Arranging for abatement procedures called for in the abatement recommended actions.
3. Complying with all state, OSHA, or EPA rules or regulations regarding asbestos abatement activities.
4. Routine maintenance activities by in-house personnel.
5. Coordinating and overseeing work done by outside contractors if the possibility exists that ACBM can be disturbed by this work.
6. Establishment of a respiratory protection program for "Asbestos Maintenance" in accordance with OSHA recommendations.
7. Procurement and maintenance of specialized equipment and supplies needed for implementation of this plan.
8. Monitoring of all asbestos containing materials in the building.
9. Ensure that all asbestos waste generated at the school is packaged, transported, and disposed of in accordance with EPA requirements and that the necessary chain of custody documentation is maintained.
10. Warnings, notifications, and record keeping as outlined in U.S. EPA Regulations 40 CFR Part 763.
11. Maintenance of all medical records required by OSHA for any school employees involved in in-house repair or removal of ACBM.
12. Updating existing management program every six months.
13. Labeling Asbestos Containing Building Materials.

A. RESOURCES NEEDED:

EQUIPMENT:

- HEPA vacuum
- Half-face respirator
- Emergency repair tool kit
- Disposable type suits
- 6-mil polyethylene sheeting
- Asbestos labeled bags

SUPPORT PERSONNEL:

- Licensed Consultant
- Trained Maintenance Personnel

B. NOTIFICATION:

The LEA is responsible for informing all building occupants annually of the asbestos control program at the school. Notification serves two purposes: It alerts affected parties to a potential hazard in the building; and it provides basic information on avoiding the hazard. Building occupants, employees, and others who are aware of the presence of ACBM are less likely to disturb the material and cause fiber release. It is recommended to post in the school's web site.

C. PERIODIC SURVEILLANCE:

At least once every six months, the LEA or his/her designee will conduct periodic surveillance in each building that contains asbestos-containing thermal system insulation. Each person performing periodic surveillance shall:

1. Visually inspect all areas that have been identified as ACBM

2. Record the data of the surveillance, his or her name, and any changes in the condition of ACBM
3. Submit to the Asbestos Control Manager a copy of such a record or report for inclusion into the management plan or permanent asbestos file

D. RE-INSPECTION:

1. Re-inspection of friable and non-friable ACBM every three years
2. Inspection by an accredited inspector
3. Re-inspection shall include:
   A. Visual re-inspection of all friable ACBM and newly friable ACBM
   B. Re-assessment of all friable ACBM
   C. Recheck all previously non-friable ACBM to determine if they have become friable
   D. Identify newly friable materials
   E. Collect and submit samples of newly friable ACBM if previously assumed to be ACBM
   F. Assess under 763.88, newly friable ACBM
   G. Reassess condition of previously identified friable ACBM
   H. Record and submit:
      1. Re-inspection report
      2. Inventory of homogeneous areas. Exact sample site locations
      3. Description of manner used to determine sample site locations

E. RECORDKEEPING:

The O&M plan contains the specifications and forms for keeping records regarding any repair or removal work involving ACBM. The record keeping procedure assures that:

1. Major repair work carried out by outside contractor is documented
2. Minor repair work by qualified in-house worker is documented
3. Monitoring of remaining asbestos is recorded
4. Personnel records for training and medical monitoring are kept

In general, this record keeping system must track two types of data: data on the physical condition of the ACBM's and actions taken on those ACBM's; the data associated with the personnel involved with the asbestos management program.

Tracking of the ACBM's maybe thought of as the tracking of physical inventory. The condition of the material recorded at intervals (record of the inspection and surveillance), that recording of substantive changes in material status (removal, enclosure or encapsulation), various required reports to governing bodies (notices of abatement and disposal actions to the EPA) and the recording of a new audited inventory in the context of the 3-year re-inspection.

Personnel tracking require: identity; training; medical monitoring; and exposure of the individual to be recorded on a form (which is to be on file for a period of at least 30 years). The following record formats and descriptions are intended as generalized basic examples of the type of records required for daily use.

LIST OF REQUIRED RECORDKEEPING (763.94)

1. Records location
   A. Removal records retention
   B. Records as part of the management plan

2. For each preventive measure:
   A. Detailed written description of measure or action including,
      1. Location of measure or action
      2. Methods used
      3. Reasons for selecting the measure of action
      4. Name and addresses of all contractors involved
   B. Identification of person taking clearance air samples
      1. Locations where samples were collected
      2. Date of collection
      3. Name and address of analysis lab
      4. Date of analysis
      5. Method of analysis
      6. Name and signature of person performing the analysis
      7. Statement that lab meets 763 .90(1) (2) (ii)
3. For each person required to be trained under 763.92(a) (1) and (2):
   A. Name and job title.
   B. Date training completed
   C. Location of training
   D. Hours of training
4. For each periodic surveillance under 763 .91 (c):
   A. Name of person performing surveillance
   B. Date of surveillance
   C. Any changes in the conditions of materials
5. For each cleaning under 763.91(d):
   A. Name of each person performing cleaning
   B. State and completion dates
   C. Locations
   D. Description of activity
   E. Method of used
6. For each time an O&M activity is performed under 763.91(d):
   A. Name of each person performing activity
   B. State and completion dates
   C. Locations
   D. Description of activity
   E. Measure used
   F. Locations of storage/disposal site
7. For each time that a major asbestos activity under 763.9 1(a) is performed:
   A. Name, signature, state of accreditation, number of persons performing activities.
   B. Start and completion dates,
   C. Locations and description of activity.
   D. Methods used.
   E. Location of storage disposal site.
   F. Results of any air sampling analysis performed.
8. For each fiber release episode under 763.91(f):
   A. Date and location of the episode,
   B. Method of repair,
   C. Preventive measures taken.
   D. Name of each person performing work.
   E. Location of storage/disposal site.

THIRD YEAR RE-INSPECTION SPREADSHEETS

The regulations require that this report provide a considerable quantity of specific data related to asbestos containing materials within buildings. The information contained in these spreadsheets provides a condensed, easy to use summary of much of that data. It indicates whether or not the various building materials contain asbestos. If they do, the spreadsheets indicate where the asbestos is located, what kind of asbestos it is, and most importantly, what actions are recommended to be taken. The measures include both scheduled action by asbestos abatement contractors as well as day to day activities by the building's custodial and maintenance personnel.

You should find these spreadsheets easy to use and very helpful. To assist you in its use, the following pages provide column by column explanations of the spreadsheets.

HOMOGENEOUS AREA:
This column defines the various homogeneous areas throughout the building. It is important that you understand the concept of a homogeneous area. It is really very simple. By definition a homogeneous area is one in which the materials, are evenly mixed and similar in appearance and texture throughout. All that means is that the materials appear to be the same. Therefore, during the survey, all the materials throughout the school that appeared to be the same were grouped into homogeneous areas. For example, a given building may have had a white, speckled 2' x 2' suspended ceiling in several of the classrooms. Therefore, one homogeneous area was described as 2' x 2' suspended ceiling and its area was comprised of every school classroom in which that suspended ceiling was present. Another example is hard joints on pipe insulation. Generally, hard, joints on pipe insulation are similar in texture and appearance. Therefore, all joints on a particular type of pipe were considered one homogeneous area.

As you can see a homogeneous area is just the means by which similar materials are grouped. The importance of the homogeneous area is that it provides a method to determine whether or not a material contains asbestos without having to sample every building material in every room. When homogeneous areas have been defined, representative samples of that material are taken and tested to determine whether or not they contain asbestos. Based on those test results, it can logically be presumed whether or not all the material in a given homogeneous area does or does not contain asbestos.

Turning to the spreadsheet you will see that in the first column each homogeneous area is assigned a number starting with 1. The number of homogeneous areas in each building will vary depending on how many types of building materials there are.

DESCRIPTION:
This column provides a brief description of what each homogeneous area is and lists all the areas within the building in which that material is present. For example, a description of one homogeneous area may be "Joint Insulation". Then under that description, will be a listing of all the rooms in the school in which that joint insulation is present.

SAMPLE NUMBER:
This column is for the sample number. The number is comprised of three numbers divided by dashes. The first number identifies the date the sample was taken. The second number identifies the each individual sample number taken in the specific building. For each homogeneous area, the sample numbers are listed only in the rooms where actual samples were taken. For all the other rooms within a homogeneous area where there is no sample number listed, there was no sample taken. However, because the materials are in the same homogeneous area, it is assumed that the materials are similar.

ASBESTOS TYPE:
If there is asbestos present, this column defines the percentage of asbestos and the type asbestos. These are defined by a number and a four letter abbreviation. The number is the percentage of asbestos and the four letter abbreviation represents the type of asbestos. In the lower left hand corner of each spreadsheet there is a legend

which explains what each abbreviation stands for. For example, CHRY stands for Chrysotile. If no asbestos was found in the sample, “0%” or “ND” is listed in the column. Please note that only the specific samples taken indicate the type and percentage of asbestos. For all other areas within a homogeneous area where no specific sample was taken, the material is either assumed positive or negative based on the results of the actual samples.

MATERIAL:
The next three columns describe the material by the following criteria:
Type:
This column identifies the type of material as “S” for Surfacing, “T” for Thermal or “M” for Miscellaneous. Surfacing materials include such items as acoustical spray, wall and ceiling plaster, and spray on fireproofing. Thermal materials include such items as hard joints, boiler insulation, and duct insulation. Miscellaneous materials include such items as suspended acoustical tile and vinyl floor tile.
Location:
This column places the location of the sample into two broad categories. Either “AC” for above ceiling or “BC” for below the ceiling;
Quantity:
This column represents the quantity of material present. In the case of pipe insulation the quantity is linear feet. In case of hard joints the quantity is for each joint.

FRIABILITY:
If a material contains asbestos, this column indicates whether the material is friable or non-friable. A friable material is one that contains 1% or more of asbestos by weight and can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable materials are all other types of asbestos containing materials.

It is important to remember that the danger of asbestos is when the fibers become airborne. Therefore, the friable asbestos is potentially more dangerous than the non-friable asbestos. In this column each material containing asbestos is defined by “F” for friable or “NF” for non-friable.

AHERA ASSESSMENT CATEGORIES:
This column indicates the assessments made in accordance with EPA guidelines.

RECOMMENDATIONS:
This column indicates the recommended action and dates to complete the work (if needed).

AHERA ASSESSMENT CATEGORIES

CATEGORY 1	Damaged or significantly damaged thermal system insulation ACM
CATEGORY 2	Damaged friable surfacing ACM
CATEGORY 3	Significantly damaged friable surfacing ACM
CATEGORY 4	Damaged or significantly damaged friable miscellaneous ACM
CATEGORY 5	ACBM with potential for damage
CATEGORY 6	ACBM with potential for significant damage
CATEGORY 7	Any remaining friable ACBM or friable suspected ACBM

6-MONTH SURVEILLANCE

INFORMATION

NAME: _____

CONSULTING FIRM/LEA: _____

ACCREDITATION NUMBER (If Applicable): _____

I certify that I have performed a surveillance inspection of the said building in accordance with AHERA regulations 40 CFR Part 763.

SIGNATURE: _____

DATE: _____

COMMENTS: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

12-MONTH SURVEILLANCE

INFORMATION

NAME: _____

CONSULTING FIRM/LEA: _____

ACCREDITATION NUMBER (If Applicable): _____

I certify that I have performed a surveillance inspection of the said building in accordance with AHERA regulations 40 CFR Part 763.

SIGNATURE: _____

DATE: _____

COMMENTS: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

18-MONTH SURVEILLANCE

INFORMATION

NAME: _____

CONSULTING FIRM/LEA: _____

ACCREDITATION NUMBER (If Applicable): _____

I certify that I have performed a surveillance inspection of the said building in accordance with AHERA regulations 40 CFR Part 763.

SIGNATURE: _____

DATE: _____

COMMENTS: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

24-MONTH SURVEILLANCE

INFORMATION

NAME: _____

CONSULTING FIRM/LEA: _____

ACCREDITATION NUMBER (If Applicable): _____

I certify that I have performed a surveillance inspection of the said building in accordance with AHERA regulations 40 CFR Part 763.

SIGNATURE: _____

DATE: _____

COMMENTS: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

30-MONTH SURVEILLANCE

INFORMATION

NAME: _____

CONSULTING FIRM/LEA: _____

ACCREDITATION NUMBER (If Applicable): _____

I certify that I have performed a surveillance inspection of the said building in accordance with AHERA regulations 40 CFR Part 763.

SIGNATURE: _____

DATE: _____

COMMENTS: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

FOX HILL ELEMENTARY SCHOOL

HOM. AREA	DESCRIPTION	SAMPLE DATE	ASBESTOS (Y/N/A)	DAM	QUANTITY	FRIABLE	2021 ASSESSMENT 40 CFR 763.88	RESPONSE ACTION START/END DATES	SPECIAL CLEANING NEEDED	TYPE OF DAMAGE	RECOMMENDATIONS REFER TO REPORT FOR DATES AND COST ESTIMATES
1	**WHITE/LIGHT BROWN 12" x 12" VINYL FLOOR TILE**										
	POD-2		A	N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	POD-3			N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	POD-4			N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	CAFETERIA			N	3,100 SF	NF	5		N		GOOD CONDITION - O&M
	MCAS			N	50 SF	NF	5		N		GOOD CONDITION - O&M
	HALLWAY ALONG GYMNASIUM			N	800 SF	NF	5		N		GOOD CONDITION - O&M
2	**MASTIC FOR WHITE/LIGHT BROWN 12" x 12" VINYL FLOOR TILE**										
	POD-2		A	N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	POD-3			N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	POD-4			N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	CAFETERIA			N	3,100 SF	NF	5		N		GOOD CONDITION - O&M
	MCAS			N	50 SF	NF	5		N		GOOD CONDITION - O&M
	HALLWAY ALONG GYMNASIUM			N	800 SF	NF	5		N		GOOD CONDITION - O&M
3	**WHITE/GREY 12" x 12" VINYL FLOOR TILE**										
	POD-1		A	N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 1			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 2			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 3			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 4			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 5			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 6			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 7			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	HALLWAYS ALONG LIBRARY DOWN TO POD-2			N	1,200 SF	NF	5		N		GOOD CONDITION - O&M
	LIBRARY OFFICE			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	POD-2 BATHROOM			N	160 SF	NF	5		N		GOOD CONDITION - O&M
4	**MASTIC FOR WHITE/GREY 12" x 12" VINYL FLOOR TILE**										
	POD-1		A	N	1,500 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 1			N	900 SF	NF	5		N		GOOD CONDITION - O&M

ASBESTOS TYPE
CHRY Chrysotile
AMOS Amosite
ACTI Actinolite
ANTH Anthophyllite
CROC Crocidolite
NA/PS Not Analyzed/Positive Stop
NO No Asbestos Detected

QUANTITY
SF Square Feet
LF Linear Feet
EA Each
TO Total

TYPE OF MATERIAL
M Miscellaneous
S Surfacing
T Thermal

ASBESTOS
Y Yes
N No
A Assumed

NOTES
HV - HEPA VACCUUM
2X/WK TWICE PER WEEK

(1) Damaged or significantly damaged thermal system insulation ACM.
(2) Damaged friable surfacing ACM.
(3) Significantly damaged friable surfacing ACM.
(4) Damaged or significantly damaged friable miscellaneous ACM.
(5) ACBM with potential for damage.
(6) ACBM with potential for significant damage.
(7) Any remaining friable ACBM or friable suspected ACBM.

FOX HILL ELEMENTARY SCHOOL

HOM. AREA	DESCRIPTION	SAMPLE DATE	ASBESTOS (Y/N/A)	DAM	QUANTITY	FRIABLE	2021 ASSESSMENT 40 CFR 763.88	RESPONSE ACTION START/END DATES	SPECIAL CLEANING NEEDED	TYPE OF DAMAGE	RECOMMENDATIONS REFER TO REPORT FOR DATES AND COST ESTIMATES
4	**MASTIC FOR WHITE/GREY 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 2		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 3			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 4			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 5			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 6			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 7			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	HALLWAYS ALONG LIBRARY DOWN TO POD-2			N	1,200 SF	NF	5		N		GOOD CONDITION - O&M
	LIBRARY OFFICE			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	POD-2 BATHROOM			N	160 SF	NF	5		N		GOOD CONDITION - O&M
5	**GREY 12" x 12" VINYL FLOOR TILE**										
	CUSTODIAN OFFICE		A	N	150 SF	NF	5		N		GOOD CONDITION - O&M
	POD-2 STORAGE			N	100 SF	NF	5		N		GOOD CONDITION - O&M
	POD-1 STORAGE			N	80 SF	NF	5		N		GOOD CONDITION - O&M
	POD-3 STORAGE-1			N	100 SF	NF	5		N		GOOD CONDITION - O&M
	POD-3 STORAGE-2			N	60 SF	NF	5		N		GOOD CONDITION - O&M
6	**MASTIC FOR GREY 12" x 12" VINYL FLOOR TILE**										
	CUSTODIAN OFFICE		A	N	150 SF	NF	5		N		GOOD CONDITION - O&M
	POD-2 STORAGE			N	100 SF	NF	5		N		GOOD CONDITION - O&M
	POD-1 STORAGE			N	80 SF	NF	5		N		GOOD CONDITION - O&M
	POD-3 STORAGE-1			N	100 SF	NF	5		N		GOOD CONDITION - O&M
	POD-3 STORAGE-2			N	60 SF	NF	5		N		GOOD CONDITION - O&M
7	**OFF-WHITE/GREY 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 10		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 11			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 12			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 12			**Y**	**2 SF**	**F**	**4**	**2/1/22-8/30/22**	**HV-WET CLEAN 1X/WK**	**LOOSE**	**REMOVE/REPLACE-MONITOR-O&M**
	CLASSROOM 13			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 14			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 15			N	900 SF	NF	5		N		GOOD CONDITION - O&M

ASBESTOS TYPE
CHRY Chrysotile
AMOS Amosite
ACTI Actinolite
ANTH Anthophyllite
CROC Crocidolite
NA/PS Not Analyzed/Positive Stop
ND No Asbestos Detected

QUANTITY
SF Square Feet
LF Linear Feet
EA Each
TO Total

TYPE OF MATERIAL
M Miscellaneous
S Surfacing
T Thermal

ASBESTOS
Y Yes
N No
A Assumed

NOTES
HV - HEPA VACCUUM
2X/WK TWICE PER WEEK

(1) Damaged or significantly damaged thermal system insulation ACM.
(2) Damaged friable surfacing ACM.
(3) Significantly damaged friable surfacing ACM.
(4) Damaged or significantly damaged friable miscellaneous ACM.
(5) ACBM with potential for damage.
(6) ACBM with potential for significant damage.
(7) Any remaining friable ACBM or friable suspected ACBM.

HOM. AREA	DESCRIPTION	SAMPLE DATE	ASBESTOS (Y/N/A)	DAM	QUANTITY	FRIABLE	2021 ASSESSMENT 40 CFR 763.88	RESPONSE ACTION START/END DATES	SPECIAL CLEANING NEEDED	TYPE OF DAMAGE	RECOMMENDATIONS REFER TO REPORT FOR DATES AND COST ESTIMATES
7	**OFF-WHITE/GREY 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 16		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 21			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 22			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 27			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 28			N	900 SF	NF	5		N		GOOD CONDITION - O&M
8	**MASTIC FOR OFF-WHITE/GREY 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 10		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 11			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 12			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 13			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 14			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 15			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 16			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 21			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 22			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 27			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 28			N	900 SF	NF	5		N		GOOD CONDITION - O&M
9	**LIME 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 9		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
10	**MASTIC FOR LIME 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 9		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
11	**WHITE/GREY STREAKS 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 8		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 23			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 23			**Y**	**20 SF**	**F**	**4**	**2/1/22-8/30/22**	**HV-WET CLEAN 1X/WK**	**LIFTING CORNERS**	**REMOVE/REPLACE-MONITOR-O&M**

ASBESTOS TYPE
CHRY Chrysotile
AMOS Amosite
ACTI Actinolite
ANTH Anthophyllite
CROC Crocidolite
NA/PS Not Analyzed/Positive Stop
ND No Asbestos Detected

QUANTITY
SF Square Feet
LF Linear Feet
EA Each
TO Total

TYPE OF MATERIAL
M Miscellaneous
S Surfacing
T Thermal

ASBESTOS
Y Yes
N No
A Assumed

NOTES
HV - HEPA VACCUUM
2X/WK TWICE PER WEEK

(1) Damaged or significantly damaged thermal system insulation ACM.
(2) Damaged friable surfacing ACM.
(3) Significantly damaged friable surfacing ACM.
(4) Damaged or significantly damaged friable miscellaneous ACM.
(5) ACBM with potential for damage.
(6) ACBM with potential for significant damage.
(7) Any remaining friable ACBM or friable suspected ACBM.

HOM. AREA	DESCRIPTION	SAMPLE DATE	ASBESTOS (Y/N/A)	DAM	QUANTITY	FRIABLE	2021 ASSESSMENT 40 CFR 763.88	RESPONSE ACTION START/END DATES	SPECIAL CLEANING NEEDED	TYPE OF DAMAGE	RECOMMENDATIONS REFER TO REPORT FOR DATES AND COST ESTIMATES
11	**WHITE/GREY STREAKS 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 24		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 25			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 25			**Y**	**10 SF**	**F**	**4**	**2/1/22-8/30/22**	**HV-WET CLEAN 1X/WK**	**BROKEN**	**REMOVE/REPLACE-MONITOR-O&M**
	CLASSROOM 26			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 26			**Y**	**15 SF**	**F**	**4**	**2/1/22-8/30/22**	**HV-WET CLEAN 1X/WK**	**BROKEN**	**REMOVE/REPLACE-MONITOR-O&M**
	CLASSROOM 17			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 18			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 18			**Y**	**5 SF**	**F**	**4**	**2/1/22-8/30/22**	**HV-WET CLEAN 1X/WK**	**BROKEN**	**REMOVE/REPLACE-MONITOR-O&M**
	CLASSROOM 19			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 19			**Y**	**5 SF**	**F**	**4**	**2/1/22-8/30/22**	**HV-WET CLEAN 1X/WK**	**BROKEN**	**REMOVE/REPLACE-MONITOR-O&M**
	CLASSROOM 20			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 20			**Y**	**5 SF**	**F**	**4**	**2/1/22-8/30/22**	**HV-WET CLEAN 1X/WK**	**BROKEN**	**REMOVE/REPLACE-MONITOR-O&M**
	POD-4 STORAGE			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	STAGE SIDE ENTRANCE			N	12 SF	NF	5		N		GOOD CONDITION - O&M
12	**MASTIC FOR WHITE/GREY STREAKS 12" x 12" VINYL FLOOR TILE**										
	CLASSROOM 8		A	N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 23			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 24			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 25			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 26			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 17			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 18			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 19			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM 20			N	900 SF	NF	5		N		GOOD CONDITION - O&M
	POD-4 STORAGE			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	STAGE SIDE ENTRANCE			N	12 SF	NF	5		N		GOOD CONDITION - O&M
13	**TAN/BROWN 12" x 12" VINYL FLOOR TILE**										
	LIBRARY WORKROOM		A	N	60 SF	NF	5		N		GOOD CONDITION - O&M
	KITCHEN BATHROOM			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	KITCHEN OFFICE			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	TEACHER'S ROOM			N	120 SF	NF	5		N		GOOD CONDITION - O&M

ASBESTOS TYPE
CHRY Chrysotile
AMOS Amosite
ACTI Actinolite
ANTH Anthophyllite
CROC Crocidolite
NA/PS Not Analyzed/Positive Stop
ND No Asbestos Detected

QUANTITY
SF Square Feet
LF Linear Feet
EA Each
TO Total

TYPE OF MATERIAL
M Miscellaneous
S Surfacing
T Thermal

ASBESTOS
Y Yes
N No
A Assumed

NOTES
HV - HEPA VACCUUM
2X/WK TWICE PER WEEK

(1) Damaged or significantly damaged thermal system insulation ACM.
(2) Damaged friable surfacing ACM.
(3) Significantly damaged friable surfacing ACM.
(4) Damaged or significantly damaged friable miscellaneous ACM.
(5) ACBM with potential for damage.
(6) ACBM with potential for significant damage.
(7) Any remaining friable ACBM or friable suspected ACBM.

HOM. AREA	DESCRIPTION	SAMPLE DATE	ASBESTOS (Y/N/A)	DAM	QUANTITY	FRIABLE	2021 ASSESSMENT 40 CFR 763.88	RESPONSE ACTION START/END DATES	SPECIAL CLEANING NEEDED	TYPE OF DAMAGE	RECOMMENDATIONS REFER TO REPORT FOR DATES AND COST ESTIMATES
14	MASTIC FOR TAN/BROWN 12" x 12" VINYL FLOOR TILE										
	LIBRARY WORKROOM		A	N	60 SF	NF	5		N		GOOD CONDITION - O&M
	KITCHEN BATHROOM			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	KITCHEN OFFICE			N	60 SF	NF	5		N		GOOD CONDITION - O&M
	TEACHER'S ROOM			N	120 SF	NF	5		N		GOOD CONDITION - O&M
15	INTERIOR WINDOW CAULKING										
	LIBRARY		A	N	6 EA	NF	5		N		GOOD CONDITION - O&M
	CAFETERIA			N	8 EA	NF	5		N		GOOD CONDITION - O&M
	LOBBY HALLS			N	10 EA	NF	5		N		GOOD CONDITION - O&M
	POD-1 HALLS			N	10 EA	NF	5		N		GOOD CONDITION - O&M
	POD-2 HALLS			N	10 EA	NF	5		N		GOOD CONDITION - O&M
	POD-3 HALLS			N	10 EA	NF	5		N		GOOD CONDITION - O&M
	POD-4 HALLS			N	10 EA	NF	5		N		GOOD CONDITION - O&M
16	INTERIOR DOOR CAULKING										
	CAFETERIA		A	N	8 EA	NF	5		N		GOOD CONDITION - O&M
	LIBRARY			N	1 EA	NF	5		N		GOOD CONDITION - O&M
	HALLWAY BY GYMNASIUM			N	8 EA	NF	5		N		GOOD CONDITION - O&M
	LOBBY			N	4 EA	NF	5		N		GOOD CONDITION - O&M
	CLASSROOM ENTRANCE DOORS			N	28 EA	NF	5		N		GOOD CONDITION - O&M
	POD-1			N	7 EA	NF	5		N		GOOD CONDITION - O&M
	POD-2			N	7 EA	NF	5		N		GOOD CONDITION - O&M
	POD-3			N	7 EA	NF	5		N		GOOD CONDITION - O&M
	POD-4			N	7 EA	NF	5		N		GOOD CONDITION - O&M
17	DUCT INSULATION										
	BOILER ROOM		A	N	230 SF	NF	5		N		GOOD CONDITION - O&M
18	TANK INSULATION										
	BOILER ROOM		A	N	100 SF	NF	5		N		GOOD CONDITION - O&M

ASBESTOS TYPE
CHRY Chrysotile
AMOS Amosite
ACTI Actinolite
ANTH Anthophyllite
CROC Crocidolite
NA/PS Not Analyzed/Positive Stop
ND No Asbestos Detected

QUANTITY
SF Square Feet
LF Linear Feet
EA Each
TO Total

TYPE OF MATERIAL
M Miscellaneous
S Surfacing
T Thermal

ASBESTOS
Y Yes
N No
A Assumed

NOTES
HV - HEPA VACCUUM
2X/WK TWICE PER WEEK

(1) Damaged or significantly damaged thermal system insulation ACM.
(2) Damaged friable surfacing ACM.
(3) Significantly damaged friable surfacing ACM.
(4) Damaged or significantly damaged friable miscellaneous ACM.
(5) ACBM with potential for damage.
(6) ACBM with potential for significant damage.
(7) Any remaining friable ACBM or friable suspected ACBM.

HOM. AREA	DESCRIPTION	SAMPLE DATE	ASBESTOS (Y/N/A)	DAM	QUANTITY	FRIABLE	2021 ASSESSMENT 40 CFR 763.88	RESPONSE ACTION START/END DATES	SPECIAL CLEANING NEEDED	TYPE OF DAMAGE	RECOMMENDATIONS REFER TO REPORT FOR DATES AND COST ESTIMATES
19	**HARD JOINT INSULATION**										
	BOILER ROOM		A	N	53 EA	NF	5		N		GOOD CONDITION - O&M
	KITCHEN WASH ROOM			N	9 EA	NF	5		N		GOOD CONDITION - O&M
	EXTERIOR STORAGE ROOM			N	3 EA	NF	5		N		GOOD CONDITION - O&M
20	**2' X 4' SUSPENDED ACOUSTICAL CEILING TILE**										
	POD-1	7/24/2017	N	N	7,000 SF						
	POD-2			N	7,000 SF						
	POD-3			N	7,000 SF						
	POD-4			N	7,000 SF						
	HALL ALONG GYMNASIUM	10/23/2018	N	N	1,200 SF						
	LOBBY HALL			N	1,200 SF						
	HALL ALONG LIBRARY			N	1,200 SF						
	CAFETERIA			N	3,700 SF						
	LIBRARY OFFICES			N	180 SF						
	NON-POD BATHROOMS			N	600 SF						
	GENERATOR ROOM			N	200 SF						
	LIBRARY			N	1,300 SF						
21	**JOINT COMPOUND**										
	CLASSROOM 7	10/23/2018	N	N	400 SF						
	PE OFFICE			N	200 SF						
	ADMINISTRATION			N	1,500 SF						
	KITCHEN OFFICE			N	700 SF						
22	**SHEETROCK**										
	CLASSROOM 7	10/23/2018	N	N	400 SF						
	PE OFFICE			N	200 SF						
	ADMINISTRATION			N	1,500 SF						
	KITCHEN OFFICE			N	700 SF						
23	**ROUGH CEILING PLASTER**										
	BOILER ROOM	10/23/2018	N	N	850 SF						

ASBESTOS TYPE
CHRY Chrysotile
AMOS Amosite
ACTI Actinolite
ANTH Anthophyllite
CROC Crocidolite
NA/PS Not Analyzed/Positive Stop
ND No Asbestos Detected

QUANTITY
SF Square Feet
LF Linear Feet
EA Each
TO Total

TYPE OF MATERIAL
M Miscellaneous
S Surfacing
T Thermal

ASBESTOS
Y Yes
N No
A Assumed

NOTES
HV - HEPA VACCUUM
2X/WK TWICE PER WEEK

(1) Damaged or significantly damaged thermal system insulation ACM.
(2) Damaged friable surfacing ACM.
(3) Significantly damaged friable surfacing ACM.
(4) Damaged or significantly damaged friable miscellaneous ACM.
(5) ACBM with potential for damage.
(6) ACBM with potential for significant damage.
(7) Any remaining friable ACBM or friable suspected ACBM.

HOM. AREA	DESCRIPTION	SAMPLE DATE	ASBESTOS (Y/N/A)	DAM	QUANTITY	FRIABLE	2021 ASSESSMENT 40 CFR 763.88	RESPONSE ACTION START/END DATES	SPECIAL CLEANING NEEDED	TYPE OF DAMAGE	RECOMMENDATIONS REFER TO REPORT FOR DATES AND COST ESTIMATES
24	**SMOOTH WALL/CEILING PLASTER**										
	CAFETERIA	10/23/2018	N	N	2,000 SF						
25	**KILN**										
	BOILER ROOM		A	N	2 EA	NF	5		N		GOOD CONDITION - O&M
26	**WALK-IN FREEZERS**										
	KITCHEN	2/2/2018	N	N	1 EA						
27	**WHITE/GREEN 12" X 12" VINYL FLOOR TILE**										
	OT/PT ROOM		A	N	400 SF	NF	5		N		GOOD CONDITION - O&M
28	**MASTIC FOR WHITE/GREEN 12" X 12" VINYL FLOOR TILE**										
	OT/PT ROOM		A	N	400 SF	NF	5		N		GOOD CONDITION - O&M
29	**BLACK SINK COATING**										
	CLASSROOMS 1-28		A	N	28 EA	NF	5		N		GOOD CONDITION - O&M

ASBESTOS TYPE
CHRY Chrysotile
AMOS Amosite
ACTI Actinolite
ANTH Anthophyllite
CROC Crocidolite
NA/PS Not Analyzed/Positive Stop
ND No Asbestos Detected

QUANTITY
SF Square Feet
LF Linear Feet
EA Each
TO Total

TYPE OF MATERIAL
M Miscellaneous
S Surfacing
T Thermal

ASBESTOS
Y Yes
N No
A Assumed

NOTES
HV - HEPA VACCUUM
2X/WK TWICE PER WEEK

(1) Damaged or significantly damaged thermal system insulation ACM.
(2) Damaged friable surfacing ACM.
(3) Significantly damaged friable surfacing ACM.
(4) Damaged or significantly damaged friable miscellaneous ACM.
(5) ACBM with potential for damage.
(6) ACBM with potential for significant damage.
(7) Any remaining friable ACBM or friable suspected ACBM.

Number	DESCRIPTION
	NOTES
1	**DAMAGED ACM WAS FOUND DURING A REINSPECTION. THE FOLLOWING NUMERICAL CONTENT NOTES ARE ONLY RECOMMENDATIONS ON HOW TO REPAIR THE DAMAGED NON-FRIABLE ASBESTOS CONTAINING MATERIALS ON A TEMPORARY MEASURE. PLEASE CONSULT A LICENSED ASBESTOS ABATEMENT CONTRACTOR TO PROPERLY REPAIR OR REMOVE BY THE INDICATED DATE SHOWN ON THE RESPONSE ACTION COLUMN OF THIS REPORT.** *1 IF FLOOR TILES ARE DAMAGED OR LOOSE, COVER WITH A MATERIAL WHICH INCLUDES BUT IS NOT LIMITED TO CARPET, WOOD OR SIMILAR DURABLE MATERIAL AS AN INTERIM CONTROL MEASURE AS TO NOT CAUSE A TRIPPING HAZARD ON THE REMAINING FLOOR. USE A MATERIAL SUCH AS PAINTER'S TAPE TO SECURELY HOLD DOWN THE MATERIAL TO THE FLOOR WITHOUT FURTHER DAMAGING THE SURROUNDING ACM TILES. *2 IF MISSING TILES ARE PRESENT, A QUALIFIED TRAINED PERSON COULD ENCAPSULATE THE AREA USING A COMPOUND INCLUDING BUT NOT LIMITED TO A FLOOR LEVELER TO TEMPORARILY REPAIR THE CONDITION UNTIL A PERMANENT REPAIR OR REMOVAL CAN BE DONE. *3 IF MISSING TILES ARE PRESENT, A QUALIFIED TRAINED PERSON COULD INSTALL A NON ASBESTOS CONTAINING VINYL FLOOR TILE TO FIT IN THE PLACE OF A MISSING ABSBESTOS CONTAINING NON FRIABLE VINYL FLOOR TILE. *4 IF ASBESTOS CONTAINING JOINT COMPOUND IS DAMAGED, WE RECOMMEND TO COVER AREA WITH A NON ASBESTOS SPACKLING COMPOUND WITHOUT PERFORMING ANY SANDING OR ABRASION TO EXISTING ACM JOINT COMPOUND.
2	**ALL FRIABLE ASBESTOS CONTAINING MATERIAL INCLUDING BUT NOT LIMITED TO THERMAL INSULATION, CEILING TILE, ETC. SHALL ONLY BE REPAIRED OR REMOVED BY A LICENSED ABATEMENT CONTRACTOR PER AHERA REGULATIONS. FRIABLE ASBESTOS IS MATERIAL THAT CAN BE CRUMBLED, PULVERIZED, OR REDUCED TO POWDER BY THE PRESSURE OF AN ORDINARY HUMAN HAND.**

OPERATIONS AND MAINTENANCE PLAN
FOX HILL ELEMENTARY SCHOOL

INTRODUCTION:
This operations and maintenance plan detail each type of repair, removal, or maintenance activity that is likely to be necessary to keep Asbestos Containing Materials in good condition.

All Personnel MUST have a minimum of 16-hours training to perform any repair or removal for up to three (3) linear feet or square feet.

The following Asbestos Containing Material (ACM) that is either, previously found, found, or assumed to contain asbestos:

Found to be ACM:

- None.

Assumed to be ACM:

- White/Light Brown 12” x 12” Vinyl Floor Tile.
- Mastic for White/Light Brown 12” x 12” Vinyl Floor Tile.
- White/Grey 12” x 12” Vinyl Floor Tile.
- Mastic for White/Grey 12” x 12” Vinyl Floor Tile.
- Grey 12” x 12” Vinyl Floor Tile.
- Mastic for Grey 12” x 12” Vinyl Floor Tile.
- Off-White/Grey 12” x 12” Vinyl Floor Tile.
- Mastic for Off-White/Grey 12” x 12” Vinyl Floor Tile.
- Lime 12” x 12” Vinyl Floor Tile.
- Mastic for Lime 12” x 12” Vinyl Floor Tile.
- White/Grey Streaks 12” x 12” Vinyl Floor Tile.
- Mastic for White/Grey Streaks 12” x 12” Vinyl Floor Tile.
- Tan/Brown 12” x 12” Vinyl Floor Tile.
- Mastic for Tan/Brown 12” x 12” Vinyl Floor Tile.
- White/Green 12” x 12” Vinyl Floor Tile.
- Mastic for White/Green 12” x 12” Vinyl Floor Tile.
- Black Sink Coating.
- Interior Window Caulking.
- Interior Door Caulking.
- Duct insulation.
- Tank insulation.
- Hard Joint Insulation.
- Kiln.

OBJECTIVE:
The three main objectives of an Operations and Maintenance (O&M) program are:

1. To clean up existing contamination
2. To minimize future fiber release by controlling access to Asbestos Containing Material (ACM)
3. To maintain ACM until it is eventually removed.

Since by law all but small quantities of ACM must be removed from buildings before demolition, this O&M program is not a permanent solution. It is implemented as part of an overall asbestos management plan that has as its goal the elimination of asbestos exposure within the facility. The O&M program likewise is not a means by which full scale asbestos abatement is accomplished. Rather, intentional disruption of ACM should be limited to repair or removal of small areas of significantly

damaged ACM, or small areas where removal is necessary to facilitate maintenance/renovation activities.

As long as ACM remains in the building, the O&M plan must remain in effect. Unless the program is implemented properly, exposure of maintenance workers and building occupants may not decrease. ACM may be disturbed by improper cleaning or repair methods. The O&M program should be established as soon as the presence of ACM is confirmed or assumed to be present. It must address friable material as well as material about to become friable, such as transite board to be cut or drilled. The O&M includes a general set of procedures that apply to periodic inspection, building renovation, maintenance, cleaning, and work done to maintain the material in good condition.

Though an O&M program may initially seem the most cost-effective solution to an asbestos problem, there are many additional costs that must be taken into consideration. Money that could have been spent on removal must be spent on worker training, respirators, and health monitoring. These costs continue until the ACM is removed. Asbestos removal is required during renovation or demolition.

Operation and Maintenance plans vary with the type of material present in the building. All maintenance activities are regulated under the EPA CFR 763.121 "Worker Protection Act," OSHA 29 CFR 1926.1101 Asbestos Construction Standard, or Section 19 or the Occupational Health and Safety Act. Worker protection and safety requirements are of major importance if workers are exposed to the material in any way. Workers must be fit tested and respiratory equipment maintained. Medical examinations are also required in order to work with asbestos. These projects involve only areas that include less than three square or linear feet. Any larger project MUST be performed by a licensed contractor. Be certain that the LEA is aware of all activities involving ACM. All outside contractors must also be notified of the location of asbestos containing material. Building occupants and the parents of children must also be notified in writing. The following types of activities can be performed by in-house trained personnel:

- Normal maintenance HEPA vacuuming and wet wiping
- Repair or removal of pipe insulation.
- Removal of damaged vinyl asbestos tiles.
- Repair or removal of small quantities of ACM on beams or above ceiling.
- Replacement of gasket or valve.
- Installation or removal of small section of drywall.
- Installation of electrical conduits through or near ACM.
- Removal of small quantities of ACM for maintenance activities.
- Removal of material that can be contained in one glove bag.
- Minor repairs to asbestos containing wallboard.
- Small repairs that can be performed in a mini enclosure, including enclosure, encapsulation, and removal.

These activities must be used for maintenance or emergency repair, NOT just for removal. The following sections will explain how to perform each asbestos related activity. A sample form for documenting O&M activities is also included at the end of this section.

ORGANIZATIONAL STRUCTURE
The LEA Designated Person (DP) is responsible for the total implementation of this program and keeping the school board informed of all pertinent asbestos related activities. The DP is the main contact for any information on the asbestos control program. The responsibilities of the DP are included in this report.

NOTIFICATION OF OCCUPANTS
The DP is responsible for informing all building occupants, employees, parents, contractors, annually of the asbestos control program. Notification serves two purposes: it alerts affected parties to a potential hazard in the buildings, and it provides basic information on avoiding the hazard. Building occupants, employees, and others who are aware of the presence of ACM are less likely to disturb the material and

cause fiber release. All new employees and building occupants during their initial orientation shall be informed of the asbestos control program and locations of ACM at this school.

LABELING

Labeling in areas where ACM is located is required in the case of thermal system insulation in mechanical rooms. Labeling is not intended as general information. It serves as a final line of defense to prevent unprotected individuals from disturbing ACM or entering areas where repair or renovation activities involving ACM are underway. Warning signs used in conjunction with small renovation or repair that involves the disruption of ACM should be posted at the entrances and around the perimeter of the project and in accordance with OSHA Asbestos Standard for the Construction Industry (29 CFR l926.1101). Warning labels must be put on all asbestos containing thermal system insulation in mechanical rooms that say the following:

CAUTION
ASBESTOS HAZARDOUS
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT

All labels shall be prominently displayed in readily visible locations and shall remain posted until the ACM that is labeled is removed.

TRAINING

Training of service (custodial and maintenance) workers is one of the most important aspects of an effective O&M plan. Training serves to establish proper awareness and understanding of work practices that are vital to the success of the program. All service workers should receive at least two hours of general awareness training. This training session should include, at a minimum, all the information outlined in the notification section. Service personnel who conduct any activities that will result in the disturbance of ACM must receive 14 hours of additional training which should include cleaning techniques, appropriate practices for handling ACM, the proper use of personal protective equipment, and hands on training. The training program should be conducted by the DP, or a person trained in asbestos control.

It should be noted that only up to three (3) linear feet of square feet could be performed by the trained personnel.

RESPIRATORY PROTECTION

Any employer who requires or permits employees to wear a respirator must have a written respiratory protection program. This is required by OSHA in both of their asbestos standards (29 CFR 1910.1001 and l926.1101) and respiratory regulations (29 CFR 1910.134). The written respiratory program establishes standard operating procedures for the use and maintenance of respiratory equipment. The OSHA regulations outline exactly what must be included in a written program. Minimum respiratory protection requirements include the use of a half-face HEPA filter negative pressure respirator. A higher degree of protection can be achieved using a full-face mask or a power-assisted air purifying respirator (PAPR). It is preferable to use the highest level of protection possible when dealing with asbestos. Every worker who uses a respirator must have a medical exam and be fit tested. Never attempt to disturb asbestos without using properly fitted protective equipment. Personal exposure monitoring is required for workers to ensure that air levels are within the legal limits.

MEDICAL SURVEILLANCE

Employers are required to institute a medical surveillance program for all employees who are assigned to wear a negative-pressure respirator. All examinations and procedures must be performed by or under the supervision of a licensed physician at no cost to the employee. The purpose of the medical surveillance program is to establish an employee's fitness to wear a respirator, and to detect any changes in the gastrointestinal and cardiopulmonary systems as a result of working in asbestos contaminated areas. The OSHA regulation outlines what is required in the medical surveillance program.

PREVENTIVE MEASURES
The purpose of this is to eliminate the possibility of any disturbance and/or fiber release due to unknown activities. At a minimum, the following should be implemented:

1. Do not dry clean or sweep.
2. Do not cut, penetrate, sand, drill, break, nail into the ACM.
3. Do not hang plants, pictures, wires from the ACM.
4. Do not place items against the ACM.
5. Do not replace light fixtures where ACM, such as plaster, fireproofing and tiles is found.
6. Should ACM become damaged, seal, isolate the area and notify the consultant.

DESIGN AND AIR CLEARANCE REQUIREMENTS:
The work (greater than 3 LF or 3 SF) must be designed a Massachusetts licensed asbestos abatement designer and clearance air sampling is performed by a Massachusetts licensed project monitor. The purpose of the design is to include but not limited to the following:

- Scope of work.
- Location of work.
- Method to be utilized.
- Type of clearance air sampling.
- Scheduling and other related information.

CLEANING PROCEDURES
The cleaning activities described in this section are necessary for many different types of ACM. This section is referenced in the spread sheets for homogenous areas of friable asbestos containing surfacing material, friable thermal system insulation and friable miscellaneous materials. **The following *Friable ACM was found during the inspection.***

- **Off-White/grey 12" x 12" vinyl floor tile at classroom 12.**
- **White/grey streaks 12" x 12" vinyl floor tile at classrooms 23, 25, 26, 18, 19 and 20.**

1. **Initial Cleaning**
   Unless the building has been cleaned within the previous 6 months, all areas of a school building where friable ACM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACM assumed to be ACM are present shall be cleaned at least once after the completion of the inspection required by Sec. 763.85(a) and before the initiation of any response action, other than O&M activities or repair, according to the following procedures:
   a. Do not dry clean or sweep.
   b. HEPA-vacuum or steam-clean all carpets.
   c. HEPA-vacuum or wet-clean all other floors and all other horizontal surfaces.
   d. Dispose of all debris, filters, mop-heads, and cloths in sealed, leak-tight containers.
2. **Periodic Cleaning**
   Custodial staff should perform a thorough cleaning a minimum of twice weekly where friable ACM found. HEPA vacuum or steam clean all carpets, wet mop all other floors, and wipe all other horizontal surfaces with damp cloths. Dispose of debris, filters, mop heads, and cloths in sealed plastic bags according to EPA regulations. Report the presence of debris observed near ACM to the DP immediately. If debris accumulates, cleaning should be performed more often, and repair or removal should be completed to eliminate the hazard.
3. **Emergency Procedures**
   If an emergency occurs, immediately notify the LEA, and restrict access to the area. Common emergencies include pipe leaks, boiler breakdowns, and water damage. Keep the phone number of a dependable local contractor for problems that may be larger than the in-house staff can handle. If you are not certain of the size or the extent of the damage, have a contractor and consultant look at it immediately.

4. **Specialized Cleaning Procedures**
   Special cleaning practices should be followed in buildings with ACM. Cleaning up existing asbestos contamination within a building is one of the primary objectives of the O&M program. Things not to do when cleaning asbestos containing materials:
   a. Do not sand backing material.
   b. Do not dust with a wire brush.
   c. Do not dry sweep floors.
   d. Do not use an ordinary vacuum to clean up asbestos debris.
   c. Do not use any method that might disturb the ACM.

The following precautions should always be used when cleaning ACM:

- All dusting and mopping of the ACM must be conducted using "wet" cleaning techniques (mops or cloths dampened with water or dust suppressant) or with special vacuum cleaner's equipment with High Efficiency Particulate Air (HEPA) filters.
- Spray (mist) bottled of water or dust suppressant should be available and used to keep the mops and cloths damp.
- Cleaning materials (mop heads, cloths, etc.) should be washed after each cleaning, changed at regular intervals, and discarded as asbestos waste
- The materials should be placed in 6 mil plastic bags, the bags sealed and labeled:

"DANGER CONTAINS ASBESTOS FIBERS
AVOID
CREATING DUST
CANCER AND LUNG DISEASE HAZARD,"

And the bags deposited in an approved landfill. A disposal company could then transport the waste to an approved landfill periodically.

For each time that cleaning under Sec. 763.91(c) is performed, the local education agency shall record the name of each person performing the cleaning, the date of such cleaning, the locations cleaned, and the methods used to perform such cleaning.

MAINTENANCE OF VINYL FLOORING (VAT)
Refer to the attached "Recommended Work Practice for Removal of Resilient Floor Covering" for more detailed procedures.

Proper upkeep, disturbance, and removal of vinyl asbestos flooring are explained in this section. This section is referenced in the spread sheets for all homogenous areas of asbestos containing vinyl asbestos flooring. Although the main emphasis of this section is for vinyl asbestos flooring, the practices described in subsection three and four for drilling and removing vinyl asbestos flooring are recommended procedures for all vinyl flooring. It must be remembered that even for vinyl flooring which lab analysis has determined to be asbestos free, the mastic used on it and on all vinyl base boards could contain asbestos and should never be made friable by sanding. Any vinyl flooring not identified by this inspection which may be revealed upon removal of carpeting should be considered to contain asbestos until lab analysis proves otherwise.

1. **Care of Vinyl Floor Tile (VAT)**
   Do not sand, abrade, wire brush or the use of any method that might release fibers of vinyl asbestos tiles (VAT). VAT are unlikely to release any fibers unless cut or sanded. Use HEPA attachments described in the section on cutting non friable materials. The adhesive that is used to stick floor tiles to the floor is likely to have asbestos in it also. Do not sand or wire brush the adhesive. The best way to deal with VAT is to use regular detergent and floor wax. Keep a heavy layer of wax on the surface and that will act as an encapsulant. Use all procedures outlined in the sections for respiratory protection, protective clothing, and work area preparation. Remember that the adhesive probably has more asbestos than the tile itself. Dispose contaminated material and replace the tile with non-asbestos tile. Since the sharp tile edges could cut through a bag, wrap the tile in plastic and put them in a box. Wrap the box and put it in a bag or drum.

2. **Stripping/Waxing VAT**
   a. Wet methods must always be used when stripping, waxing, or buffing asbestos containing vinyl flooring.
   b. Never dry buff the asbestos-containing vinyl flooring.
   c. Always have a HEPA vacuum and respirators available if needed.
   d. If a HEPA vacuum is required, all filters, cleaning clothes, and debris should be disposed of as asbestos waste.
3. **Drilling of VAT**
   If it is necessary to drill into asbestos containing vinyl flooring (making the ACM friable) the following precautions must be followed.
   a. Worker or workers should wear NIOSH/MSHS approved respirators equipped with HEPA filter cartridges.
   b. Wet wipe the area to be drilled.
   c. Use a HEPA vacuum adjacent to the drilling operation to pick up fibers and debris as the drilling occurs.
   d. Dispose of any debris as asbestos waste as outlined in the previous section.
   e. Clean up area as outlined above.
4. **Removing or Repairing VAT**
   a. To remove small sections of floor tiles, dry ice or heat from a portable heater can be applied to the tops of the tiles, and then the tiles can be pried up.
   b. Use a 'wet' or solvent method to remove and clean the adhesive.
   c. Do not sand the adhesive from the base flooring.
   d. A HEPA vacuum or wet wiping should be used to clean up as outlined above.
   e. All tiles, cloths, and debris must be disposed of as asbestos waste.

MAINTENANCE FOR THERMAL INSULATION

Maintenance activities affecting asbestos containing thermal system insulation generally involve plumbing-type repairs. Frequently the ACM must be removed to provide access to the valve, flange, or related system part needing maintenance. The extent of special work practices is tailor to reflect the likelihood that the ACM will be disturbed and that asbestos fibers will be released. Four categories of potential disturbance are defined: (1) contact with ACM is very unlikely, (2) accidental disturbance of ACM is possible, (3) disturbance of ACM is intended or likely - small disturbances (under three (3) feet of thermal system insulation), and (4) disturbance of ACM is intended or likely large disturbances (greater than three (3) feet of thermal system insulation).

1. **Contact with ACM Unlikely**
   Repairs which can be performed without contacting or disturbing the ACM require only normal care, good workmanship, and respirators. A HEPA vacuum should be available for use if required.
2. **Accidental Disturbance of ACM Possible**
   Maintenance tasks that involve no direct contact with ACM may cause accidental disturbance. Vibrations created by maintenance activities in one part of a piping network will be transmitted to other parts. Vibrations could then cause fibers to be released from insulation which is exposed or not in good condition. If in doubt about the possibility of fiber release, thoroughly inspect the asbestos—containing material before undertaking the maintenance or repair work. Then, either correct the problem before starting, or assume that the maintenance work may cause accidental disturbance and fiber release. In this case, the following procedures should be used:
   a. Approval should be obtained from the DP before beginning work. The DP or supervisor should make an initial visit to the work site.
   b. The work should be scheduled after normal working hours, if possible, or access to the work area should be controlled: doors should be locked from the inside and signs posted to prevent unauthorized persons from entering the work area
   (e.g., MAINTENANCE WORK IN PROGRESS, DO NOT ENTER"). Note emergency exits must remain in operation.
   c. The air-handling system should be shut off or temporarily modified to prevent the distribution of any released fibers to areas outside the work site.
   d. A 6-mil polyethylene plastic drop cloth should be placed beneath the location of the maintenance work, extending at least 10 feet beyond all sides of the work site.

e. Plastic sheets (6-mil polyethylene) should be cut and taped around any asbestos containing insulation which might be accidentally disturbed. The plastic should be misted with amended water before sealing with tape. Workers should wear full respiratory protection and protective clothing.
f. After the maintenance work is completed, all tools, ladders, and other equipment should be HEPA-vacuumed or wiped with a damp cloth. Special care should be taken when removing the plastic from the insulation to minimize disturbance of ACM dust or debris that may have fallen from the insulation.
g. If any debris is apparent on the drop cloth, floor, or elsewhere, it should be HEPA-vacuumed.
h. The plastic drop cloth should be wiped with a dampen cloth, carefully folded, and discarded as asbestos waste.
i. All clothes, vacuum bags/filters, and other disposable materials should be discarded in sealed and labeled plastic bags as asbestos waste.
j. Workers should HEPA-vacuum respirators and protective clothing at the work site. The clothing should then be discarded as asbestos waste. If the ACM was disturbed during the course of the work, the workers should leave their respirators on, proceed to a shower room, shower with respirators on, and clean their respirators while in the shower.

3. Small Disturbance of ACM Intended

Where less than 3 feet of asbestos containing thermal system insulation must be removed to maintain or repair the thermal system, the following procedures should be used:

a. Approval should be obtained from the DP before beginning work. The DP or supervisor should make an initial visit to the work site.
b. The work should be scheduled after normal working hours, if possible, or access to the work area should be controlled: doors should be locked from the inside and signs posted to prevent unauthorized persons from entering the work area (e.g., “MAINTENANCE WORK IN PROGRESS, DO NOT ENTER”). Note, emergency exists must remain in operation.
c. The air-handling system should be shut off or temporarily modified to prevent the distribution of any released fibers to areas outside the work site.
d. Maintenance workers should wear at least air-purifying respirators with HEPA filters and protective clothing (suit, hood, and boots) in case of a fiber release accident.
e. The asbestos containing thermal system insulation should be removed as necessary for the repairs, and the repairs made using standard glove bag techniques where possible (refer to the EPA publication: “Asbestos-in-Building Technical Bulletin: Abatement of Asbestos containing Pipe Insulation,” 1986-2 and the OSHA Construction Industry Rule). Glove bags are fastened around the part to be repaired, the insulation is removed with knives and saws to make the part accessible, and the repairs are made using tools contained in the glove bag tool pouch.
f. At the conclusion of the work, Maintenance workers should clean their clothing using a HEPA vacuum and wet wiping.
g. All glove bags and any other used materials (including disposable clothing) should be discarded as asbestos waste, if the ACM was disturbed during the course of the work; the workers should leave their respirators on, proceed to a shower room, shower with respirators on, and clean their respirators while in the shower.
h. Non asbestos insulating material can be installed as necessary to replace insulation which was removed.

4. Large Disturbance of ACM Intended

When more than 3 feet of asbestos containing thermal system insulation must be removed to maintain or repair the thermal system, this is considered to be a large-scale disturbance of ACM, and glove bags are not feasible. With this situation an outside contractor should be hired for the removal project before the maintenance work begins.

If maintenance personnel are to conduct the asbestos removal, they must be thoroughly trained in removal techniques as required by OSHA. If the maintenance activities are likely to cause disturbance of ACM on pipes, boilers, or ducts at sites other than just those undergoing repair (due to vibration, etc.), then the entire room or area must be isolated and large-scale asbestos removal procedures employed. These include construction of containment barriers and ventilation system:

use of protective clothing, and “type C” respirators by workers; proper disposal of asbestos debris; and proper cleanup of the work site followed by clearance air monitoring.

MAINTENANCE OF INTERIOR CAULKING
Do not remove or scrape the ACM. For removal (quantities >3 LF) retain the services of a licensed contractor. The ACM would still have to be disposed properly. Follow procedures listed in the Massachusetts Regulations 6.13 “Work Practices Involving Non-Friable Asbestos).

MAINTENANCE OF SINK COATING
Do not remove or scrape the ACM. For removal (quantities >3 LF) retain the services of a licensed contractor. The ACM would still have to be disposed properly. Follow procedures listed in the Massachusetts Regulations 6.13 “Work Practices Involving Non-Friable Asbestos).

MAINTENANCE OF KILN
Do not remove ACM. For removal (quantities >3 LF) retain the services of a licensed contractor. The ACM would still have to be disposed properly. Follow procedures listed in the Massachusetts Regulations 6.13 “Work Practices Involving Non-Friable Asbestos).

PROCEDURES FOR FIBER RELEASE EPISODES
As long as ACM remains in the building, a fiber release episode could occur. A fiber release episode is when the ACM becomes damaged in such a way as to release asbestos fibers to the atmosphere. Knowing the procedures necessary to control a fiber release episode is essential in any building which contains ACM. Reference to this section is recommended for all homogenous areas of asbestos containing friable surfacing material and thermal system insulation including pipe, joint, tank, duct, and boiler insulation, which are listed on the sp read sheets of section four. Building custodial and maintenance staff should refer to this section to prevent a fiber release episode and to be thoroughly prepared for procedures should one occur. Custodial and maintenance workers should report to the DP the presence of debris on the floor, water, or physical damage to the ACM, or any other evidence of possible fiber release. Fiber release episodes can also occur during maintenance or renovation projects. The DP should assign a suitably trained in—house team to clean up debris and make repairs as soon as possible. For fiber release episodes of asbestos containing thermal system insulation the following procedures should be used.

1. Workers should wear at minimum air purifying respirators with HEPA filters.
2. Debris should be thoroughly saturated with water or amended water using a mister with a very fine spray. The debris should then be placed in a labeled 6-mil plastic bag for disposal and the floor should be cleaned with dampen cloths or a mop, or the debris can be collected with, a HEPA vacuum cleaner.
3. Read the HEPA vacuum manual to thoroughly understand its operation before using it. Ask the sales representative for a detailed demonstration of how to use the HEPA vacuum. Always empty the vacuum under controlled conditions, remove the filter after dampening it and treat all waste as contaminated material. Misuse of a HEPA vacuum can cause a major contamination problem.
4. All debris and materials used in the cleanup should be discarded as asbestos waste.
5. Workers should vacuum their disposable suits, if used, before leaving the work site and discard them as asbestos waste.
6. The damaged ACM should be repaired with asbestos-free spackling, plaster, cement, insulation, re-wettable fiberglass or sealed with latex paint or an encapsulant.
7. Each fiber release episode should be documented, and a report should be filed in this management plan or in the permanent asbestos file.

GLOVEBAG REMOVAL PROCEDURES FOR REPAIR OR MAINTENANCE

This section explains the proper procedures for glove bag removal of ACM. All homogenous areas of asbestos containing pipe and joint insulation recorded of the spread sheets reference this section of the O&M plan. Custodial and maintenance personnel should review this section if glove bagging is necessary to access an area where repair of maintenance is required. Remember, glove bag removal

involves only areas less than 3 square or linear feet and can be done only for maintenance purposes not for the sake of removal alone.

The work area must be secured according to the section on work area preparation. All persons not involved in the procedure must leave the site and warning signs must be posted. Try to perform the work when the building is unoccupied. Building occupants are very curious as to whether this type of operation could be harmful. The work area floor must be covered with plastic in~ case of breakage. Be generous with the plastic it is a lot less expensive to be cautious with protection than to clean up a contaminated area. The glove bag must fully cover the three feet or less to be removed, since the bag cannot be moved once it is in place. All tools such as wire cutters, bone saw, nylon brush and knife are to be placed in the pouch that is inside the bag. The tools are reached by using the gloves.

Inspect the work area and determine the location boundaries of the work to be accomplished. Be sure it is not over three feet! Cut the sides of the glove bag down far enough to place it over the pipe. Support the bottom of the glove bag to prevent the weight of the debris and water from causing the bag to leak or break. Always be as cautious as possible when dealing with asbestos.

Attach the top seam of the glove bag by taping with heavy duct tape. Use several different pieces overlapping each other instead of one long piece. Staple the tape at intervals of two or three inches. Fold the taped flap over on itself and tape again. Tape the bottom seam of the bag also. These precautions can prevent a costly and dangerous fiber release.

Tape the openings on each side of the glove bag where the pipes protrude. Put several layers of duct tape to ensure that there is no fiber release. The glove bag must then be smoke tested to ensure that there are no leaks. An aspirator bulb filled with smoke is inserted into an opening pre cut by the manufacturer. The same opening will be used to insert a sprayer wand used to wet the material. If there is not opening on the glove bag, cut a small hole through a duct tape patch and insert the smoke tube. The duct tape patch ensures that the bag will not rip along that opening. Patch any area that leaks with duct tape. Upon insuring that the bag is air-tight, insert the spray wand and HEPA vacuum hose into either hole made by the manufacturer or self placed patched hole. Duct tape the equipment into the holes securely. The holes should be in the upper 1/3 of the bag so it is easy to wet, the material. Use the best quality glove bags possible which will have, reinforced entry holes for the smoke tube, spray wand, and HEPA-VAC hose. Some bags even have zippers, which eliminates the cutting section. Fold the taped flap over it itself and tape again. Tape the bottom seam of the bag also.

Completely wet the section of pipe to be removed, however, do not fill the glove bag with water. The solution used to wet the material must be “amended water.’ The solution can be obtained through asbestos supply companies (or soap can be used). The amended water ensures that the material is wetted as evenly as possible. Using a razor, knife, or bone saw, cut through to the pipe on both sides and remove the material as smoothly as possible. Use a retractable blade and always retract it when not in use being careful not to cut the bag open by mistake. A second person must keep the material wet using the wand. Soak the bare pipe and hand clean is using the rags and nylon brush that are in the pouch contained within the bag. Threaded areas of pipes and joint areas require particular attention to clean.

Wash down the interior of the glove bag and pipe section one final time to ensure that all debris is at the bottom of the bag. Place all tools into the hand part of one of the gloves. Pull the glove inside out, seal it with duct tape and cut between the sealed areas. Re-tape the glove and place it in a bucket of water. Later, the glove may be untied, and the tools cleaned. Activate the HEPA vacuum and collapse the bag as much as possible. Do not collapse too much or the bag will be damaged. The HEPA vacuum should continue to run during the entire process of removing the glove bag.

Twist the glove bag closed and tape it shut. A disposal bag should be placed over the glove bag while it is still on the pipe. Carefully cut the glove bag from the pipe and place in the disposal bag. Dispose of properly as asbestos containing waste.

The ends of the pipe must be covered with re-wettable fiberglass. Cut a large enough piece to cover the area and dip it in a bucket of clean water. Wrap it around the end of the pipe and smooth until all openings are covered. Spray the bare pipe with encapsulant to lock down any remaining fibers. The pipe may be painted with heat resistant latex paint if desired.

REMOVAL OF ACM

1. All removal or repair projects should be correctly and safely set up. These are minimum work practices required by state and federal law. Work may not be performed if the area exceeds three square or linear feet. You must have a contractor do the work if it exceeds these size limits. Refer back to this section whenever you plan to disturb asbestos containing material. The initial set up of any job that disturbs asbestos is as important as the actual removal itself. The following steps must be followed to ensure a safe project.

    a. Restrict entry by physical isolation or scheduling to ensure unauthorized persons do not enter the area.
    b. Post warning signs at all entrances to the site to prevent unauthorized entry.
    c. Shut of f air handling equipment or modify all air conditioning, heating, ventilation systems, etc. Restrict air movement (fans, windows).
    d. Remove moveable objects and cover remaining items with plastic. Duct tape 6-mill plastic over any remaining surfaces and duct tape to provide an air-tight seal. Decontaminate any objects that have debris by wet-wiping and HEPA vacuuming.
    e. Isolate the work area by sealing and taping vents, windows, air conditioners, ducts, drains, grills, windows, and doors etc. with plastic. If the building is occupied, the entrances to the work area must be sealed and caulked with plywood, gypsum board or a solid material. Plastic does not qualify as a critical barrier. Glove bag operations are exempt from this requirement. Ceramic tiles on floors, walls or ceiling that are impervious (no cracks, holes, fissures) need not be covered. If there is uncertainty regarding permeability, put up plastic.
    f. Cover walls and ceilings with plastic sheeting with seams and joints sealed with duct tape to make an impervious barrier to the floor, ceiling, wall etc. Two layers of plastic are required for the floor and walls with an overlap of 12” on the wall. The wall covering must overlap the floor.
    g. Ground fault circuit interrupters must always be used when working in a WET environment.
    h. Clean fixtures and equipment in the work area using proper cleaning methods.
    i. Properly dispose of all ACM in properly labeled, leak proof containers.
2. Asbestos projects that involve less than 25 square or linear feet require the use of a change room that is used as the sole entrance and exit to the facility. Before leaving the removal area to enter the change room HEPA vacuum and wet wipe the protective clothing. All other equipment must be decontaminated by wet-wiping and HEPA vacuuming or by wrapping the material in two layers of 6 mil plastic or put in a drum with a locking lid. Glove bag operations are exempt from this requirement. Use of a changing room is applicable to removal of surface material where a glove bag cannot be used.
3. Read the HEPA vacuum manual to thoroughly understand its operation before using it. Ask the sales representative for a detailed demonstration of how to use the HEPA vacuum. Always empty the vacuum under controlled conditions, remove the filter after dampening it and treat all waste as contaminated material. Misuse of a HEPA vacuum can cause a major contamination problem.
4. Any material that is enclosed must be clearly identified in the building records. The enclosure must be airtight wooden structures must be made with tongue and groove construction and caulked. Gypsum board seams must be taped. Drills and other tools should have a HEPA attachment and all electrical conduits, telephone lines, etc. must be moved so there is not reason to re-enter the area. If this cannot be accomplished, the area should not be contained. Any wrapped material such as a boiler or pipe must be labeled as asbestos. Suspended ceilings can not quality as enclosure since it is not airtight.
5. Liquid Encapsulant must be applied with an airless sprayer and are not to be used on severely damaged or deteriorating surfaces.
6. Asbestos must be wet when it is disturbed in any way. The material must be wet enough to keep the dust down, but not wet enough to cause the water to leak out of the project area. A surfactant must be used, as this increases the ability of the water to penetrate the fibers. During the project,

dispose of asbestos as it accumulates in double 6-mil labeled bags or drums with locking lids. Do not remove the material and leave it on the floor. When working at heights do not throw debris to the ground, have another individual put the debris in the disposal container.

DISPOSAL OF ASBESTOS WASTE

Proper disposal of asbestos containing material is an important procedure for the well being of the environment. This section of the O&M plan is referenced for all asbestos containing material that was sampled and all material assumed to be ACM that is recorded on the spread sheets. Always refer to this section when disposing of asbestos waste. All asbestos containing materials, waste, bags, and equipment (such as mop heads or air filters) must be disposed of in a labeled 6-mu polyethylene bag. The bag must be placed in a sealed impermeable container such as a drum. Water used for cleaning must be either filtered or placed in an impermeable container. A single drum may be used until it is full. The drum must be disposed of at a licensed landfill and a disposal receipt with the location obtained to prove that the waste was disposed of it legally. An interim storage area must be secured and locked with only trained personnel having access to it.

Transportation must be done in closed trucks (not rented) and the truck wet cleaned after each use. The easiest way to dispose of small amounts of asbestos is to accumulate it and have a licensed contractor remove it. Find a local company willing to provide this service to you.

In a secured and isolated storage is limited to 30-days. Contract the DEP for any questions.

OUTSIDE SERVICE CONTRACTORS

If any outside contractor is employed to do work where the ACM may be disturbed (such as periodic cleaning, major renovation, or pipe repairs), contracts with such companies should include provisions to ensure that the workers can and will follow appropriate work practices. The contractor should provide proof that his workers have been properly notified about ACM in the building where the work is to take place (***see contractor acknowledgement form at the end of this section***). For a major renovation or removal, the contractor should also provide copies of the respiratory protection, medical surveillance, and worker training documentation submitted to OSHA. Also, the contractor should provide historical air monitoring data with emphasis on projects similar to those likely to be encountered in the building for examples of previous projects.

PERIODIC SURVEILLANCE OF ACM

At least once every six (6) months, the DP or his designee will conduct periodic surveillance in each building that contains asbestos. Each person performing periodic surveillance shall:

1. Visually inspect all areas that have been identified as asbestos containing.
2. Record the data of the surveillance, any changes in the conditions of the ACM, and the name of the individual conducting the surveillance.
3. Submit to the DP a copy of such a record or report for inclusion into the management plan or permanent asbestos file.

The DP is responsible for compliance to this section. An example of the periodic surveillance form to be used is shown at the end of this section.

EQUIPMENT NEEDED

Every school should have on-site at least one HEPA vacuum cleaner to be used when needed. Also at least one half-mask air-purifying respirator for each worker who may be required to wear one will be needed. An asbestos emergency repair kit which contains the equipment and tools necessary for repair of damage asbestos containing insulation and asbestos disposal bags is also recommended. Disposable suits may also be needed for maintenance workers.

A written respirator program as well as a written medical monitoring plan must be kept, and all work must comply with the written programs.

RECORDKEEPING

All written records discussed in this Operations and Maintenance program should be maintained as part of this management plan.

PERIODIC SURVEILLANCE REPORT

RETURN COMPLETED FORM TO ASBESTOS PROGRAM MGR.

PAGE___ OF___

DATE: ___ ___,____

Building Number and Name

ROOM Number and Name

Building Location

IF THE STATUS OF THE ACBM HAS CHANGED. THEN PHOTOGRAPH THE AREA AND RECORD THE PHOTOGRAPH NUMBER IN THE SPACE PROVIDED. NOTIFY THE ASBESTOS PROGRAM MANAGER CONCERNING THE CHANGE.

SAMPLE AREA/LOT OR SALIENT ID	SAMPLE AREA/LOT OR SALIENT DESCRIPTION	LAST MAT. COND.			CHANGE ?		NEW PHOTO NUMBER	NOTES
		T	DC	PD	YES	NO		

Signature of Person Completing Report

Title of Person Completing Report

* REFERS TO MATERIAL TYPE AND DAMAGE CATEGORIES
. T – MATERIAL TYPE AS:
. S – SURFACING
. M – MISCELLANEOUS
. T – THERMAL SYSTEM

DC – DAMAGE CONDITION
. ND – NO DAMAGE
. D – DAMAGE
. SD – SIGNIFICANT DAMAGE

PD – POTENTIAL DAMAGE CATEGORIES
. NPD – NO POTENTIAL DAMAGE
. PD – POTENTIAL DAMAGE
. PSD – POTENTIAL SIG. DAMAGE

OPERATIONS AND MAINTENANCE ACTIVITIES

BUILDING NAME: _____

ADDRESS: _____

ROOM NUMBER(s): _____

QUANTITY OF ACM REMOVED OR REPAIRED: _____

ACTIVITY START DATE: _____ **ACTIVITY END DATE:** _____

DESCRIPTION OF METHOD(S) USED DURING O&M ACTIVITY:

PERSONNEL PERFORMING ACTIVITIES:

NAME: _____

SIGNATURE: _____ DATE: _____

NAME: _____

SIGNATURE: _____ DATE: _____

NAME: _____

SIGNATURE: _____ DATE: _____

STORAGE OR DISPOSAL SITE INFORMATION:

STORAGE / DISPOSAL SITE NAME: _____

ADDRESS: _____

_____

******NOTE: ATTACH ALL WASTE SHIPMENT RECORDS******

CONTRACTOR ACKNOWLEDGEMENT FORM

PART A (To be completed by the LEA Designated Person)

☐ No known Asbestos Containing Materials (ACM) will be impacted by the work required to be performed by the outside contractor(s).

☐ ACM may be impacted by the work required to be performed by the outside contractor(s). The outside contractor(s) has been notified as to the types and locations of ACM present. Notification has also been made with respect to proper work procedures as included in the inspection report Operations and Maintenance Program.

LEA Designated Person: _____

Signature: _____ Date: _____

PART B (To be completed by the Outside Contractor(s))

As an Outside Contractor I acknowledge that I have been informed about the ACM in the area in which contract work will be performed and that the statement in Part A of the form is accurate to the best of my knowledge.

Name of Employee: _____

Company: _____

Address: _____

_____

Telephone: _____

Signature: _____ Date: _____

EMPLOYEE TRAINING

NAME: _____ DATE: _____

SIGNATURE: _____ JOB TITLE: _____

BUILDING: _____

TRAINING PROVIDER: _____ COURSE TITLE: _____

ADDRESS: _____ COURSE LENGTH: _____

_____ CERTIFICATION NO: _____

NAME: _____ DATE: _____

SIGNATURE: _____ JOB TITLE: _____

BUILDING: _____

TRAINING PROVIDER: _____ COURSE TITLE: _____

ADDRESS: _____ COURSE LENGTH: _____

_____ CERTIFICATION NO: _____

NAME: _____ DATE: _____

SIGNATURE: _____ JOB TITLE: _____

BUILDING: _____

TRAINING PROVIDER: _____ COURSE TITLE: _____

ADDRESS: _____ COURSE LENGTH: _____

_____ CERTIFICATION NO: _____

NAME: _____ DATE: _____

SIGNATURE: _____ JOB TITLE: _____

BUILDING: _____

TRAINING PROVIDER: _____ COURSE TITLE: _____

ADDRESS: _____ COURSE LENGTH: _____

_____ CERTIFICATION NO: _____

AHERA RESPONSE ACTIONS RECORDS CHECKLIST

LOCAL EDUCATION AGENCY (LEA): _____

NAME OF SCHOOL: _____

ADDRESS: _____

DESIGNATED PERSON: _____

DESCRIPTION OF RESPONSE ACTION / PROJECT DESIGN:

- ❑ METHODS USED
- ❑ LOCATION OF RESPONSE ACTION
- ❑ START DATE
- ❑ COMPLETION DATE

PROJECT DESIGNER:

- ❑ NAME
- ❑ CERTIFICATION NUMBER

CONTRACTORS & WORKERS CONDUCTING ACTIVITY

- ❑ NAME
- ❑ ADDRESS
- ❑ CERTIFICATION NUMBER
- ❑ NAME / LOCATION OF STORAGE / DISPOSAL SITE

CLEARANCE DOCUMENTATION

- ❑ DATE VISUAL INSPECTION WAS CONDUCTED
- ❑ NAME OF PERSON PERFORMING VISUAL INSPECTION
- ❑ AIR SAMPLES COLLECTED AT COMPLETION OF RESPONSE ACTION USING AGGRESSIVE SAMPLING METHODS
- ❑ NAME, SIGNATURE AND CERTIFICATION NUMBER OF PROJECT MONITOR COLLECTING AIR SAMPLES
- ❑ DATE OF SAMPLE COLLECTION
- ❑ SAMPLE LOCATIONS
- ❑ AIR SAMPLES ANALYZED AT ACCREDITED LABORATORY
- ❑ LABORATORY NAME AND CERTIFICATION NUMBER
- ❑ ANALYSIS METHOD
  - ❑ PHASE CONTRAST MICROSCOPY (PCM)
  - ❑ TRANSMISSION ELECTRON MICROSCOPY (TEM)
- ❑ NAME AND SIGNATURE OF ANALYSTS
- ❑ RESULTS OF ANALYSIS (ATTACH LAB REPORT

SMALL SCALE, SHORT DURATION OPERATIONS AND MAINTENANCE ACTIVITIES CHECKLIST

LOCAL EDUCATION AGENCY (LEA): _____

NAME OF SCHOOL: _____

ADDRESS: _____

ROOM NUMBER: _____

QUANTITIES OF ACM (Removed or Repaired): _____

DESIGNATED PERSON: _____

DATE OF ACTIVITY: _____

METHOD USED: _____

NAME OF PERSON(S) PERFORMING WORK/CLEANING:

_____
(Name and Signature)

_____
(Name and Signature)

_____
(Name and Signature)

STORAGE OR DISPOSAL SITE: _____

_____
(Address and Phone Number)

TITLE 40

PROTECTION OF ENVIRONMENT

CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)

PART 763 - ASBESTOS

Subpart E - Asbestos-Containing Materials in Schools

Section

763.80 Scope and purpose.
763.83 Definitions.
763.84 General local education agency responsibilities.
763.85 Inspection and re-inspections.
763.86 Sampling.
763.87 Analysis.
763.88 Assessment.
763.90 Response actions.
763.91 Operations and maintenance.
763.92 Training and periodic surveillance.
763.93 Management plans.
763.94 Recordkeeping.
763.95 Warning labels.
763.97 Compliance and enforcement.
763.98 Waiver; delegation to State.
763.99 Exclusions.

Subpart E - Asbestos-Containing Materials in Schools

Source: 52 FR 41846, Oct. 30, 1987, unless otherwise noted.

Sec. 763.80 Scope and purpose

(a) This rule requires local education agencies to identify friable and non-friable asbestos-containing material (ACM) in public and private elementary and secondary schools by visually inspecting school buildings for such materials, sampling such materials if they are not assumed to be ACM, and having samples analyzed by appropriate techniques referred to in this rule. The rule requires local education agencies to submit management plans to the Governor of their State by October 12, 1988, begin to implement the plans by July 9, 1989, and complete implementation of the plans in a timely fashion. In addition, local education agencies are required to use persons who have been accredited to conduct inspections, re-inspections, develop management plans, or perform response actions. The rule also includes recordkeeping requirements. Local education agencies may contractually delegate their duties under this rule, but they remain responsible for the proper performance of those duties. Local education agencies are encouraged to consult with EPA Regional Asbestos Coordinators, or if applicable, a State's lead agency designated by the State Governor, for assistance in complying with this rule.

(b) Local education agencies must provide for the transportation and disposal of asbestos in accordance with EPA's "Asbestos Waste Management Guidance." For convenience, applicable sections of this guidance are reprinted as Appendix D of this subpart. There are regulations in place, however, that affect transportation and disposal of

asbestos waste generated by this rule. The transportation of asbestos waste is covered by the Department of Transportation (49 CFR part 173, subpart J) and disposal is covered by the National Emissions Standards for Hazardous Air Pollutants (NESHAP) (40 CFR part 61, subpart M).

Sec. 763.83 Definitions
For purposes of this subpart:
Act means the Toxic Substances Control Act (TSCA), 15 U.S.C. 2601, et seq.

Accessible, when referring to ACM, means that the material is subject to disturbance by school building occupants or custodial or maintenance personnel in the course of their normal activities.
Accredited or accreditation when referring to a person or laboratory means that such person or laboratory is accredited in accordance with section 206 of Title II of the Act. Air erosion means the passage of air over friable ACBM which may result in the release of asbestos fibers.
Asbestos means the asbestiform varieties of: Chrysotile (serpentine); Crocidolite riebeckite); Amosite (cummingtonitegrunerite); Anthophyllite; Tremolite; and Actinolite. Asbestos-containing material (ACM) when referring to school buildings means any material or product which contains more than one percent (1%) asbestos.
Asbestos-containing building material (ACBM) means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building. Asbestos debris means pieces of ACBM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.
Damaged friable miscellaneous ACM means friable miscellaneous ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or, if applicable, which has delaminated such that its bond to the substrate (adhesion) is inadequate or which for any other reason lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.
Damaged friable surfacing ACM means friable surfacing ACM which has deteriorated or sustained physical injury such that the internal structure (cohesion) of the material is inadequate or which has delaminated such that its bond to the substrate (adhesion) is inadequate, or which, for any other reason, lacks fiber cohesion or adhesion qualities. Such damage or deterioration may be illustrated by the separation of ACM into layers; separation of ACM from the substrate; flaking, blistering, or crumbling of the ACM surface; water damage; significant or repeated water stains, scrapes, gouges, mars or other signs of physical injury on the ACM. Asbestos debris originating from the ACBM in question may also indicate damage.
Damaged or significantly damaged thermal system insulation ACM means thermal system insulation ACM on pipes, boilers, tanks, ducts, and other thermal system insulation equipment where the insulation has lost its structural integrity, or its covering, in whole or in part, is crushed, water-stained, gouged, punctured, missing, or not intact such that it is not able to contain fibers. Damage may be further illustrated by occasional punctures, gouges or other signs of physical injury to ACM; the protective coverings/jackets; or exposed ACM ends or joints. Asbestos debris originating from the ACBM in question may also indicate damage.
Encapsulation means the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).
Enclosure means an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air. Fiber release episode means any uncontrolled or unintentional disturbance of ACBM resulting in visible emission. Friable when referring to material in a school building means that the material, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure, and includes previously non-friable material after such previously non-friable material becomes damaged to the extent that when dry it may be crumbled, pulverized, or reduced to powder by hand pressure.
Functional space means a room, group of rooms, or homogeneous area (including crawl spaces or the space between a dropped ceiling and the floor or roof deck above), such as classroom(s), a cafeteria, gymnasium,

hallway(s), designated by a person accredited to prepare management plans, design abatement projects, or conduct response actions.
High-efficiency particulate air (HEPA) refers to a filtering system capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles 0.3 µm in diameter or larger.
Homogeneous area means an area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in color and texture.
Local education agency means:
(1) Any local educational agency as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 3381).
(2) The owner of any nonpublic, nonprofit elementary, or secondary
school building.
(3) The governing authority of any school operated under the defense dependent's education system provided for under the Defense Dependents' Education Act of 1978 (20 U.S.C. 921, et seq.).
Miscellaneous ACM means miscellaneous material that is ACM in a school building.
Miscellaneous material means interior building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and does not include surfacing material or thermal system insulation.
Non-friable means material in a school building which when dry may not be crumbled, pulverized, or reduced to powder by hand pressure.
Operations and maintenance program means a program of work practices to maintain friable ACBM in good condition, ensure clean up of asbestos fibers previously released, and prevent further release by minimizing and controlling friable ACBM disturbance or damage.
Potential damage means circumstances in which:
(1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities.
(2) There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.
Potential significant damage means circumstances in which:
(1) Friable ACBM is in an area regularly used by building occupants, including maintenance personnel, in the course of their normal activities.
(2) There are indications that there is a reasonable likelihood that the material or its covering will become significantly damaged, deteriorated, or delaminated due to factors such as changes in building use, changes in operations and maintenance practices, changes in occupancy, or recurrent damage.
(3) The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or, under certain circumstances, vibration or air erosion.
Preventive measures means actions taken to reduce disturbance of ACBM or otherwise eliminate the reasonable likelihood of the material's becoming damaged or significantly damaged.
Removal means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area in a school building.
Repair means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.
Response action means a method, including removal, encapsulation, enclosure, repair, operations and maintenance that protect human health and the environment from friable ACBM.
Routine maintenance area means an area, such as a boiler room or mechanical room, that is not normally frequented by students and in which maintenance employees or contract workers regularly conduct maintenance activities.
School means any elementary or secondary school as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2854).

School building means:
(1) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food.

(2) Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education.
(3) Any other facility used for the instruction or housing of students or for the administration of educational or research programs.
(4) Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described in this definition of "school building" under paragraphs (1), (2), or (3).
(5) Any portico or covered exterior hallway or walkway.
(6) Any exterior portion of a mechanical system used to condition interior space.

Significantly damaged friable miscellaneous ACM means damaged friable miscellaneous ACM where the damage is extensive and severe.

Significantly damaged friable surfacing ACM means damaged friable surfacing ACM in a functional space where the damage is extensive and severe.

Surfacing ACM means surfacing material that is ACM.

Surfacing material means material in a school building that is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Thermal system insulation means material in a school building applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes.

Thermal system insulation ACM means thermal system insulation that is ACM.

Vibration means the periodic motion of friable ACBM which may result in the release of asbestos fibers.

Sec. 763.84 General local education agency responsibilities

Each local education agency shall:

(a) Ensure that the activities of any persons who perform inspections, re-inspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with subpart E of this part.
(b) Ensure that all custodial and maintenance employees are properly trained as required by this subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
(c) Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic re-inspection and surveillance activities that are planned or in progress.
(d) Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations of ACBM and suspected ACBM assumed to be ACM.
(e) Ensure that warning labels are posted in accordance with Sec. 763.95.
(f) Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under Sec. 763.93(g).
(g) (1) Designate a person to ensure that requirements under this section are properly implemented.
(2) Ensure that the designated person receives adequate training to perform duties assigned under this section. Such training shall provide, as necessary, basic knowledge of:
(i) Health effects of asbestos.
(ii) Detection, identification, and assessment of ACM.
(iii) Options for controlling ACBM.
(iv) Asbestos management programs.
(v) Relevant Federal and State regulations concerning asbestos, including those in this subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Labor, the U.S. Department of Transportation and the U.S. Environmental Protection Agency.
(h) Consider whether any conflict of interest may arise from the interrelationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under this subpart.

Sec. 763.85 Inspection and re-inspections.

(a) Inspection.

(1) Except as provided in paragraph (a)(2) of this section, before October 12, 1988, local education agencies shall inspect each school building that they lease, own, or otherwise use as a school building to identify all locations of friable and non-friable ACBM.

(2) Any building leased or acquired on or after October 12, 1988, that is to be used as a school building shall be inspected as described under paragraphs (a) (3) and (4) of this section prior to use as a school building. In the event that emergency use of an un-inspected building as a school building is necessitated, such buildings shall be inspected within 30 days after commencement of such use.

(3) Each inspection shall be made by an accredited inspector.

(4) For each area of a school building, except as excluded under Sec. 763.99, each person performing an inspection shall:

(i) Visually inspect the area to identify the locations of all suspected ACBM.

(ii) Touch all suspected ACBM to determine whether they are friable.

(iii) Identify all homogeneous areas of friable suspected ACBM and all homogeneous areas of non-friable suspected ACBM.

(iv) Assume that some or all of the homogeneous areas are ACM, and, for each homogeneous area that is not assumed to be ACM, collect and submit for analysis bulk samples under Secs. 763.86 and 763.87.

(v) Assess, under Sec. 763.88, friable material in areas where samples are collected, friable material in areas that are assumed to be ACBM, and friable ACBM identified during a previous inspection.

(vi) Record the following and submit to the person designated under Sec. 763.84 a copy of such record for inclusion in the management plan within 30 days of the inspection:

(a) An inspection report with the date of the inspection signed by each accredited person making the inspection, State of accreditation, and if applicable, his or her accreditation number.

(b) An inventory of the locations of the homogeneous areas where samples are collected, exact location where each bulk sample is collected, dates that samples are collected, homogeneous areas where friable suspected ACBM is assumed to be ACM, and homogeneous areas where non-friable suspected ACBM is assumed to be ACM.

(c) A description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number.

(d) A list of whether the homogeneous areas identified under paragraph (a)(4)(vi)(B) of this section, are surfacing material, thermal system insulation, or miscellaneous material.

(e) Assessments made of friable material, the name and signature of each accredited inspector making the assessment, State of accreditation, and if applicable, his or her accreditation number.

(b) Re-inspection.

(1) At least once every 3 years after a management plan is in effect, each local education agency shall conduct a re-inspection of all friable and non-friable known or assumed ACBM in each school building that they lease, own, or otherwise use as a school building.

(2) Each inspection shall be made by an accredited inspector.

(3) For each area of a school building, each person performing a re-inspection shall:

(i) Visually re-inspect, and reassess, under Sec. 763.88, the condition of all friable known or assumed ACBM.

(ii) Visually inspect material that was previously considered non-friable ACBM and touch the material to determine whether it has become friable since the last inspection or re-inspection.

(iii) Identify any homogeneous areas with material that has become friable since the last inspection or re-inspection.

(iv) For each homogeneous area of newly friable material that is already assumed to be ACBM, bulk samples may be collected and submitted for analysis in accordance with Secs. 763.86 and 763.87.

(v) Assess, under Sec. 763.88, the condition of the newly friable material in areas where samples are collected, and newly friable materials in areas that are assumed to be ACBM.

(vi) Reassess, under Sec. 763.88, the condition of friable known or assumed ACBM previously identified.

(vii) Record the following and submit to the person designated under Sec. 763.84 a copy of such record for inclusion in the management plan within 30 days of the re-inspection:

(a) The date of the re-inspection, the name and signature of the person making the re-inspection, State of accreditation, and if applicable, his or her accreditation number, and any changes in the condition of known or assumed ACBM.

(b) The exact locations where samples are collected during the re-inspection, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number.

(c) Any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, State of accreditation, and if applicable, his or her accreditation number.

(d) General. Thermal system insulation that has retained its structural integrity and that has an undamaged protective jacket or wrap that prevents fiber release shall be treated as non-friable and therefore is subject only to periodic surveillance and preventive measures as necessary.

Sec. 763.86 Sampling

(a) Surfacing material. An accredited inspector shall collect, in a statistically random manner that is representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM, and shall collect the samples as follows:

(1) At least three bulk samples shall be collected from each homogeneous area that is 1,000 ft\2\ or less, except as provided in Sec. 763.87(c)(2).

(2) At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 ft\2\ but less than or equal to 5,000 ft\2\, except as provided in Sec. 763.87(c)(2).

(3) At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 ft\2\, except as provided in Sec. 763.87(c)(2).

(b) Thermal system insulation.

(1) Except as provided in paragraphs (b) (2) through (4) of this section and Sec. 763.87(c), an accredited inspector shall collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM.

(2) Collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet.

(3) In a manner sufficient to determine whether the material is ACM or not ACM, collect bulk samples from each insulated mechanical system that is not assumed to be ACM where cement or plaster is used on fittings such as tees, elbows, or valves, except as provided under Sec. 763.87(c)(2).

(4) Bulk samples are not required to be collected from any homogeneous area where the accredited inspector has determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-ACBM.

(c) Miscellaneous material. In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.

(d) Non-friable suspected ACBM. If any homogeneous area of non-friable suspected ACBM is not assumed to be ACM, then an accredited inspector shall collect, in a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from the homogeneous area of non-friable suspected ACBM that is not assumed to be ACM.

Sec. 763.87 Analysis

(a) Local education agencies shall have bulk samples, collected under Sec. 763.86 and submitted for analysis, analyzed for asbestos using laboratories accredited by the National Bureau of Standards (NBS). Local education agencies shall use laboratories which have received interim accreditation for polarized light microscopy (PLM)

analysis under the EPA Interim Asbestos Bulk Sample Analysis Quality Assurance Program until the NBS PLM laboratory accreditation program for PLM is operational.

(b) Bulk samples shall not be composited for analysis and shall be analyzed for asbestos content by PLM, using the "Interim Method for the Determination of Asbestos in Bulk Insulation Samples" found at appendix E to subpart E of this part.

(c)
  (1) A homogeneous area is considered not to contain ACM only if the results of all samples required to be collected from the area show asbestos in amounts of 1 percent or less.
  (2) A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent.

(d) The name and address of each laboratory performing an analysis, the date of analysis, and the name and signature of the person performing the analysis shall be submitted to the person designated under Sec. 763.84 for inclusion into the management plan within 30 days of the analysis. [52 FR 41846, Oct. 30, 1987, as amended at 60 FR 31922, June 19, 1995]

Sec. 763.88 Assessment

(a)
  (1) For each inspection and re-inspection conducted under Sec. 763.85 (a) and (c) and previous inspections specified under Sec. 763.99, the local education agency shall have an accredited inspector provide a written assessment of all friable known or assumed ACBM in the school building.
  (2) Each accredited inspector providing a written assessment shall sign and date the assessment, provide his or her State of accreditation, and if applicable, accreditation number, and submit a copy of the assessment to the person designated under Sec. 763.84 for inclusion in the management plan within 30 days of the assessment.

(b) The inspector shall classify and give reasons in the written assessment for classifying the ACBM and suspected ACBM assumed to be ACM in the school building into one of the following categories:
  (1) Damaged or significantly damaged thermal system insulation ACM.
  (2) Damaged friable surfacing ACM.
  (3) Significantly damaged friable surfacing ACM.
  (4) Damaged or significantly damaged friable miscellaneous ACM.
  (5) ACBM with potential for damage.
  (6) ACBM with potential for significant damage.
  (7) Any remaining friable ACBM or friable suspected ACBM.

(c) Assessment may include the following considerations:
  (1) Location and the amount of the material, both in total quantity and as a percentage of the functional space.
  (2) Condition of the material, specifying:
    (i) Type of damage or significant damage (e.g., flaking, blistering, water damage, or other signs of physical damage).
    (ii) Severity of damage (e.g., major flaking, severely torn jackets, as opposed to occasional flaking, minor tears to jackets).
    (iii) Extent or spread of damage over large areas or large percentages of the homogeneous area.
  (3) Whether the material is accessible.
  (4) The material's potential for disturbance.
  (5) Known or suspected causes of damage or significant damage (e.g., air erosion, vandalism, vibration, water).
  (6) Preventive measures which might eliminate the reasonable likelihood of undamaged ACM from becoming significantly damaged.

(d) The local education agency shall select a person accredited to develop management plans to review the results of each inspection, re-inspection, and assessment for the school building and to conduct any other necessary activities in order to recommend in writing to the local education agency appropriate response actions. The accredited person shall sign and date the recommendation, provide his or her State of accreditation, and, if

applicable, provide his or her accreditation number, and submit a copy of the recommendation to the person designated under Sec. 763.84 for inclusion in the management plan.

Sec. 763.90 Response actions

(a) The local education agency shall select and implement in a timely manner the appropriate response actions in this section consistent with the assessment conducted in Sec. 763.88. The response actions selected shall be sufficient to protect human health and the environment. The local education agency may then select, from the response actions which protect human health and the environment, that action which is the least burdensome method. Nothing in this section shall be construed to prohibit removal of ACBM from a school building at any time, should removal be the preferred response action of the local education agency.

(b) If damaged or significantly damaged thermal system insulation ACM is present in a building, the local education agency shall:
   (1) At least repair the damaged area.
   (2) Remove the damaged material if it is not feasible, due to technological factors, to repair the damage.
   (3) Maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition.

(c)
   (1) If damaged friable surfacing ACM or damaged friable miscellaneous ACM is present in a building, the local education agency shall select from among the following response actions: encapsulation, enclosure, removal, or repair of the damaged material.
   (2) In selecting the response action from among those which meet the definitional standards in Sec. 763.83, the local education agency shall determine which of these response actions protects human health and the environment. For purposes of determining which of these response actions are the least burdensome, the local education agency may then consider local circumstances, including occupancy and use patterns within the school building, and its economic concerns, including short- and long-term costs.

(d) If significantly damaged friable surfacing ACM or significantly damaged friable miscellaneous ACM is present in a building the local education agency shall:
   (1) Immediately isolate the functional space and restrict access, unless isolation is not necessary to protect human health and the environment.
   (2) Remove the material in the functional space or, depending upon whether enclosure or encapsulation would be sufficient to protect human health and the environment, enclose or encapsulate.

(e) If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that has potential for damage is present in a building, the local education agency shall at least implement an operations and maintenance (O&M) program, as described under Sec. 763.91.

(f) If any friable surfacing ACM, thermal system insulation ACM, or friable miscellaneous ACM that has potential for significant damage is present in a building, the local education agency shall:
   (1) Implement an O&M program, as described under Sec. 763.91.
   (2) Institute preventive measures appropriate to eliminate the reasonable likelihood that the ACM or its covering will become significantly damaged, deteriorated, or delaminated.
   (3) Remove the material as soon as possible if appropriate preventive measures cannot be effectively implemented, or unless other response actions are determined to protect human health and the environment. Immediately isolate the area and restrict access if necessary to avoid an imminent and substantial endangerment to human health or the environment.

(g) Response actions including removal, encapsulation, enclosure, or repair, other than small-scale, short-duration repairs, shall be designed and conducted by persons accredited to design and conduct response actions.

(h) The requirements of this subpart E in no way supersede the worker protection and work practice requirements under 29 CFR 1926.58 (Occupational Safety and Health Administration (OSHA) asbestos worker protection standards for construction), 40 CFR part 763, subpart G (EPA asbestos worker protection standards for public employees), and 40 CFR part 61, subpart M (National Emission Standards for Hazardous Air Pollutants—Asbestos).

(i) Completion of response actions.

(1) At the conclusion of any action to remove, encapsulate, or enclose ACBM or material assumed to be ACBM, a person designated by the local education agency shall visually inspect each functional space where such action was conducted to determine whether the action has been properly completed.

(2)

(i) A person designated by the local education agency shall collect air samples using aggressive sampling as described in appendix A to this subpart E to monitor air for clearance after each removal, encapsulation, and enclosure project involving ACBM, except for projects that are of small-scale, short-duration.

(ii) Local education agencies shall have air samples collected under this section analyzed for asbestos using laboratories accredited by the National Bureau of Standards to conduct such analysis using transmission electron microscopy (TEM) or, under circumstances permitted in this section, laboratories enrolled in the American Industrial Hygiene Association Proficiency Analytical Testing Program for phase contrast microscopy (PCM).

(iii) Until the National Bureau of Standards TEM laboratory accreditation program is operational, local educational agencies shall use laboratories that use the protocol described in appendix A to subpart E of this part.

(3) Except as provided in paragraphs (i)(4), and (i)(5), of this section, an action to remove, encapsulate, or enclose ACBM shall be considered complete when the average concentration of asbestos of five air samples collected within the affected functional space and analyzed by the TEM method in appendix A of this subpart E, is not statistically significantly different, as determined by the Z-test calculation found in appendix A of this subpart E, from the average asbestos concentration of five air samples collected at the same time outside the affected functional space and analyzed in the same manner, and the average asbestos concentration of the three field blanks described in appendix A of this subpart E is below the filter background level, as defined in appendix A of this subpart E, of 70 structures per square millimeter (70 s/mm \2\).

(4) An action may also be considered complete if the volume of air drawn for each of the five samples collected within the affected functional space is equal to or greater than 1,199 L of air for a 25 mm filter or equal to or greater than 2,799 L of air for a 37 mm filter, and the average concentration of asbestos as analyzed by the TEM method in appendix A of this subpart E, for the five air samples does not exceed the filter background level, as defined in appendix A, of 70 structures per square millimeter (70 s/mm \2\). If the average concentration of asbestos of the five air samples within the affected functional space exceeds 70 s/mm \2\, or if the volume of air in each of the samples is less than 1,199 L of air for a 25 mm filter or less than 2,799 L of air for a 37 mm filter, the action shall be considered complete only when the requirements of paragraph (i)(3) or (i)(5), of this section are met.

(5) At any time, a local education agency may analyze air monitoring samples collected for clearance purposes by phase contrast microscopy (PCM) to confirm completion of removal, encapsulation, or enclosure of ACBM that is greater than small-scale, short-duration and less than or equal to 160 square feet or 260 linear feet. The action shall be considered complete when the results of samples collected in the affected functional space and analyzed by phase contrast microscopy using the National Institute for Occupational Safety and Health (NIOSH) Method 7400 entitled “Fibers” published in the NIOSH Manual of Analytical Methods, 3rd Edition, Second Supplement, August 1987, show that the concentration of fibers for each of the five samples is less than or equal to a limit of quantization for PCM (0.01 fibers per cubic centimeter (0.01 f/cm \3\) of air). The method is available for public inspection at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, DC, 20408, and the Non-Confidential Information Center (NCIC) (7407), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room B-607 NEM, 401 M St., SW., Washington, DC 20460, between the hours of 12 p.m. and 4 p.m. weekdays excluding legal holidays. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The method is incorporated as it exists on the effective date of this rule, and a notice of any change to the method will be published in the Federal Register.

(6) To determine the amount of ACBM affected under paragraph (i)(5) of this section, the local education agency shall add the total square or linear footage of ACBM within the containment barriers used to isolate the functional space for the action to remove, encapsulate, or enclose the ACBM. Contiguous portions of material subject to such action conducted concurrently or at approximately the same time within the same school building shall not be separated to qualify under paragraph (i)(5), of this section. [52 FR 41846, Oct. 30, 1987, as amended at 53 FR 12525, Apr. 15, 1988; 60 FR 31922, June 19, 1995; 60 FR 34465, July 3, 1995]

Sec. 763.91 Operations and maintenance

(a) Applicability. The local education agency shall implement an operations, maintenance, and repair (O&M) program under this section whenever any friable ACBM is present or assumed to be present in a building that it leases, owns, or otherwise uses as a school building. Any material identified as non-friable ACBM or non-friable assumed ACBM must be treated as friable ACBM for purposes of this section when the material is about to become friable as a result of activities performed in the school building.

(b) Worker protection. Local education agencies must comply with either the OSHA Asbestos Construction Standard at 29 CFR 1926.1101, or the Asbestos Worker Protection Rule at 40 CFR 763.120, whichever is applicable.

(c) Cleaning

(1) Initial cleaning. Unless the building has been cleaned using equivalent methods within the previous 6 months, all areas of a school building where friable ACBM, damaged or significantly damaged thermal system insulation ACM, or friable suspected ACBM assumed to be ACM are present shall be cleaned at least once after the completion of the inspection required by Sec. 763.85(a) and before the initiation of any response action, other than O&M activities or repair, according to the following procedures:

(i) HEPA-vacuum or steam-clean all carpets.

(ii) HEPA-vacuum or wet-clean all other floors and all other horizontal surfaces.

(iii) Dispose of all debris, filters, mop-heads, and cloths in sealed, leak-tight containers.

(2) Additional cleaning. The accredited management planner shall make a written recommendation to the local education agency whether additional cleaning is needed, and if so, the methods and frequency of such cleaning.

(d) Operations and maintenance activities. The local education agency shall ensure that the procedures described below to protect building occupants shall be followed for any operations and maintenance activities disturbing friable ACBM:

(1) Restrict entry into the area by persons other than those necessary to perform the maintenance project, either by physically isolating the area or by scheduling.

(2) Post signs to prevent entry by unauthorized persons.

(3) Shut off or temporarily modify the air-handling system and restrict other sources of air movement.

(4) Use work practices or other controls, such as, wet methods, protective clothing, HEPA-vacuums, mini-enclosures, glove bags, as necessary to inhibit the spread of any released fibers.

(5) Clean all fixtures or other components in the immediate work area.

(6) Place the asbestos debris and other cleaning materials in a sealed, leak-tight container.

(e) Maintenance activities other than small-scale, short-duration.

The response action for any maintenance activities disturbing friable ACBM, other than small-scale, short-duration maintenance activities, shall be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.(f) Fiber release episodes

(1) Minor fiber release episode. The local education agency shall ensure that the procedures described below are followed in the event of a minor fiber release episode (i.e., the falling or dislodging of 3 square or linear feet or less of friable ACBM):

(i) Thoroughly saturate the debris using wet methods.

(ii) Clean the area, as described in paragraph (e) of this section.

(iii) Place the asbestos debris in a sealed, leak-tight container.

(iv) Repair the area of damaged ACM with materials such as asbestos-free spackling, plaster, cement, or insulation, or seal with latex paint or an encapsulant, or immediately have the appropriate response action implemented as required by Sec. 763.90.

(2) Major fiber release episode. The local education agency shall ensure that the procedures described below are followed in the event of a major fiber release episode (i.e., the falling or dislodging of more than 3 square or linear feet of friable ACBM):

(i) Restrict entry into the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.

(ii) Shut off or temporarily modify the air-handling system to prevent the distribution of fibers to other areas in the building.

(iii) The response action for any major fiber release episode must be designed by persons accredited to design response actions and conducted by persons accredited to conduct response actions.[52 FR 41846, Oct. 30, 1987, as amended at 65 FR 69216, Nov. 15, 2000]

Sec. 763.92 Training and periodic surveillance

(a) Training.

(1) The local education agency shall ensure, prior to the implementation of the O&M provisions of the management plan, that all members of its maintenance and custodial staff (custodians, electricians, heating/air conditioning engineers, plumbers, etc.) who may work in a building that contains ACBM receive awareness training of at least 2 hours, whether or not they are required to work with ACBM. New custodial and maintenance employees shall be trained within 60 days after commencement of employment. Training shall include, but not be limited to:

(i) Information regarding asbestos and its various uses and forms.

(ii) Information on the health effects associated with asbestos exposure.

(iii) Locations of ACBM identified throughout each school building in which they work.

(iv) Recognition of damage, deterioration, and de-lamination of ACBM.

(v) Name and telephone number of the person designated to carry out general local education agency responsibilities under Sec. 763.84 and the availability and location of the management plan.

(2) The local education agency shall ensure that all members of its maintenance and custodial staff who conduct any activities that will result in the disturbance of ACBM shall receive training described in paragraph (a)(1) of this section and 14 hours of additional training.

Additional training shall include, but not be limited to:

(i) Descriptions of the proper methods of handling ACBM.

(ii) Information on the use of respiratory protection as contained in the EPA/NIOSH Guide to Respiratory Protection for the Asbestos Abatement Industry, September 1986 (EPA 560/OPPTS-86-001), available from the Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, U.S. Environmental Protection Agency, Room E-543B, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Telephone: (202) 554-1404, TDD: (202) 544-0551 and other personal protection measures.

(iii) The provisions of this section and Sec. 763.91, Appendices A, C, and D of this subpart E of this part, EPA regulations contained in 40 CFR part 763, subpart G, and in 40 CFR part 61, subpart M, and OSHA regulations contained in 29 CFR 1926.58.

(iv) Hands-on training in the use of respiratory protection, other personal protection measures, and good work practices.

(3) Local education agency maintenance and custodial staff who have attended EPA-approved asbestos training or received equivalent training for O&M and periodic surveillance activities involving asbestos shall be considered trained for the purposes of this section.

(b) Periodic surveillance.

(1) At least once every 6 months after a management plan is in effect, each local education agency shall conduct periodic surveillance in each building that it leases, owns, or otherwise uses as a school building that contains ACBM or is assumed to contain ACBM.

(2) Each person performing periodic surveillance shall:

(i) Visually inspect all areas that are identified in the management plan as ACBM or assumed ACBM.
(ii) Record the date of the surveillance, his or her name, and any changes in the condition of the materials.
(iii) Submit to the person designated to carry out general local education agency responsibilities under Sec. 763.84 a copy of such record for inclusion in the management plan. [52 FR 41846, Oct. 30, 1987, as amended at 60 FR 34465, July 3, 1995; 65 FR 69216, Nov. 15, 2000]

Sec. 763.93 Management plans

(a)(1)On or before October 12, 1988, each local education agency shall develop an asbestos management plan for each school, including all buildings that they lease, own, or otherwise use as school buildings, and submit the plan to an Agency designated by the Governor of the State in which the local education agency is located. The plan may be submitted in stages that cover a portion of the school buildings under the authority of the local education agency.

(2) If a building to be used as part of a school is leased or otherwise acquired after October 12, 1988, the local education agency shall include the new building in the management plan for the school prior to its use as a school building. The revised portions of the management plan shall be submitted to the Agency designated by the Governor.

(3) If a local education agency begins to use a building as a school after October 12, 1988, the local education agency shall submit a management plan for the school to the Agency designated by the Governor prior to its use as a school.

(b) On or before October 17, 1987, the Governor of each State shall notify local education agencies in the State regarding where to submit their management plans. States may establish administrative procedures for reviewing management plans. If the Governor does not disapprove a management plan within 90 days after receipt of the plan, the local education agency shall implement the plan.

(c) Each local education agency must begin implementation of its management plan on or before July 9, 1989, and complete implementation in a timely fashion.

(d) Each local education agency shall maintain and update its management plan to keep it current with ongoing operations and maintenance, periodic surveillance, inspection, re-inspection, and response action activities. All provisions required to be included in the management plan under this section shall be retained as part of the management plan, as well as any information that has been revised to bring the plan up-to-date.

(e) The management plan shall be developed by an accredited management planner and shall include:

(1) A list of the name and address of each school building and whether the school building contains friable ACBM, non-friable ACBM, and friable and non-friable suspected ACBM assumed to be ACM.

(2) For each inspection conducted before the December 14, 1987:

(i) The date of the inspection.

(ii) A blueprint, diagram, or written description of each school building that identifies clearly each location and approximate square or linear footage of any homogeneous or sampling area where material was sampled for ACM, and, if possible, the exact locations where bulk samples were collected, and the dates of collection.

(iii) A copy of the analyses of any bulk samples, dates of analyses, and a copy of any other laboratory reports pertaining to the analyses.

(iv) A description of any response actions or preventive measures taken to reduce asbestos exposure, including if possible, the names and addresses of all contractors involved, start and completion dates of the work, and results of any air samples analyzed during and upon completion of the work.

(v) A description of assessments, required to be made under Sec. 763.88, of material that was identified before December 14, 1987, as friable ACBM or friable suspected ACBM assumed to be ACM, and the name and signature, State of accreditation, and if applicable, accreditation number of each accredited person making the assessments.

(3) For each inspection and re-inspection conducted under Sec. 763.85:

(i) The date of the inspection or re-inspection and the name and signature, State of accreditation and, if applicable, the accreditation number of each accredited inspector performing the inspection or re-inspection.

(ii) A blueprint, diagram, or written description of each school building that identifies clearly each location and approximate square or linear footage of homogeneous areas where material was sampled for ACM, the exact location where each bulk sample was collected, date of collection, homogeneous areas where friable suspected ACBM is assumed to be ACM, and where non-friable suspected ACBM is assumed to be ACM.

(iii) A description of the manner used to determine sampling locations, and the name and signature of each accredited inspector collecting samples, the State of accreditation, and if applicable, his or her accreditation number.

(iv) A copy of the analyses of any bulk samples collected and analyzed, the name and address of any laboratory that analyzed bulk samples, a statement that the laboratory meets the applicable requirements of Sec. 763.87(a) the date of analysis, and the name and signature of the person performing the analysis.

(v) A description of assessments, required to be made under Sec. 763.88, of all ACBM and suspected ACBM assumed to be ACM, and the name, signature, State of accreditation, and if applicable, accreditation number of each accredited person making the assessments.

(4) The name, address, and telephone number of the person designated under Sec. 763.84 to ensure that the duties of the local education agency are carried out, and the course name, and dates and hours of training taken by that person to carry out the duties.

(5) The recommendations made to the local education agency regarding response actions, under Sec. 763.88(d), the name, signature, State of accreditation of each person making the recommendations, and if applicable, his or her accreditation number.

(6) A detailed description of preventive measures and response actions to be taken, including methods to be used, for any friable ACBM, the locations where such measures and action will be taken, reasons for selecting the response action or preventive measure, and a schedule for beginning and completing each preventive measure and response action.

(7) With respect to the person or persons who inspected for ACBM and who will design or carry out response actions, except for operations and maintenance, with respect to the ACBM, one of the following statements:

(i) If the State has adopted a contractor accreditation program under section 206(b) of Title II of the Act, a statement that the person(s) is accredited under such plan.

(ii) A statement that the local education agency used (or will use) persons who have been accredited by another State which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act or is accredited by an EPA-approved course under section 206 (c) of Title II of the Act.

(8) A detailed description in the form of a blueprint, diagram, or in writing of any ACBM or suspected ACBM assumed to be ACM which remains in the school once response actions are undertaken pursuant to Sec. 763.90. This description shall be updated as response actions are completed.

(9) A plan for re-inspection under Sec. 763.85, a plan for operations and maintenance activities under Sec. 763.91, and a plan for periodic surveillance under Sec. 763.92, a description of the recommendation made by the management planner regarding additional cleaning under Sec. 763.91(c)(2) as part of an operations and maintenance program, and the response of the local education agency to that recommendation.

(10) A description of steps taken to inform workers and building occupants, or their legal guardians, about inspections, re-inspections, response actions, and post-response action activities, including periodic re-inspection and surveillance activities that are planned or in progress.

(11) An evaluation of the resources needed to complete response actions successfully and carry out re-inspection, operations and maintenance activities, periodic surveillance and training.

(12) With respect to each consultant who contributed to the management plan, the name of the consultant and one of the following statements:

(i) If the State has adopted a contractor accreditations plan under section 206(b) of Title II of the Act, a statement that the consultant is accredited under such plan.

(ii) A statement that the contractor is accredited by another State which has adopted a contractor accreditation plan under section 206(b) of Title II of the Act, or is accredited by an EPA-approved course developed under section 206(c) of Title II of the Act.

(f) A local education agency may require each management plan to contain a statement signed by an accredited management plan developer that such person has prepared or assisted in the preparation of such plan or has reviewed such plan, and that such plan is in compliance with this subpart E. Such statement may not be signed by a person who, in addition to preparing or assisting in preparing the management plan, also implements (or will implement) the management plan.

(g)

(1) Upon submission of a management plan to the Governor for review, a local education agency shall keep a copy of the plan in its administrative office. The management plans shall be available, without cost or restriction, for inspection by representatives of EPA and the State, the public, including teachers, other school personnel and their representatives, and parents. The local education agency may charge a reasonable cost to make copies of management plans.

(2) Each local education agency shall maintain in its administrative office a complete, updated copy of a management plan for each school under its administrative control or direction. The management plans shall be available, during normal business hours, without cost or restriction, for inspection by representatives of EPA and the State, the public, including teachers, other school personnel and their representatives, and parents. The local education agency may charge a reasonable cost to make copies of management plans.

(3) Each school shall maintain in its administrative office a complete, updated copy of the management plan for that school. Management plans shall be available for inspection, without cost or restriction, to workers before work begins in any area of a school building. The school shall make management plans available for inspection to representatives of EPA and the State, the public, including parents, teachers, and other school personnel and their representatives within 5 working days after receiving a request for inspection. The school may charge a reasonable cost to make copies of the management plan.

(4) Upon submission of its management plan to the Governor and at least once each school year, the local education agency shall notify in writing parent, teacher, and employee organizations of the availability of management plans and shall include in the management plan a description of the steps taken to notify such organizations, and a dated copy of the notification. In the absence of any such organizations for parents, teachers, or employees, the local education agency shall provide written notice to that relevant group of the availability of management plans and shall include in the management plan a description of the steps taken to notify such groups, and a dated copy of the notification.

(h) Records required under Sec. 763.94 shall be made by local education agencies and maintained as part of the management plan.

(i) Each management plan must contain a true and correct statement, signed by the individual designated by the local education agency under Sec. 763.84, which certifies that the general, local education agency responsibilities, as stipulated by Sec. 763.84, have been met or will be met.

Sec. 763.94 Recordkeeping

(a) Records required under this section shall be maintained in a centralized location in the administrative office of both the school and the local education agency as part of the management plan. For each homogeneous area where all ACBM has been removed, the local education agency shall ensure that such records are retained for 3 years after the next re-inspection required under Sec. 763.85(b)(1), or for an equivalent period.

(b) For each preventive measure and response action taken for friable and non-friable ACBM and friable and non-friable suspected ACBM assumed to be ACM, the local education agency shall provide:

(1) A detailed written description of the measure or action, including methods used, the location where the measure or action was taken, reasons for selecting the measure or action, start and completion dates of the work, names and addresses of all contractors involved, and if applicable, their State of accreditation, and accreditation numbers, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(2) The name and signature of any person collecting any air sample required to be collected at the completion of certain response actions specified by Sec. 763.90(i), the locations where samples were collected, date of collection, the name and address of the laboratory analyzing the samples, the date of analysis, the results of

the analysis, the method of analysis, the name and signature of the person performing the analysis, and a statement that the laboratory meets the applicable requirements of Sec. 763.90(i)(2)(ii).

(c) For each person required to be trained under Sec. 763.92(a) (1) and (2), the local education agency shall provide the person's name and job title, the date that training was completed by that person, the location of the training, and the number of hours completed in such training.

(d) For each time that periodic surveillance under Sec. 763.92(b) is performed, the local education agency shall record the name of each person performing the surveillance, the date of the surveillance, and any changes in the conditions of the materials.

(e) For each time that cleaning under Sec. 763.91(c) is performed, the local education agency shall record the name of each person performing the cleaning, the date of such cleaning, the locations cleaned, and the methods used to perform such cleaning.

(f) For each time that operations and maintenance activities under Sec. 763.91(d) are performed, the local education agency shall record the name of each person performing the activity, the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(g) For each time that major asbestos activity under Sec. 763.91(e) is performed, the local education agency shall provide the name and signature, State of accreditation, and if applicable, the accreditation number of each person performing the activity, the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(h) For each fiber release episode under Sec. 763.91(f), the local education agency shall provide the date and location of the episode, the method of repair, preventive measures or response action taken, the name of each person performing the work, and if ACBM is removed, the name and location of storage or disposal site of the ACM.

(Approved by the Office of Management and Budget under control number 2070-0091)

Sec. 763.95 Warning labels

(a) The local education agency shall attach a warning label immediately adjacent to any friable and non-friable ACBM and suspected ACBM assumed to be ACM located in routine maintenance areas (such as boiler rooms) at each school building.

This shall include:

(1) Friable ACBM that was responded to by a means other than removal.

(2) ACBM for which no response action was carried out.

(b) All labels shall be prominently displayed in readily visible locations and shall remain posted until the ACBM that is labeled is removed.

(c) The warning label shall read, in print which is readily visible because of large size or bright color, as follows:

CAUTION:
ASBESTOS HAZARDOUS
DO NOT DISTURB WITHOUT PROPER
TRAINING AND EQUIPMENT.

Sec. 763.97 Compliance and enforcement

(a) Compliance with Title II of the Act.

(1) Section 207(a) of Title II of the Act (15 U.S.C. 2647) makes it unlawful for any local education agency to:

(i) Fail to conduct inspections pursuant to section 203(b) of Title II of the Act, including failure to follow procedures and failure to use accredited personnel and laboratories.

(ii) Knowingly submit false information to the Governor regarding any inspection pursuant to regulations under section 203(i) of Title II of the Act.

(iii) Fail to develop a management plan pursuant to regulations under section 203(i) of Title II of the Act.

(2) Section 207(a) of Title II of the Act (15 U.S.C. 2647) also provides that any local education agency which violates any provision of section 207 shall be liable for a civil penalty of not more than $5,000 for each day during which the violation continues. For the purposes of this subpart, a "violation" means a failure to comply with respect to a single school building.

(b) Compliance with Title I of the Act.

(1) Section 15(1)(D) of Title I of the Act (15 U.S.C. 2614) makes it unlawful for any person to fail or refuse to comply with any requirement of Title II or any rule promulgated or order issued under Title II. Therefore, any person who violates any requirement of this subpart is in violation of section 15 of Title I of the Act.

(2) Section 15(3) of Title I of the Act (15 U.S.C. 2614) makes it unlawful for any person to fail or refuse to establish or maintain records, submit reports, notices or other information, or permit access to or copying of records, as required by this Act or a rule thereunder.

(3) Section 15(4) (15 U.S.C. 2614) of Title I of the Act makes it unlawful for any person to fail or refuse to permit entry or inspection as required by section 11 of Title I of the Act.

(4) Section 16(a) of Title I of the Act (15 U.S.C. 2615) provides that any person who violates any provision of section 15 of Title I of the Act shall be liable to the United States for a civil penalty in an amount not to exceed $25,000 for each such violation. Each day such a violation continues shall, for purposes of this paragraph, constitute a separate violation of section 15. A local education agency is not liable for any civil penalty under Title I of the Act for failing or refusing to comply with any rule promulgated or order issued under Title II of the Act.

(c) Criminal penalties. If any violation committed by any person (including a local education agency) is knowing or willful, criminal penalties may be assessed under section 16(b) of Title I of the Act.

(d) Injunctive relief. The Agency may obtain injunctive relief under section 208(b) of Title II of the Act to respond to a hazard which poses an imminent and substantial endangerment to human health or the environment or section 17 (15 U.S.C. 2616) of Title I of the Act to restrain any violation of section 15 of Title I of the Act or to compel the taking of any action required by or under Title I of the Act.

(e) Citizen complaints. Any citizen who wishes to file a complaint pursuant to section 207(d) of Title II of the Act should direct the complaint to the Governor of the State or the EPA Asbestos Ombudsman, 1200 Pennsylvania Ave., NW., Washington, DC 20460. The citizen complaint should be in writing and identified as a citizen complaint pursuant to section 207(d) of Title II of TSCA. The EPA Asbestos Ombudsman or the Governor shall investigate and respond to the complaint within a reasonable period of time if the allegations provide a reasonable basis to believe that a violation of the Act has occurred.

(f) Inspections. EPA may conduct inspections and review management plans under section 11 of Title I of the Act (15 U.S.C. 2610) to ensure compliance.

Sec. 763.98 Waiver; delegation to State

(a) General.

(1) Upon request from a State Governor and after notice and comment and an opportunity for a public hearing in accordance with paragraphs (b) and (c) of this section, EPA may waive some or all of the requirements of this subpart E if the State has established and is implementing or intends to implement a program of asbestos inspection and management that contains requirements that are at least as stringent as the requirements of this subpart E.

(2) A waiver from any requirement of this subpart E shall apply only to the specific provision for which a waiver has been granted under this section. All requirements of this subpart E shall apply until a waiver is granted under this section.

(b) Request. Each request by a Governor to waive any requirement of this subpart E shall be sent with three complete copies of the request to the Regional Administrator for the EPA Region in which the State is located and shall include:

(1) A copy of the State provisions or proposed provisions relating to its program of asbestos inspection and management in schools for which the request is made.

(2)

(i) The name of the State agency that is or will be responsible for administering and enforcing the requirements for which a waiver is requested, the names and job titles of responsible officials in that agency, and phone numbers where the officials can be contacted.

(ii) In the event that more than one agency is or will be responsible for administering and enforcing the requirements for which a waiver is requested, a description of the functions to be performed by each agency, how the program will be coordinated by the lead agency to ensure consistency and effective administration in the asbestos inspection and management program within the State, the names and job titles of responsible officials in the agencies, and phone numbers where the officials can be contacted. The lead agency will serve as the central contact point for the EPA.

(3) Detailed reasons, supporting papers, and the rationale for concluding that the State's asbestos inspection and management program provisions for which the request is made are at least as stringent as the requirements of this subpart E.

(4) A discussion of any special situations, problems, and needs pertaining to the waiver request accompanied by an explanation of how the State intends to handle them.

(5) A statement of the resources that the State intends to devote to the administration and enforcement of the provisions relating to the waiver request.

(6) Copies of any specific or enabling State laws (enacted and pending enactment) and regulations (promulgated and pending promulgation) relating to the request, including provisions for assessing criminal and/or civil penalties.

(7) Assurance from the Governor, the Attorney General, or the legal counsel of the lead agency that the lead agency or other cooperating agencies have the legal authority necessary to carry out the requirements relating to the request.

(c) General Notice - hearing.

(1) Within 30 days after receipt of a request for a waiver, EPA will determine the completeness of the request. If EPA does not request further information within the 30-day period, the request will be deemed complete.

(2) Within 30 days after EPA determines that a request is complete, EPA will issue for publication in the Federal Register a notice that announces receipt of the request, describes the information submitted under paragraph (b) of this section, and solicits written comment from interested members of the public. Comments must be submitted within 60 days.

(3) If, during the comment period, EPA receives a written objection to a Governor's request and a request for a public hearing detailing specific objections to the granting of a waiver, EPA will schedule a public hearing to be held in the affected State after the close of the comment period and will announce the public hearing date in the Federal Register before the date of the hearing. Each comment shall include the name and address of the person submitting the comment.

(d) Criteria. EPA may waive some or all of the requirements of subpart E of this part if:

(1) The State's lead agency and other cooperating agencies have the legal authority necessary to carry out the provisions of asbestos inspection and management in schools relating to the waiver request.

(2) The State's program of asbestos inspection and management in schools relating to the waiver request and implementation of the program are or will be at least as stringent as the requirements of this subpart E.

(3) The State has an enforcement mechanism to allow it to implement the program described in the waiver request.

(4) The lead agency and any cooperating agencies have or will have qualified personnel to carry out the provisions relating to the waiver request.

(5) The State will devote adequate resources to the administration and enforcement of the asbestos inspection and management provisions relating to the waiver request.

(6) When specified by EPA, the State gives satisfactory assurances that necessary steps, including specific actions it proposes to take and a time schedule for their accomplishment, will be taken within a reasonable time to conform with applicable criteria under paragraphs (d) (2) through (4) of this section.

(e) Decision. EPA will issue for publication in the Federal Register a notice announcing its decision to grant or deny, in whole or in part, a Governor's request for a waiver from some or all of the requirements of this subpart E within 30 days after the close of the comment period or within 30 days following a public hearing, whichever is

applicable. The notice will include the Agency's reasons and rationale for granting or denying the Governor's request. The 30-day period may be extended if mutually agreed upon by EPA and the State.

(f) Modifications. When any substantial change is made in the administration or enforcement of a State program for which a waiver was granted under this section, a responsible official in the lead agency shall submit such changes to EPA.

(g) Reports. The lead agency in each State that has been granted a waiver by EPA from any requirement of subpart E of this part shall submit a report to the Regional Administrator for the Region in which the State is located at least once every 12 months to include the following information:
   (1) A summary of the State's implementation and enforcement activities during the last reporting period relating to provisions waived under this section, including enforcement actions taken.
   (2) Any changes in the administration or enforcement of the State program implemented during the last reporting period.
   (3) Other reports as may be required by EPA to carry out effective oversight of any requirement of this subpart E that was waived under this section.

(h) Oversight. EPA may periodically evaluate the adequacy of a State's implementation and enforcement of and resources devoted to carrying out requirements relating to the waiver. This evaluation may include, but is not limited to, site visits to local education agencies without prior notice to the State.
   (1) Informal conference. EPA may request that an informal conference be held between appropriate State and EPA officials when EPA has reason to believe that a State has failed to:
      (i) Substantially comply with the terms of any provision that was waived under this section.
      (ii) Meet the criteria under paragraph (d) of this section, including the failure to carry out enforcement activities or act on violations of the State program.
   (2) EPA will:
      (i) Specify to the State those aspects of the State's program believed to be inadequate.
      (ii) Specify to the State the facts that underlie the belief of inadequacy.
   (3) If EPA finds, on the basis of information submitted by the State at the conference, that deficiencies did not exist or were corrected by the State, no further action is required.
   (4) Where EPA finds that deficiencies in the State program exist, a plan to correct the deficiencies shall be negotiated between the State and EPA. The plan shall detail the deficiencies found in the State program, specify the steps the State has taken or will take to remedy the deficiencies, and establish a schedule for each remedial action to be initiated.

(j) Rescission.
   (1) If the State fails to meet with EPA or fails to correct deficiencies raised at the informal conference, EPA will deliver to the Governor of the State and a responsible official in the lead agency a written notice of its intent to rescind, in whole or part, the waiver.
   (2) EPA will issue for publication in the Federal Register a notice that announces the rescission of the waiver, describes those aspects of the State's program determined to be inadequate, and specifies the facts that underlie the findings of inadequacy.

Sec. 763.99 Exclusions

(a) A local education agency shall not be required to perform an inspection under Sec. 763.85(a) in any sampling area as defined in 40 CFR 763.103 or homogeneous area of a school building where:
   (1) An accredited inspector has determined that, based on sampling records, friable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her State of accreditation and if applicable, accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under Sec. 763.84 for inclusion in the management plan. However, an accredited inspector shall assess the friable ACBM under Sec. 763.88.

(2) An accredited inspector has determined that, based on sampling records, non-friable ACBM was identified in that homogeneous or sampling area during an inspection conducted before December 14, 1987. The inspector shall sign and date a statement to that effect with his or her State of accreditation and if applicable, accreditation number and, within 30 days after such determination, submit a copy of the statement to the person designated under Sec. 763.84 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was non-friable has become friable since that previous inspection and shall assess the newly-friable ACBM under Sec. 763.88.

(3) Based on sampling records and inspection records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area and the records show that the area was sampled, before December 14, 1987 in substantial compliance with Sec. 763.85(a), which for purposes of this section means in a random manner and with a sufficient number of samples to reasonably ensure that the area is not ACBM.

(i) The accredited inspector shall sign and date a statement, with his or her State of accreditation and if applicable, accreditation number that the homogeneous or sampling area determined not to be ACBM was sampled in substantial compliance with Sec. 763.85(a).

(ii) Within 30 days after the inspector's determination, the local education agency shall submit a copy of the inspector's statement to the EPA Regional Office and shall include the statement in the management plan for that school.

(4) The lead agency responsible for asbestos inspection in a State that has been granted a waiver from Sec. 763.85(a) has determined that, based on sampling records and inspection records, no ACBM is present in the homogeneous or sampling area and the records show that the area was sampled before December 14, 1987, in substantial compliance with Sec. 763.85(a). Such determination shall be included in the management plan for that school.

(5) An accredited inspector has determined that, based on records of an inspection conducted before December 14, 1987, suspected ACBM identified in that homogeneous or sampling area is assumed to be ACM. The inspector shall sign and date a statement to that effect, with his or her State of accreditation and if applicable, accreditation number and, within 30 days of such determination, submit a copy of the statement to the person designated under Sec. 763.84 for inclusion in the management plan. However, an accredited inspector shall identify whether material that was non-friable suspected ACBM assumed to be ACM has become friable since the previous inspection and shall assess the newly friable material and previously identified friable suspected ACBM assumed to be ACM under Sec. 763.88.

(6) Based on inspection records and contractor and clearance records, an accredited inspector has determined that no ACBM is present in the homogeneous or sampling area where asbestos removal operations have been conducted before December 14, 1987, and shall sign and date a statement to that effect and include his or her State of accreditation and, if applicable, accreditation number. The local education agency shall submit a copy of the statement to the EPA Regional Office and shall include the statement in the management plan for that school.

(7) An architect or project engineer responsible for the construction of a new school building built after October 12, 1988, or an accredited inspector signs a statement that no ACBM was specified as a building material in any construction document for the building, or, to the best of his or her knowledge, no ACBM was used as a building material in the building. The local education agency shall submit a copy of the signed statement of the architect, project engineer, or accredited inspector to the EPA Regional Office and shall include the statement in the management plan for that school.

(b) The exclusion, under paragraphs (a) (1) through (4) of this section, from conducting the inspection under Sec. 763.85(a) shall apply only to homogeneous or sampling areas of a school building that were inspected and sampled before October 17, 1987. The local education agency shall conduct an inspection under Sec. 763.85(a) of all areas inspected before October 17, 1987 that were not sampled or were not assumed to be ACM.

(c) If ACBM is subsequently found in a homogeneous or sampling area of a local education agency that had been identified as receiving an exclusion by an accredited inspector under paragraphs (a) (3), (4), (5) of this section, or an architect, project engineer or accredited inspector under paragraph (a)(7) of this section, the local education agency shall have 180 days following the date of identification of ACBM to comply with this subpart E.

131302977

131302977

UEC universal environmental consultants
12 Brewster Road
Framingham, MA 01702
Phone: 508.628.5486
Fax: 508.628.5488

CHAIN OF CUSTODY

BUILDING / SITE NAME: Foxhill school
WORK AREA: Office
TOWN / CITY: Burlington
STATE: MA

Analysis Type	Turnaround Time (x) 6-8 Hr	12 Hr	24 Hr	48 Hr	72 hr
TEM / AHERA					
TEM / Level II					
TEM / Dust					
TEM / Bulk					
TEM / Water					
PLM			X		
Mold					
Other:					

Specific Project Notes

SAMPLE ID	MATERIAL DESCRIPTION	SAMPLE LOCATION	START	STOP	TIME	L/MIN	VOLUME
1	white 12"x12" VAT	storge room					
2		" "					
3		under carpet					
4	white 12"x12" VAT	" "					
5	Black mastic	storage room					
6		" "					
7		under carpet					
8	Black mastic	" "					

SAMPLED BY: Jason Bero 7-16-13 DATE/TIME: RECEIVED BY: DATE/TIME:
RELINQUISHED BY: DATE/TIME: RECEIVED IN LAB BY: DATE/TIME:

RECEIVED JUL 16 2013 By SA 13:12 W-IN

EMSL Analytical, Inc.
7 Constitution Way, Suite 107, Woburn, MA 01801
Phone/Fax: (781) 933-8411 / (781) 933-8412
bostonlab@emsl.com

EMSL Order:	131302977
CustomerID:	UEC63
CustomerPO:	
ProjectID:	

Attn: **Jason Becotte**
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone:	(508) 628-5486
Fax:	(508) 628-5488
Received:	07/16/13 1:12 PM
Analysis Date:	7/16/2013
Collected:	7/16/2013

Project: **Fox Hill School Office; Burlington, MA**

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
1 *131302977-0001*	Storage Room - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
2 *131302977-0002*	Storage Room - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
3 *131302977-0003*	Under Carpet - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
4 *131302977-0004*	Under Carpet - White 12x12 VAT	White Non-Fibrous Homogeneous		95% Non-fibrous (other)	**5% Chrysotile**
5 *131302977-0005*	Storage Room - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**
6 *131302977-0006*	Storage Room - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**
7 *131302977-0007*	Under Carpet - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**
8 *131302977-0008*	Under Carpet - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (other)	**10% Chrysotile**

Analyst(s)
Kevin Pine (8)

Renaldo Drakes, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%
Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

Initial report from 07/16/2013 15:51:12

THIS IS THE LAST PAGE OF THE REPORT.

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Burlington, MA Building Name Fox Hill school

Sample	Result	Description of Material	Sample Location
1		sheetrock 2x4 SAT	Cafeteria Storage room
2		sheet rock 2x4 SAT	Cafeteria Storage room

Reported By: Jason Becotte Date: 7-24-17 Due Date:

Received By: [signature] Date: 7-24-17

Asbestos Identification Laboratory

165 New Boston St., Ste 227
Woburn, MA 01801
781-932-9600

Web: www.asbestosidentificationlab.com
Email: mikemanning@asbestosidentificationlab.com

Batch: 24416

NVLAP®
Lab Code: 200919-0

July 25, 2017

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Number:
Project Name: Fox Hill School, Burlington, MA

Date Sampled: 2017-07-24
Work Received: 2017-07-24
Work Analyzed: 2017-07-24

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project .

The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Manning
Owner/Director

July 25, 2017

Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project Number:
Project Name: Fox Hill School, Burlington, MA

Date Sampled: 2017-07-24
Work Received: 2017-07-24
Work Analyzed: 2017-07-24

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID / LabID	Material	Location	Color	Non-Asbestos %	Asbestos %
1 / 275096	Sheetrcok 2x4 SAT	Cafeteria Storage Room	gray	Fiberglass 2 Cellulose 20 Non-Fibrous 78	None Detected
2 / 275097	Sheetrcok 2x4 SAT	Cafeteria Storage Room	gray	Fiberglass 2 Cellulose 30 Non-Fibrous 68	None Detected

Tuesday 25 July 2017
Analyzed by:

End of Report

Batch: 24416

OrderID: 131800703

131800703

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
24-hour TAT

Town/City: Burlington, MA Building Name Fox Hill School

Sample	Result	Description of Material	Sample Location
1		Plaster cement	walk-In freezer wall
2		" "	" "
3		" "	" "
4		Cork	walk-In freezer insulation
5		"	" "
6		"	" "
7		Black tar on cork	walk-In freezer insulation
8		" "	" "
9		" "	" "

Reported By: Jason Beaute Date: 2-2-18 Due Date:

Received By: Date:

REC'D 16:15 EST
EMSL-BOSTON FEB 02 2018

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 131800703
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Phone: (617) 984-9772
Fax: (508) 628-5488
Received Date: 02/02/2018 4:15 PM
Analysis Date: 02/05/2018
Collected Date: 02/02/2018

Project: Fox Hill School / Burlington, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
1 *131800703-0001*	Walk-In Freezer Wall - Plaster Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2 *131800703-0002*	Walk-In Freezer Wall - Plaster Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3 *131800703-0003*	Walk-In Freezer Wall - Plaster Cement	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4 *131800703-0004*	Walk-In Freezer Insulation - Cork	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5 *131800703-0005*	Walk-In Freezer Insulation - Cork	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6 *131800703-0006*	Walk-In Freezer Insulation - Cork	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7 *131800703-0007*	Walk-In Freezer Insulation - Black Tar on Cork	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8 *131800703-0008*	Walk-In Freezer Insulation - Black Tar on Cork	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9 *131800703-0009*	Walk-In Freezer Insulation - Black Tar on Cork	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Elizabeth Stutts (9)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 02/05/2018 12:14:31

OrderID: 131808190

131808190

CHAIN OF CUSTODY

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM
48-hour TAT

Town/City: Burlington, MA Building Name Fox Hill School

Sample	Result	Description of Material	Sample Location
1		Rough Ceiling Plaster	Boiler room
2			
3			
4		Smooth Plaster	Cafeteria
5			
6			
7			
8			
9		2x4 SAT	Hall along Gym
10			Pod A
11		Joint compound	Kitchen Storage
12			PE office
13		Sheet rock	Kitchen Storage
14			PE office

Reported By: Jason Beaupre Date: 10-23-18 Due Date:

Received By: Date:

REC'D 8:14 AM 8:35
EMSL-BOSTON OCT 23 2018

UNIVERSAL ENVIRONMENTAL CONSULTANTS

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 131808190
Customer ID: UEC63
Customer PO:
Project ID:

Attention: Ammar Dieb
Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702

Project: Fox Hill School / Burlington MA

Phone: (617) 984-9772
Fax: (508) 628-5488
Received Date: 10/23/2018 2:35 PM
Analysis Date: 10/25/2018
Collected Date: 10/23/2018

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1 *131808190-0001*	Boiler Room - Rough Ceiling Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2 *131808190-0002*	Boiler Room - Rough Ceiling Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3 *131808190-0003*	Boiler Room - Rough Ceiling Plaster	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4 *131808190-0004*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5 *131808190-0005*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6 *131808190-0006*	Cafeteria - Smooth Plaster	Gray Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
7 *131808190-0007*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8 *131808190-0008*	Cafeteria - Smooth Plaster	White/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9 *131808190-0009*	Hall Along Gym - 2x4 SAT	Gray/White Fibrous Homogeneous	45% Cellulose 40% Min. Wool	15% Non-fibrous (Other)	None Detected
10 *131808190-0010*	Pod 4 - 2x4 SAT	Gray/White Fibrous Homogeneous	45% Cellulose 40% Min. Wool	15% Non-fibrous (Other)	None Detected
11 *131808190-0011*	Kitchen Storage - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12 *131808190-0012*	PE Office - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13 *131808190-0013*	Kitchen Storage - Sheet Rock	Brown/Gray Non-Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
14 *131808190-0014*	PE Office - Sheet Rock	Brown/Gray Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected

Initial report from: 10/25/2018 18:02:48

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	131808190
Customer ID:	UEC63
Customer PO:	
Project ID:	

Analyst(s)
John McCarthy (14)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 10/25/2018 18:02:48

Recommended Work Practices for Removal of Resilient Floor Coverings

Supersedes Recommended Work Practices Published in August 2004

JANUARY 2018

RFCi
Resilient Floor Covering Institute

115 Broad Street, Suite 201, LaGrange, GA 30240 I phone: 706.882.3833
fax: 706.882.3880 I www.rfci.com

RFCi
Resilient Floor Covering Institute

Recommended Work Practices for Removal of Resilient Floor Coverings

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive.

These products may contain asbestos fibers and/or c ystalline silica.

Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers reatly increases the risk of serious bodily harm.

Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.

Similarly, absent testing data or objective evidence that work with the product will **not** result in exposures to crystalline silica greater than allowed by applicable regulations, protection may be required.

RFCI's Recommended Work Practices for Removal of Resilient Floor Coverings are a defined set of instru tions addressed to the task of removing all resilient floor overing structures.

Januay 2018

IN CANADA

The Recommended Work Practices for the Removal of Resilient Floor Covering Materials are intended for use in the United States. The work practices for the removal of in-place resilient floor overings and associated adhesives described in this publication have not been reviewed with either National or Provincial officials i Canada to determine their applicability when asbestos-containing or assumed to be asbestos-containing resilient floor overing materials are encountered .
These work practices are recommended when removing resilient floor overing and its associated adhesives that have been determined not to be asbestos-containing.

To determine what are acceptable work practices and the associated requirements for the removal of resilient floor overing that is assumed to contain asbestos or has been determined to contain asbestos, you should contact your local or provincial officia .

As an alternative to the removal of any in-place resilient floor overing materials, refer to page 10 (Alternative to Removal of Existing Resilient Floor Coverings).

TABLE OF CONTENTS

- IMPORTANT INFORMATION CONCERNING EXISTING FLOOR COVERING INSTALLATIONS.....4
- IMPORTANT INFORMATION: MOLD AND MILDEW.....5
- OSHA REQUIREMENTS.....6
- EPA LEAD-BASED PAINT REQUIREMENTS.....8
- GENERAL RULES FOR REMOVAL OF RESILIENT FLOOR COVERING.....9
- ALTERNATIVES TO REMOVAL OF EXISTING RESILIENT FLOOR COVERINGS

  Installing resilient floor overing over existing resilient floor overing.....10

  Use of embossing leveler.....10

  Installing resilient floor overing over new underlayment.....10
- REMOVAL OF RESILIENT SHEET FLOORING

  Supplies and tools.....11

  Fully-adhered resilient sheet flooring.....12

  Unadhered (loose-lay) or peripherally-adhered resilient sheet floo ing.....15
- REMOVAL OF RESILIENTTILE

  Supplies and tools 17

  Removal procedure.....18
- REMOVAL OF RESIDUAL ADHESIVE

  Supplies and tools.....22

  Wet-scraping residual adhesive.....25

  Complete removal of Asphaltic "cutback" Adhesive.....26
- COMPLETE REMOVAL OF WOOD UNDERLAYMENT

  Supplies and tools.....28

  Wood underlayment with sheet flooring.....29

  Wood underlayment with tile flooring.....31

  Removal of wood underlayment boards 33

NOTICE

Various Federal, State and local government agencies have regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor overing structure that contains (or is presumed to contain) asbestos, you must review and comply with all applicable regulations.

This booklet replaces all prior editions of the RFCI and Armstrong Recommended Work Practices Publications. Please note that these recommended work practices are subject to change as new practices are incorporated. It is your responsibility to determine that the recommended work practices you use are those in effect.

Important Information for Installers of Resilient Floor Coverings Concerning Existing Resilient Floor Covering Structures

- Vinyl asbestos tile and asphalt tile contain asbestos fiber , as did some asphaltic "cutback" adhesives and the backings of many sheet vinyl floo ings and lining felts. The presence of the asbestos in these products is not readily identifiabl .

- While resilient floor overing products manufactured today do not contain asbestos, the asbestos used in the older products was encapsulated in the matrix of the product. The Environmental Protection Agency (EPA) recognizes that those products are non-friable (i.e. when dry cannot be crumbled, pulverized or reduced to powder by hand pressure) unless certain activities prohibited by the removal practices in this booklet occur.

- Unless positively certain that the product you intend to remove is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.

- RFCI's Recommended Work Practices are a defined set of instru tions addressed to the task of removing all resilient floor overing structures whether or not they contain asbestos. When RFCI's Recommended Work Practices are followed, resilient floor overing structures that contain (or are presumed to contain) asbestos can be removed in a manner that will comply with the current Occupational Exposure to Asbestos Standard's Permissible Exposure Limits (PEL) issued by the Occupational Safety and Health Administration (OSHA).

- Numerous products, devices and techniques have been recently introduced and/ or recommended for the removal of resilient floor overing st ructures. Before you use any practices other than those identified in this boo let for the removal of an in-place resilient floo -covering product that contains (or is presumed to contain) asbestos, you must determine that the practice meets all applicable regulations or standards including the OSHA standards for occupational exposure to asbestos and the EPA asbestos regulations. You must also determine that any materials used during the removal practice will be compatible with the new floor overing to be installed.

Mold and Mildew

Prior to removing an existing resilient floor ollowing the **RFCI Recommended Work Practices for Removal of Resilient Floor Coverings** (unless state or local law requires other measures) or installing a new floo , if there are visible indica tions of mold or mildew or the presence of a strong musty odor in the area where resilient floo ing is to be removed or installed, the source of the problem should be identified and orrected before proceeding with the floo ing work. In virtually all situations, if there is a mold issue, there is or has been an excessive moisture issue. Visible signs of mold or mildew (such as discoloration) can indicate the presence of mold or mildew on the subfloo , on the underlayment, on the back of the floo ing, and sometimes even on the floor surface. If mold or mildew is discovered during the removal or installation of resilient floo ing, all floo ing work should stop until the mold/mildew problem (and any related moisture problem) has been addressed. Before installing the new resilient floo ing, make sure the underlayment and/or subfloor is allowed to thoroughly dry and that any residual effect of excessive moisture, mold, or structural damage has been corrected.

To deal with mold and mildew issues, you should refer to the U.S. Environmental Protection Agency (EPA) guidelines that address mold and mildew. Depending on the mold or mildew condition present, those remediation options range from cleanup measures using gloves and biocide to hiring a professional mold and mildew remediation contractor to address the condition. Remediation measures may require structural repairs such as replacing the underlayment and/or subfloor ontaminated with mold and mildew as a result of prolonged exposure to moisture.

The EPA mold guidelines are contained in two publications "A Brief Guide to Mold, Moisture and Your Home" (EPA 402-K-02-003) and "Mold Remediation in Schools and Commercial Buildings" (EPA 402-K-01-001). Appendix B of the "Mold Reme diation in Schools and Commercial Buildings" publication describes potential health effects from exposure to mold, such as allergic and asthma reactions and irritation to eyes, skin, nose and throat. These publications can be located on EPA's website at www.epa.gov/iaq/molds

OSHA REQUIREMENTS

A. Asbestos

In August 1994, OSHA published revised asbestos standards which affect some of the operations described in this booklet. OSHA has determined that intact resilient floor overing materials can be removed under a "negative exposure assessment" in compliance with the revised standards by appropriately trained workers using the Recommended Work Practices.

- "Intact" is defined o mean that the asbestos-containing material has not crumbled, been pulverized, or otherwise deteriorated so that it is no longer likely to be bound with its matrix. The incidental breakage of floo ing materials, or slicing of sheet vinyl floor overing with a sharp-edged instrument, during removal operations conducted in accordance with the Recommended Work Practices does not mean that the materials are not removed in an "intact" condition . OSHA has recognized that resilient floor overing materials are considered nonfriable if intact and generally do not emit airborne fibers unless subje ted to sanding, sawing or other aggressive operations.

- Installers of resilient floor overing materials that plan to use the Recommended Work Practices outlined in this book to remove intact and nonfriable asbestos containing floo ing materials are required to complete an 8-hour training program.

- Employers must designate a "competent person" with 4 hours of additional training to be responsible for the health and safety of the workers at the floor emoval job site.

- OSHA has determined that the competent person can make a "negative exposure assessment" based upon data in the OSHA asbestos rulemaking record (including data from the Environ Reports) showing that use of the Recommended Work Practices during removal of intact floo ing material consistently results in worker exposures below the levels permitted in the OSHA standards.

- Where other workers or persons may have access to the floo ing removal worksite, the employer must establish a demarcated "regulated area" (e.g. using barrier tape or closing room doors to enclose a work area) and post warning signs.

- Workers who engage in the removal of asbestos-containing floo ing materi als for more than 30 days per year (one hour or more per day) must receive medical su rveillance .

- Employers are required to maintain certain training and workplace and medical records.

B. Crystalline Silica

In March 2016, OSHA published a revised rule relating to occupational exposure to respirable crystalline silica which could affect some of the operations described in this booklet. In general, the revised rule established a new permissible exposure limit (PEL) of 50 ug/m^3 for respirable silica. The rule also requires exposure assessments, the use of exposure control methods, respiratory protection, medical surveillance, hazard communication information, and recordkeeping.

More specificall , the revised standard requires employers:

- to assess employee exposures to silica if exposures may be at or above an action level of 25 ug/m^3 (micrograms per cubic meter of air) when averaged over an eight hour day;
- to protect workers from respirable crystalline silica exposures above the permissible exposure limit of 50 ug/m^3, when averaged over an eight hour day;
- to limit worker access to areas where they could be exposed to crystalline silica above the PEL;
- to use dust controls to protect workers from exposures above the PEL, and where that is not possible, to provide respirators;
- to use feasible housekeeping methods that do not create airborne dust;
- to establish and implement a written exposure control plan that identifies tasks th t involve exposure and protection methods; and
- to offer medical exams every three years for workers who are exposed at or above the action level for at least 30 days per year; and to provide certain training and maintain certain records.

Most provisions of the rule took effect on January 23, 2018, except that the medical surveillance provisions will become applicable on June 23, 2020.

EPA LEAD-BASED PAINT REQUIREMENTS

Effective July 6, 2010, EPA has established training, certific tion, and work practice requirements for paid renovation, repair, or remodeling work that disturbs more than 6 square feet of lead-based paint per room within a 30 day period in a home (e.g. single-family, apartments) or a facility occupied by children under age of 6 (e.g., daycare center, preschool) built prior to 1978. 40 C.F.R. § 745.80 et seq. In these pre-1978 facilities, it is assumed that any painted surfaces contain lead paint, unless EPA-approved testing is performed to show that the disturbed surfaces are lead-free.

The removal or installation of resilient floo ing in these pre-1978 buildings may involve disturbing or removing molding, baseboards, or floors (.g., wood) that have been painted with lead-based paint or cutting off the bot om of painted doors or molding to allow the new floors o fi . To determine whether more than 6 square feet in a room is disturbed, multiply the total length of the disturbed painted material by its height (both numbers in feet). For example, if a 4 inch high baseboard (1/3 foot) is being removed as part of an installation or removal, over 18 linear feet of this baseboard would have to be removed to trigger the rule (1/3 foot x 18 feet= 6 square feet). For more examples, see http:// www.epa.gov/lead/pubs/ rrp-faq.pdf.

If the rule is triggered the following training, certific tion, and work practices are required:

- Employees performing the work must have completed a lead-safe work practices training course of 8 hours in length approved by EPA, which training is valid for 5 years.

- The fi m performing the work must be lead-safe certified y EPA, which requires the submission of an application and fee to EPA. The application fee is typically $300 for a fi e year certific tion and it may take up to 90 days to process the application. The application procedures for each state can be found at the link in the paragraph above.

- Before beginning work, your fi m must: (1) notify the residents of the affected homes or the parents of the affected children by providing the EPA Renovate Right pamphlet (http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf); and (2) must maintain its notific tion records for 3 years.

- Your fi m and employees must use lead-safe work practices, including posting warning signs; isolating the work area with plastic sheeting or other materials; removing or covering furniture; cleaning and inspecting the worksite when the work is finished; and disposing of a y waste in a safe manner.

Some states operate their own lead-based paint programs and may have more stringent requirements than the EPA rule. See http://www.epa.gov/lead/pubs/ renovation.htm#states for a list of states with their own rules.

GENERAL RULES FOR REMOVAL OF RESILIENT FLOOR COVERING

When following the Recommended Work Practices there are several general rules to follow:

Never sand, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize any resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive to remove them from the floo . See "Warning Statement" on page one.

- Unless positively certain the product you intend to remove is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.
- Removal of existing floor overing should be considered the last alternative.
- Use a vacuum equipped with HEPA fil er, disposable dust bag, and metal floor attachment (no brush).
- All sheet floor emovals must be done using detergent solution.
- All felt scraping must be done wet.
- Prior to removal, all tile must be wetted (except in cases where heat will be applied).
- Do not dry sweep.
- Material removed must be placed in heavy-duty impermeable bags at least 6 mils thick or in a leak-tight container, properly labeled and disposed of in an authorized landfil .

ALTERNATIVES TO REMOVAL OF EXISTING RESILENT FLOOR COVERINGS

Removal of the in-place resilient floor should be onsidered the final al ernative. It is preferred you leave the existing resilient floor overing in place and go over the top (single floo ing layer only) with the new floo .

Alternatives to the removal of an existing resilient floor ver approved subfloors a e:

- Installing directly over a single layer of approved existing resilient floo ing.
- Filling the embossing of the in-place resilient floo ing with embossing leveler before installation (residential use only).
- Covering existing resilient floo ing on an approved suspended wood subfloor with a recommended wood underlayment.

When you plan to install a new resilient sheet or tile floor overing over an existing resilient floor overing, follow the installation instructions published by the manufacturer. Those instructions will tell you what must be done to the existing surface before the new resilient floor overing can be installed. Remove wax and other finishes y wet stripping only.

Contact a local established floo covering dealer for additional information.

REMOVAL OF RESILIENT SHEET FLOORING

Supplies and Tools

- Safety glasses and gloves
- Stiff-bladed all or floor sc aper
- Utility or hook knife
- Tank-type High Efficie y Particulate Air (HEPA) wet/dry vacuum cleaner with disposable dust bag and metal floor ttachment (no brush)
- Hand-held tank sprayer
- Large-size heavy-duty impermeable trash bags (at least 6 mils thick) or closed leak-tight containers with ties, tape, or string to tie the bags shut, and appropriate labels stating, for example "Caution- Contains Asbestos. Avoid Opening or Breaking Bag or Container. Breathing Asbestos is Hazardous to Your Health". It may also be appropriate to include in the label a warning regarding the presence of crystalline silica.
- A liquid dishwashing detergent which is stated to contain anionic, nonionic and amphoteric surfactant s. Mix this specified liquid dis washing detergent with water to make a dilute solution (16 oz. specified liquid dis washing detergent in one gallon of water)
- Ground fault circuit interrupter for electrical connection of the HEPA vacuum and any other electrical connections required

REMOVAL OF FULLY-ADHERED RESILIENT SHEET FLOORING

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

- Remove all furniture and appliances from the work area.
- Remove any binding strips or other restrictive moldings from doorways, walls, etc.
- Prepare the specified liquid dis washing detergent solution (16 oz. of specified liquid dishwashing detergent to one gallon of water) and pour into a hand sprayer.
- Before removal begins, vacuum the entire floor using a HE A vacuum with a metal floor ttachment.

WARNING

Electrical shock hazard exists. Use a ground fault interrupter for any electrical connections of equipment used in a wet environment

- Make a series of parallel slices 4" to 8" apart through the top layer of the floo ing and about halfway through the backing, parallel to the wall, for the entire floo .

WARNING

Resilient floo ing becomes slippery when wet with the specified liquid dis washing detergent solution. Use caution to contain the solution in the immediate work area.

- Wear layer removal: One worker starts at the end of the room farthest from the entrance door and pries up the corner of the strip, separating the backing from the wear layer. As the strip is being removed, another worker sprays a constant mist of the specified liquid dis washing detergent solution into the delamination nip point to minimize any airborne dust particles. When done properly, the felt remaining on the floor and on the back of the st ip will be thoroughly wet. Do only one three strip area at a time. Stand on the remaining floor overing or clean floor (o the extent feasible, minimize standing on the felt). The sliced strips should be peeled from the backing by pulling or rolling around a core which will control the stripping angle to create a uniform tension (some resilient floo ing wear layers may not be readily strippable and may require wet-scraping). Tie or tape the removed material securely and place in the heavy-duty impermeable trash bag or closed leak-tight container for disposal.

- Remove and dispose of each succeeding strip in the above manner. Minimize walking on the exposed felt to the extent feasible. Worker footwear must be cleaned or removed before leaving work area. Close full bags tightly, and seal securely for disposal. Identify with an appropriate label stating, for example "Caution-Contains Asbestos. Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Dispose in an approved landfill onl .

- Occasionally, parts of the top or inner layer will stick to the backing. This can often be eliminated by peeling in the opposite direction. The stiff-bladed sc aper may aid in the removal or peeling of these layers.

- Wet-scraping residual felt :

  (1) After three strips of floo ing material are removed, any residual felt must be wet scraped. Thoroughly wet the residual felt with the specified liquid dishwashing detergent solution. Wait a few minutes to allow the specified liquid dis washing detergent solution to soak into the felt.

  (2) Stand on the remaining floor overing to the extent feasible (not the felt) and use the stiff bladed sc aper to scrape up the wet felt.

  (3) Rewet the felt if the specified liquid dis washing detergent solution has not completely penetrated, if drying occurs, or if dry felt is exposed during scraping. Pick up the scrapings while still wet as they are removed from the floor and pla e in a heavy-duty impermeable trash bag or leak-tight container. Wet-scrape all felt from this floor a ea before proceeding further.

PRECAUTION:
Excessive moisture can cause permanent damage to wood underlayments. It is the installer's responsibility to use the correct amount of specified liquid dis washing detergent solution to prevent underlayment damage. A fl or that has been wet-scraped must be allowed to dry before installing any new resilient fl oring.

(4) When this floor a ea has been cleaned free of felt, vacuum with HEPA vacuum cleaner with the metal floor ttachment. Position the vacuum cleaner so that the discharge air does not blow on the area being cleaned.

(5) Repeat the above on the next series of strips.

(6) Repeat this operation until the felt has been removed from the whole floo . Close full bags tightly and seal securely for disposal. Identify with an appropriate label stating, for example "Caution-Contains Asbestos. Avoid Opening or Breaking Bag or Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Dispose in an approved landfill onl .

(7) When the entire floor has been emoved, let it dry and vacuum with HEPA vacuum cleaner with the metal floor ttachment. Position the vacuum cleaner so that the discharge air does not blow on the area being cleaned.

(8) After vacuuming, used HEPA fil ers and cleaner bags should be removed according to the manufacturer's instructions and placed in a heavy-duty impermeable trash bag or leaktight container with an appropriate label stating, for example "Caution-Contains Asbestos Avoid Opening or Breaking Bag or Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Close and seal the trash bag securely for disposal. Dispose in an approved landfill onl .

(9) The floor is n w ready to have a new resilient floor overing installed. Follow the manufacturer's installation instructions.

REMOVAL OF UNADHERED (LOOSE-LAY) OR PERIPHERALLY-ADHERED RESILIENT SHEET FLOORING

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

- Remove all furniture and appliances from the work area.
- Remove any binding strips or other restrictive moldings from doorways, walls, etc.
- Prepare the specified liquid dis washing detergent solution (16 oz. of specified liquid dishwashing detergent to one gallon of water) and pour into a hand sprayer.
- Before removal begins, vacuum the entire floor using a HE A vacuum with a metal floor ttachment.

WARNING

Electrical shock hazard exists. Use a ground fault interrupter for any electrical connections of equipment used in a wet environment

- If floo ing is unadhered, start at the end of the room farthest from the entrance doorway and slice a strip 18" wide in the unadhered floo ing. One worker removes the sliced strip while another worker sprays the specified liquid dis washing detergent solution directly into the separation nip point. Minimize standing on the exposed subfloor du ing the removal process to the extent feasible.

CAUTION

Resilient floo ing becomes slippery when wet with specified liquid dis washing detergent solution. Use caution to contain the solution in the immediate work area. Standing on a new sheet of plywood or non-slip surface while working is recommended.

- Roll the wet strip tightly and tie or tape securely so it will not unroll. Place it in a heavy-duty, impermeable trash bag or closed leak-tight container big enough to accommodate several rolls for disposal.

Use this method for nonbonded areas of peripherally-adhered floor . To remove bonded areas, follow instructions under "Removal of Fully-Adhered Resilient Sheet Flooring."

- Clean the exposed floor with a HE A vacuum cleaner with the metal floor attachment. Position the vacuum cleaner so that the discharge air does not blow on the area being cleaned.

- Repeat the above, slicing, rolling and disposing of one strip at a time and cleaning the newly exposed area immediately until the entire floor overing has been removed. Let the floor d y, then vacuum with a HEPA vacuum cleaner using metal floor ttachment.

- After vacuuming, used HEPA fil ers and cleaner bags should be removed according to manufacturer's instructions and placed in a heavy-duty impermeable trash bag or leak-tight container with an appropriate label stating, for example "Caution-Contains Asbestos . Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health:" It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Close and seal the trash bags or leak-tight container securely for disposal. Dispose in an approved landfill onl .

- The floor is n w ready for installation of new floor overing using the manufacturer's installation instructions.

REMOVAL OF RESILIENT TILE

Supplies and Tools

- Safety glasses and gloves
- Short or long-handled scraper (DO NOT USE SPUD BAR OR MECHANICAL CHIPPER)
- Hammer
- Commercial-type hand-held hot-air gun or a radiant heat source such as an infrared machine
- Large size, heavy-duty labeled, impermeable trash bags with minimum 6 mil thickness (or closed leak-tight containers), with ties, tape or string to tie shut, and tags for labeling
- Tank-type High Efficie y Particulate Air (HEPA) wet/dry vacuum cleaner with disposable dust bag and metal floor ttachment (no brush)
- Hand-held tank sprayer
- Ground fault circuit interrupter for electrical connection of the HEPA vacuum and any other electrical connections required

REMOVAL PROCEDURE

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize existing resilient floo ing, backing lining felt, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

- Remove all furniture and appliances from the work area. Remove any binding strips or other restrictive moldings from doorways, walls, etc.

- Before removal begins, vacuum the entire floor using a HE A vacuum with a metal floor ttachment.

- Floor tiles must be wetted (misted with hand sprayer) before actual removal begins (unless heat will be used to remove tile s).

WARNING

Electrical shock hazard exists. Use a ground fault interrupter for any electrical connections of equipment used in a wet environment.

- Those areas normally exposed to heavy foot traffic tterns usually have tiles adhered the tightest. In starting the tile removal process, select those areas which receive the least traffic. Try to remove individual tiles in one piece although some breakage of tiles is unavoidable.

- Start the removal by carefully wedging a short or long handled scraper in the seam of two adjoining tiles and gradually forcing the edge of one of the tiles up and away from the floo . Continue to force the balance of the tile up by working the scraper beneath the tile and exerting both a forward pressure and a twisting action on the blade to promote release of the tile from the adhesive and the floo .

- After the tiles are removed, place them, without further breakage, in a heavy-duty impermeable trash bag or closed leak-tight container which will be used for disposal. Removed tiles can be placed in empty tile cartons first and then pla ed in the heavy-duty impermeable trash bag. To prevent tearing of the heavy-duty impermeable trash bag, place only one full carton of removed tile in a bag.

- With the removal of the first til , accessibility of other tiles is imp roved. Force the scraper under the exposed edge of another tile, and continue to exert a prying, twisting force to the scraper as it is moved under the tile until the tile releases from the floo . Remove and dispose of each tile in the manner described above.

- Minimize walking on the exposed adhesive to the extent feasible. Worker footwear must be cleaned or removed before leaving work area. Close full bags tightly and seal securely for disposal. Identify with an appropriate label stating, for example "Caution-Contains Asbestos. Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Dispose in an approved landfill onl .

- Some tiles will release quite easily while others require varying degrees of force. Where the adhesive is spread heavily or the tile is bonded tightly, it may prove easier to force the scraper under the tightly adhered areas by striking the scraper handle with a hammer, using blows of moderate force while maintaining the scraper at a 25° to 30° angle to the floo .

CAUTION

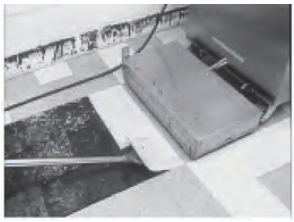
Wear safety glasses when using this procedure.

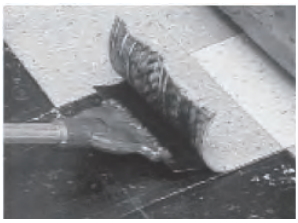
- If you encounter areas where even the above methods will not remove the tiles, the removal procedure can be simplified y thoroughly heating the tiles with a hot air gun or a radiant heat source until the heat penetrates through the tile and softens the adhesive.

- Alternatively, without first p ying up floor tiles using a sc aper, a heat source like a hot air gun or infrared heat machine can be used to apply heat to the floor tiles and then the tiles may be removed by hand or by using a scraper. (Wetting the tiles is not required for this alternative removal method). When using this procedure, walking on exposed adhesive may be unavoidable. Worker footwear must be cleaned or removed before leaving the work area.

CAUTION

Handle the hot-air gun or radiant heat source carefully to avoid burn injury. Do not handle the heated tiles or adhesive without suitable glove protection. Do not use a blowtorch or open flam . Use caution not to burn or char tiles. Work area must be adequately ventilated.





- When using an infrared heat machine, follow manufacturer's instructions.

- After tiles are removed, place them in a heavy-duty impermeable trash bag or other closed leak-tight container without further breakage. Removed tiles can be placed in empty tile cartons first and then pla ed in the heavy duty impermeable trash bag s. To prevent tearing of the heavy-duty impermeable trash bag, place only one full carton of removed tile in a bag.

- Close the full bags of removed tile tightly and seal securely for disposal. Identify with an appropriate label stating, for example "Caution- Contains Asbestos. Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Dispose in an approved landfill onl .

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

- See Section 5, "Removal of Residual Adhesives" for proper treatment of remaining adhesive.

REMOVAL OF RESIDUAL ADHESIVE

The removal of latex based adhesives commonly used with vinyl sheet floors and some tiles can be accomplished by wetting the adhesive residue (which will soften the adhesive) and scraping. Do not use an excessive amount of water which can damage wood subfloor . The treatment of residual asphaltic "cutback" adhesive, which is covered in this section, is dependent upon the type of new resilient floor overing material to be installed and the type of subfloo . Recommendations for the treatment of residual asphaltic "cutback" adhesive are shown on pages 21 through 26.

NOTE

There are commercial adhesive removal products containing solvents that are effective in removing cutback or emulsion adhesives and comply with OSHA requirements (e.g. flashpoi t greater than 140° F). These products may be used for adhesive removal; however, they may leave a solvent residue within the subfloor th t can adversely affect the new adhesive or floor overing. Thus, the warranties provided by the manufacturers of new floor overing materials will not cover instances where subfloor conditions damage their products or affect their installation.

The use of asbestos encapsulants or bridging materials over asphaltic adhesive is not recommended as those products may affect the bonding properties of the new adhesive. The application of asphaltic "cutback" adhesives, if recommended by the replacement floo ing manufacture, has been demonstrated to be a suitable adhesive when applied over existing cutback adhesive. The use of any new adhesive must be consistent with the installation recommendations of the replacement-floo ing manufacturer.

Supplies and Tools

- Safety glasses and gloves
- Stiff-bladed all or floor sc aper
- Tank-type High Efficie y Particulate Air (HEPA) wet/dry vacuum cleaner with disposable dust bag and metal floor ttachment (no brush)
- Large-size, heavy-duty, impermeable trash bags (or closed leak-tight containers) with ties, tape, or string to tie the bags shut, and tags for labeling.
- Slip-resistant shoes or rubber boots
- Ground fault circuit interrupter for electrical connection of the HEPA vacuum and any other electrical connections required
- Hand-held sprayer

- A liquid dishwashing detergent which is stated to contain anionic, nonionic and amphoteric surfactants. Mix this specified liquid dis washing detergent with water to make a dilute solution (1 oz. of the specified liquid dis washing detergent to one gallon of water)

- Floor machine fit ed with 3M black floor pad (or equi alent)

- Removal solution-e.g. "mop on, mop off, no machine scrub," tripping solution See note on page 23 regarding use of other solutions

- Water-absorbent material

RESIDUAL ASPHALTIC "CUTBACK" ADHESIVE

CONCRETE SUBFLOOR			WOOD UNDERLAYMENT SUBFLOOR	
New Material to Be Installed	Removal of Residual Adhesive	Alternative to Removal	Removal of Residual Adhesive	Alternative to Removal
Resilient floor tile to be installed using cutback adhesive.	Residual adhesive must be wet-scraped so that no ridges or puddles are evident and what remains is a thin, smooth film. See wet-scraping of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.[2]	The use of a cutback adhesive over wood underlayment subfloor is not recommended.	The use of a cutback adhesive over wood underlayment subfloor is not recommended
Resilient floor tile to be installed using an adhesive other than cutback adhesive.	Residual adhesive must be wet-scraped so that no ridges or puddles are evident and what remains is a thin, smooth film. See wet-scraping of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.[2]	Complete removal of Wood Underlayment. See Complete Removal of Wood Underlayment Under Existing Tile.	Covering residual asphaltic "cutback" adhesive on an approved wood subfloor with a recommended wood underlayment.[2] When installing this new wood underlayment, felt or polyethylene sheeting may be placed over the residual adhesive to prevent a cracking or tacky sound when walking on the floor.
Any vinyl-backed sheet flooring	100% of the residual adhesive must be removed from the area to be covered. See removal of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.[2]	Complete removal of Wood Underlayment. See Complete Removal of Wood Underlayment Under Existing Tile	Covering residual asphaltic "cutback" adhesive on an approved wood subfloor with a recommended wood underlayment.[2] When installing this new wood underlayment, felt or polyethylene sheeting may be placed over the residual adhesive to prevent a cracking or tacky sound when walking on the floor.
Felt-backed sheet flooring.	Enough of the residual adhesive must be removed so that 80% to 100% of the original substrate of the overall area is exposed.[1] See removal of residual adhesive.	Application of a cementitious underlayment that is approved by the underlayment manufacturer for use over residual asphaltic "cutback" adhesive.[2]	Complete removal of Wood Underlayment. See Complete Removal of Wood Underlayment Under Existing Tile	Covering residual asphaltic "cutback" adhesive on an approved wood subfloor with a recommended wood underlayment.[2] When installing this new wood underlayment, felt or polyethylene sheeting may be placed over the residual adhesive to prevent a cracking or tacky sound when walking on the floor.

[1] Amount of adhesive which must be removed varies. Check with manufacturer of replacement felt-backed sheet floo ing for requirements.

[1]All warranties and/or guarantees concerning underlayment's performance rest with the underlayment manufacturer and not with the resilient floor overing manufacturer.

WET-SCRAPING RESIDUAL ADHESIVE

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphalic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

If new resilient floor tile is o be installed over a concrete subfloor using an asphaltic adhesive, the residual asphaltic "cutback" adhesive must be left so that no ridges or puddles are evident and what remains is a thin, smooth film. This can be accomplished by wet-scraping the residual adhesive.

Wet-Scraping residual asphaltic "cutback" adhesive:

- Moisten an area with water mixed with the specified liquid dishwashing detergent (1 oz. specified liquid dis washing detergent to one gallon of water) to aid in wetting the adhesive. Make sure that the area stays moist. Wet-scrape with a stiff-bladed all or floor sc aper removing ridges and any loose adhesive. Make sure the adhesive is kept wet.
- Place loosened adhesive residue into a heavy-duty impermeable trash bag or leak-tight container with an appropriate label stating, for example: "Caution -Contains Asbestos. Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Close and seal the trash bag securely for disposal. Dispose in an approved landfill onl .
- Wet vacuum standing water with the HEPA vacuum cleaner.
- Continue above steps until what remains of the residual asphaltic "cutback" adhesive is a thin, smooth film
- Clean the entire floor with the HE A vacuum cleaner using the metal floor attachment.
- After vacuuming, used HEPA fil ers and cleaner bags should be removed according to manufacturer's instructions and placed in a heavy-duty, imperme able trash bag or leak tight container with an appropriate label stating, for example: "Caution-Contains Asbestos. Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Close and seal the trash bags or containers securely for disposal. Dispose in an approved landfill onl .

COMPLETE REMOVAL OF ASPHALTIC "CUTBACK" ADHESIVE

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast or mechanically chip or pulverize existing resilient floo ing, backing, lining fell, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

REMOVAL METHOD

- Start in corner of the room farthest from the entrance door. Apply the removal solution (e.g. "mop on, mop off, no machine scrub," stripping solution) by using a hand sprayer or mop over an area of residual adhesive so that the adhesive in this area always remains wet during its removal. Allow the area to soak for 5-10 minutes. Remove the adhesive using a floor machine equipped with a 3M black floor pa (or equivalent), ensuring that the floor is kept et in the area where the machine is operating.

WARNING

Electrical shock hazard exists. Use a ground fault circuit interrupter for any electrical connections of equipment used in a wet environment.

- Occasionally push away the adhesive slurry from the subfloor with a all or floor scraper or squeegee to check for complete removal. Continue to use the floor machine, equipped with black pad, in the same area until the concrete subfloor is cleaned to the degree necessary for the new floor install tion.

- Adhesive around the edge of the room and in areas that were missed or difficult o reach with the machine can be removed with a hand-held piece of the black floor pad using the above procedures.

WARNING

Electrical shock hazard exists. Use a ground fault interrupter for any electrical connections of equipment used in a wet environment.

- Wet HEPA vacuum the adhesive slurry. When the HEPA vacuum is full, place commercially suitable water absorbent into the HEPA container until the adhesive slurry is absorbed. An absorbent material may be used on the slurry to absorb the adhesive residue. Place the adhesive waste from the HEPA vacuum or floor into heavy-duty, impermeable bags or leak-tight containers with an appropriate label stating, for example "Caution-Contains Asbestos Avoid Creating Dust. Avoid Opening or Breaking Container. Breathing Asbestos May Cause Bodily Harm." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Close and seal the trash bag securely for disposal. Dispose in an approved landfill onl .

- Rinse floor a ea with clean water using a hand sprayer or mop. Worker footwear should also be cleaned and rinsed.

- Wet-vacuum standing water with HEPA vacuum cleaner.

- Continue above steps until the entire room is complete.

- Allow subfloor o dry and vacuum with a HEPA vacuum with metal floor ttachment.

- Minimize walking on the wet adhesive to the extent feasible. Worker footwear must be cleaned or removed before leaving the work area.

COMPLETE REMOVAL OF WOOD UNDERLAYMENT

Supplies and Tools

- Safety glasses and gloves
- Chisel
- Hammer or mallet
- Short and long-handled pry bars
- Utility or hook knife
- Stiff-bladed all or floor sc aper
- Large-size, heavy-duty, impermeable trash bags (or leak-tight container) with ties, tape, or string to tie the bag shut and tag for labeling
- Tank-type High Efficie y Particulate Air (HEPA) wet/dry vacuum cleaner with disposable dust bags and metal floor ttachment (no brush)
- Hand sprayer
- A liquid dishwashing detergent which is stated to contain anionic, nonionic and amphoteric surfactants
- 6-mil polyethylene sheeting
- Duct tape
- Ground fault circuit interrupter for electrical connection of the HEPA vacuum and any other electrical connections required
- For tile removal only-Commercial-type, handheld, hot-air gun or a radiant heat source such as infrared machine

COMPLETE REMOVAL OF WOOD UNDERLAYMENT {SUBFLOOR) UNDER EXISTING SHEET FLOORING

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

- Remove all furniture and appliances from the work area.
- Remove any binding strips or other restrictive moldings from doorways, walls, etc.
- Prepare the specified liquid dis washing detergent solution (16 oz. of specified liquid dishwashing detergent to one gallon of water) and pour into a hand sprayer.
- Before removal begins, vacuum the entire floor using a HE A vacuum with a metal floor ttachment

WARNING

Electrical shock hazard exists. Use a ground fault interrupter for any electrical connections of equipment used in a wet environment.

- Starting at the doorway or a floor entilation vent, locate a joint in an underlayment board.
- Slice a strip of floo ing 4 to 8 inches wide centered over the underlayment joint in the panel to be removed. Slice through the top and inner layers of floo ing and about halfway through the backing. Continue this procedure for all underlayment joints over the entire floo .

CAUTION

Resilient floo ing becomes slippery when wet with specified liquid dis washing detergent solution. Use caution to contain the solution in the immediate work area.

- One worker pries up the corner of a strip, separating the backing from the wear layer. As the strip is being removed, another worker sprays a constant mist of the specified liquid dis washing detergent solution into the delamination nip point to minimize any airborne dust particle s. When done properly, the felt remaining on the floor and on the back of the st ip will be thoroughly wet. Stand on the remaining floor overing or clean floor (do not stand on the elt).

The sliced strips should be peeled from the backing by pulling or rolling around a core which will control the stripping angle to create a uniform tension (some resilient floo ing wear layers may not be readily strippable and may require wet-scraping). Tie or tape the removed material securely and place in a heavy-duty, impermeable, trash bag or closed leak tight container for disposal.

- Remove and dispose of each succeeding strip in the above manner. Minimize walking on the exposed felt to the extent feasible. Worker footwear must be cleaned or removed before leaving work area. Close full bags tightly, and seal securely for disposal. Identify with an appropriate label stating, for example "Caution-Contains Asbestos Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health:" It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Dispose in an approved landfill onl .

- Occasionally, parts of the top or inner layer will stick to the backing. This can often be eliminated by peeling in the opposite direction. The stiff bladed sc aper may aid in the removal or peeling of these layers.

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

- Remove all furniture and appliances from the work area.

- Remove any binding strips or other restrictive moldings from doorways, walls, etc.

- Prepare the specified liquid dis washing detergent solution (16 oz. of specified liquid dishwashing detergent to one gallon of water) and pour into a hand sprayer.

- Before removal begins, vacuum the entire floor using a HE A vacuum with a metal floor ttachment

- Wet-scraping residual felt-follow instructions for wet-scraping residual felt on Page 12.

- For procedures for removing wood underlayment boards see Page 32.

COMPLETE REMOVAL OF WOOD UNDERLAYMENT {SUBFLOOR) UNDER EXISTING TILE FLOORING

- Before removal begins, the entire floor is acuumed using a HEPA vacuum with a metal floor ttachment.

WARNING

Electrical shock hazard exists. Use a ground fault interrupter for any electrical connections of equipment used in a wet environment.

- Floor tiles must be wetted (misted with hand sprayer) before actual removal begins (unless heat will be used to remove tiles).

WARNING

Resilient floo ing becomes slippery when wet with the specified liquid dis washing detergent solution. Use caution to contain the solution in the immediate work area.

- Starting at the doorway or a floor entilation vent, locate a joint in an underlayment board.

- Start the removal of the tile at the underlayment joint by carefully wedging the scraper in the seam of two adjoining tiles and gradually forcing the edge of one of the tiles up and away from the floo . Do not intentionally break off pie es of the tile, but continue to force the balance of the tile up by working the scraper beneath the tile and exerting both a forward pressure and a twisting action of the blade to promote release of the tile from the adhesive and the floo . Continue to remove tiles in this manner at all underlayment joints until all board joints are exposed.

- After the tiles are removed place them, without further breakage into smaller pieces, in a heavy-duty impermeable trash bag or closed leak-tight container which will be used for disposal. Removed tiles can be placed in empty tile cartons first and then placed in heavy-duty, impermeable, trash bags. To prevent tearing of the heavy-duty, impermeable, trash bag, place only one full carton of removed tile in a bag.

- With the removal of the first til , accessibility of the other tiles is improved. Force the scraper under the exposed edge of another tile, and continue to exert a prying, twisting force to the scraper as it is moved under the tile until the tile releases from the underlayment. Remove and dispose of each tile in the manner above. Minimize walking on the exposed adhesive to the extent feasible. Worker footwear must be cleaned or removed before leaving area. Close full bags or leak-tight container tightly and seal securely for disposal. Identify with an appropriate label stating, for example "Caution-Contains Asbestos. Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to

include in the label a warning regarding the presence of crystalline silica. Dispose in an approved landfill onl .

- Some tiles will release quite easily while others require varying degrees of force. Where the adhesive is spread heavily or the tile is bonded tightly, it may prove easier to force the scraper through the tightly adhered areas by striking the scraper handle with a hammer, using blows of moderate force while maintaining the scraper at a 25° to 30° angle to the floo .

- If you encounter areas where even the above methods will not remove the tiles, the removal procedure can be simplified y thoroughly heating the tiles with a hot-air gun or a radiant heat source until the heat penetrates through the tile and softens the adhesive.

- When using automated infrared heating machines, follow the manufacturer's instructions.

WARNING

Handle the hot-air gun or radiant heat source carefully to avoid burn injury. Do not handle the heated tiles or adhesive without suitable glove protection. Do not use a blowtorch or open flam . Use caution not to burn or char tiles. Work area must be adequately ventilated.

REMOVAL OF WOOD UNDERLAYMENT BOARDS

WARNING

Do not sand, dry sweep, dry scrape, drill, saw, beadblast or mechanically chip or pulverize existing resilient floo ing, backing, lining felt, asphaltic "cutback" adhesive, or other adhesive. See "Warning Statement" on page one.

- After all felt from sheet floo ing has been wetscraped or tiles removed from the underlayment joints, drive a chisel, using a hammer or mallet, between the underlayment board and the subfloo . Use the chisel to pry up the underlayment enough to insert a pry bar and remove the chisel. Slowly and carefully use pry bars to pry up the underlayment board a little at a time until the board is completely loose and can be removed.

- Caution must be used to avoid breaking the underlayment board. The underlay ment board should be removed in one piece. If the underlayment board breaks, slice through the sheet resilient floo ing at the break and spray any exposed felt with the specified liquid dis washing detergent solution. Allow the specified liquid dishwashing detergent solution to penetrate for a few minutes, then continue lifting the broken underlayment. In the case of a broken underlayment board with tile adhered, wet (mist) the broken tile and carefully remove any loose pieces.

- Wear heavy gloves and be careful of wood splinters and fasteners sticking out of the back of the underlayment. Each underlayment board (or piece of board) should be removed from the work area as soon as it has been pried up to avoid injuries (such as stepping on a nail). Fasteners protruding from removed board should be fl ttened with a hammer. Place removed underlayment boards on skids with the nails pointing downward. Wrap skid with 6-mil polyethylene plastic sheeting and secure with duct tape. Identify with an appropriate label stating, for example "Caution-Contains Asbestos. Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Dispose in an approved landfill onl .

- If the underlayment panel extends under cabinets or wall partitions, it will be necessary to slice through the floo ing with a knife as close to the vertical surface as possible. Deeply score the panel. This should allow for removal.

- After each panel has been removed, pull out any nails or fasteners still in the subfloo .

- A chisel is not needed to start the removal of boards after the first boa d has been removed. Simply work the pry bar under the exposed edge of the next board.

- When removal of the underlayment under the existing floor is omplete, thoroughly check the exposed subfloo . Rena ii loose areas and reset any "popped" nails or fasteners.

- Vacuum up any residue using the HEPA vacuum cleaner with the metal floor attachment.

- After vacuuming, used HEPA fil ers and cleaner bags should be removed according to the manufacturer's instructions and placed in a heavy-duty, impermeable, trash bag or leak-tight container with an appropriate label stating, for example "Caution-Contains Asbestos. Avoid Opening or Breaking Container. Breathing Asbestos is Hazardous to Your Health." It may also be appropriate to include in the label a warning regarding the presence of crystalline silica. Close and seal the trash bag or container securely for disposal. Dispose in an approved landfill onl .

- Prepare the subfloor y installing new underlayment and or floor overing according to the manufacturer's installation instructions.

115 Broad Street, Suite 201
LaGrange, GA 30240
706.882.3833

January 2018

This book replaces all prior editions of the RFCI and Armstrong Recommended Work Practices publications . Future editions of these work practices may be issued to replace this publication .

RFCi
Resilient Floor Covering Institute

LGCI
Lahlaf Geotechnical Consulting, Inc.

March 11, 2023

Ms. Nichole Coscia
Burlington Public Schools
123 Cambridge Street
Burlington, MA 01803
Phone: 781-270-1800

Re: **Preliminary Geotechnical Report**
Proposed Fox Hill Elementary School
Burlington, Massachusetts
LGCI Project No. 2307

Dear Ms. Coscia:

Lahlaf Geotechnical Consulting, Inc. (LGCI) has completed a preliminary geotechnical study for the proposed Fox Hill Elementary School in Burlington, Massachusetts. We are submitting our preliminary geotechnical report electronically.

The soil and rock samples from our explorations are currently stored at LGCI for further analysis, if requested. Unless notified otherwise, we will dispose of the soil and rock samples after three (3) months.

Thank you for choosing LGCI as your geotechnical engineer.

Very truly yours,

Lahlaf Geotechnical Consulting, Inc.

Abdelmadjid M. Lahlaf, Ph.D., P.E.
Principal Engineer

LGCI
Lahlaf Geotechnical Consulting, Inc.

PRELIMINARY GEOTECHNICAL REPORT
PROPOSED FOX HILL ELEMENTARY SCHOOL
BURLINGTON, MASSACHUSETTS

LGCI Project No. 2307
March 11, 2023

Prepared for:

BURLINGTON PUBLIC SCHOOLS
123 Cambridge Street
Burlington, MA 01803
Phone: 781-270-1800

PRELIMINARY GEOTECHNICAL REPORT
PROPOSED FOX HILL ELEMENTARY SCHOOL
BURLINGTON, MASSACHUSETTS
LGCI Project No. 2307
March 11, 2023

Prepared for:

BURLINGTON PUBLIC SCHOOLS
123 Cambridge Street
Burlington, MA 01803
Phone: 781-270-1800

Prepared by:

LAHLAF GEOTECHNICAL CONSULTING, INC.
100 Chelmsford Road, Suite 2
Billerica, Massachusetts 01862
Phone: (978) 330-5912
Fax: (978) 330-5056

Abdelmadjid M. Lahlaf, Ph.D., P.E.
Principal Engineer

TABLE OF CONTENTS

1. PROJECT INFORMATION 2

1.1 PROJECT AUTHORIZATION 2
1.2 PURPOSE AND SCOPE OF SERVICES 2
1.3 SITE DESCRIPTION 2
1.4 PROJECT DESCRIPTION 3
1.5 ELEVATION DATUM 3

2. SITE AND SUBSURFACE CONDITIONS 4

2.1 SURFICIAL GEOLOGY 4
2.2 LGCI'S EXPLORATIONS 4
2.2.1 General 4
2.2.2 LGCI's Soil Borings 4
2.2.3 LGCI's Test Pits 5
2.2.4 Exploration Logs and Locations 5
2.3 SUBSURFACE CONDITIONS 5
2.4 GROUNDWATER 7
2.5 LABORATORY TEST DATA 7

3. EVALUATION AND RECOMMENDATIONS 8

3.1 GENERAL 8
3.1.1 Asphalt, Surficial Topsoil, Existing Fill, and Buried Organic Soil 8
3.1.2 Shallow Footings 9
3.1.3 Reuse on Onsite Materials 9
3.1.4 Additional Explorations 9
3.2 FOUNDATION RECOMMENDATIONS 9
3.2.1 Footing Design 9
3.2.2 Settlement Estimates 10
3.3 CONCRETE SLAB CONSIDERATIONS 10
3.3.1 Slabs-on-Grade 10
3.3.2 Under-slab Drains and Waterproofing 11
3.4 SEISMIC DESIGN 11
3.5 LATERAL PRESSURES FOR WALL DESIGN 12
3.5.1 Lateral Earth Pressures 12
3.5.2 Seismic Pressures 13
3.5.3 Perimeter Drains 13
3.6 PARKING LOTS, DRIVEWAYS, AND SIDEWALKS 14
3.6.1 General 14
3.6.2 Sidewalks 14
3.6.3 Pavement Sections 14
3.7 UNDERGROUND UTILITIES 15

4. CONSTRUCTION CONSIDERATIONS 16

4.1 SUBGRADE PREPARATION 16
4.2 SUBGRADE PROTECTION 17
4.3 FILL MATERIALS 17
4.3.1 Structural Fill 17
4.3.2 Ordinary Fill 18
4.4 REUSE OF ONSITE MATERIALS 18
4.5 GROUNDWATER CONTROL PROCEDURES 19
4.6 TEMPORARY EXCAVATIONS 19

5. RECOMMENDATIONS FOR FUTURE WORK 20

6. REPORT LIMITATIONS 21

7. REFERENCES..... 22

List of Tables and Figures

Table 1 Summary of LGCI's Borings
Table 2 Summary of LGCI's Test Pits

Figure 1 Site Location Map
Figure 2 Surficial Geologic Map
Figure 3 Exploration Location Plan

List of Appendices

Appendix A LGCI's Boring Logs
Appendix B LGCI's Test Pit Logs
Appendix C Laboratory Test Results

1. PROJECT INFORMATION

1.1 Project Authorization

This preliminary geotechnical report presents the results of the preliminary subsurface explorations and a preliminary geotechnical evaluation performed by Lahlaf Geotechnical Consulting, Inc. (LGCI) for the proposed Fox Hill Elementary School in Burlington, Massachusetts. We performed our services in general accordance with our proposal No. 22155-Rev. 1 dated December 19, 2022, revised on February 2, 2023. Ms. Nichole Coscia of the Burlington Public Schools authorized our services by signing our proposal on February 7, 2023, and by issuing a purchase order (PO) No. 23001804-00 on February 8, 2023.

1.2 Purpose and Scope of Services

The purpose of our geotechnical services was to perform preliminary subsurface explorations at the site for the proposed Fox Hill Elementary School, and to provide preliminary foundation design and construction recommendations. LGCI performed the following services:

- Coordinated our exploration locations with Dore and Whittier, the owner project manager (OPM) for this project.
- Marked the exploration locations at the site and notified Dig Safe Systems Inc. (Dig Safe) and the Town of Burlington for utility clearance.
- Engaged a drilling subcontractor for two (2) days to advance seven (7) soil borings at the site.
- Engaged an excavation subcontractor for one (1) day to excavate six (6) test pits at the site.
- Provided an LGCI geotechnical engineer at the site to coordinate and observe the borings and test pits, describe the soil samples and rock cores, and prepare field logs.
- Submitted two (2) soil samples from the borings and test pits for laboratory testing.
- Prepared this preliminary geotechnical report containing the results of our preliminary subsurface explorations and our preliminary recommendations for foundation design and construction.

Our scope does not include preparing specifications, reviewing contract documents, attending meetings, or providing construction services. LGCI would be pleased to perform these services when needed. Recommendations for unsupported slopes, stormwater management, erosion control, pavement design, slope stability analyses, liquefaction and/or site-specific seismic analysis, pile analysis and design, and cost or quantity estimates are not included in our scope of work.

LGCI's scope of services does not include an environmental assessment for the presence or absence of wetlands or analytical testing for hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site, or mold in the soil or in any structure at the site. Any statements regarding odors, colors, or unusual or suspicious items or conditions are strictly for the information of the client.

1.3 Site Description

Our understanding of the site is based on our field observations, our discussions with Dore and Whittier, readily available aerial photographs of the site, and on the following documents:

- Drawing 1 titled: "Site Plan, Elementary School No. 5, Burlington, Massachusetts," (1965 Site Plan) prepared by J. Williams Beal, Sons, Granger & Postus, dated September 17, 1965, and provided to LGCI by Dore and Whittier via email on February 10, 2023.

- Drawing 3 titled: "Building Layout, Elementary School No. 5, Burlington, Massachusetts," (1965 Building Layout) prepared by J. Williams Beal, Sons, Granger & Postus, dated September 17, 1965, and provided to LGCI by Dore and Whittier via e-mail on February 10, 2023.

- Drawing 12 titled: "Elevations, Elementary School No. 5, Burlington, Massachusetts," (1965 Building Elevations) prepared by J. Williams Beal, Sons, Granger & Postus, dated September 17, 1965, and provided to LGCI by Dore and Whittier via e-mail on February 10, 2023.

The site is part of the existing Fox Hill Elementary School located on Fox Hill Road near the intersection with Westwood Street in Burlington, Massachusetts as shown in Figure 1. The site is bordered by wooded land on the northern, eastern, and southern sides, and by Fox Hill Road on the western side. The site is currently occupied by the existing Fox Hill Elementary School building and its associated parking lots and driveways. The site also includes a landscaped area, a paved playground area, and a baseball field and grass fields on the eastern side of the existing school building.

Based on the 1965 Site Plan, we understand that the existing elementary school building was constructed in the late 1960s. The formerly proposed grades for the current school ranged between El. 146 feet on the western side of the site and El. 186 feet near the eastern side of the site. The grades on the western side of the site, i.e., in the general vicinity of the existing elementary school building, ranged between El. 146 feet near the intersection of Fox Hill Road and Westwood Street and El. 158 feet near the existing school building. The grades on the eastern side of the site, i.e., in the general vicinity of the landscaped area, paved playground, and baseball and grass fields located on the eastern side of the existing elementary school building, range between El. 158 feet near the existing elementary school building and El. 186 feet near the eastern edge of the site. Please note that the existing grades at the site may have changed since the construction of the existing elementary school.

The existing Fox Hill Elementary School building consists of an irregularly-shaped, one-story building located on the western side of the site. Based on the 1965 Building Elevations, we

understand that the first finished floor elevation (FFE) of the existing elementary school is El. 158 feet.

1.4 Project Description

Our understanding of the proposed construction is based on our discussions with Dore and Whittier, the documents listed in Section 1.3, and the following document:

- Untitled boring location plan (Boring Location Plan) prepared by Dore and Whittier, undated, and provided to LGCI by Dore and Whittier via e-mail on February 2, 2023.

We understand that at the time of this preliminary geotechnical report, the size, layout, location, and grades of the proposed school building have not been established. Based on the Boring Location Plan, we understand that there two options are being considered at the current time for the proposed school as follows:

- Option 1 – This option consists of a somewhat rectangular-shaped building located near the paved parking lot located on the northern side of the existing school building.

- Option 2 – This option consists of an L-shaped building located within the landscaped area, paved playground, and baseball and grass fields located on the eastern side of the existing school building.

1.5 Elevation Datum

The 1965 Site Plan, the 1965 Building Layout, and the 1965 Building Elevations did not include a reference to a vertical elevation datum.

2. SITE AND SUBSURFACE CONDITIONS

2.1 Surficial Geology

LGCI reviewed a surficial geologic map titled: "Surficial Materials Map of the Wilmington Quadrangle, Massachusetts," prepared by Stone, B.D., Stone, J.R., and DiGiacomo-Cohen, M.L., Scientific Investigation Map 3402, Quadrangle 113 – Wilmington, 2018.

The Surficial Geologic Map of the site indicates that the natural soils in the general vicinity of the site consist of thin till and thick till.

The thin till is described as non-sorted, non-stratified matrix of sand, some silt, and little clay that contains scattered pebbles, cobbles, and boulders. The thin till is generally less than 10 to 15 feet thick. The thick till is similar in composition to the thin till but is more than 10 to 15 feet thick.

The Surficial Geologic Map indicates that abundant rock outcrops are present near the southeastern corner the eastern side of the site.

The Surficial Geologic Map is shown in Figure 2.

2.2 LGCI's Explorations

2.2.1 General

LGCI coordinated our exploration locations with Dore and Whittier and marked the exploration locations in the field. LGCI notified Dig Safe and the Town of Burlington for utility clearance prior to starting our explorations at the site.

Unless notified otherwise, we will dispose of the soil and rock samples obtained during our explorations after three (3) months.

2.2.2 LGCI's Soil Borings

LGCI engaged Northern Drilling Services, Inc. (NDS) of Northborough, Massachusetts to advance seven (7) soil borings (B-1 to B-7) at the site on February 20 and 21, 2023. The borings were advanced with a Mobile B-59 Truck-Mounted Drill Rig using drive and wash boring techniques with 4-inch casings. The borings extended to depths ranging between 12 and 21 feet beneath the ground surface. Upon completion, the boreholes were backfilled with soil cuttings and gravel. The ground surface was restored with asphalt cold patch in paved areas.

NDS performed Standard Penetration Tests (SPT) and obtained split spoon samples with an automatic hammer at typical depth intervals of 2 feet or 5 feet as noted on the boring logs in general accordance with ASTM D-1586.

An LGCI geotechnical engineer observed and logged the borings in the field.

2.2.3 LGCI's Test Pits

LGCI engaged Saunders Construction of Reading, Massachusetts to excavate six (6) test pits (TP-1 to TP-6) at the site on February 21, 2023. The test pits were excavated with a Takeuchi TB-175 excavator. The test pits extended to depths ranging between 7.4 feet and 10.5 feet beneath the ground surface.

Upon completion, the test pit excavations were backfilled with the excavated material in 12-inch to 18-inch lifts and tamped with the excavator bucket.

An LGCI geotechnical engineer observed and logged the test pits in the field.

2.2.4 Exploration Logs and Locations

The boring and test pit locations are shown in Figure 3. Appendix A contains LGCI's boring logs and Appendix B contains LGCI's test pit logs. Tables 1 and 2 include summaries of LGCI's borings and test pits, respectively.

2.3 Subsurface Conditions

The subsurface description in this report is based on a limited number of explorations and is intended to highlight the major soil strata encountered during our explorations. The subsurface conditions are known only at the actual exploration locations. Variations may occur and should be expected between exploration locations. The boring and test pit logs represent conditions that we observed at the time of our explorations and were edited, as appropriate, based on the results of the laboratory test data and inspection of the soil and rock samples in the laboratory. The strata boundaries shown in our boring and test pit logs are based on our interpretations and the actual transitions may be gradual. Graphic soil symbols are for illustration only.

The soil strata encountered in LGCI's borings and test pits were as follows, starting at the ground surface.

Topsoil – A layer of surficial organic topsoil was encountered at the ground surface in all borings and test pits except in boring B-3. The thickness of the topsoil ranged between 0.4 feet and 1 foot.

Asphalt – Asphalt was encountered at the ground surface in boring B-3. The thickness of the asphalt was 0.3 feet.

Fill – A layer of fill was encountered beneath the topsoil or asphalt in all borings and test pits. The fill extended to depths ranging between 1.4 feet and 6 feet beneath the ground surface. The samples within this layer were mostly described as silty sand. Two (2) samples were described as poorly graded sand and one (1) sample was described as well graded sand. The fines content in

the fill ranged between 5 and 35 percent, and the gravel content ranged between 0 and 25 percent. The fill contained traces of organic soil, roots, brick, and asphalt. The fill also contained cobbles and boulders ranging up to about 20 inches in size.

The SPT N-values in this layer ranged between 8 blows per foot (bpf) and 42 bpf, with most values lower than 18 bpf, indicating mostly loose to medium dense material. Please note that that high SPT N-values in the fill may be due to obstructions such as cobbles and boulders present in the fill and may not represent the true density of the fill. The excavation effort within the fill was described as easy to moderate.

Buried Organic Soil – A layer of buried organic soil was encountered beneath the fill in boring B-7 and in test pits TP-2 to TP-4. The buried organic soil extended to depths ranging between 4.5 feet and 8.5 feet beneath the ground surface. The samples in this layer were described as silty sand. The fines content in the buried organic soil ranged between 20 and 30 percent. The buried organic soil contained traces of organic soil, roots, and wood.

The SPT N-values in this layer were 5 bpf and 16 bpf, indicating very loose to medium dense material. The excavation effort within the buried organic soil was described as easy suggesting a loose material.

Sand and Gravel – A layer of sand and gravel was encountered beneath the layer of fill or buried organic soil in all borings and test pits. The sand and gravel extended to the termination depths in all borings and test pits except in boring B-6. In boring B-6, the sand and gravel extended to the top of rock at a depth of 9.4 feet beneath the ground surface. Split spoon refusal was encountered on rock at the bottom of borings B-3, B-5, and B-6 at depths of 20.3 feet, 20 feet, and 9.4 feet beneath the ground surface, respectively. Excavator refusal was encountered on apparent rock at the bottom of this layer in test pits TP-5 and T-6 at depths of 8 feet and 7.4 feet beneath the ground surface, respectively. The samples in this layer were mostly described as silty sand. Four (4) samples were described as poorly graded sand, and one (1) sample was described as well graded sand. The fines content in this layer ranged between 5 and 35 percent, and the gravel content ranged between 0 and 30 percent. A few samples within the sand and gravel contained traces of weathered rock. The sand and gravel also contained cobbles and boulders up to about 2 feet in size.

The SPT N-values in this layer ranged between 7 bpf and refusal, with most values higher than 20 bpf, indicating mostly medium dense to very dense material. Please note that the high SPT N-values in the sand and gravel may be due to obstructions such as cobbles and boulders in the sand and gravel and may not represent the true density of the sand and gravel. The excavation effort within the sand and gravel was described as easy to difficult.

Rock – Split spoon refusal and excavator refusal were encountered on rock in borings B-3, B-5, and B-6 and in test pits TP-5 and TP-6 at depths ranging between 7.4 feet and 20.3 feet beneath the ground surface.

To confirm and characterize the rock in boring B-6, the roller bit was advanced in apparent rock between the depths of 9.4 and 15 feet beneath the ground surface, and a 5-foot rock core was obtained between the depths of 15 and 20 feet beneath the ground surface. The cored rock consisted of hard to very hard, severely weathered to fresh, slightly fractured to sound, gray to brown, coarse-grained, Granite. The rock core recovery was 100 percent, and the Rock Quality Designation (RQD) was 68.3 percent. The coring rate ranged between 2.6 and 3.8 minutes per foot (min./ft.).

2.4 Groundwater

Groundwater was encountered in all borings and test pits except in test pit TP-6 at depths ranging between 2.0 and 8.3 feet beneath the ground surface, as shown in Tables 1 and 2 and in the boring and test pit logs.

The groundwater information reported herein is based on observations made during or shortly after the completion of drilling or excavation. In addition, the drilling procedure introduced water into the boreholes during drilling. Therefore, the reported groundwater levels may not represent the actual groundwater conditions, as additional time may be required for the groundwater levels to stabilize. The groundwater information presented in this report only represents the conditions encountered at the time and location of the explorations. Seasonal fluctuation should be anticipated.

2.5 Laboratory Test Data

LGCI submitted two (2) soil samples collected from the borings and test pits for grain-size analysis. The results of the grain-size analyses are provided in the test data sheets included in Appendix C and are summarized in the table below.

Grain-Size Analysis Test Results

Boring / Test Pit No.	Sample No.	Stratum	Sample Depth (ft.)	Percent Gravel	Percent Sand	Percent Fines
B-6	S2	Fill	2.0 – 4.0	20.4	47.6	32.0
TP-1	Grab	Sand and Gravel	1.4 – 10	10.9	57.9	31.2

3. EVALUATION AND RECOMMENDATIONS

3.1 General

Based on our understanding of the proposed construction, our observation of our borings and test pits, and the results of our laboratory testing, there are a few issues that we would like to highlight for consideration and discussion.

3.1.1 Asphalt, Surficial Topsoil, Existing Fill, and Buried Organic Soil

- Asphalt, topsoil, existing fill, and buried organic soil were encountered in the borings and test pits. These materials are not suitable to support foundations.

- The asphalt and topsoil should be removed from within the entire construction area, including the proposed building footprint, proposed driveways and parking lots, and site retaining walls and other structures.

- The existing fill was observed to be variable in composition and density. In addition, variable amounts of organic matter were noted in several of the fill samples. Existing fill that was not placed with strict moisture, density, and gradation control presents risk of unpredictable settlement that may result in poor performance of floor slabs and foundations. Due to these risks, the existing fill as well as the buried organic soil should be entirely removed from within the proposed building footprint and replaced with Structural Fill. Based on the limited explorations performed within the currently proposed building footprint, we anticipate that the removal will extend up to depths of about 4 feet, but may extend to depths of up to 8.5 feet beneath the ground surface based on borings and test pits conducted outside the currently proposed building footprints. The removal may extend to greater depths at locations not explored by LGCI. Laterally, the removal should extend beyond the proposed building footprint a distance equal to the distance between the bottom of the proposed footings and the top of the natural sand and gravel, or 5 feet, whichever is greater.

- LGCI considered the option of the leaving the existing fill and buried organic soil in placed and improving them by means of aggregate piers. However, we dismissed this option because the depth to the bottom of the existing fill and buried organic soil is not sufficient to warrant the use of aggregate piers. We will reconsider this option after additional explorations are performed at the site when the proposed building location, size, layout, and finished floor elevation are established.

- The subgrade of footings should be prepared in accordance with the recommendations in Section 4.1.

- Within paved areas, the existing fill and buried organic soil should be removed to the top of the natural sand and gravel or to a depth of 18 inches beneath the bottom of the

proposed pavement. Where organic soil is exposed, the organic soil should be removed. Where existing fill is exposed, the existing fill deeper than 18 inches beneath the bottom of the proposed pavement can remain in place provided these materials are firm and unyielding following proofrolling as described in Section 4.1.

3.1.2 Shallow Footings

Based on the results of the borings and test pits, the subsurface conditions are suitable to support shallow spread and continuous footings bearing on Structural Fill placed directly on top of the sand and gravel layer after entirely removing the asphalt, the topsoil, the existing fill, and the buried topsoil. Our recommendation for net allowable bearing capacity in the sand and gravel is presented in Section 3.2.1. Our estimates for settlement are presented in Section 3.2.2. Our concrete slab considerations are presented in Section 3.3. Section 4.1 provides recommendations for preparation of subgrades.

3.1.3 Reuse on Onsite Materials

Based on our field observations and the results of the grain-size analyses, the onsite soils are not suitable for reuse as Ordinary Fill or Structural Fill. Additional recommendations for reuse of onsite materials are presented in Section 4.4.

3.1.4 Additional Explorations

We recommend performing additional explorations at the site after the proposed building location, size, layout, and finished floor elevation are established. We recommend performing at least eight (8) borings and six (6) test pits, including installing a groundwater observation well.

3.2 Foundation Recommendations

3.2.1 Footing Design

- We recommend entirely removing the surficial asphalt, topsoil, s existing fill, and buried organic soil from within the proposed building footprint as described in Section 3.1.2.

- We recommend supporting the proposed building on spread footings bearing on Structural Fill placed directly on the natural sand and gravel.

- We recommend designing the proposed footings using a net allowable bearing pressure of 5 kips per square foot (ksf). We recommend that the footings bear on a minimum of 12 inches of Structural Fill placed directly on top of the natural sand and gravel or on rock. The Structural Fill should extend at least 1 foot laterally beyond the limits of the footings.

- Footing subgrades should be prepared in accordance with the recommendations in Section 4.1.

- Foundations should be designed in accordance with The Commonwealth of Massachusetts State Building Code 780 CMR, Ninth Edition (MSBC 9th Edition).

- Exterior footings and footings in unheated areas should be placed at a minimum depth of 4 feet below the final exterior grade to provide adequate frost protection. Interior footings in heated areas may be designed and constructed at a minimum depth of 2 feet below finished floor grades.

- Wall footings should be designed and constructed with continuous, longitudinal steel reinforcement for greater bending strength to span across small areas of loose or soft soils that may go undetected during construction.

- A representative of LGCI should be engaged to observe that the subgrade has been prepared in accordance with our recommendations.

3.2.2 Settlement Estimates

Based on our experience with similar soils and designs using a net allowable bearing pressure of 5 ksf, we anticipate that the total settlement will be approximately 1 inch, and that the differential settlement of the footings will be 3/4 inch or less over a distance of 25 feet. We believe that total and differential settlements of this magnitude are tolerable for a similar structure. However, the tolerance of the proposed structure to the predicted total and differential settlements should be assessed by the structural engineer.

3.3 Concrete Slab Considerations

3.3.1 Slabs-on-Grade

- Floor slabs should be constructed as a slabs-on-grade bearing on a minimum of 12 inches of Structural Fill placed directly on top of the weathered rock. The subgrade of the slabs should be prepared as described in Section 4.1.

- To reduce the potential for dampness in the proposed floor slab, the project architect may consider placing a vapor barrier beneath the floor slab. The vapor barrier should be protected from puncture during the placement of the proposed slab reinforcement.

- For the design of the floor slab bearing on the materials described above, we recommend using a modulus of subgrade reaction, k_{s1}, of 100 tons per cubic foot (tcf). Please note that the values of k_{s1} are for a 1 x 1 square foot area. These values should be adjusted for larger areas using the following expression:

$$Modulus\ of\ Subgrade\ Reaction\ (k_s) = k_{s1} * \left(\frac{B+1}{2B}\right)^2$$

where:

k_s = Coefficient of vertical subgrade reaction for loaded area;
k_{s1} = Coefficient of vertical subgrade reaction for a 1 x 1 square foot area; and
B = Width of area loaded, in feet.

Please note that cracking of slabs-on-grade can occur as a result of heaving or compression of the underlying soil, but also as a result of concrete curing stresses. To reduce the potential for cracking, the precautions listed below should be closely followed during the construction of all slabs-on-grade:

- Construction joints should be provided between the floor slab and the walls and columns in accordance with the American Concrete Institute (ACI) requirements, or other applicable code.

- The backfill in interior utility trenches should be properly compacted.

- In order for the movement of exterior slabs not to be transmitted to foundations or superstructures, exterior slabs, such as approach slabs and sidewalks, should be isolated from the superstructure.

3.3.2 Under-slab Drains and Waterproofing

Based on the groundwater level observed in the borings, we believe that an under-slab drainage system is not required.

If the proposed building includes an elevator pit or other structure that extends beneath the FFE, such elevator pit or other structure should be designed to be waterproof.

LGCI will revise this recommendation after we are engaged to perform additional explorations at the site.

3.4 Seismic Design

Based on the SPT N-values from the borings, we estimate that the seismic criteria for the site are as follows:

- Site Class: D
- Spectral Response Acceleration at short period (Ss): 0.227g

- Spectral Response Acceleration at 1 sec. (S_1): 0.072g
- Site Coefficient Fa (Table 1613.5.3(1)): 1.6
- Site Coefficient Fv (Table 1613.5.3(2): 2.4
- Adjusted spectral response S_{MS}: 0.363g
- Adjusted spectral response S_{M1}: 0.173g

LGCI will revise the site class to a Site Class C, if applicable, after additional explorations are performed, including rock cores.

Based on the SPT data from the borings, the site soils are not susceptible to liquefaction.

3.5 Lateral Pressures for Wall Design

3.5.1 Lateral Earth Pressures

Lateral earth pressures for the design of below-grade walls, if any, and site retaining walls are provided below.

Coefficient of Active Earth Pressure, K_A:	0.31
Coefficient of At-Rest Earth Pressure, K_o:	0.47
Coefficient of Passive Earth Pressure, K_p:	3.3
Total Unit Weight γ:	125 pcf

Note: The values in the table are based on a friction angle for the backfill of 32 degrees and neglecting friction between the backfill and the wall. The design active and passive coefficients are based on horizontal surfaces (non-sloping backfill) on both the active and passive sides, and on a vertical wall face.

- Exterior walls of below-ground spaces and other retaining walls braced at the top to restrain movement/rotation, should be designed using the "at-rest" pressure coefficient.

- We recommend placing free-draining material within the 3 feet immediately behind retaining walls.

- We recommend providing weep holes at the bottom of site retaining walls, including temporary SOE systems, to promote drainage where possible. Alternatively, a pipe should be placed at the base of the wall to collect the water. Groundwater collected by the wall drains should be discharged into a lower area if gravity flow is possible.

- Passive earth pressures should only be used at the toe of the wall where special measures or provisions are taken to prevent the disturbance or future removal of the soil on the passive side of the wall, or in areas where the wall design includes a key. In any case, the passive pressures should be neglected in the top 4 feet.

- Where a permanent vertical uniform load will be applied to the active side immediately adjacent to the wall, a horizontal surcharge load equal to half of the uniform vertical load should be applied over the height of the wall. At a minimum, a temporary lateral

construction surcharge load of 100 pounds per square foot (psf) should be applied uniformly over the height of the wall.

- We recommend using an ultimate friction factor of 0.5 between the weathered rock and the bottom of the wall. Below-grade walls should be designed for minimum factors of safety of 1.5 for sliding and 2.0 for overturning.

3.5.2 Seismic Pressures

In accordance with the Massachusetts State Building Code, 9th Edition (MSBC 9th Edition), Section 1610, a lateral earthquake force equal to $0.100*(S_s)*(F_a)*\gamma*H^2$ should be included in the design of the walls (for horizontal backfill), where S_s is the maximum considered earthquake spectral response acceleration (defined in Section 3.4), F_a is the site coefficient (defined in Section 3.4), γ is the total unit weight of the soil backfill, and H is the height of the wall.

The earthquake force should be distributed as an inverted triangle over the height of the wall. In accordance with MSBC 9th Edition, Section 1610.2, a load factor of 1.43 should be applied to the earthquake force for wall strength design.

Temporary surcharges should not be included when designing for earthquake loads. Surcharge loads applied for extended periods of time should be included in the total static lateral soil pressure, and their earthquake lateral force should be computed and added to the force determined above.

3.5.3 Perimeter Drains

- We recommend that free-draining material be placed within 3 feet of the exterior of walls of below-ground spaces, if any. To reduce the potential for dampness in below-ground spaces, proposed below-ground walls should be damp-proofed.

- We recommend that drains be provided behind the exterior of walls of below-ground spaces. The drains should consist of 4-inch perforated PVC pipes installed with the slots facing down. Perimeter drains should be installed at the bottom of the wall in 18 inches of crushed stone wrapped in a geotextile for separation and filtration.

To the extent possible, groundwater collected by the wall drains should be discharged in a lower area if gravity flow is possible. In any case, the groundwater collected by the wall drains should be discharged in accordance with municipal, state, and other applicable standards.

3.6 Parking Lots, Driveways, and Sidewalks

3.6.1 General

The subsurface conditions encountered at the site are generally suitable to support the proposed driveways, parking lots, and sidewalks after preparation of the subgrade as described in Section 4.1.

- We recommend entirely removing the existing asphalt and topsoil from within the footprint of the proposed driveways and parking lots.

- The existing fill should be improved in accordance with the recommendations in Section 4.1.

- Cobbles and boulders should be removed to at least 18 inches below the bottom of the pavement.

3.6.2 Sidewalks

- Sidewalks should be placed on a minimum of 12 inches of Structural Fill with less than 5 percent fines.

- To reduce the potential for heave caused by surface water penetrating under the sidewalk, the joints between sidewalk concrete sections should be sealed with a waterproof compound. The sidewalks should be sloped away from the building or other vertical surfaces to promote flow of water. To the extent possible, roof leaders should not discharge onto sidewalk surfaces.

3.6.3 Pavement Sections

A typical, minimum, standard-duty pavement section that could be used for parking areas is as follows:

1.5" Asphalt "Top Course"
2.0" Asphalt "Base Course"
8" Processed Gravel for Sub-Base (MassDOT M1.03.1)

A typical, minimum, heavy-duty pavement section that could be used for areas of heavy truck traffic is as follows:

2.0" Asphalt "Top Course"
2.5" Asphalt "Base Course"
12" Processed Gravel for Sub-Base (MassDOT M1.03.1)

The pavement sections shown above represent minimum thicknesses representative of typical local construction practices for similar use. Periodic maintenance should be anticipated.

Pavement material types and construction procedures should conform to specifications of the "Standard Specifications for Highways and Bridges," prepared by the Commonwealth of Massachusetts Department of Public Works and dated 1988 (with the latest Supplemental Specifications).

Areas to receive relatively highly concentrated, sustained loads such as dumpsters, loading areas, and storage bins are typically installed over a rigid pavement section to distribute concentrated loads and reduce the possibility of high stress concentrations on the subgrade. Typical rigid pavement sections consist of 6 inches of concrete placed over a minimum of 12 inches of subbase material.

3.7 Underground Utilities

Boulders at the bottom of utility trenches should be removed to at least 12 inches below the pipe invert and the resulting excavation should be backfilled with suitable backfill. Utilities should be placed on suitable bedding material in accordance with the manufacturer's recommendations. "Cushion" material should be placed, by hand, above the utility pipe in maximum 6-inch lifts. The lift should be compacted by hand to avoid damage to the utility. Where the bedding/cushion material consists of crushed stone, it should be wrapped in a geotextile fabric.

Compaction of fill in utility trenches should be in accordance with our recommendations in Section 4.3. To reduce the potential for damage to utilities, placement and compaction of fill immediately above the utilities should be performed in accordance with the manufacturer's recommendations.

4. CONSTRUCTION CONSIDERATIONS

4.1 Subgrade Preparation

- Asphalt, organic materials, existing fill, buried organic soil, buried subsoil, if any, abandoned utilities, buried foundations, and other below-ground structures should be entirely removed from within the footprint of the proposed building and site structures, including site retaining walls, and exterior stairs, if any, before the start of foundation work.

- Tree stumps, root balls, and roots larger than ½ inch in diameter should be removed and the cavities filled with suitable material and compacted per Section 4.3 of this report.

- Cobbles and boulders should be removed at least 6 inches from beneath footings and 18 inches beneath the bottom of slabs and paved areas. The resulting excavations should be backfilled with compacted Structural Fill under the building and with Ordinary Fill under the subbase of paved areas.

- The bottom of the excavation resulting from the removal of the existing fill or natural soil should be compacted with a dynamic vibratory compactor imparting a minimum of 40 kips of force to the subgrade.

- The base of the footing excavations in granular soil should be compacted with a dynamic vibratory compactor weighing at least 200 pounds and imparting a minimum of 4 kips of force to the subgrade.

- After the surficial materials are removed to a depth of 18 inches within the proposed paved areas in accordance with the recommendations in Section 3.1, the exposed existing fill and buried organic soil deeper than 18 inches beneath the bottom of the proposed pavement should be improved by proofrolled using a loaded rubber-tire truck. Where soft zones of soil are observed, the soft soil should be removed, and the grade should be restored using Ordinary Fill to the bottom of the proposed subbase layer. After proofrolling is completed, the subgrade should be compacted with at least six (6) passes of a vibratory roller compactor imparting a dynamic effort of at least 40 kips to a firm and unyielding condition. If pumping of the existing fill or buried organic soil deeper than 18 inches beneath the bottom of the proposed pavement is observed, the soft and/or pumping material should be removed and replaced.

- Fill placed within the footprint of the proposed building should meet the gradation and compaction requirements of Structural Fill, shown in Section 4.3.1.

- Fill placed under the subbase of paved areas should meet the gradation and compaction requirements of Ordinary Fill, shown in Section 4.3.2.

- Fill placed in the top 12 inches beneath sidewalks should consist of Structural Fill with less than 5 percent fines.

- Loose or soft soils identified during the compaction of the footing or floor slab subgrades should be excavated to a suitable bearing stratum, as determined by the representative of LGCI. Grades should be restored by backfilling with Structural Fill or crushed stone.

- When crushed stone is required in the drawings or is used for the convenience of the contractor, it should be wrapped in a geotextile fabric for separation except where introduction of the geotextile fabric promotes sliding. A geotextile fabric should not be placed between the bottoms of the footings and the crushed stone.

- An LGCI representative should observe the exposed subgrades prior to fill and concrete placement to verify that the exposed bearing materials are suitable for the design soil bearing pressure. If soft or loose pockets are encountered in the footing excavations, the soft or loose materials should be removed and the bottom of the footing should be placed at a lower elevation on firm soil, or the resulting excavation should be backfilled with Structural Fill, or crushed stone wrapped in a filter fabric.

4.2 Subgrade Protection

The onsite fill and natural soils are frost susceptible. If construction takes place during freezing weather, special measures should be taken to prevent the subgrade from freezing. Such measures should include the use of heat blankets or excavating the final six inches of soil just before pouring the concrete. Footings should be backfilled as soon as possible after footing construction. Soil used as backfill should be free of frozen material, as should the ground on which it is placed. Filling operations should be halted during freezing weather.

Materials with high fines contents are typically difficult to handle when wet, as they are sensitive to moisture content variations. Subgrade support capacities may deteriorate when such soils become wet and/or disturbed. The contractor should keep exposed subgrades properly drained and free of ponded water. Subgrades should be protected from machine and foot traffic to reduce disturbance.

4.3 Fill Materials

Structural Fill and Ordinary Fill should consist of inert, hard, durable sand and gravel free from organic matter, clay, surface coatings, and deleterious materials, and should conform to the gradation requirements shown below.

4.3.1 Structural Fill

The Structural Fill should have a plasticity index of less than 6 and should meet the gradation requirements shown below. Structural Fill should be compacted in maximum 9-inch loose lifts to at least 95 percent of the Modified Proctor maximum dry density (ASTM

D1557), with moisture contents within ±2 percentage points of the optimum moisture content.

Sieve Size Percent	Passing by Weight
3 inches	100
1 ½ inch	80-100
½ inch	50-100
No. 4	30-85
No. 20	15-60
No. 60	5-35
No. 200*	0-10

* 0 – 5 for the top 12 inches under sidewalks, exterior slabs, pads, and walkways

4.3.2 Ordinary Fill

Ordinary Fill should have a plasticity index of less than 6 and should meet the gradation requirements shown below. Ordinary Fill should be compacted in maximum 9-inch loose lifts to at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557), with moisture contents within ±2 percentage points of the optimum moisture content.

Sieve Size Percent	Passing by Weight
6 inches	100
1 inch	50-100
No. 4	20-100
No. 20	10-70
No. 60	5-45
No. 200	0-20

4.4 Reuse of Onsite Materials

Based on our field observations and the results of the grain-size analyses, the onsite fill materials are not suitable for reuse as Ordinary Fill or Structural Fill. These materials can be used in landscaped areas.

The contractor should avoid mixing the reusable soils with fine-grained and/or organic soils. The soils to be reused should be excavated and stockpiled separately for compliance testing. Soils with 20 percent or greater fines contents are generally very sensitive to moisture content variations and are susceptible to frost. Such soils are very difficult to compact at moisture contents that are much higher or much lower than the optimum moisture content determined from the laboratory compaction test. Therefore, strict moisture control should be implemented during the compaction of onsite soils with fines contents of 20 percent or greater. The contractor should be prepared to remove and replace such soils if pumping occurs.

If needed, the onsite material could be blended with imported rock and processed in a crusher to produce fill meeting the gradation requirements of the materials in Section 4.3. Suitable imported material and amended/improved materials should be stockpiled separately from unimproved onsite soils.

Materials to be used as fill should first be tested for compliance with the applicable gradation specifications.

4.5 Groundwater Control Procedures

Based on the groundwater levels measured in our borings, we do not anticipate that major groundwater control procedures will be needed during construction. We anticipate that filtered sump pumps installed in a series of sump pump pits located at least 3 feet below the bottom of planned excavations may be sufficient to handle groundwater and surface runoff that may enter the excavation during wet weather. The contractor should be prepared to use multiple sump pumps to maintain a dry excavation during the removal of the existing fill.

The contractor should be permitted to employ whatever commonly accepted means and practices are necessary to maintain the groundwater level below the bottom of the excavation and to maintain a dry excavation during wet weather. Groundwater levels should be maintained at a minimum of 1 foot below the bottom of the excavations during construction. The placement of reinforcing steel or concrete in standing water should not be permitted.

To reduce the potential for sinkholes developing over sump pump pits after the sump pumps are removed, the crushed stone placed in the sump pump pits should be wrapped in a geotextile fabric. Alternatively, the crushed stone should be entirely removed after the sump pump is no longer in use, and the sump pump pit should be restored with suitable backfill.

4.6 Temporary Excavations

All excavations to receive human traffic should be constructed in accordance with OSHA guidelines.

The site soils should generally be considered Type “C” and should have a maximum allowable slope of 1.5 Horizontal to 1 Vertical (1.5H:1V) for excavations less than 20 feet deep. Deeper excavations, if needed, should have shoring designed by a professional engineer.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain the stability of the excavation sides and bottom.

5. RECOMMENDATIONS FOR FUTURE WORK

We recommend engaging LGCI to perform the following services:

- Perform additional explorations at the site after the proposed building location, size, layout, and finished floor elevation are established, and update our geotechnical report.

- Prepare Earth Moving Specifications and review the geotechnical aspect of contract drawings.

- Review contractor submittals and Request for Information (RFIs).

- Provide a field engineer during construction to observe the removal of the unsuitable soil, and to observe the subgrade of footings and slabs.

6. REPORT LIMITATIONS

Our analyses and recommendations are based on project information provided to us at the time of this report. If changes to the type, size, and location of the proposed structures or to the site grading are made, the recommendations contained in this report shall not be considered valid unless the changes are reviewed, and the conclusions and recommendations modified in writing by LGCI. LGCI cannot accept responsibility for designs based on our recommendations unless we are engaged to review the final plans and specifications to determine whether any changes in the project affect the validity of our recommendations, and whether our recommendations have been properly implemented in the design.

It is not part of our scope to perform a more detailed site history; therefore, we have not explored for or researched the locations of buried utilities or other structures in the area of the proposed construction. Our scope did not include environmental services or services related to moisture, mold, or other biological contaminants in or around the site.

The recommendations in this report are based in part on the data obtained from the subsurface explorations. The nature and extent of variations between explorations may not become evident until construction. If variations from anticipated conditions are encountered, it may be necessary to revise the recommendations in this report. We cannot accept responsibility for designs based on recommendations in this report unless we are engaged to 1) make site visits during construction to check that the subsurface conditions exposed during construction are in general conformance with our design assumptions and 2) ascertain that, in general, the work is being performed in compliance with the contract documents.

Our report has been prepared in accordance with generally accepted engineering practices and in accordance with the terms and conditions set forth in our agreement. No other warranty, expressed or implied, is made. This report has been prepared for the exclusive use of Burlington Public Schools for the Proposed Fox Hill Elementary School in Burlington, Massachusetts as conceived at this time.

7. REFERENCES

In addition to the references included in the text of the report, we used the following references:

American Society of Civil Engineers, "Minimum Design Loads and Associated Criteria for Buildings and Other Structures," ASCE/SEI 7-16, 2017.

The Commonwealth of Massachusetts (2017), "The Massachusetts State Building Code, Ninth (9th) Edition."

The Department of Labor, Occupational Safety and Health Administration (1989), "Occupational Safety and Health Standards - Excavations; Final Rule," 20 CFR Part 1926, Subpart P.

USGS Burlington, MA topographic map from http://mapserver.mytopo.com.

Table 1 - Summary of LGCI's Borings
Proposed Fox Hill Elementary School
Burlington, Massachusetts
LGCI Project No. 2307

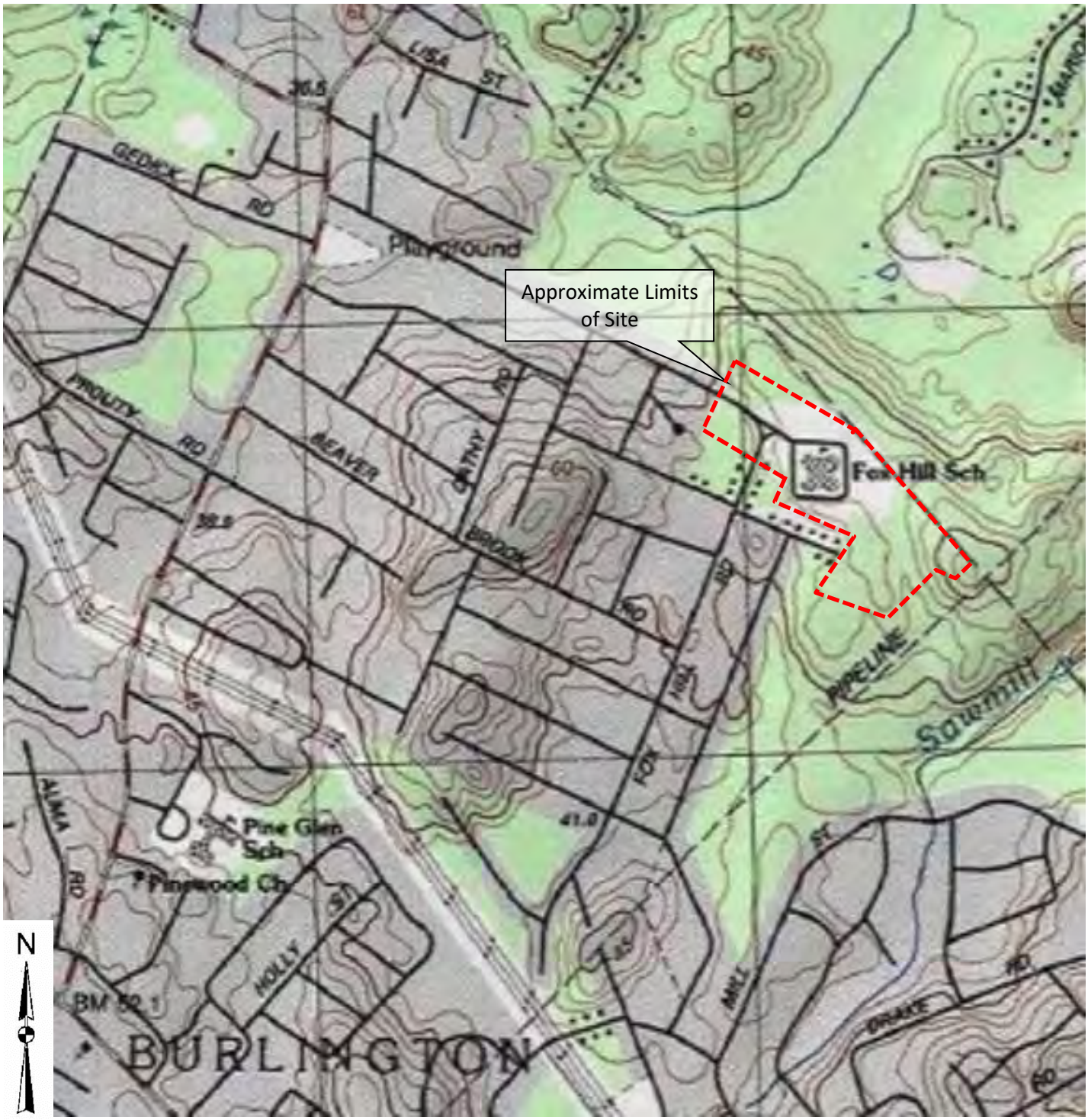
Boring No.	Ground Surface Elevation (ft.)[1]	Groundwater[2] Depth / El. (ft.)	Bottom of **Asphalt /** Topsoil Depth / El. (ft.)	Bottom of Fill Depth / El. (ft.)	Bottom of Buried Organic Soil Depth / El. (ft.)	Bottom of Sand Depth / El. (ft.)	Top of Possible rock Depth / El. (ft.)	Bottom of Boring Depth / El. (ft.)
B-1	170.0	4.0 / **166.0**	0.4 / **169.6**	2.0 / **168.0**	- / **-**	21.0 [3]/ **149.0**	- / **-**	21.0 /[3] **149.0**
B-2	176.0	4.0 / **172.0**	1.0 / **175.0**	4.0 / **172.0**	- / **-**	21.0 [3]/ **155.0**	- / **-**	21.0 /[3] **155.0**
B-3	174.0	3.8 / **170.2**	**0.3** / **173.7**	2.0 / **172.0**	- / **-**	20.3 [3]/ **153.7**	20.3 / **153.7**	20.3 /[3] **153.7**
B-4	171.0	4.0 / **167.0**	0.4 / **170.6**	4.0 / **167.0**	- / **-**	21.0 [3]/ **150.0**	- / **-**	21.0 /[3] **150.0**
B-5	174.0	4.3 / **169.7**	0.5 / **173.5**	6.0 / **168.0**	- / **-**	20.0 [3]/ **154.0**	20.0 / **154.0**	20.0 /[3] **154.0**
B-6	175.0	2.0 / **173.0**	0.5 / **174.5**	4.0 / **171.0**	- / **-**	9.4 [3]/ **165.6**	9.4 / **165.6**	20.0 /[4] **155.0**
B-7	173.0	2.0 / **171.0**	0.6 / **172.4**	4.0 / **169.0**	8.0 / **165.0**	12.0 [3]/ **161.0**	- / **-**	12.0 /[3] **161.0**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.
2. Groundwater was measured during drilling, at the end of drilling, or based on sample moisture, whichever is shallower.
3. Boring terminated in the sand and gravel layer.
4. Boring terminated in rock.
5. "-" means layer was not encountered.

Table 1 - Summary of LGCI's Borings
Proposed Fox Hill Elementary School
Burlington, Massachusetts
LGCI Project No. 2307

Boring No.	Ground Surface Elevation (ft.)[1]	Groundwater[2] Depth / El. (ft.)	Bottom of Topsoil Depth / El. (ft.)	Bottom of Fill Depth / El. (ft.)	Bottom of Buried Organic Soil Depth / El. (ft.)	Bottom of Sand Depth / El. (ft.)	Top of Possible rock Depth / El. (ft.)	Bottom of Boring Depth / El. (ft.)
TP-1	175.0	7.0 / **168.0**	0.5 / **174.5**	1.4 / **173.6**	- / **-**	10.0 [3]/ **165.0**	- / **-**	10.0 / **165.0**
TP-2	172.0	8.3 / **163.7**	0.9 / **171.1**	5.5 / **166.5**	7.0 / **165.0**	10.5 [3]/ **161.5**	- / **-**	10.5 / **161.5**
TP-3	173.0	7.0 / **166.0**	**0.5** / **172.5**	6.0 / **167.0**	8.5 / **164.5**	10.0 [3]/ **163.0**	- / **-**	10.0 / **163.0**
TP-4	175.0	5.0 / **170.0**	0.6 / **174.4**	2.3 / **172.7**	4.5 / **170.5**	9.0 [3]/ **166.0**	- / **-**	9.0 / **166.0**
TP-5	180.0	2.0 / **178.0**	0.5 / **179.5**	1.5 / **178.5**	- / **-**	8.0 [3]/ **172.0**	8.0 / **172.0**	8.0 / **172.0**
TP-6	178.0	- / **-**	0.5 / **177.5**	2.2 / **175.8**	- / **-**	7.4 [3]/ **170.6**	7.4 / **170.6**	7.4 / **170.6**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.
2. Groundwater was measured during excavation, at the end of excavation, or based on sample moisture, whichever is shallower.
3. Test pit terminated in the sand and gravel layer.
4. "-" means groundwater or layer was not encountered.

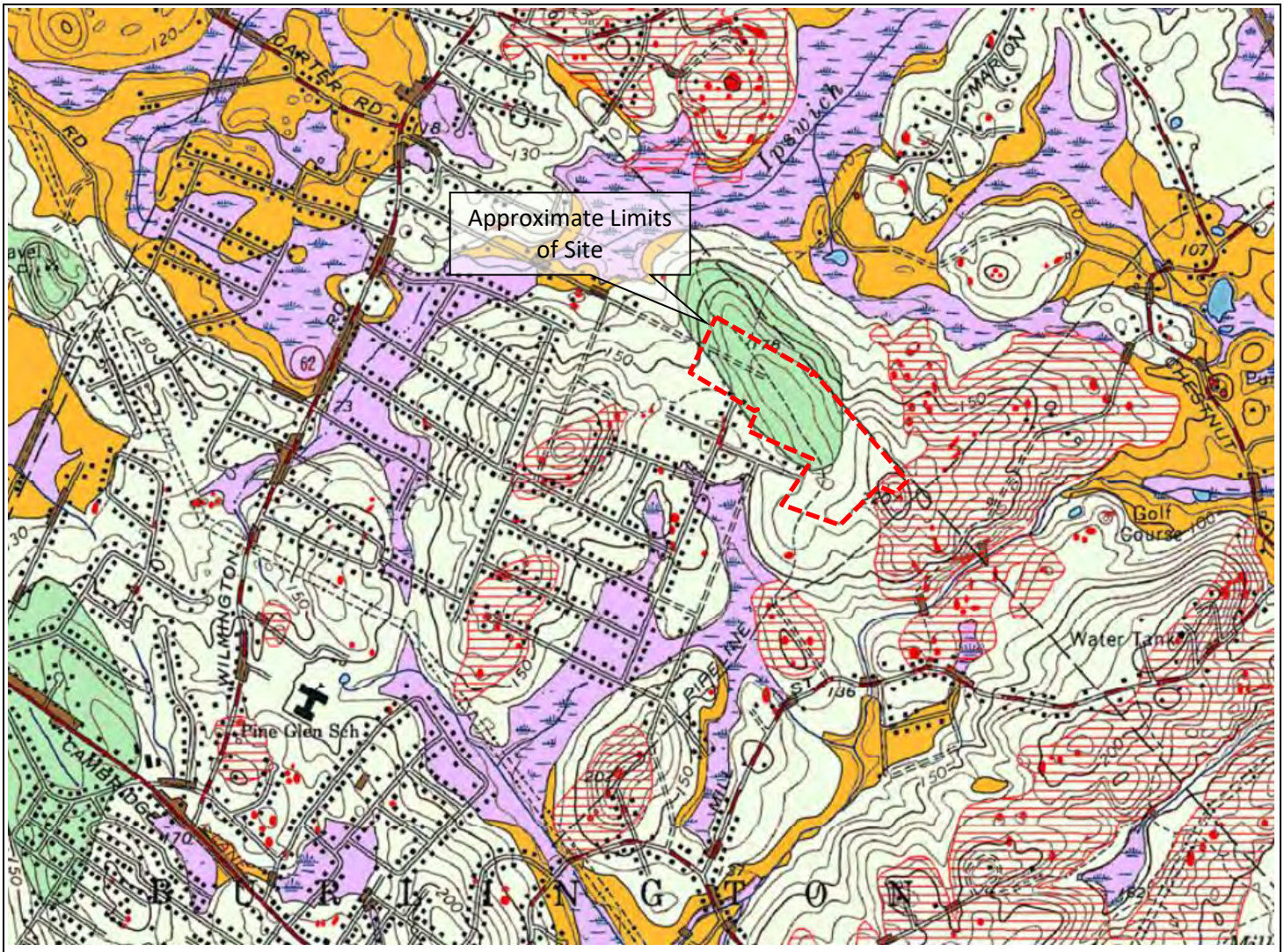


Contour Intervals: 10 feet

0.4 mi

Note: Figure based on USA Topo Maps of Burlington, MA obtained from https://viewer.nationalmap.gov/. Limits of site are based on sketch provided to LGCI by Dore and Whittier on February 2, 2023.

Client:	Project:		
Burlington Public Schools	Proposed Fox Hill Elementary School	Figure 1 – Site Location Map	
LGCI Lahlaf Geotechnical Consulting, Inc.	Project Location: Burlington, MA	LGCI Project No.: 2307	Date: Mar. 2023



Thin till—Nonsorted, nonstratified matrix of sand, some silt, and little clay containing scattered pebble, cobble, and boulder clasts; large surface boulders are common; unit was mapped where till is generally less than 10 to 15 ft thick including areas of shallow bedrock. Predominantly consists of upper till of the last glaciation; loose to moderately compact, generally sandy, commonly stony. Two facies are present in some places: a looser, coarser grained ablation facies, melted out from supraglacial position; and an underlying more compact, finer grained lodgement facies deposited subglacially. In general, both ablation and lodgement facies of upper till derived from fine-grained bedrock are finer grained, more compact, less stony and have fewer surface boulders than upper till derived from coarse-grained crystalline rocks. Across Massachusetts, fine-grained bedrock sources include the red Mesozoic sedimentary rocks of the Connecticut Valley lowland, marble in the western river valleys, and fine-grained schists in upland areas

N

Thick till—Nonsorted, nonstratified matrix of sand, some silt, and little clay containing scattered pebbles, cobbles, and boulders in the shallow subsurface; at greater depths consists of compact, nonsorted matrix of silt, very fine sand, and some clay containing scattered small gravel clasts. Mapped in areas where till is greater than 10 to 15 ft thick, mostly in drumlin landforms in which till thickness commonly exceeds 100 ft (maximum recorded thickness is 230 ft). Although upper till of late Wisconsinan age is the surface deposit, lower till of probable Illinoian age constitutes the bulk of the material in thick-till areas. Lower till is moderately to very compact and is commonly finer grained and less stony than upper till. An oxidized zone, the lower part of a soil profile formed during a period of interglacial weathering, is generally present in the upper part of the lower till. This zone commonly shows closely spaced joints that are stained with iron and manganese oxides

Note: Figure based on map titled: "Surficial Materials Map of the Wilmington Quadrangle, Massachusetts," prepared by Stone, B.D., Stone J.R., and DiGiacomo-Cohen, M.L., Scientific Investigation Map 3402, Quadrangle 113 – Wilmington, 2018.
Limits of site are based on sketch provided to LGCI by Dore and Whittier on February 2, 2023.

Client:	Project	Figure 2 – Surficial Geologic Map	
Burlington Public Schools	Proposed Fox Hill Elementary School		
LGCI Lahlaf Geotechnical Consulting, Inc.	Project Location: Burlington, MA	LGCI Project No.: 2307	Date: Mar. 2023

Legend

Approximate location of borings advanced by Northern Drill Services, Inc. (NDS) of Northborough, MA on February 20 and 21, 2023, and observed by Lahlaf Geotechnical Consulting, Inc. (LGCI).

Approximate location of test pits excavated by Saunders Construction on February 21, 2023, and observed by LGCI.

N

Approximate Scale (ft.)

100 0 100 200

2' CONTOUR INTERVAL

Note

1. Figure based on aerial image from Google maps and overlayed on drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

2. Limits of proposed/possible building footprint are based on sketch provided to LGCI by Dore and Whittier via e-mail on February 2, 2023.

Client:	Project:	Figure 3 – Exploration Location Plan	
Burlington Public Schools	Proposed Fox Hill Elementary School		
LGCI Lahlaf Geotechnical Consulting, Inc.	Project Location: Burlington, MA	LGCI Project No.: 2307	Date: Mar. 2023

Appendix A – LGCI's Boring Logs

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

BORING LOG

B-1

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/20/23 **DATE COMPLETED:** 2/20/23
BORING LOCATION: Near NW corner of site
COORDINATES: NA
SURFACE El.: 170 ft. (see note 1) **TOTAL DEPTH:** 21 ft.
WEATHER: 50's / Cloudy
GROUNDWATER LEVELS:
- ▽ **DURING DRILLING:** 6.0 ft. / El. 164.0 ft. Based on sample moisture
- ▼ **AT END OF DRILLING:** 4.0 ft. / El. 166.0 ft.
- ▼ **OTHER:** -

DRILLING SUBCONTRACTOR: Northern Drill Service, Inc.
DRILLING FOREMAN: Tyler Kennedy
DRILLING METHOD: Drive and wash with 4-inch casing
DRILL RIG TYPE/MODEL: Mobile B-59 Truck mounted
HAMMER TYPE: Automatic
HAMMER WEIGHT: 140 lb. **HAMMER DROP:** 30 in.
SPLIT SPOON DIA.: 1.375 in. I.D., 2 in. O.D.
CORE BARREL SIZE: NA
LOGGED BY: TG **CHECKED BY:** NP

Depth (ft.)	El. (ft.)	Sample Interval (ft.)	Sample Number	Blow Counts (N Value)	Pen./Rec. (in.)	Remark	Strata	Depth El.(ft.)	Material Description
		0	S1	2-6-6-7 (12)	24/20		Topsoil	0.4	S1 - Top 5": Topsoil
							Fill	169.6	Bot. 15": Silty SAND (SM), fine to medium, trace coarse, 15-20% fines, 5-10% fine subangular gravel, trace of organic soil, trace of roots, brown, moist
		2	S2	7-13-14-16 (27)	24/22		Sand and Gravel	2.0 / 168.0	S2 - Silty SAND (SM), fine to medium, trace coarse, ~15% fines, 0-5% fine subangular gravel, gray, moist
		4	S3	9-11-12-11 (23)	24/15				▼ S3 - Similar to S2
5	165.0	6	S4	7-7-8-7 (15)	24/16				▽ S4 - Silty SAND (SM), fine to medium, trace coarse, 15-20% fines, gray, wet
		8							
		9	S5	8-10-13-28 (23)	24/18				S5 - Similar to S4, 10-15% coarse subangular gravel
10	160.0	11							
		14	S6	15-20-29-32 (49)	24/20				S6 - Similar to S4
15	155.0	16							
		19	S7	19-24-25-27 (49)	24/20				S7 - Similar to S4
20	150.0	21						21.0	Bottom of borehole at 21.0 feet. Borehole backfilled with drill cuttings.
25	145.0								

GENERAL NOTES:

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

BORING LOG

B-2

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/20/23 **DATE COMPLETED:** 2/20/23
BORING LOCATION: Near northern portion of site
COORDINATES: NA
SURFACE El.: 176 ft. (see note 1) **TOTAL DEPTH:** 21 ft.
WEATHER: 50's / Cloudy
GROUNDWATER LEVELS:
DURING DRILLING: 4.0 ft. / El. 172.0 ft. Based on sample moisture
AT END OF DRILLING: 4.5 ft. / El. 171.5 ft.
OTHER: -

DRILLING SUBCONTRACTOR: Northern Drill Service, Inc.
DRILLING FOREMAN: Tyler Kennedy
DRILLING METHOD: Drive and wash with 4-inch casing
DRILL RIG TYPE/MODEL: Mobile B-59 Truck mounted
HAMMER TYPE: Automatic
HAMMER WEIGHT: 140 lb. **HAMMER DROP:** 30 in.
SPLIT SPOON DIA.: 1.375 in. I.D., 2 in. O.D.
CORE BARREL SIZE: NA
LOGGED BY: TG **CHECKED BY:** NP

Depth (ft.)	El. (ft.)	Sample Interval (ft.)	Sample Number	Blow Counts (N Value)	Pen./Rec. (in.)	Remark	Strata	Depth El.(ft.)	Material Description
	175.0	0	S1	3-9-13-15 (22)	24/12	1	Topsoil	1.0 175.0	S1 - Topsoil REMARK 1: Strata changed assumed based on drilling effort.
		2	S2	15-17-25-23 (42)	24/2		Fill	4.0 172.0	S2 - Poorly Graded SAND with Silt (SP-SM), fine to medium, trace coarse, 5-10% fines, 10-15% fine to coarse subangular gravel, trace of organic soil, trace of roots, light brown, moist
5	170.0	4	S3	17-13-15-17 (28)	24/16		Sand and Gravel		S3 - Silty SAND (SM), fine to coarse, 15-20% fines, 5-10% fine to coarse subrounded gravel, gray, wet
		6	S4	17-26-42-44 (68)	24/20				S4 - Similar to S3
		8							
10	165.0	9	S5	13-21-25-30 (46)	24/21				S5 - Silty SAND (SM), fine to medium, trace coarse, 20-25% fines, ~5% fine subangular gravel, gray, wet
		11							
15	160.0	14	S6	14-20-25-40 (45)	24/23				S6 - Similar to S5
		16							
20	155.0	19	S7	25-33-49-53 (82)	24/18				S7 - Similar to S5, 5-10% fine angular gravel
		21						21.0	Bottom of borehole at 21.0 feet. Borehole backfilled with drill cuttings.
25									

GENERAL NOTES:

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

BORING LOG

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/20/23 **DATE COMPLETED:** 2/20/23
BORING LOCATION: Near northern portion of site
COORDINATES: NA
SURFACE El.: 174 ft. (see note 1) **TOTAL DEPTH:** 20.3 ft.
WEATHER: 50's / Sunny
GROUNDWATER LEVELS:
DURING DRILLING: 6.0 ft. / El. 168.0 ft. Based on sample moisture
AT END OF DRILLING: 3.8 ft. / El. 170.2 ft.
OTHER: -

DRILLING SUBCONTRACTOR: Northern Drill Service, Inc.
DRILLING FOREMAN: Tyler Kennedy
DRILLING METHOD: Drive and wash with 4-inch casing
DRILL RIG TYPE/MODEL: Mobile B-59 Truck mounted
HAMMER TYPE: Automatic
HAMMER WEIGHT: 140 lb. **HAMMER DROP:** 30 in.
SPLIT SPOON DIA.: 1.375 in. I.D., 2 in. O.D.
CORE BARREL SIZE: NA
LOGGED BY: TG **CHECKED BY:** NP

Depth (ft.)	El. (ft.)	Sample Interval (ft.)	Sample Number	Blow Counts (N Value)	Pen./Rec. (in.)	Remark	Strata	Depth El.(ft.)	Material Description
							Asphalt	0.3 / 173.7	Top 2": Asphalt
		0.5	S1	5-7-6 (13)	18/12		Fill	2.0 / 172.0	S1 - Well Graded SAND with Silt (SW-SM), fine to coarse, 5-10% fines, 10-15% fine to coarse subangular gravel, trace of asphalt, brown, moist
		2	S2	4-3-4-3 (7)	24/11		Sand and Gravel		S2 - Silty SAND (SM), fine to medium, trace coarse, 15-20% fines, 0-5% fine subrounded gravel, light brown, moist
	170.0	4	S3	5-6-5-6 (11)	24/0				S3 - No recovery
5		6	S4	4-5-4-3 (9)	24/24				S4 - Silty SAND (SM), fine to medium, trace coarse, 15-20% fines, 0-5% fine subangular gravel, brown, wet
		8							
	165.0	9	S5	12-10-12-18 (22)	24/20				S5 - Similar to S4
10		11							
	160.0	14	S6	11-19-22-32 (41)	24/20				S6 - Similar to S4, 20-25% fines
15		16							
	155.0	19	S7	15-50-50/3" (100/9")	15/14				S7 - Silty SAND with Gravel (SM), fine to coarse, 20-25% fines, 15-20% fine to coarse angular gravel, trace of weathered rock, gray, wet
20		20.3				1		20.3	REMARK 1: Split spoon refusal encountered at depth of 20.3 feet on possible boulder or rock.
									Bottom of borehole at 20.3 feet. Borehole backfilled with drill cuttings and 5 bags of gravel. Ground surface restored with asphalt cold patch.
	150.0								
25									

GENERAL NOTES:

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

BORING LOG

B-4

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/20/23 **DATE COMPLETED:** 2/20/23
BORING LOCATION: Near NE portion of site
COORDINATES: NA
SURFACE El.: 171 ft. (see note 1) **TOTAL DEPTH:** 21 ft.
WEATHER: 50's / Cloudy
GROUNDWATER LEVELS:
DURING DRILLING: 4.0 ft. / El. 167.0 ft. Based on sample moisture
AT END OF DRILLING: 4.5 ft. / El. 166.5 ft.
OTHER: -

DRILLING SUBCONTRACTOR: Northern Drill Service, Inc.
DRILLING FOREMAN: Tyler Kennedy
DRILLING METHOD: Drive and wash with 4-inch casing
DRILL RIG TYPE/MODEL: Mobile B-59 Truck mounted
HAMMER TYPE: Automatic
HAMMER WEIGHT: 140 lb. **HAMMER DROP:** 30 in.
SPLIT SPOON DIA.: 1.375 in. I.D., 2 in. O.D.
CORE BARREL SIZE: NA
LOGGED BY: TG **CHECKED BY:** NP

Depth (ft.)	El. (ft.)	Sample Interval (ft.)	Sample Number	Blow Counts (N Value)	Pen./Rec. (in.)	Remark	Strata	Depth El.(ft.)	Material Description
	170.0	0	S1	2-7-10-10 (17)	24/15		Topsoil	0.4 / 170.6	S1 - Top 5": Topsoil Bot. 10": Silty SAND (SM), fine to medium, trace coarse, 15-20% fines, 0-5% fine subangular gravel, brown, moist
		2	S2	6-4-4-3 (8)	24/6		Fill		S2 - Similar to S1 Bot. 10" (appears reworked)
5	165.0	4	S3	2-5-6-14 (11)	24/14		Sand and Gravel	4.0 / 167.0	S3 - Silty SAND with Gravel (SM), fine to coarse, 15-20% fines, 15-20% fine to coarse subangular gravel, brown, wet
		6	S4	30-27-24-22 (51)	24/20				S4 - Well Graded SAND with Silt and Gravel (SW-SM), fine to coarse, 10-15% fines, 20-25% fine to coarse angular gravel, brown, wet
10	160.0	8 9	S5	15-19-18-23 (37)	24/17				S5 - Poorly Graded SAND with Silt (SP-SM), fine to medium, 5-10% fines, light brown, wet
15	155.0	11 14	S6	14-22-19-20 (41)	24/14				S6 - Silty SAND (SM), fine to medium, 15-20% fines, 10-15% fine to coarse angular gravel, brown, wet
20	150.0	16 19	S7	37-29-35-38 (64)	24/17				S7 - Silty SAND with Gravel (SM), fine to medium, trace coarse, 20-25% fines, 15-20% fine to coarse angular gravel, trace of weathered rock, gray, wet
25		21						21.0	Bottom of borehole at 21.0 feet. Borehole backfilled with drill cuttings.

GENERAL NOTES:

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

BORING LOG

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
BORING LOCATION: Near eastern portion of site
COORDINATES: NA
SURFACE El.: 174 ft. (see note 1) **TOTAL DEPTH:** 20 ft.
WEATHER: 30's / Snow
GROUNDWATER LEVELS:
- ▽ **DURING DRILLING:** 6.0 ft. / El. 168.0 ft. Based on sample moisture
- ▼ **AT END OF DRILLING:** 4.3 ft. / El. 169.7 ft.
- ▼ **OTHER:** -

DRILLING SUBCONTRACTOR: Northern Drill Service, Inc.
DRILLING FOREMAN: Tim Tucker
DRILLING METHOD: Drive and wash with 4-inch casing
DRILL RIG TYPE/MODEL: Mobile B-59 Truck mounted
HAMMER TYPE: Automatic
HAMMER WEIGHT: 140 lb. **HAMMER DROP:** 30 in.
SPLIT SPOON DIA.: 1.375 in. I.D., 2 in. O.D.
CORE BARREL SIZE: NA
LOGGED BY: TG **CHECKED BY:** NP

Depth (ft.)	El. (ft.)	Sample Interval (ft.)	Sample Number	Blow Counts (N Value)	Pen./Rec. (in.)	Remark	Strata	Depth El.(ft.)	Material Description
		0	S1	2-4-10-13 (14)	24/12		Topsoil	0.5 / 173.5	S1 - Top 6": Topsoil Bot. 6": Silty SAND (SM), fine to medium, trace coarse, 15-20% fines, 0-5% fine subangular gravel, trace of organic soil, trace of roots, brown, moist
		2	S2	8-10-5-5 (15)	24/16		Fill		S2 - Similar to S1 Bot. 6", 10-15% fine to coarse subangular gravel
	170.0	4	S3	2-5-8-12 (13)	24/16				▼ S3 - Similar to S1 Bot. 6"
5		6	S4	13-13-8-11 (21)	24/18			6.0 / 168.0 ▽	S4 - Silty SAND (SM), fine to medium, trace coarse, 20-25% fines, 0-5% fine subangular gravel, brown, wet
	165.0	8							
		9	S5	8-7-9-10 (16)	24/17		Sand and Gravel		S5 - Silty SAND (SM), fine to coarse, 15-20% fines, 5-10% fine to coarse subangular gravel, brown, wet
10		11							
	160.0	14	S6	13-12-18-17 (30)	24/13				S6 - Poorly Graded SAND with Silt (SP-SM), fine to medium, trace coarse, 10-15% fines, 5-10% fine to coarse subangular gravel, brown, wet
15		16							
	155.0	19	S7	53-50	12/8	1		20.0	S7 - Silty SAND with Gravel (SM), fine to medium, trace coarse, ~20% fines, 25-30% fine to coarse angular gravel, trace of weathered rock, gray, wet REMARK 1: Split spoon refusal encountered at depth of 20 feet on possible boulder or rock. Bottom of borehole at 20.0 feet. Borehole backfilled with drill cuttings and 3 bags of gravel.
20		20							
	150.0								
25									

GENERAL NOTES:

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

BORING LOG

B-6

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
BORING LOCATION: Near SE portion of site
COORDINATES: NA
SURFACE El.: 175 ft. (see note 1) **TOTAL DEPTH:** 20 ft.
WEATHER: 30's / Snow
GROUNDWATER LEVELS:
DURING DRILLING: 4.0 ft. / El. 171.0 ft. Based on sample moisture
AT END OF DRILLING: 2.0 ft. / El. 173.0 ft.
OTHER: -

DRILLING SUBCONTRACTOR: Northern Drill Service, Inc.
DRILLING FOREMAN: Tim Tucker
DRILLING METHOD: Drive and wash with 4-inch casing
DRILL RIG TYPE/MODEL: Mobile B-59 Truck mounted
HAMMER TYPE: Automatic
HAMMER WEIGHT: 140 lb. **HAMMER DROP:** 30 in.
SPLIT SPOON DIA.: 1.375 in. I.D., 2 in. O.D.
CORE BARREL SIZE: NX
LOGGED BY: TG **CHECKED BY:** NP

Depth (ft.)	El. (ft.)	Sample Interval (ft.)	Sample Number	Blow Counts (N Value)	Pen./Rec. (in.)	Remark	Strata	Depth El.(ft.)	Material Description
		0	S1	1-8-8-11 (16)	24/14	1	Topsoil	0.5 / 174.5	S1 - Top 6": Topsoil REMARK 1: Puddle of water observed at ground surface.
		2	S2	61-23-14-11 (37)	24/17		Fill		Bot. 8": Poorly Graded SAND with Silt and Gravel (SP-SM), fine to medium, trace coarse, 10-15% fines, 20-25% fine to coarse subrounded gravel, brown, moist S2 - Silty SAND with Gravel (SM), mostly fine to medium, 30-35% fines, 20-25% fine to coarse subangular gravel, brown, moist
		4						4.0 / 171.0	
5	170.0		S3	11-21-7-9 (28)	24/7		Sand and Gravel		S3 - Silty SAND (SM), fine to medium, trace coarse, 15-20% fines, 0-5% fine subangular gravel, gray, wet
		6	S4	11-13-13-17 (26)	24/16				S4 - Similar to S3
		8							
		9 / 9.4	S5	100/5"	5/3	2		9.4 / 165.6	S5 - Similar to S3 REMARK 2: Split spoon refusal encountered at depth of 9.4 feet on possible boulder or rock. Advanced drill bit to depth of 14 into possible boulder or rock.
10	165.0								
		14 / 14.1	S6	100/1"	1/0	3	Rock		REMARK 3: Split spoon refusal encountered at depth of 14.1 feet on rock. Advanced drill bit to depth of 15 and started coring rock. S6 - No recovery
15	160.0	15	C1		60/60				C1 - Min./ft.: 2.6, 3.3, 2.9, 3.1, 3.8 REC. = 60"/60" = 100% RQD = 41"/60" = 68.33% Hard to very hard, severely weathered to fresh, slightly fractured to sound, gray to brown, coarse-grained, GRANITE
20	155.0	20						20.0	
25	150.0								Bottom of borehole at 20.0 feet. Borehole backfilled with drill cuttings.

GENERAL NOTES:

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

BORING LOG

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
BORING LOCATION: Near eastern portion of site
COORDINATES: NA
SURFACE El.: 173 ft. (see note 1) **TOTAL DEPTH:** 12 ft.
WEATHER: 30's / Snow
GROUNDWATER LEVELS:
DURING DRILLING: 6.0 ft. / El. 167.0 ft. Based on sample moisture
AT END OF DRILLING: 2.0 ft. / El. 171.0 ft.
OTHER: -

DRILLING SUBCONTRACTOR: Northern Drill Service, Inc.
DRILLING FOREMAN: Tim Tucker
DRILLING METHOD: Drive and wash with 4-inch casing
DRILL RIG TYPE/MODEL: Mobile B-59 Truck mounted
HAMMER TYPE: Automatic
HAMMER WEIGHT: 140 lb. **HAMMER DROP:** 30 in.
SPLIT SPOON DIA.: 1.375 in. I.D., 2 in. O.D.
CORE BARREL SIZE: NA
LOGGED BY: TG **CHECKED BY:** NP

Depth (ft.)	El. (ft.)	Sample Interval (ft.)	Sample Number	Blow Counts (N Value)	Pen./Rec. (in.)	Remark	Strata	Depth El.(ft.)	Material Description
		0	S1	1-5-9-10 (14)	24/16		Topsoil	0.6	S1 - Top 7": Topsoil
							Fill	172.4	Bot. 9": Silty SAND (SM), fine to medium, 15-20% fines, 5-10% fine to coarse subangular gravel, trace of organic soil, brown, moist
		2	S2	20-11-7-7 (18)	24/0				S2 - No recovery
	170.0							4.0	
		4	S3	5-5-11-2 (16)	24/1		Buried Organic Soil	169.0	S3 - Piece of wood
5		6	S4	2-2-3-4 (5)	24/12				S4 - Silty SAND (SM), fine to medium, 25-30% fines, trace of organic soil, trace of roots, dark brown, wet
	165.0	8	S5	10-16-20-17 (36)	24/12			8.0	
10		10	S6	16-19-19-18 (38)	24/23		Sand and Gravel	165.0	S5 - Poorly Graded SAND with Silt (SP-SM), fine to medium, 5-10% fines, gray, wet
		12							S6 - Similar to S5, 10-15% fines
								12.0	
	160.0								Bottom of borehole at 12.0 feet. Borehole backfilled with drill cuttings and 2 bags of gravel.
15									
	155.0								
20									
	150.0								
25									

GENERAL NOTES:

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

Appendix B – LGCI's Test Pit Logs

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

TEST PIT LOG

TP-1

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
TEST PIT LOCATION: Near northern portion of site
COORDINATES: NA
SURFACE EL.: 175 ft. (see note 1) **TOTAL DEPTH:** 10 ft.
GROUNDWATER LEVELS:
DURING EXCAVATION: 7.0 ft. / El. 168.0 ft. Based on sample moisture
AT END OF EXCAVATION: 7.0 ft. / El. 168.0 ft.

EXCAVATION SUBCONTRACTOR: Saunders Construction
EXCAVATION FOREMAN: Keith Webb
EXCAVATOR TYPE/MODEL: Takeuchi TB-175
WEATHER: 30's / Snow
TEST PIT DIMENSIONS: 10.0' x 3.0'
LOGGED BY: OL **CHECKED BY:** NP

Depth (ft)	El. (ft)	Excavation Effort	Remark	Strata	Depth El.(ft.)	Material Description
		E		Topsoil	0.5	0 ft. - 0.5 ft.: Topsoil
		M		Fill	174.5 / 1.4	0.5 ft. - 1.4 ft.: Silty SAND (SM), fine to medium, trace coarse, 20-25% fines, 0-5% fine subangular gravel, brown, moist
2.5	172.5	M		Sand and Gravel	173.6	1.4 ft. - 10 ft.: Silty SAND (SM), mostly fine to medium, 30-35% fines, 10-15% fine to coarse subrounded gravel, light brown, moist to wet
5.0	170.0					
7.5	167.5					
10.0	165.0		1		10.0	REMARK 1: Test pit terminated at depth of 10 feet due to sides of excavation collapsing.

Bottom of test pit at 10.0 feet. Test pit backfilled with excavated material in 12-inch to 18-inch lifts and tamped with the excavator bucket.

GENERAL COMMENTS: **E = Easy, M - Moderate, D = Difficult, V = Very Difficult**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

TEST PIT LOG

TP-2

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
TEST PIT LOCATION: Near NE portion of site
COORDINATES: NA
SURFACE EL.: 172 ft. (see note 1) **TOTAL DEPTH:** 10.5 ft.
GROUNDWATER LEVELS:
▽ **DURING EXCAVATION:** 8.3 ft. / El. 163.7 ft. Based on sample moisture
▼ **AT END OF EXCAVATION:** 8.3 ft. / El. 163.7 ft.

EXCAVATION SUBCONTRACTOR: Saunders Construction
EXCAVATION FOREMAN: Keith Webb
EXCAVATOR TYPE/MODEL: Takeuchi TB-175
WEATHER: 30's / Snow
TEST PIT DIMENSIONS: 9.0' x 3.5'
LOGGED BY: OL **CHECKED BY:** NP

Depth (ft)	El. (ft)	Excavation Effort	Remark	Strata	Depth El.(ft.)	Material Description
		E		Topsoil	0.9	0 ft. - 0.9 ft.: Topsoil
	170.0	E		Fill	171.1	0.9 ft. - 5.5 ft.: Silty SAND with Gravel (SM), fine to medium, 15-20% fines, 15-20% fine subrounded gravel, trace of organic soil, cobbles and boulders up to 16" in size, orange-brown, moist
2.5						
	167.5					
5.0					5.5	
		E		Buried Organic Soil	166.5	5.5 ft. - 7 ft.: Silty SAND (SM), fine to medium, 20-25% fines, trace of organic soil, trace of roots, black, moist
	165.0				7.0	
7.5		E		Sand and Gravel	165.0	7 ft. - 10.5 ft.: Silty SAND (SM), fine, 15-20% fines, 0-5% fine subrounded gravel, brown, moist to wet
	162.5					
10.0			1		10.5	REMARK 1: Test pit terminated at depth of 10.5 feet due to sides of excavation collapsing.

Bottom of test pit at 10.5 feet. Test pit backfilled with excavated material in 12-inch to 18-inch lifts and tamped with the excavator bucket.

GENERAL COMMENTS: **E = Easy, M - Moderate, D = Difficult, V = Very Difficult**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

TEST PIT LOG

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
TEST PIT LOCATION: Near eastern portion of site
COORDINATES: NA
SURFACE EL.: 174 ft. (see note 1) **TOTAL DEPTH:** 10 ft.
GROUNDWATER LEVELS:
DURING EXCAVATION: 7.0 ft. / El. 167.0 ft. Based on sample moisture
AT END OF EXCAVATION: 7.0 ft. / El. 167.0 ft.

EXCAVATION SUBCONTRACTOR: Saunders Construction
EXCAVATION FOREMAN: Keith Webb
EXCAVATOR TYPE/MODEL: Takeuchi TB-175
WEATHER: 30's / Snow
TEST PIT DIMENSIONS: 18.0' x 5.0'
LOGGED BY: OL **CHECKED BY:** NP

Depth (ft)	El. (ft)	Excavation Effort	Remark	Strata	Depth El.(ft.)	Material Description
		E		Topsoil	0.5 / 173.5	0 ft. - 0.5 ft.: Topsoil
	172.5	E		Fill		0.5 ft. - 6 ft.: Silty SAND with Gravel (SM), fine to coarse, 15-20% fines, 15-20% fine subrounded gravel, trace of organic soil, trace of brick, cobbles and boulders up to about 6' in size, light brown, moist
2.5		M				
	170.0					
5.0		E			6.0 / 168.0	
	167.5	E		Buried Organic Soil		6 ft. - 8.5 ft.: Silty SAND (SM), fine to medium, 25-30% fines, trace of organic soil, trace of roots, black, moist to wet
7.5					8.5 / 165.5	
	165.0	E		Sand and Gravel		8.5 ft. - 10 ft.: Silty SAND (SM), fine, 15-20% fines, 0-5% fine subrounded gravel, orange-brown, wet
10.0			1		10.0	REMARK 1: Test pit terminated at depth of 10 feet due to sides of excavation collapsing.

Bottom of test pit at 10.0 feet. Test pit backfilled with excavated material in 12-inch to 18-inch lifts and tamped with the excavator bucket.

GENERAL COMMENTS: **E = Easy, M - Moderate, D = Difficult, V = Very Difficult**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

TEST PIT LOG

TP-4

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
TEST PIT LOCATION: Near eastern portion of site
COORDINATES: NA
SURFACE EL.: 175 ft. (see note 1) **TOTAL DEPTH:** 9 ft.
GROUNDWATER LEVELS:
▽ **DURING EXCAVATION:** 5.0 ft. / El. 170.0 ft. Based on sample moisture
▼ **AT END OF EXCAVATION:** 5.0 ft. / El. 170.0 ft.

EXCAVATION SUBCONTRACTOR: Saunders Construction
EXCAVATION FOREMAN: Keith Webb
EXCAVATOR TYPE/MODEL: Takeuchi TB-175
WEATHER: 30's / Snow
TEST PIT DIMENSIONS: 12.0' x 5.0'
LOGGED BY: OL **CHECKED BY:** NP

Depth (ft)	El. (ft)	Excavation Effort	Remark	Strata	Depth El.(ft.)	Material Description
		E		Topsoil	0.6	0 ft. - 0.6 ft.: Topsoil
		E		Fill	174.4 / 2.3	0.6 ft. - 2.3 ft.: Silty SAND with Gravel (SM), fine to coarse, ~20% fines, 15-20% fine to coarse subrounded gravel, trace of organic soil, trace of roots, trace of brick, brown, moist
2.5	172.5	E		Buried Organic Soil	172.7 / 4.5	2.3 ft. - 4.5 ft.: Silty SAND (SM), fine to medium, 25-30% fines, trace of organic soil, trace of roots, trace of wood, black, moist
5.0	170.0	M		Sand and Gravel	170.5	▼ 4.5 ft. - 9 ft.: Silty SAND (SM), fine, 20-25% fines, 0-5% fine subrounded gravel, cobbles and boulders up to about 2' in size, light brown, moist to wet
7.5	167.5		1		9.0	REMARK 1: Test pit terminated at depth of 9 feet due to sides of excavation collapsing.

Bottom of test pit at 9.0 feet. Test pit backfilled with excavated material in 12-inch to 18-inch lifts and tamped with the excavator bucket.

GENERAL COMMENTS: **E = Easy, M - Moderate, D = Difficult, V = Very Difficult**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

TEST PIT LOG

TP-5

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
TEST PIT LOCATION: Near SE portion of site
COORDINATES: NA
SURFACE EL.: 180 ft. (see note 1) **TOTAL DEPTH:** 8 ft.
GROUNDWATER LEVELS:
DURING EXCAVATION: 2.0 ft. / El. 178.0 ft. Based on sample moisture
AT END OF EXCAVATION: 2.0 ft. / El. 178.0 ft.

EXCAVATION SUBCONTRACTOR: Saunders Construction
EXCAVATION FOREMAN: Keith Webb
EXCAVATOR TYPE/MODEL: Takeuchi TB-175
WEATHER: 30's / Snow
TEST PIT DIMENSIONS: 10.0' x 4.0'
LOGGED BY: OL **CHECKED BY:** NP

Depth (ft)	El. (ft)	Excavation Effort	Remark	Strata	Depth El.(ft.)	Material Description
		E		Topsoil	0.5 / 179.5	0 ft. - 0.5 ft.: Topsoil
		E		Fill	1.5 / 178.5	0.5 ft. - 1.5 ft.: Silty SAND (SM), fine to coarse, 20-25% fines, 10-15% fine to coarse subrounded gravel, brown, moist
2.5	177.5	E		Sand and Gravel		1.5 ft. - 8 ft.: Silty SAND (SM), fine to medium, 15-20% fines, 25-30% fine to coarse subrounded gravel, cobbles up to 8" in size, brown, moist to wet
5.0	175.0	M				
7.5	172.5	D	1		8.0	

REMARK 1: Excavator refusal encountered at depth of 8 feet on possible boulder or rock. Test pit terminated.

Bottom of test pit at 8.0 feet. Test pit backfilled with excavated material in 12-inch to 18-inch lifts and tamped with the excavator bucket.

GENERAL COMMENTS: **E = Easy, M - Moderate, D = Difficult, V = Very Difficult**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

LGCI
Lahlaf Geotechnical Consulting, Inc.
100 Chelmsford Road, Suite 2
Billerica, MA 01862
Telephone: (978) 330-5912
Fax: (978) 330-5056

TEST PIT LOG

TP-6

CLIENT: Burlington Public Schools
PROJECT NAME: Prop. Fox Hill Elementary School
LGCI PROJECT NUMBER: 2307
PROJECT LOCATION: Burlington, MA

DATE STARTED: 2/21/23 **DATE COMPLETED:** 2/21/23
TEST PIT LOCATION: Near southern portion of site
COORDINATES: NA
SURFACE EL.: 179 ft. (see note 1) **TOTAL DEPTH:** 7.4 ft.
GROUNDWATER LEVELS:
DURING EXCAVATION: Not encountered
AT END OF EXCAVATION: Not encountered

EXCAVATION SUBCONTRACTOR: Saunders Construction
EXCAVATION FOREMAN: Keith Webb
EXCAVATOR TYPE/MODEL: Takeuchi TB-175
WEATHER: 30's / Snow
TEST PIT DIMENSIONS: 10.0' x 4.0'
LOGGED BY: OL **CHECKED BY:** NP

Depth (ft)	El. (ft)	Excavation Effort	Remark	Strata	Depth El.(ft.)	Material Description
		E		Topsoil	0.5	0 ft. - 0.5 ft.: Topsoil
	177.5	E		Fill	178.5 / 2.2	0.5 ft. - 2.2 ft.: Silty SAND with Gravel (SM), fine to coarse, 15-20% fines, 15-20% fine to coarse subrounded gravel, trace of organic soil, trace of roots, trace of brick, cobbles and boulders up to 20" in size, light brown, moist
2.5	175.0	M		Sand and Gravel	176.8	2.2 ft. - 7.4 ft.: Silty SAND with Gravel (SM), fine to medium, ~20% fines, 15-20% fine to coarse subrounded gravel, brown, moist
5.0	172.5	D	1		7.4	REMARK 1: Excavator refusal encountered at depth of 7.4 feet on possible boulder or rock.

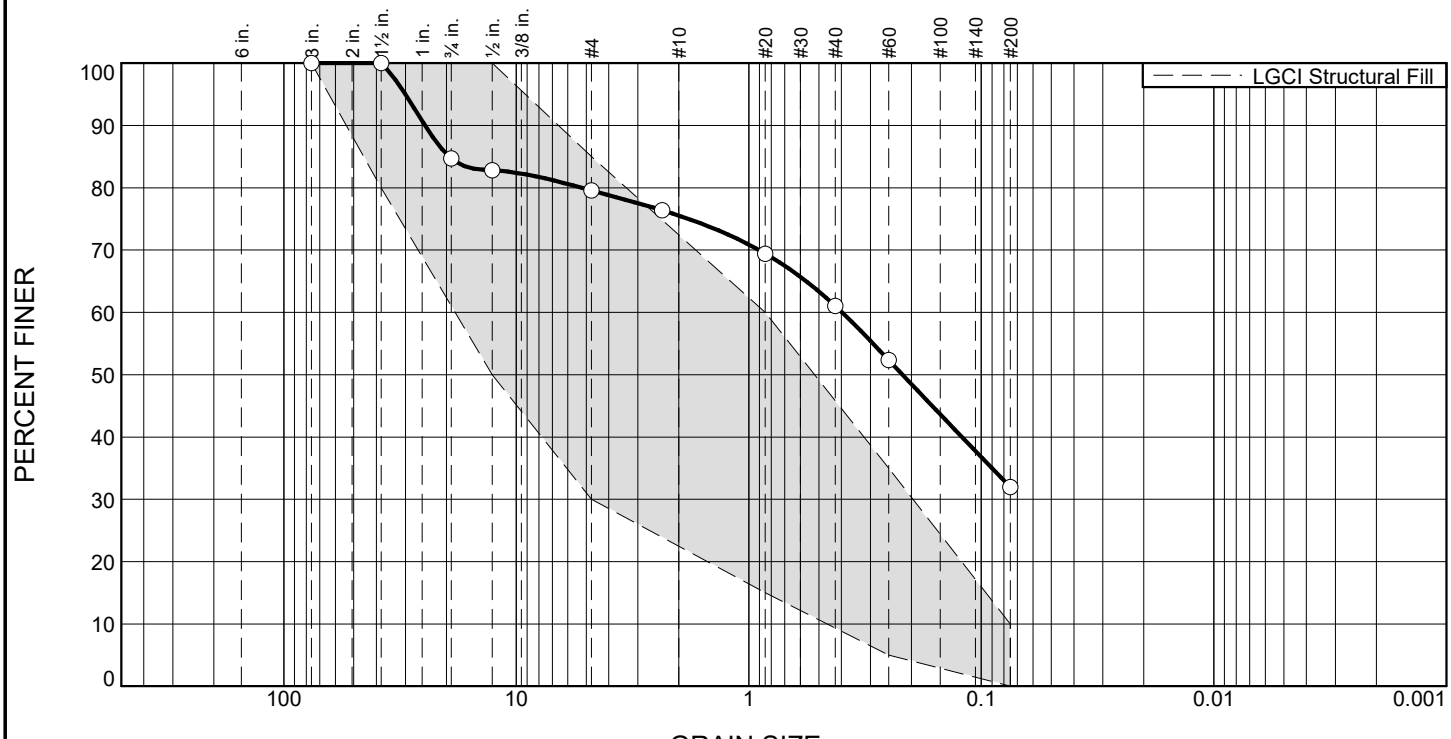
Bottom of test pit at 7.4 feet. Test pit backfilled with excavated material in 12-inch to 18-inch lifts and tamped with the excavator bucket.

GENERAL COMMENTS: **E = Easy, M - Moderate, D = Difficult, V = Very Difficult**

1. The ground surface elevation was interpolated to the nearest 2 feet from drawing 9 titled: "Burlington Mass.," prepared by COL-EAST, Inc., dated March 24, 1976, and provided to LGCI by Dore and Whittier via e-mail on February 23, 2023.

Appendix C – Laboratory Test Results

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	15.3	5.1	4.1	14.4	29.1	32.0	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0	100.0	
1.5"	100.0	80.0 - 100.0	
0.75"	84.7		
0.5"	82.8	50.0 - 100.0	
#4	79.6	30.0 - 85.0	
#8	76.4		
#20	69.4	15.0 - 60.0	X
#40	61.1		
#60	52.3	5.0 - 35.0	X
#200	32.0	0.0 - 10.0	X

* LGCI Structural Fill

Material Description

ASTM (D 2488) Classification: Silty SAND with Gravel (SM), mostly fine to medium, 30-35% fines, 20-25% fine to coarse subangular gravel, brown

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 24.6925 D_{85}= 19.4344 D_{60}= 0.3964
D_{50}= 0.2182 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

Fill sample.

Date Received: 2/21/23 **Date Tested:** 2/22/23

Tested By: NP

Checked By: SL

Location: Boring B-6
Sample Number: S2 **Depth:** 2.0'-4.0'

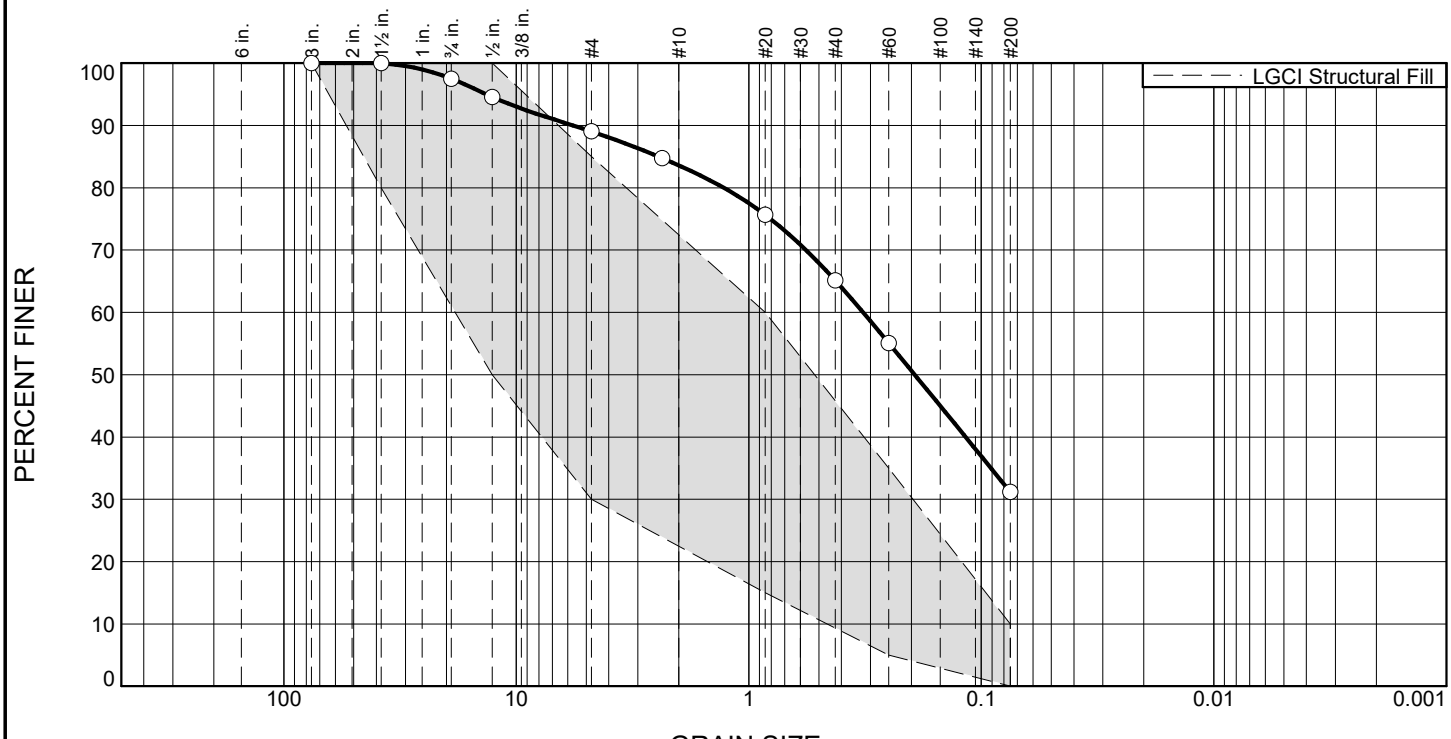
Date Sampled: 2/21/23

LGCI
Lahlaf Geotechnical Consulting, Inc.

Client: Burlington Public Schools
Project: Proposed Fox Hill Elementary School, Burlington, MA

Project No: 2307 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	2.5	8.4	5.5	18.5	33.9	31.2	

TEST RESULTS

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0	100.0	
1.5"	100.0	80.0 - 100.0	
0.75"	97.5		
0.5"	94.6	50.0 - 100.0	
#4	89.1	30.0 - 85.0	X
#8	84.8		
#20	75.6	15.0 - 60.0	X
#40	65.1		
#60	55.1	5.0 - 35.0	X
#200	31.2	0.0 - 10.0	X

* LGCI Structural Fill

Material Description

ASTM (D 2488) Classification: Silty SAND (SM), mostly fine to medium, 30-35% fines, 10-15% fine to coarse subrounded gravel, light brown

Atterberg Limits (ASTM D 4318)

PL= **LL=** **PI=**

Classification

USCS (D 2487)= **AASHTO (M 145)=**

Coefficients

D_{90}= 5.6863 D_{85}= 2.4473 D_{60}= 0.3219
D_{50}= 0.1932 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Remarks

Natural sand and gravel sample.

Date Received: 2/21/23 **Date Tested:** 2/22/23

Tested By: NP

Checked By: SL

Location: Test Pit TP-1
Sample Number: Grab **Depth:** 1.4'-10.0'

Date Sampled: 2/21/23

LGCI
Lahlaf Geotechnical Consulting, Inc.

Client: Burlington Public Schools
Project: Proposed Fox Hill Elementary School, Burlington, MA

Project No: 2307 **Figure**

6

PINE GLEN ELEMENTARY SCHOOL

- Plans
- Space Summary
- Narratives
- Cost Estimates

PINE GLEN AERIAL PLAN
1/64" = 1'-0"

0 32' 64' 128'
SCALE: 1/64" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX

Drawn By: KJL

Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

N

Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT

123 CAMBRIDGE STREET
BURLINGTON, MA

Stamp:

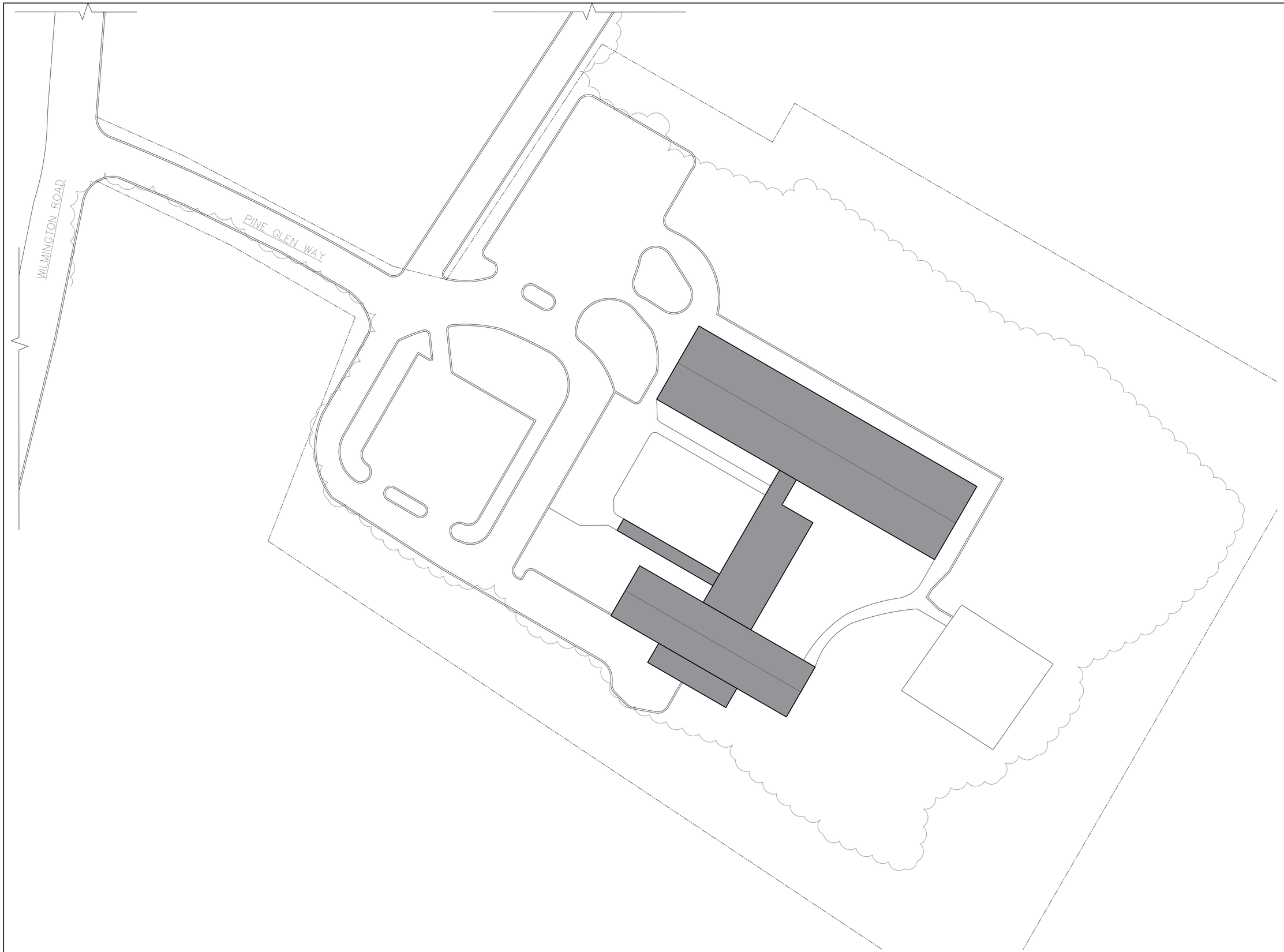
Drawing Name:

PINE GLEN
SCHOOL
AERIAL PLAN

Job No.: S119416-PP

Date: 03/22/2017

Drawing No. A6.00



PINE GLEN SITE PLAN
1/32" = 1'-0"

0 16' 32' 64'
SCALE: 1/32" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.
6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX
Drawn By: KJL
Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

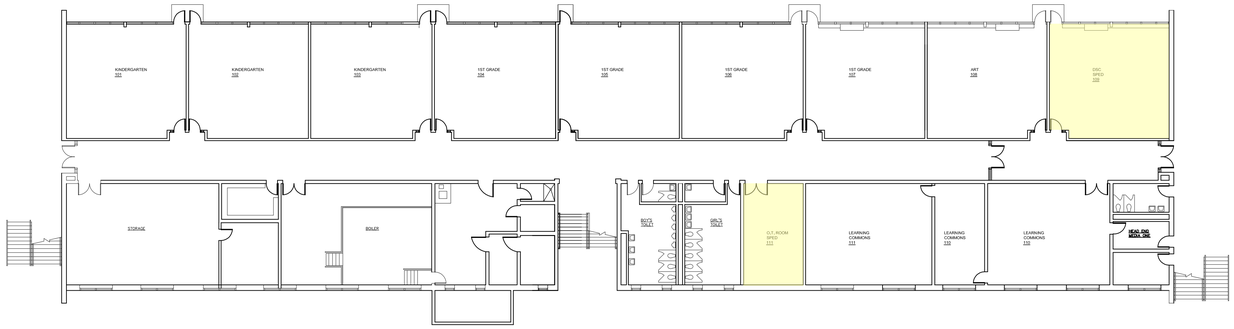
Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT
123 CAMBRIDGE STREET
BURLINGTON, MA

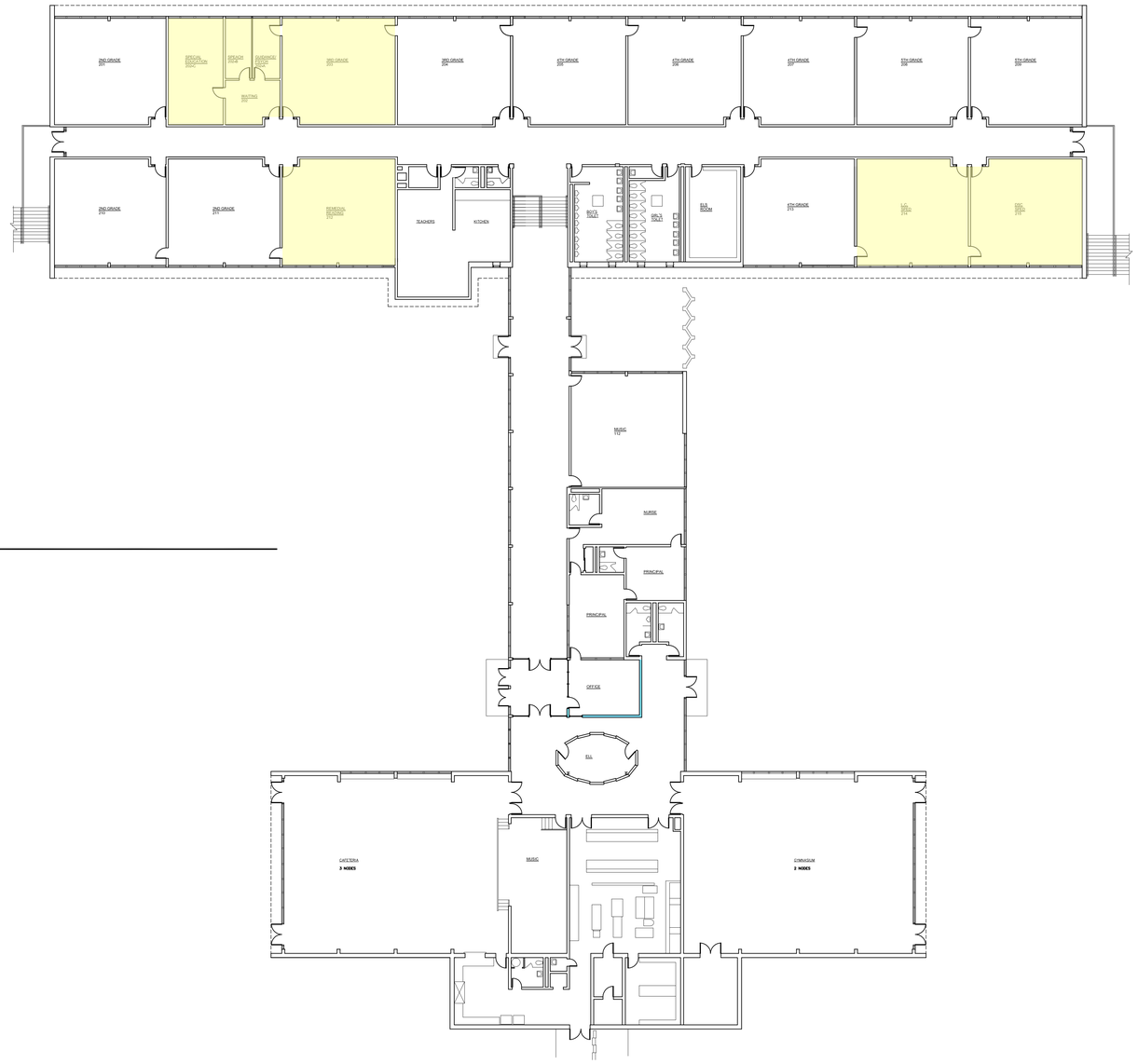
Stamp:

Drawing Name:
PINE GLEN
SCHOOL
SITE PLAN

Job No.: S119416-PP
Date: 03/22/2017
Drawing No. A6.01



LOWER LEVEL FLOOR PLAN
1/16" = 1'-0"



UPPER LEVEL FLOOR PLAN
1/16" = 1'-0"

0 8' 16' 32'
SCALE: 1/16" = 1'-0"

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.
6 THIRTEENTH STREET
CHARLESTOWN, MA. 02129
617-241-2807 (T)
617-241-2857 (F)

Designed By: XXXX
Drawn By: KJL
Checked By: XXXX

REV	DATE	DESCRIPTION

Project North:

Key Plan:

BURLINGTON PUBLIC SCHOOLS
FACILITY AUDIT
123 CAMBRIDGE STREET
BURLINGTON, MA

Stamp:

Drawing Name:
PINE GLEN SCHOOL FLOOR PLAN

Job No.: S119416-PP
Date: 03/22/2017
Drawing No. A6.10

Proposed Space Summary- Elementary Schools

PINE GLEN ES	Existing Conditions			PROPOSED: Existing to Remain/Renovated			PROPOSED: New			PROPOSED: Total			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**17,694**			**0**			**0**			**0**		**13**	**12,850**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet													1,200		-	1,100 SF min - 1,300 SF max
Kindergarten		3	2,760										1,200	2	2,400	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-5		14	12,880										950	11	10,450	900 SF min - 1,000 SF max
Learning Commons		3	2,054													
SPECIAL EDUCATION			**5,930**			**0**			**0**			**0**			**3,020**	
(List rooms of different sizes separately)																
Self-Contained SPED		4	3,680										950	2	1,900	8% of pop. in self-contained SPED
DSC		1	920										60	2	120	
Speech/Guidance Psych Suite		1	920										500	1	500	1/2 size Genl. Clrm.
OT		1	410										500	1	500	1/2 size Genl. Clrm.
ART & MUSIC			**1,920**			**0**			**0**			**0**			**2,500**	
Art Classroom - 25 seats		1	920										1,000	1	1,000	assumed schedule 2 times / week / student
Art Workroom w/ Storage & kiln													150	1	150	
Music Classroom / Large Group - 25-50 seats		1	1,000										1,200	1	1,200	assumed schedule 2 times / week / student
Music Practice / Ensemble													75	2	150	
HEALTH & PHYSICAL EDUCATION			**3,475**			**0**			**0**			**0**			**6,300**	
Gymnasium		1	3,190										6,000	1	6,000	6000 SF Min. Size
Gym Storeroom		1	285										150	1	150	
Health Instructor's Office w/ Shower & Toilet													150	1	150	
MEDIA CENTER			**0**			**0**			**0**			**0**			**2,020**	
Media Center / Reading Room													2,020	1	2,020	
DINING & FOOD SERVICE			**5,640**			**0**			**0**			**0**			**5,228**	
Cafeteria / Dining		1	3,120										2,228	1	2,228	2 seatings - 15SF per seat
Stage		1	600										1,000	1	1,000	
Chair / Table / Equipment Storage													200	1	200	
Kitchen		1	1,595										1,600	1	1,600	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room		1	325										200	1	200	20 SF/Occupant
MEDICAL			**525**			**0**			**0**			**0**			**510**	
Medical Suite Toilet		1	75										60	1	60	
Nurses' Office / Waiting Room		1	450										250	1	250	
Examination Room / Resting													100	2	200	
ADMINISTRATION & GUIDANCE			**1,813**			**0**			**0**			**0**			**2,015**	
General Office / Waiting Room / Toilet		1	310										300	1	300	
Teachers' Mail and Time Room													100	1	100	
Duplicating Room													150	1	150	
Records Room													110	1	110	
Principal's Office w/ Conference Area		1	245										375	1	375	
Principal's Secretary / Waiting		1	355										125	1	125	
Assistant Principal's Office													120	0	-	
Supervisory / Spare Office													120	1	120	
Conference Room													250	1	250	
Guidance Office													150	1	150	
Guidance Waiting		1	178													
Guidance Storeroom													35	1	35	
Teachers' Work Room		1	475										300	1	300	
Speech		1	125													
Psychology		1	125													
CUSTODIAL & MAINTENANCE			**2,725**			**0**			**0**			**0**			**1,900**	
Custodian's Office		1	750										150	1	150	
Custodian's Workshop													375	1	375	
Custodian's Storage		1	1,050										375	1	375	
Recycling Room / Trash		1	575										400	1	400	
Receiving and General Supply													200	1	200	
Storeroom		1	245										200	1	200	
Network / Telecom Room		1	105										200	1	200	
OTHER			**0**			**0**			**0**			**0**			**0**	
Other *(specify)*																
Total Building Net Floor Area (NFA)			**39,722**			**0**			**0**			**0**			**36,343**	
Proposed Student Capacity / Enrollment			**297**												**297**	
Total Building Gross Floor Area (GFA)[2]			**55,577**												**53,460**	
Grossing factor (GFA/NFA)			**1.40**									**#DIV/0!**			**1.47**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

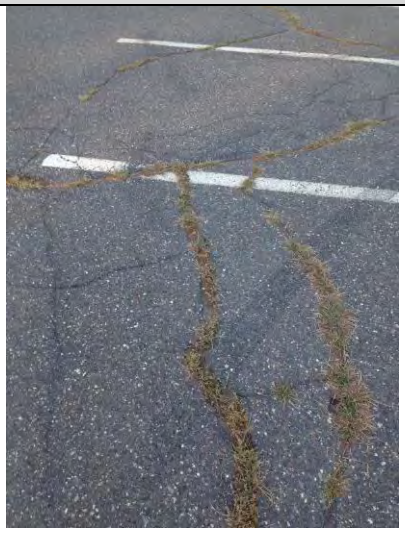
Signature of Principal Architect: _____

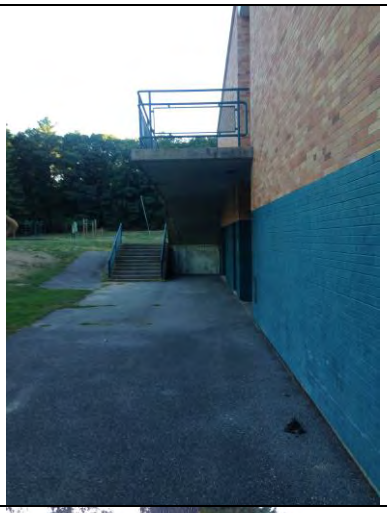
Date: _____

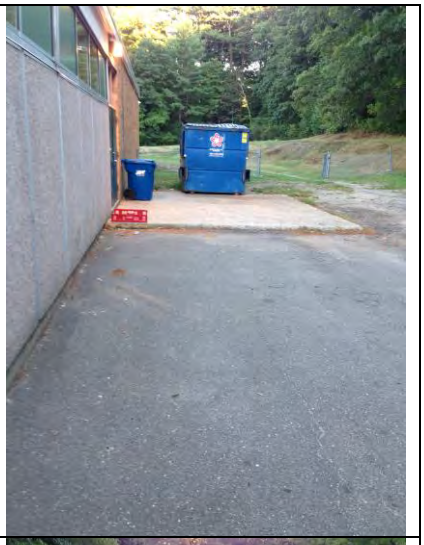
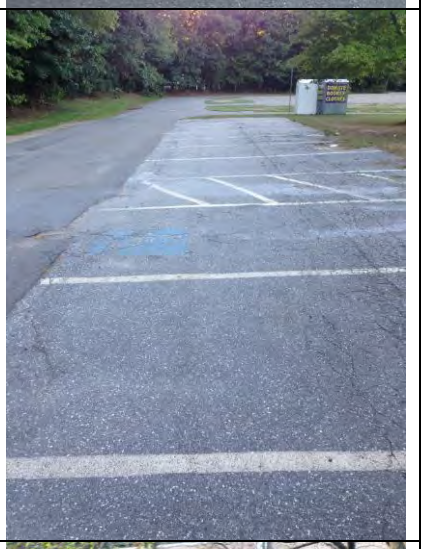
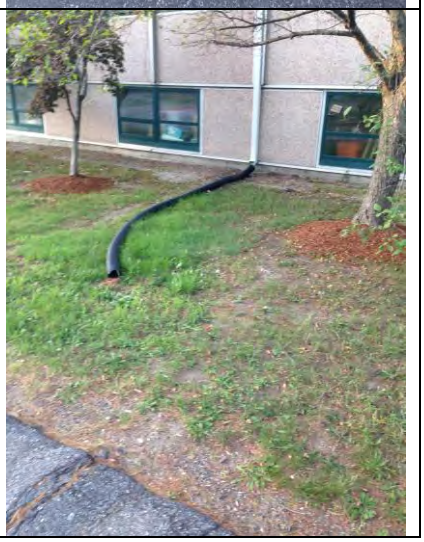
Nitsch Engineering

SITE AND CIVIL
PINE GLEN ES

	GENERAL INTRODUCTION
Description	**Photograph**
Pine Glen Elementary School is located 11.8-acre parcel on Pine Glen Way off of Wilmington Road.	

			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
1	Parking lot pavement: The pavement in the main parking lot is uneven and is severely cracked.	Reconstruction of the parking lot should be considered as part of any major renovation or reconstruction of the school. Any reconstruction of the parking lot should include new drainage structures.	
2	Accessibility to playfields: Some of the classroom doors to the playfields are not handicap accessible.	The non-compliant ramps at the doorways should be removed and new landings and accessible ramps should be installed.	

3	Accessibility at back entrance: The doorway from the rear fields to the second floor of the building can only be accessed by a set of stairs. In addition, the walkway from the ground level to the rear playground is not compliant.	Accessible routes from the building to all of the exterior site features, and between site features should be provided as part of any major renovation or reconstruction.	
4	Tree health: Some of the major trees on the site appear to be in decline.	An arborist should review the health of the trees on the site and those trees in declining health or that pose a potential risk should be removed.	
5	Playground area: The curb around the playground prevents accessible access to the play area.	Provide accessible access to the playground by installing a new compliant walkway which meets curb around the playground in a flush condition and provide additional wood chip mulch on the playground side of the curb.	

6	Dumpster pad and enclosure: The dumpster is not located on a dumpster pad or is it enclosed in any way.	Provide a concrete pad and fenced in enclosure for the dumpster.	
7	Accessible parking: The accessible parking along the side of the school appears to be not be compliant.	The accessible parking area should be reconstructed so that proper signage and pavement markings are provided and maximum slopes are not exceeded.	
8	Roof leaders: Several roof leaders discharge onto the ground adjacent to the building.	The roof leaders should be connected to a new, below-grade drain that is connected to the site drainage system or to a new drywell.	

9	Walkways and paths: Many of the pathways area cracked and uneven.	Deteriorating pathways should be reconstructed and made handicapped accessible.	
10	Paving at play area: The paving at the play area located at the front of the school is cracked and deteriorating.	The play area should be regraded and repaved so that is handicap accessible.	

KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

ARCHITECTURAL EXTERIOR ENVELOPE

PINE GLEN ES

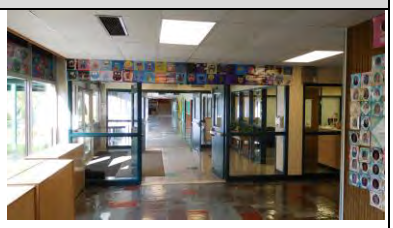
GENERAL INTRODUCTION	
Description	**Photograph**
Pine Glen is the smallest property size of Burlington's elementary schools at 11.8 acres. Built in 1962 the building consists of a variety of framing sections at the different wings, varying from steel frame to concrete construction. A new EPDM roof was completed in 2016, preceded by new entrance vestibule in 2014, new elevator in 2004 and new boilers in the late 1990's.	

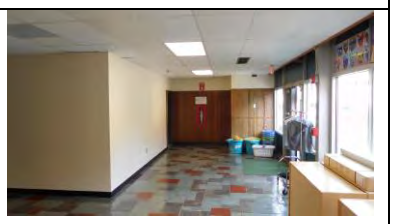
			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
1	Exterior doors and entrances Aluminum doors with insulated glass and hollow metal frames (new at main entrance but dated and showing some wear throughout the building.)	Replace within 1 – 5 years except for few aluminum entrance door and cross corridor doors at 2014 entrance vestibule upgrade all remaining exterior doors should be planned for replacement.	
2	Windows and skylights Combination of insulated fixed glass and insulated panel in storefront frame Mostly older aluminum window frames without proper thermal break.	Assembly is fine for 8 - 10 years from appearance standpoint but would receive a much improved energy efficiency upgrade if they were to be replaced with new thermally broken system.	
3	Concrete foundations or walls Concrete soffit overhangs appear to have most deterioration but also contain ACM materials as shown in UEC report.	Sporadic spalling throughout. Parge affected areas for aesthetic purposes only. Structural report from Souza, True recommends replacement in next 1 – 5 years of concrete soffits.	

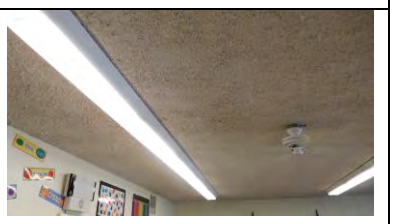
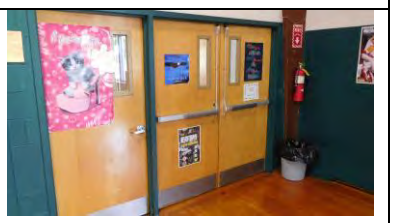
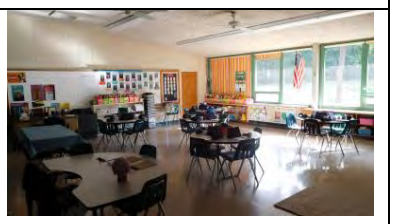
4	Masonry Appears to be in good condition with minor signs of distress associated with building of this vintage	Address joint mortar failure as needed and should be fine for a minimum of 10 - 15 years. Structural report primarily identified some loose window sills that require re-anchoring back into masonry.	
5	Siding Pebble finish insulated panels at portions of classroom wings and cafetorium space.	Panel appear to be in good condition. Maintain caulking and good for maintenance and panels, although energy inefficient, could remain adequate for next 5 – 7 years.	
6	Roofing – sloped roofs New EPDM 2016 on the two sloped wing sections. One, the classroom wing and the other sloped area covers the gym/cafeteria/kitchen area.	25 year warranty on the new 2016 EPDM roof and roughly the exact same for the flat roof area replaced with EPDM in the summer of 2013 and the replacement of the standing seam metal canopy.	
7	Roofing – flat roofs New EPDM 2013 during replacement of flat roof sections all new urethane board insulation was added for significant thermal upgrade.	22 years remaining on warranty for complete system of glued down membrane (EPDM) flashing and mechanically fastened insulation board.	
8	Drainage elements Minor ponding on flat roof Downspouts connected to inverts roofing manufacturer allows minor ponding after rainstorm to account for settlement and movement.	No concerns for ponding. Jet clean inverts and downspouts regularly to keep debris from roof drains and downspouts and effectively keep roof in good condition.	

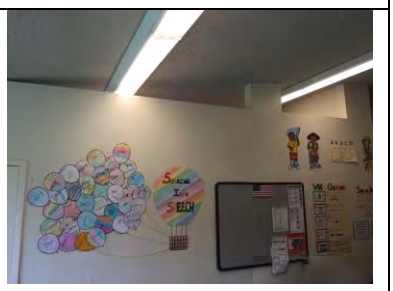
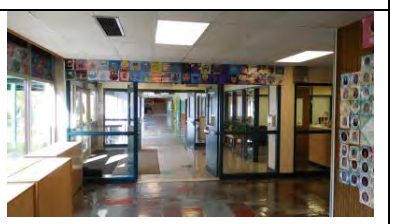
KBA ARCHITECTS
KNIGHT, BAGGE AND ANDERSON, INC.

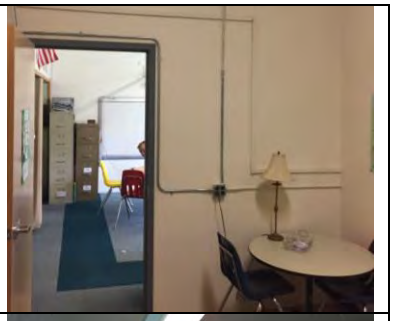
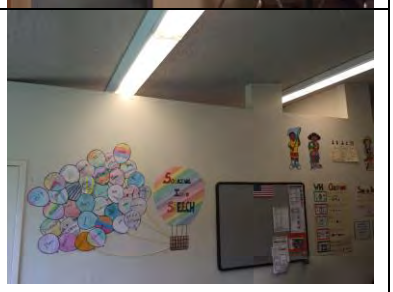
ARCHITECTURAL INTERIORS
PINE GLEN ES

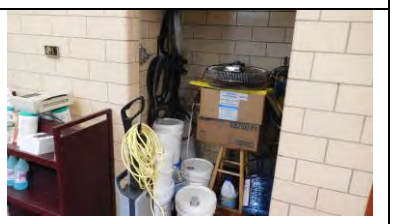
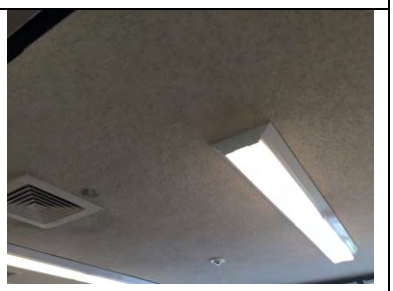
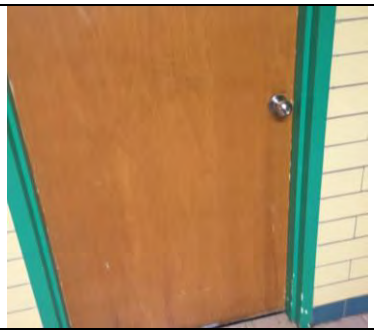
GENERAL INTRODUCTION	
Description	**Photograph**
Pine Glen is the smallest property size of Burlington's elementary schools at 11.8 acres. Built in 1962 the building consists of a variety of framing sections at the different wings, varying from steel frame to concrete construction. A new EPDM roof was completed in 2016, preceded by new entrance vestibule in 2014, new elevator in 2004 and new boilers in the late 1990's.	

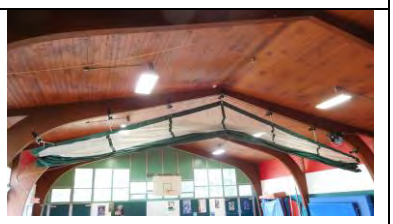
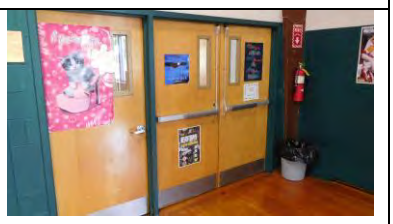
			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
CLASSROOMS			
1	Floors consist of sheet vinyl with welded seams Universal Environmental Consultants (UEC) has previously confirmed that most floor materials contain some form of asbestos containing material.	Sheet vinyl in good condition. Continue maintenance program, being vigilante at seams. Overall floors are secure and encapsulated but should eventually be replaced.	
2	Walls Painted GWB Vertical matched wood	Patch as needed. Re-coat within 3 – 5 years. Some areas require patching with joint compound. Sand, prime, add 2 coats finish. Other areas with minor blemishes can be addressed with spackle, sand and paint. Ongoing maintenance.	
3	Ceilings Suspended acoustical ceilings tiles – fair condition grid – good condition Replacement would significantly improve acoustic values	Ceiling tiles should be replaced within 1 – 2 years. Ceiling grid in good condition but of 1 ½" deep grid and older acoustical tile with limited STC (Sound Transmission Coefficient)	

3A	Ceilings GWB sloped with textured finish	No evidence of cracks or water staining. Appears to be in good condition. Due to rough texture it is difficult to maintain. Clean appearance, i.e. diffuser locations. Apply paint 3 – 4 year cycle	
3B	Ceilings Flat with textured finish appears in good condition	No evidence of cracks or water staining. Appears to be in good condition. Due to rough texture it is difficult to maintain. Clean appearance, i.e. diffuser locations. Apply paint 3 – 4 year cycle	
4	Doors and Hardware Wood door in HMF with lever type passage sets	Base of most doors are scuffed but with no evidence of de-lamination. Lightly sand, apply 2 coats of polyurethane. Should extend life to 3 – 5 years.	
4A	Doors and Hardware Knob type hardware at various locations	There are numerous locations where knob type hardware exists. Should be removed and replaced with lever type in all areas required.	
5	Chalkboards/Tackboards Whiteboard with tackboard above	All whiteboards appear to be in good condition as well as tackboards.	

LOBBY/CORRIDORS			
6	Floors Slate appears in good condition and provides good surface for heavy traffic areas such as lobbies and vestibules	Continued maintenance should assure added 5 – 7 years	
7	Walls Areas of partitions installed below ceiling which creates poor acoustical environment	Wall surface not appropriate for taping and tacking materials. Consider replacing with material more conducive for this use, i.e. tackboard and hard gloss surface.	
8	Ceilings 2 x 4 SAC Fair condition	Some replacement tiles have been obviously installed. This makes for poor aesthetics. Consider replacing all ceiling tiles for consistency	
9	Doors and Hardware Wood doors in hollow metal frames. Knob type hardware.	Remove knob type hardware and replace with lever type. Refinish door faces by lightly sanding, apply 2 coats of polyurethane.	
ADMINISTRATION/NURSE/SPED SUITES			
10	Floors VCT Carpet	VCT in good condition. Continue maintenance program. Consider replacing in 5 – 7 years. Carpet in fair condition. Wearing patterns evident. Consider replacing in 1 – 3 years.	

11	Walls GWB Painted	Good Condition Touch up as needed. Repaint entire surface within 5 years.	
12	Ceilings GWB with heavy stucco painted finish.	No cracks or staining evident. Due to textured surface, maintaining a clean appearance is difficult, especially at diffuser locations. Painting cycle at 3 – 5 years.	
13	Doors and Hardware Wood, HMF and vision panel	Some doors continue to have knob type passage sets. These must be replaced with accessible lever type within 1 year.	
CAFETERIA/KITCHEN			
14	Floors VCT at cafeteria	VCT at Cafeteria shows little or no signs of wear, cracking or adhesion issues. 7 – 10 years.	
14A	Floors 6 x 6 quarry at kitchen	Quarry tiles at kitchen floor are in very good condition. No cracks in tiles or voids in jointing. Avoid unnecessary impacts. 7 – 10 years.	

15	Walls – Cafeteria Textured, painted walls	Minor blemishes at louver level are not evident due to dark coloring no cracks or staining. Recoat on 3 – 4 year cycle	
15A	Walls – Kitchen Glazed wall tiles	Glazed wall tiles are secure. No damaged tiles or grout issues. Minor maintenance required.	
16	Ceilings – Cafeteria Stained Wood pine boards	No signs of water intrusion or staining. No work currently required.	
16A	Ceilings – Kitchen Spray applied textured	Good condition. Due to the work environment a re-coating of paint should be done on a 2 – 3 year cycle.	
17	Doors and Hardware All doors and hardware should be considered for new replacement	Upgraded lever handle hardware may be requires as part of overall renovation exceeding thresholds but good practice to replace all hardware this year.	

GYMNASIUM			
18	Floors Hardwood flooring	Floor currently in very good condition. Maintenance program consisting of screening and re-coat annually / bi-annually depending on use.	
19	Walls Combination of painted CMU block and insulated exterior panels	Both materials appear to be in good condition despite the se of the space. Re-coat on 5 – 7 year cycle	
20	Ceilings Stained pine board with beveled edge.	Simply maintain roof otherwise no work. The ceiling is in very good condition. The continued state of this ceiling is a direct result of maintaining a roof in optimal condition at all times.	
21	Doors and Hardware 2 sets of hollow metal double doors to the exterior with panic devices.	Doors, panic devices and closers are all in operable condition.	
AUDITORIUM/STAGE			
22	Floors Stage with hardwood floor	Stage floor in good condition. Stage access is not compliant with accessibility laws. Introduction of ramp or lift is required within 1 year.	

23	Walls Painted, textured GWB	Good condition. Re-coat 5 – 7 year cycle.	
24	Ceilings Pine board with beveled edge.	Ceiling in very good condition. Now work needed currently. Roof must be maintained to assure existing condition going forward.	
25	Doors and Hardware Hollow metal frame and fiberglass doors	Insulated panels at exterior window wall and exterior fiberglass doors with operating panic hardware in good condition	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

STRUCTURAL

PINE GLEN ES

GENERAL INTRODUCTION

Description	Photograph
The existing building located at Pine Glen Way in Burlington, MA, which was constructed around 1965, is comprised of three different sections; a one-story office area, a two-story classroom wing (which has a lower level), and a one-story auditorium / gymnasium wing. There appears to be a building expansion joint between the one and two story sections of the building. The roof framing system of the one-story central office area appears to be constructed with tectum plank supported by bulb tees, steel joists, beams and columns. The auditorium / gymnasium roof is constructed with tongue and grooved wood decking supported by glulam arched-beams. The two-story wing consists of CIP concrete construction at the first floor level and tectum plank and sloped steel joists at the upper roof level. The first floor level (not above the basement) and the lower level slab appears to be a conventional concrete slab-on-grade. An elevator addition was apparently constructed around 2003 at the juncture between the two-story wing and office wing. The roof of the building was apparently replaced in 2015. Modifications to the entrance canopy were made in 2014. Most of the interior walls appear to be CMU walls. There are a few roof-top units, although access to the roof was not provided during our walk-through. Apparently, termite and water damage to the base of the glulam arches required structurally repairs to the building about 20 years ago. We understand a new “shoe” base was constructed at several of the arched glulam bases (although the shoe was not visible at the time of our visit, due to architectural finishes). Based on our limited field observations and walk-through of the building, the structural behavior of the building appears to be satisfactorily with only a few minor signs of distress. Please note that our structural observations were based on our review of the exposed-to-view structural elements only. None of the architectural finishes were removed as part of our assessment.	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

STRUCTURAL

PINE GLEN ES

			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
1	Spalled concrete and corroded reinforcing steel at underside of exterior concrete stair slab at the east end of the building.	The reinforcing steel in the concrete stair slab is moderately corroded, particularly where the steel post for the railing system anchors to the slab. The corroded rebar and spalled concrete should be structurally repaired within the next 5 years or so. This slab is most likely exposed to heavy de-icing salts during the winter months, which has exacerbated the corrosion of the exposed rebar.	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

			OBSERVED CONDITIONS
No.	**Noted item**	**Recommendation**	**Photograph**
2	Spalled and cracked brick veneer at base of exterior brick wall at the auditorium.	A portion of the exterior brick wall at the base of the wall has spalled off. It appears that this spall has been caused by freezing and thawing action during the winter months or by de-icing salts. The brick overhang appears to be supported by a steel angle that has become corroded. The portion of the spalled wall shall be structurally repaired by re-bricking and re-pointing of the wall within the next five years or so. The support of the brick overhang shall also be investigated in more detail for structural integrity.	

SOUZA, TRUE AND PARTNERS, INC.
STRUCTURAL ENGINEERS
265 Winter Street, Third Floor, Waltham, MA 02451
Tel: 617-926-6100

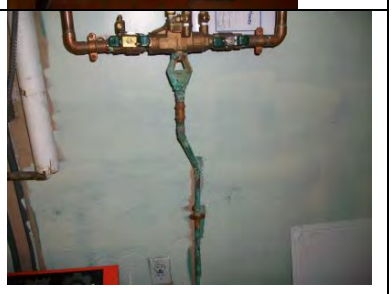
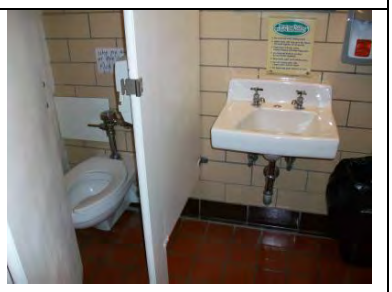
STRUCTURAL

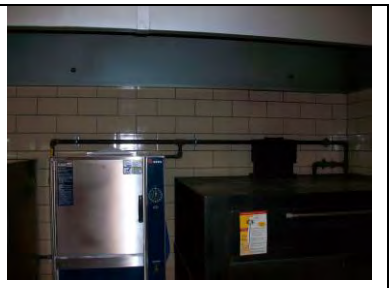
PINE GLEN ES

			PRIORITY ITEMS
No.	**Noted item**	**Recommendation**	**Photograph**
1	There are no priority items related to the structure that would need to be addressed within the next 1-3 years.	N/A	N/A

PLUMBING & FIRE PROTECTION
PINE GLEN ES

GENERAL INTRODUCTION	
Description	**Photograph**
The Pine Glen Elementary School is currently provided with dedicated utilities located within the main Boiler Room. (2) 75 gallon direct fired storage tank hot water heaters is provided for the building's domestic hot water use and kitchen use respectively. Commercial grade plumbing fixtures are supplied throughout the building's core and accessory bathrooms. A commercial kitchen is located within the building for meal preparation and cooking. Most classrooms are typical inclusive of a classroom sink. The building does not have a fire protection system.	

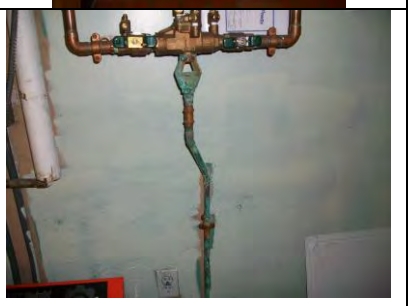
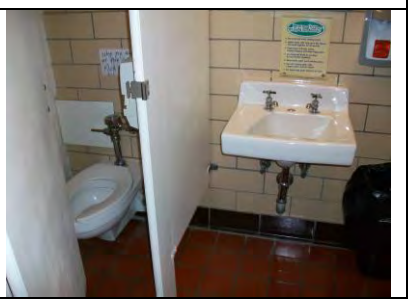
OBSERVED CONDITIONS			
No.	**Noted item**	**Recommendation**	**Photograph**
1	Kitchen domestic hot water heater has outlived its life expectancy.	Replace tank with new high efficient appliance.	
2	Water piping in general appears to be in poor conditions with multiple locations of "pitting", oxidizing and previous patches/replacement.	A thorough investigation should be provided on the building domestic water system. The investigation may include but not be limited to: a water analysis, potential for water treatment and/or replacement of the existing domestic water piping.	
4	Plumbing fixtures appear to be in fair condition however, many have outlived their expected lifetime.	Plumbing fixtures should be selectively replaced with new water efficient fixtures.	

5	Commercial kitchen is not equipped with an interlock system to stop the flow of gas when the kitchen exhaust is not operational, as required by the latest Plumbing Code.	Hoods should be equipped with the latest safety standards.	
6	The hand sinks in both the kitchen and bathrooms did not appear to have mixing valves to safely wash hands between 110-120F.	Mixing valves should be installed per the latest safety standards.	
7	The commercial kitchen only appears to have the 3-compartment sink terminate to a grease trap. Current plumbing codes require dish machines, floor drains and various other sinks to terminate to a grease trap.	A central grease trap should be provided in accordance with the latest plumbing codes.	
10	It was noted throughout the facility that janitorial soap dispensers were installed without the use of a reduced pressure backflow assembly.	Soap dispensers should be equipped with a reduced pressure backflow to avoid any back syphoning of chemicals to the potable water system.	
11	The building does not currently have a fire protection system.	A fire protection system should be installed as a life safety measure.	

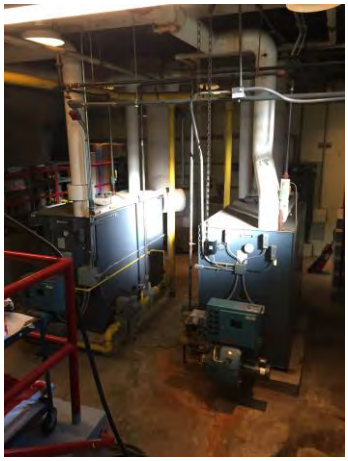
BLW ENGINEERS

PLUMBING & FIRE PROTECTION

PINE GLEN ES

No.	Noted Item	Recommendations	Priority Items Photographs
1	The building does not currently have a fire protection system.	A fire protection system should be installed as a life safety measure.	
2	**Kitchen existing domestic hot water heater has outlived its life expectancy.**	**Replace tank with new high efficient appliance.** **Approx. cost for replacement $10,000.00**	
3	**Water piping in general appears to be in fair/poor conditions with multiple locations of "pitting", oxidizing and previous patches/replacement.**	**A thorough investigation should be provided on the building domestic water system. The investigation may include but not be limited to: a water analysis, potential for water treatment and/or replacement of the existing domestic water piping.** **Approx. cost for replacement of domestic water piping system $250,000.000**	
4	Plumbing fixtures appear to be in fair condition however, many have outlived their expected lifetime.	Plumbing fixtures should be selectively replaced with new water efficient fixtures.	

HVAC
PINE GLEN ES

GENERAL INTRODUCTION	
Description	**Photograph**
The boiler room is located on the lower level; it provides hot water for heating to the building. The hot water heating system consists of two Weil McLein gas cast iron sectional boilers, two 5 hp hot water circulating pumps to two heating zones, water specialties, insulated hot water distribution piping system, boiler breeching system and pneumatic controls. Insulated hot water distribution system from the boilers to the building circulating pumps provides heating hot water into the insulated hot water distribution piping system. The boiler room entry indicates asbestos containing materials but the insulation did not appear to be asbestos containing materials	 Hot Water Boilers Hot Water Pumps ATC Compressor

Classrooms are provided with unit ventilators to provide classroom heating ventilating. Each unit is controlled by a wall mounted pneumatic thermostat. Units are provided with a hot water heating coils interconnected to the hot water distribution piping system. Each classroom is provided destratification ceiling fans. The Library, Media Center and Computer classrooms are provided with cooling from a window type air conditioning unit; heating and ventilating is provided by a unit ventilator interconnected to the heating hot water piping distribution system. Classrooms with floor level lower than grade level have been provided with louvers in former window areas and ductwork extensions to unit ventilator intake on the backside of the unit.

Administration exterior areas have been provided with fintube radiation for heating and a rooftop air conditioning unit for cooling and ventilation; supply and return ductwork from the rooftop air conditioning unit is run along the roof and down to ceiling air outlets in each space. Administration interior areas have been provided with supplemental split system air conditioning units consisting of a wall mounted unit, remote air cooled unit and interconnecting refrigerant pipe.

Computer Classroom

Classroom Unit Ventilator

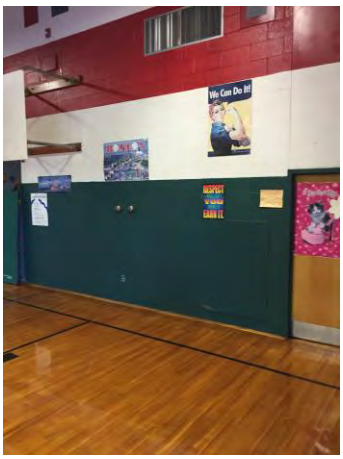
Classroom Exhaust

The Cafeteria is provided with heating and ventilation from hot water heating air handlings unit at the stage. Low pressure supply air duct systems distribute air through ductwork that terminates at wall supply registers; air is returned to unit through return registers and return ductwork. The unit is provided with a hot water heating interconnected to the hot water distribution piping system. The Cafeteria is provided by supplemental heat by fintube radiation along the exterior perimeter of the space.

The Gymnasium is provided with heating and ventilation from a hot water heating air handling units on the interior side of the gymnasium. Low pressure supply air duct systems distribute air through ductwork that terminates at wall supply registers; air is returned to unit through return registers and return ductwork. The unit is provided with a hot water heating interconnected to the hot water distribution piping system. The gymnasium is provided by supplemental heat by fintube radiation along the exterior perimeter of the space.

Kitchen Hood Exhaust

Cafeteria/Stage

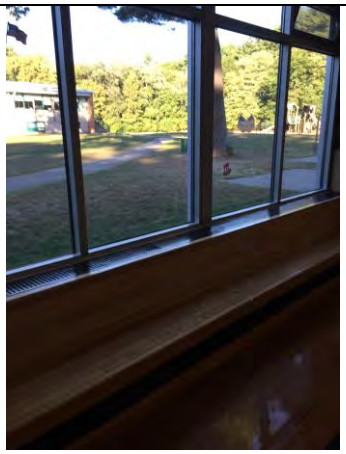


Gymnasium AH Registers

The Kitchen/Servery has been provided with heating by a hot water unit heater; makeup air is provided by a hot water heating air handling unit. The kitchen hoods are provided with a grease duct system and exhaust fan.

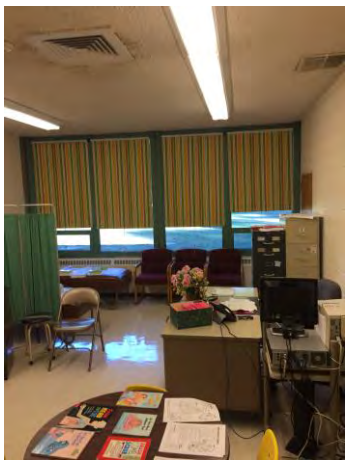
The corridors are provided with heating by convectors or fintube radiation interconnected to the hot water distribution piping system. Entries and vestibules are heated by hot water cabinet heaters located above the ceiling ducted to supply/return ceiling registers and interconnected to the hot water distribution piping system.

Each toilet is provided with exhaust through ceiling mounted exhaust register(s) to provide exhaust from the space by a roof mounted exhaust fans through a low pressure duct distribution system. Each exhaust fan operates continuously during occupied hours and be deenergized during unoccupied hours. Heating is provided by fintube radiation.



Gymnasium FTR

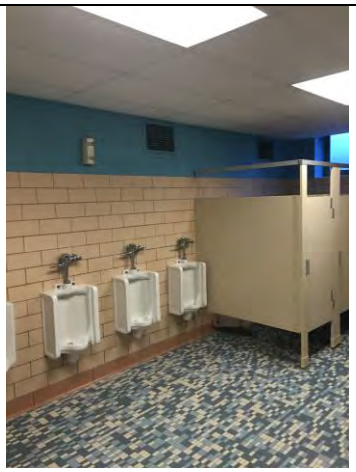
Interior Office HVAC



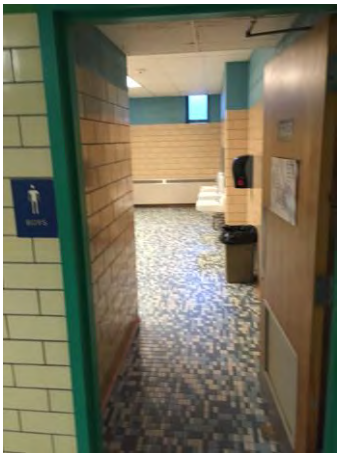
Exterior Office HVAC

Miscellaneous spaces, such as storage rooms, are provided with hot water heating, where required, and an exhaust air system in accordance with applicable code requirements.

All automatic temperature controls are pneumatic except for packaged rooftop units and split air conditioning systems.

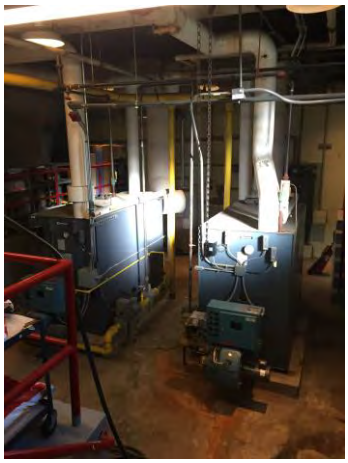
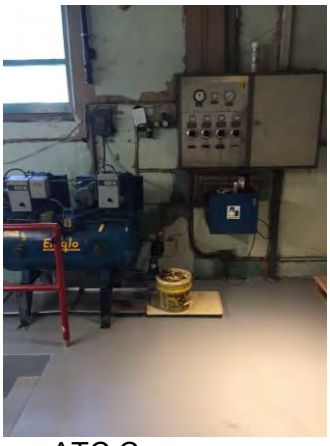


Bathroom Exhaust



Bathroom FTR

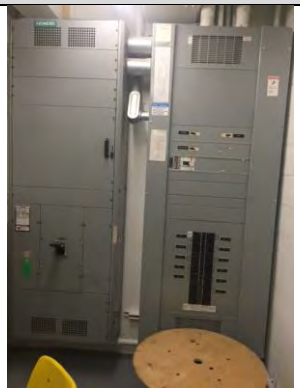
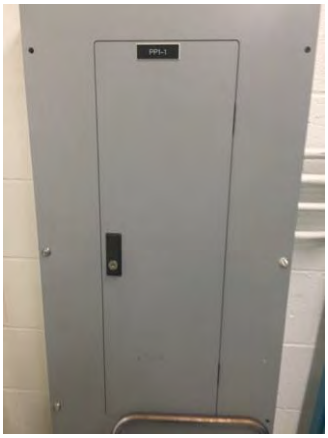
Rooftop Units

No.	Noted item	Recommendation	OBSERVED CONDITIONS Photograph
1	Boilers were installed in 1999 and appear in good operating condition. The boilers are gas fired and standard efficiency.	The boilers will require replacement in approximately 10 years. Boilers should be replaced with condensing type boilers for high efficiency operation.	 Hot Water Boilers
2	Hot water pumps were replaced as part of the 1999 boiler renovation project. The pumps do not have variable speed drives.	The pumps will require replacement in approximately 10 years. Pumps should be provided with variable speed drives for high efficiency operation.	 Hot Water Pumps
3	Building controls are pneumatic.	When the building is renovated the controls should be completely replaced with new direct digital controls.	 ATC Compressor

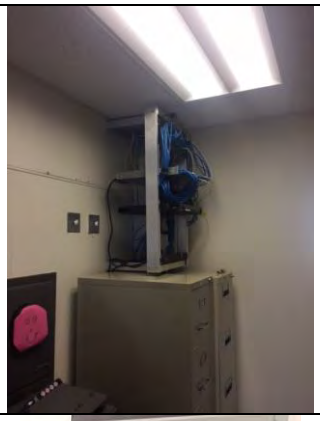
4	Building HVAC equipment, in general, appear to be in good operating condition. The building equipment is standard operating efficiency.	The HVAC system will require replacement in approximately 10 years.	 Classroom Unit Ventilator

ELECTRICAL
PINE GLEN ES

GENERAL INTRODUCTION	
Description	**Photograph**
The Pine Glen Elementary School was built in 1965. The electrical service equipment is original to the building. The standby generator was installed 12-13 years ago and is in good condition. The fire alarm system is in adequate condition, is approximately 10 years old.	

OBSERVED CONDITIONS			
No.	**Noted item**	**Recommendation**	**Photograph**
1	The electric service equipment consists of a 1200 amp Siemens main circuit breaker and a 1200 amp Eaton Cutler Hammer Power Line C distribution brand, installed in 2003.	Equipment is in good condition and has a remaining 20 years of expected life.	
2	The electrical panels were also manufactured by Cutler Hammer in 2003. There are a few original panels remaining.	Panels are in good condition and have a remaining 20 years of expected life. The original panels should be replaced.	

3	The clock/speaker system is a Valcom Communications system, original to the building. It has been reported that clocks do not work or have been replaced.	Replace the entire system within the next 2-3 years.	
4	The fire alarm system is an addressable Fire Lite MS-9200UDLS and is connected to a Sig Com radio master box.	The coverage is not completely up to present codes. Additional devices should be provided to bring up to present code, immediately.	

5	Lighting fixtures are in decent condition. They have been replaced or retrofitted in recent years.	Fixtures should be replaced with LED energy efficient fixtures within the next 305 years.	
6	There is an exterior Olympian G30F gas generator and a GE Zenith automatic transfer switch. Both are in good condition.	Provide yearly maintenance on both generator and ATS.	

			Priority Items
No.	**Noted Item**	**Recommendations**	**Photographs**
1	Clock/Speaker System	Replace in the next 2-3 years.	
2	Lighting System	Replace with LED light fixtures in the next 3-5 years.	

Burlington Public Schools
Facilities Audit Cost Estimate
(For anticipated items over the next 1-5 years)

Pine Glen Elementary School		58,000 SF
Architectural Access compliance trigger amount		$ 1,882,500

Trade or Work Category		**Amount**
Sitework		$ 150,000
Haz Mat		$ 1,629,800
Exterior Envelope		$ 150,000
Architectural Interiors		$ 125,000
Security	Not included	$ -
Structural		$ 50,000
Plumbing		$ 261,000
Fire Protection		$ 580,000
HVAC		$ 290,000
Electrical		$ 319,000
	Subtotal	**$ 3,554,800**
Accessibility Upgrades		$ 870,000
	Trade cost Subtotal	$ 4,424,800
O&P, General Conditions, Contingency (40%)		$ 1,769,920
	Construction total 2017	**$ 6,194,720**
Escalation for 5 years	4% annually	$ 1,342,396
	Total construction in 2022	**$ 7,537,116**

57-04

BK 9897 PG 159

SEP 26-61 PM 12:07 197RE 7.00

We, Alfred P. Gardner and Mary F. Gardner, husband and wife, as tenants by the entirety,

of Burlington, Middlesex County, Massachusetts,

~~being unmarried~~ for consideration paid, grant to The Town of Burlington

of with ~~quitclaim covenants~~

the land in Burlington, Middlesex County, bounded and described as follows:
Containing 11.750 Acres more or less, and
Beginning from a point on the Easterly side line of Wilmington Road at land now or formerly
~~(Description and boundaries, if any)~~
of Rodgers, said point being 197.46 feet from the southerly point of tangency on a curve having a radius of 1529.93 feet as shown on the layout by the Middlesex County Commissioners dated 1928,
thence by a stone wall South 58-08-08 degrees East 83.07 feet to a drill hole,
thence South 50-52-09 degrees East 45.58 feet to a drill hole,
thence South 47-36-28 degrees East 85.04 feet to a drill hole,
thence South 41-34-32 degrees East 96. 86 feet to a drill hole,
thence South 52-40-16 degrees East 40.45 feet,
thence North 45-51-35 degrees East 167.82 feet,
thence North 46-56-55 degrees East 49.22 feet,
thence by a curve to the right having aradius 30.00 feet, a distance of 48.32 feet,
thence South 40-45-45 degrees East 178.95 feet,
thence North 49-14-15 degrees East 70.00 feet to a stone wall,
thence along the wall South 40-45-45 degrees East 122.00 feet,
thence South 42-24-45 degrees East 251.85 feet to a drill hole,
thence South 42-02-30 degrees East 75.10 feet to a drill hole,
thence South 41-30-47 degrees East 204.40 feet to the intersection of walls,
thence South 46-56-00 degrees West 46.86 feet,
thence South 53-50-00 degrees West 128.04 feet to a Land Court disc,
thence South 53-50-00 degrees West 374.32 feet to a Land Court disc,
thence South 43-55-00 degrees West 20.91 feet,
thence South 52-30-10 degrees West 62.53 feet,
thence North 35-55-42 degrees West 841.88 feet,
thence North 46-24-22 degrees East 142.27 feet,
thence North 49-14-23 degrees West 271.38 feet to the side line of Wilmington Road,
thence by a curve having a radius of 1529.93 feet, a distance of 86.00 feet, to the point of beginning. All as set forth on a Plan of Land in Burlington, Mass. dated August 18, 1961 by K. J. Miller Co., Civil Engineers and recorded herewith. Granting also the right to drain surface water from the above-described premises to a pond situated on land owned by us and located to the East of the above-described premises. For our title see Deeds from Ward et ux, Book 7818 Page 241 and Book 9517 Page 290.

SEE PLAN IN RECORD BOOK 1396 PAGE

..... husband / wife of said grantor.

.....

~~release to said grantee all right of tenancy by the curtesy dower and homestead and other interests therein.~~

Witness our hand s and seal s this 25th day of September 1961

MIDDLESEX SOUTH

COMMONWEALTH OF MASSACHUSETTS DEEDS EXCISE SEP 26 61 2575

DOCUMENTARY UNITED STATES INTERNAL REVENUE 5 FIVE DOLLARS

Alfred P. Gardner

Mary F. Gardner

The Commonwealth of Massachusetts

Middlesex ss. September 25 1961

Then personally appeared the above named Alfred P. Gardner and Mary F. Gardner

and acknowledged the foregoing instrument to be their free act and deed, before me,

DOCUMENTARY UNITED STATES INTERNAL REVENUE 10 TEN DOLLARS

Notary Public — ~~Justice of the Peace~~

My Commission expires Dec. 24 1965

5 SITE DEVELOPMENT REQUIREMENTS

Site Development Narrative

Structures & Fences

Site Access & Circulation

Parking & Paving

Code Requirements

Zoning Setbacks & Limitations

Accessibility Requirements

Easements

Wetlands and/or Flood Restrictions

Emergency Vehicle Access

Safety & Security Requirements

Utilities

Athletic Fields / Outdoor Educational Spaces

Site Orientation / Location Considerations

SITE DEVELOPMENT REQUIREMENTS

Introduction

Two sites under consideration for this study are:

- Fox Hill School site
- Pine Glen School site

Both sites are currently owned by the Town of Burlington.

The Fox Hill site is 37.90 acres with two points of access from an extension of Westwood Street and Fox Hill Road. The Pine Glen School site is 11.80 with a single point of access from Wilmington Road along Pine Glen Way.

Municipal water, electrical power, storm drainage, sanitary sewer and natural gas are available at both sites.

An Environmental Site Assessment (ESA Phase 1) study has been performed on the Fox Hill site. The full report is located in PART 4 | EVALUATION OF EXISTING CONDITIONS (electrical copy only).

Observations from the traffic report on the Fox Hill site are located in PART 4 | EVALUATION OF EXISTING CONDITIONS.

Summary Chart of Sites Under Consideration

	Fox Hill School	Pine Glen School
Existing School	✓	✓
Town Ownership	✓	✓
Acreage	37.90	11.80
Zoning	RO	RO
Utilities	✓	✓
Wetlands	✓	✓

FOX HILL SCHOOL SITE

The Fox Hill Elementary School is located at 1 Fox Hill Road in Burlington. The school is owned by the Town of Burlington and operated by Burlington Public Schools. It is one of four elementary schools in the Town with an enrollment of 428 students during the 2022-23 academic year.

The Fox Hill Elementary School is located on a 37.90 acre parcel at the intersection of Fox Hill Road and Westwood Street in a residential area of Burlington, Massachusetts. The site and neighboring properties include notable natural and recreational features. Extensive woodland (mixed deciduous and coniferous) borders the developed area of the site along most edges, with more narrow woodland buffers between the property and nearby residential areas to the northeast, south, and southwest. The Sawmill Brook Conservation Area abuts the site's southeastern property line. Two trailheads at the edge between the open lawn area and woodland provide access to trails that loop within the conservation area. The Fox Hill Nature Trail system winds through the site's northwestern woodland. Forested lots connect this wooded area to the Mill Brook Wetlands Conservation Area in the Town of Wilmington.

The school building is located in the center of the open area of the site. A modular addition lies to the west of the original building. Major site development features include five building entry areas (four pedestrian-focused and one service-focused); a generous parking lot and drop-off drive aisle to the north of the school building; an access drive circling around the building; and a large open lawn area to the east of the school building containing two playgrounds, a multisport area, a gazebo, raised garden beds, and a softball field.

A survey of the existing conditions has been completed by a licensed MA surveyor and is included in the Preliminary Design Program. The survey includes wetland and vernal pool delineations.

Structures and Fencing

In addition to the existing school building and playground equipment, there is a small gazebo adjacent to the playgrounds. There are no other built structures on the site.

All the fencing located on the school site is chain link. A 42-inch tall fence is located just beyond the access road to the east of the existing school. It runs parallel to the loop road along the east side and then continues to the south towards the wooded area. This fence primarily separates the playgrounds from the loop road.

Site Access, Circulation and Accessibility

Vehicular access to the school is along the extension of Westwood Street, which leads to the edge of the parking lot and the bus loop. The buses drop-off and pick-up along the bus loop, which is separated from the parking by a vegetated island.

Parents drop-off and pick-up on a ring road that branches off the eastern end of the bus drop-off loop, circling the existing school building and modular addition. Directly connected to the loop access road is a paved service providing access to a dumpster and raised loading dock.

The western side of Fox Hill Road is lined with an asphalt sidewalk, as is the northern side of Westwood Street providing pedestrian access to the site and its system of pedestrian walks, which connect to the main entry. There are several crosswalks with curb cuts along this route. Detectable warning panels are not present at these crosswalks.

All the exterior classroom doorways have concrete landings that ramp down to the adjacent grass, but not to an accessible route. The eastern entrance leads to a walk that is not accessible. Additionally, some of the paved walks are worn and damaged with uneven surfaces, making them not accessible.

The project will address these deficiencies; all work as part of the project scope shall be ADA and MAAB compliant.

Parking and Paving

The existing school parking lot is located to the north of the school and contains 163 spaces, of which five are marked as accessible, including three that are van accessible. The accessible parking spaces are approximately 150 feet from the main entrance. The loop access road is a single lane drive utilized for service and parent pick-up / drop-off. The western stretch of the loop road is gravel, while the rest is bituminous asphalt. There are paved play areas to the east of the school separated from the access loop by a chain link fence.

Code Requirements

The existing school has two accessible entrances, the main entrance off the parking lot and the south ramp to the modular classrooms.

ADA/MAAB

The project will address accessibility deficiencies related to the site to the extent required by the MAAB. All work as part of the project scope shall be ADA/MAAB compliant. The area around the school is relatively flat due to the previous development of the site. It is possible to bring the non-compliant pedestrian walkways into compliance with current ADA and MAAB requirements through re-paving and minor re-grading. Additional handicap parking spaces could be added to the staff parking lot with minor modifications to meet current ADA and MAAB requirements. A comprehensive approach to the site design will be part of the project scope, considering separation of buses from automobiles and safe accessible parking and routes to school. Crosswalks shall be modified to incorporate curb cuts, ramps, tactile warning surfaces, and striping compliant with MAAB guidelines and Town of Burlington standards.

Zoning Setbacks and Limitations

The Fox Hill Elementary School site is located within the Town of Burlington's One-Family Dwelling (RO) zoning district. Abutting sites are also zoned RO zoning district. Educational uses and childcare facilities in this zoning district are only subject to the minimum yards, minimum lot frontage and twenty-five (25) percent maximum aggregate building to ground area percentage. Building yard requirements are 25-foot front, 15-foot side, and 15-foot rear. Minimum lot frontage is 100 feet. Height limit in RO zoning district is 30 feet; however, section 5.1.4 of the Burlington Zoning Bylaws exempts schools from this requirement.

Easements

There are no known easements on the Fox Hill site.

Wetlands and/or Flood Restrictions

Four wetlands were identified during the field surveys on the Fox Hill site: one at the southwest corner of Westwood Street and Fox Hill Road intersection, two north of the parking lot and playground areas (likely located in the Town of Wilmington), and a fourth in the southeast corner of the site. The wetland identified in the southeast corner of the site is the only wetland mapped by MassDEP. It is characterized as Wooded Swamp Deciduous. Within this wetland is a certified vernal pool.

Emergency Vehicle Access

Currently, emergency vehicles have access to all sides of the building from the access loop road.

Safety and Security Requirements

The Fox Hill Elementary School is located within a residential neighborhood. The scope of any site design will require careful planning with the Town of Burlington School District and the abutting neighbors to ensure safe and viable access and operation of the facility and the neighborhood. Burlington Public Schools in conjunction with Mass Safe Routes to School Campaign promotes walking, biking and taking the bus to school through encouragement, education, infrastructure improvements and safety enforcement.

School leaders and safety teams work closely with the Burlington Public School facilities staff to ensure that the Fox Hill building meets all safety requirements and is maintained to support safety protocols and procedures. All school doors are locked during the day with only one point of entry. Visitors are granted entry to the building through a buzzer system. Parents/families and visitors are required to enter through the main entrance doors and sign in at the office.

Utilities

Domestic water, electrical power, gas service, stormwater drainage and sanitary sewer are presently available and in use at the Fox Hill Elementary School site.

Domestic Water Service

The site appears to be connected to Burlington's water system via a service connection in Fox Hill Road, just south of its intersection with Westwood Street. One hydrant is present on Fox Hill Road in front of #251 Fox Hill Road, south of the intersection with Westwood Street. There are three hydrants located on site, which include one hydrant located on the south side of the building, adjacent to the access driveway. Two additional hydrants are located on the north side of the building near the parking lot and main entrance.

The adequacy of the water system with respect to pressure should be verified by a hydrant flow test.

Electrical

Overhead electrical lines run via utility poles along Fox Hill Road until just south of the intersection with Westwood Street. The lines continue east/southeast through a wooded area between Fox Hill Road and the school site. These wires appear to connect to the building underground via a transformer located south of the school's northwest octagonal pod.

Stormwater

There are three main drainage features associated with the buildings onsite. The walkway canopy at the northern entrance to the school has downspouts that drain to grade with corrugated plastic pipe extensions to the surrounding area. The modular annex building also drains via downspouts to the surrounding area at grade. These downspouts appeared to be damaged, but in fair condition. The main building drains through roof drains and is assumed to outlet at a culvert that has a headwall at the north end of the parking lot. The parking lot onsite is sloped from west to east, draining to the northeastern corner at a gravel outfall. The specific drainage connections should be confirmed, and the capacity of the piping drainage system and outfall will need to be verified.

Fire Service

The current school building does not have a fire protection system. A hydrant flow test will be conducted during the Preferred Schematic phase of this project.

Sanitary Service

The site appears to be connected to Burlington's sewer system via a manhole at the intersection of Westwood Street and Fox Hill Road. Another sewer manhole is present in Fox Hill Road, just south of its intersection with Westwood Street. Precise locations and capacities of sewer connections will need to be verified with the Burlington Department of Public Works.

Gas Service

A gas line enters the property through Westwood Street and runs along the west side of the building and access roadway. The gas line enters the building from the south side near the loading area. Precise locations will need to be verified.

Athletic Fields / Outdoor Educational Spaces

There are moderately sized play areas located east of the school which include two areas with play structures, a bituminous concrete play area with no structures, raised bed garden and a softball field. The play area surfaces are wood mulch which is not accessible. The paved play area includes a basketball court to the south with two backboards and various painted games. The softball field is equipped with a fence backstop, small equipment storage and benches on either side of the backstop. Currently, the softball field is not accessible.

Opportunities to provide outdoor learning spaces to reinforce the curriculum shall be studied in conjunction with the selection of a preferred schematic.

Site Orientation, Location Considerations and Issues

The existing Fox Hill School has a complex geometry: a decagon with octagon pods at each corner (northeast, northwest, southeast and southwest) with the entrance to the north. Maximizing north/south orientation of the classrooms is an important objective. This will afford the most usable and controllable natural daylighting of these spaces, which is beneficial from an indoor environmental standpoint and will, through the use of daylighting controls of the classroom lighting system, realize significant electrical energy savings. However, the existing school does not take advantage of the site orientation, the octagonal pods have windows facing every direction. Careful consideration will be given to optimize the orientation of any new construction.

PINE GLEN SITE

The Pine Glen Elementary School is located at 4 Pine Glen Way and has an enrollment of 308 students during the 2022-23 academic year. The school is owned by the Town of Burlington and operated by Burlington Public Schools.

The Pine Glen Elementary School is located on a mostly flat property at the intersection of Pine Glen Way and Gardner Way in a residential area of Burlington, Massachusetts. The property slopes down at the northeast towards wet and woodland areas. There are narrow woodland buffers between the property and nearby residential areas to the northwest, south, and southeast. A Conservation Area abuts the site's northeast property line.

The school building is in the center of the open area of the site with four building entries (three pedestrian-focused and one service-focused). The site includes two large parking lots and drop-off drive aisle to the northwest of the school building. North of the school building is a large open multisport lawn area. Various play areas to the southeast of the building include a large fenced in playground, raised garden beds, and two paved play areas with painted games.

A survey of the existing conditions has not been completed.

Structures and Fences

The existing elementary school is a split-level building; the southwest portion of the building is a single-story on grade, the northeast academic portion has two stories with exposed exterior egress stairs on each end. The lower story of the academic wing is half a story below the entry level but has direct access to the field to the northwest. There is one play area with structures in the rear of the building. Other than the existing school and the play areas, there are no other structures on site.

There is a 42-inch height chain link fence that separates the north parking lot from the multipurpose field, the neighbors and Gardner Way. The large play area is surrounded by a 42-inch tall chain link fence.

Site Access, Circulation and Accessibility

The Pine Glen School Site has one main access point from Wilmington Road (Rt. 62) at the northwest of the intersections of Pine Glen Way and Gardner Way (a residential local street leading to Wilmington Road).

A bus loop runs around the western portions of the site and turns at the main entry. This loop surrounds the southern parking lot. A parent drop-off loop begins at the site entry, then travels through the northern parking lot connecting to a horseshoe drop-off loop adjacent to the main entry. The parent vehicles queue in the north parking lot.

The northern side of Pine Glen Way is lined with an asphalt sidewalk, as is the southern side of Gardner Way. The sidewalk from Gardner Way continues along the northern side of the bus loop and connects to the paved area at the main entrance.

No traffic studies have been completed for the Pine Glen Elementary School site. Observations are based on site visits and conversations with school staff.

Many of the walks on the property are in poor condition with cracks and heaves that make the walks not accessible. At road crossings, the walks lack detectable warning panels. From the lower level of the academic wing, classrooms egress out onto steep and uneven ramps that exceed maximum access slope.

If this site is selected, the project will address these deficiencies; all work as part of the project shall be ADA and MAAB compliant.

Parking and Paving

To the north and southwest of the school sit two existing school parking lots with 56 and 30 parking spaces. At the south side of the school, there is a service entrance with 20 parking spaces, of which two are marked as accessible. These accessible parking spaces are approximately 70 feet from the main entrance. At the main entrance, an informal parking area with one marked accessible space is located adjacent to a faded painting of the continental United States.

Code Requirements

The existing main entrance is the only accessible entrance.

ADA/MAAB

The project will address accessibility deficiencies related to the site to the extent required by the MAAB. All work as part of the project scope shall be ADA/MAAB compliant. The area around the school is relatively flat due to the previous development of the site. It is possible to bring the non-compliant pedestrian walkways into compliance with current ADA and MAAB requirements through re-paving and minor re-grading. Additional handicap parking spaces could be added to the staff parking lot with minor modifications to meet current ADA and MAAB requirements. A comprehensive approach to the site design will be part of the project scope, considering separation of buses from automobiles and safe accessible parking and routes to school. Crosswalks shall be modified to incorporate curb cuts, ramps, tactile warning surfaces, and striping compliant with MAAB guidelines and Town of Burlington standards.

Zoning Setbacks and Limitations

The Pine Glen Elementary School site is located withing the Town of Burlington's One-Family Dwelling (RO) zoning district. Abutting sites are also zoned RO zoning district. Educational uses and childcare facilities in this zoning district are only subject to the minimum yards, minimum lot frontage and twenty-five (25) percent maximum aggregate building to ground area percentage. Building yard requirements are 25-foot front, 15-foot side, and 15-foot rear. Minimum lot frontage is 100 feet. Height limit in RO zoning district is 30 feet; however section 5.1.4 of the Burlington Zoning Bylaws exempts schools from this requirement.

Easements

There are no known easements on the Pine Glen site.

Wetlands and/or Flood Restrictions

There are no MassDEP designated wetlands on the site. However, there appear to be wetlands in the forested area northeast of the school adjacent to a stream running northwest-southeast into the Pine Glen Conservation Area. More detailed wetland delineation would be needed to confirm the limits of the resource areas.

Emergency Vehicle Access

Currently, there is emergency access to the front and south side of the school. There is limited access to the north or rear of the school. The design team will meet with public safety officials, including the police and fire departments, during the design process to ensure that their requirements are incorporated into the preferred solution.

Safety and Security Requirements

The Pine Glen Elementary School is located within a residential neighborhood. The scope of any site design will require careful planning with the Town of Burlington School District and the abutting neighbors to ensure safe and viable access and operation of the facility and the neighborhood. Burlington Public Schools in conjunction with Mass Safe Routes to School Campaign promotes walking, biking and taking the bus to school through encouragement, education, infrastructure improvements and safety enforcement.

School leaders and safety teams work closely with the Burlington Public School facilities staff to ensure that the Pine Glen building meets all safety requirements and is maintained to support safety protocols and procedures. All school doors are locked during the day with only one point of entry. Visitors are granted entry to the building through a buzzer system. Parents/families and visitors are required to enter through the main entrance doors and sign in at the office.

Utilities

Domestic water, electrical power, gas service, stormwater drainage and sanitary sewer are presently available and in use at the Pine Glen Elementary School site.

Domestic Water Service

The site appears to be connected to Burlington's water system via a service connection from Pine Glen Way. One hydrant is present in a grassy area between the northern and southern parking lots. A second hydrant is located in a grassy area on the southern edge of the smaller parking lot along the southern edge of the site. A third hydrant is located immediately north of the school building in the grassy area, towards the middle of the building. A fourth hydrant is in a fenced area to the north of building.

The adequacy of the water system with respect to pressure will be verified by a hydrant flow test.

Electrical

Overhead electrical lines run via utility poles along Pine Glen Way and Gardner Way. These lines connect the building via a utility pole in the grassy area between the northern and southern parking lots, then underground via an electrical manhole in the informal parking area northwest of the school building's covered pedestrian walkway, and a transformer in the grassy courtyard north of the pedestrian walkway. A generator is also present in this area. Precise locations will need to be field verified.

Storm Drainage

Parking areas appear to sheet flow to adjacent grassy areas, and erosion was visible in some of these locations. Additional stormwater management is recommended in these areas.

The building's roof appears to be drained by a series of downspouts around the edges of the building. These downspouts are in various conditions. Most direct runoff to the area immediately adjacent to the building. In some spots, this area is impervious; in others, it is pervious (grass); and in other areas, there is a gravel strip. Some downspouts also have corrugated plastic pipe extensions to direct runoff to adjacent pervious (i.e., grassy) areas. A few of the downspouts on the northeast side of the building are connected to a subsurface stormwater infrastructure. It is assumed these downspouts along with the catch basin in the northern parking lot drain and outlet to a headwall that is on the north side of the property at the edge of the tree line. Improved and consistent stormwater management is recommended for the building's roof runoff.

More specific drainage connections should be confirmed, and the capacity of the closed drainage system and subsurface stormwater system will need to be verified.

Fire Service

The current school building does not have a fire protection system.

Sanitary

The site appears to be connected to Burlington's sewer system via a manhole at the intersection of Gardner Way and Pine Glen Way. The sewer service appears to exit the building via a manhole north of the school building's covered pedestrian walkway entrance and travel west/northwest to two manholes in the grassy area between the northern and southern parking lots. From there, the sewer service appears to continue west/northwest under the grassy area to the sewer manhole at the intersection of Gardner Way and Pine Glen Way. Precise locations and capacities of the sewer connections will need to be verified with the Burlington Department of Public Works.

Natural Gas

Based on utility markings (i.e., "dig safe") present on the ground in Pine Glen Way during a site visit, gas appears to enter the site from a 2-inch service connection at the intersection of Gardner Way and Pine Glen Way. Gas enters the building in the northwest corner of the northern section of the building, under an exterior staircase. Precise locations will need to be field verified.

Athletic Fields / Outdoor Educational Spaces

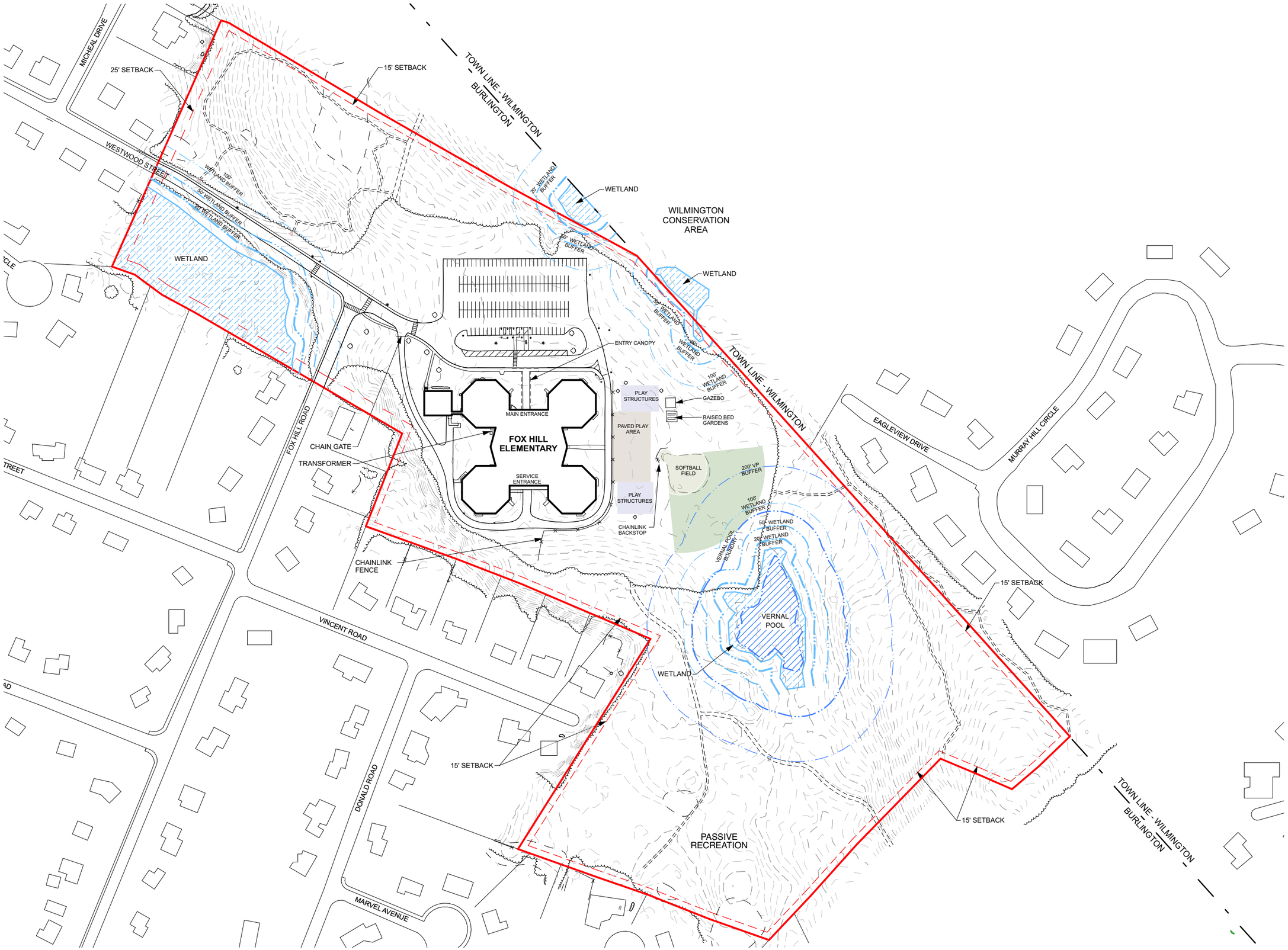
There is a large multipurpose field area located north of the school. Several play areas are located behind the school to the east. The largest has many activity structures surrounded by a chain link fence with two paved asphalt paths connected to the school. The other two play areas are bituminous concrete, one is a half basketball court with a backstop and the other has faded painted lines. A small grouping of raised garden beds is located close to the school.

Opportunities to provide outdoor learning spaces to reinforce the curriculum shall be studied in conjunction with the selection of a preferred schematic.

Site Orientation, Location Considerations and Issues

The existing building is oriented such that the academic wing windows face northeast and southwest. The gymnasium and cafeteria have large curtainwalls facing southeast from the gym and northwest from the cafeteria.

Maximizing north/south orientation of the classrooms is an important objective. This will afford the most usable and controllable natural daylighting of these spaces, which is beneficial from an indoor environmental standpoint and will, through the use of daylighting controls of the classroom lighting system, realize significant electrical energy savings. The existing school does not take advantage of optimum site orientation. Careful consideration will be given to optimize the building orientation of any new construction.



FOX HILL ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING SITE SURVEY

- Structures and fences
- Code requirements
- Zoning setback and limitations
- Easements
- Wetlands and/or flood restrictions
- Athletic fields and outdoor educational space
- Site orientation

LEGEND

- PROPERTY LINE
- ZONING SETBACK
- FENCE
- WETLAND BUFFER
- VERNAL POOL BUFFER ZONE
- WETLAND
- VERNAL POOL

NOTES:

1. The project site is located within the One-Family Dwelling (RO) zoning district. Abutting sites are also zoned RO Zoning district.

2. Dimensional regulations for RO District:
   Front Yard: 25' min setback
   Side Yard: 15' min setback
   Rear Yard: 15' min setback

0 100 200

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners

FOX HILL ELEMENTARY SCHOOL

BURLINGTON, MA

LEGEND

- BUILDING
- DECK
- CONCRETE PAD
- BUILDING OBSCURED
- STEPS
- BLEACHERS
- STRUCTURE
- PAVED ROAD
- TRAIL/WALK
- SIDEWALK
- CURB OBSCURED
- CROSSWALK
- CURB TOP OBSCURED
- CURB BACK OBSCURED
- PARKING LINE
- PAVEMENT OBSCURED
- DRIVEWAY
- DRIVEWAY OBSCURED
- RAMP/DOCK
- CURB BOTTOM
- CURB TOP
- CURB BACK
- PAINTED LINE
- FENCE
- RETAINING WALL
- SOLID WALL
- FENCE OBSCURED
- WALL OBSCURED
- STONEWALL
- GENERAL OUTLINE
- UTILITIES
- LOCATED OBJECT
- TREELINE
- HEDGES
- DENSE WOOD LIMIT
- ATHL FIELD OUTLINE
- SHRUBBERY
- INDEX CONTOUR

- ARROW
- CATCH BASIN
- LIGHT POLE
- FIRE HYDRANT
- SIGN
- FLAG POLE
- LOCATED OBJECT
- UTILITY POLE
- POST
- UTILITY POLE OBSCURED
- UTILITY COVER
- MEDIUM LONE TREE
- SMALL LONE TREE
- SHRUBS
- SPOT ELEVATION
- ROCK
- HANDICAP
- SIGN OBSCURED
- 93.7 / 12"M — PROMINENT DECIDUOUS TREE WITH ELEVATION, SIZE AND SPECIES
- 96.2 / 18"P — PROMINENT CONIFEROUS TREE WITH ELEVATION, SIZE AND SPECIES
- CI — CAST IRON
- PVC — POLYVINYL CHLORIDE
- GAS METER
- CU — CONNECTION UNKNOWN
- (R) — RECORD
- (C) — CALCULATED
- (FD) — FOUND
- DH — DRILL HOLE
- DHCB — DRILL HOLE IN CONCRETE BOUND
- I.PIPE — IRON PIPE
- I.ROD — IRON ROD
- BIT. CONC. — BITUMINOUS CONCRETE
- TEST PIT (SEE NOTE 12)
- BORING (SEE NOTE 11)
- LEDGE OUTCROP

- EDGE OF WOOD TRAIL
- 6"CI — SEWERLINE & MANHOLE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION
- SS — SEPTIC SYSTEM PIPE (SEE NOTE 9)
- 10"CONC. — ROOF DRAIN LINE WITH PIPE SIZE, MATERIAL, FLOW DIRECTION, & CATCHBASIN
- WV, GV, M — WATER MAIN, TEE, GATE VALVE & FIRE HYDRANT
- GV, G — GAS MAIN WITH GATE VALVE
- E — UNDERGROUND ELECTRIC LINES
- WF3 108 — LIMIT OF BORDERING VEGETATED WETLAND WITH FLAG NUMBER
- LIMIT OF 20-FOOT NO-DISTURB BUFFER ZONE
- LIMIT OF 50-FOOT NO-BUILD BUFFER ZONE
- LIMIT OF 100-FOOT WETLAND BUFFER ZONE
- VP109 — LIMIT OF VERNAL POOL WITH FLAG NUMBER
- LIMIT OF 100-FOOT VERNAL POOL BUFFER ZONE
- LIMIT OF 200-FOOT VERNAL POOL BUFFER ZONE
- LIMIT OF FEMA FLOOD ZONE X

MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (NAD 83)

ASSESSORS: MAP 9, LOT 47

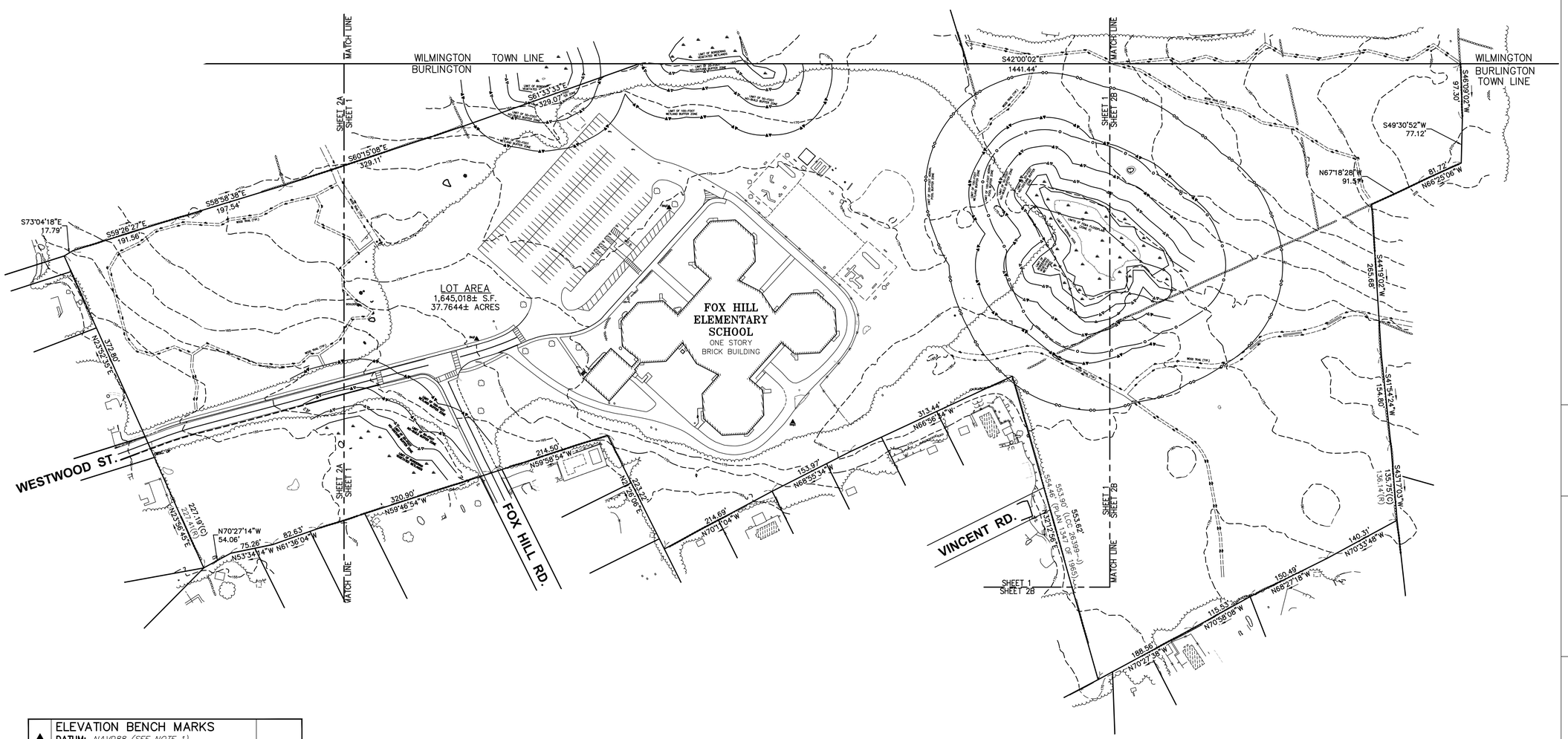
RECORD OWNER: TOWN OF BURLINGTON

REFERENCES:

DEED BOOK 10963, PAGE 296 (TAKING)
PLAN #1347 OF 1965
L.C. PLAN #26399-J
L.C. PLAN #28877-B
L.C. PLAN #38128-C
L.C. PLAN #40347-A

NOTES:

1. THE HORIZONTAL DATUM FOR THIS SURVEY IS THE MASSACHUSETTS COORDINATE SYSTEM, NAD 1983, MAINLAND ZONE. THE VERTICAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). SAID DATUMS WERE ESTABLISHED VIA GPS OBSERVATIONS UTILIZING NAD83 (NA2011) EPOCH 2010.00 (MYCS2) AND GEOID 18.
2. TOPOGRAPHY SHOWN HEREON FROM INFORMATION OBTAINED BY PHOTOGRAMMETRIC METHODS BY EASTERN TOPOGRAPHICS FROM PHOTOGRAPHS TAKEN ON JANUARY 26, 2018 AND SUPPLEMENTED WITH FIELD SURVEY.
3. TOWN LINE SHOWN HEREON FROM PLAN #1347 OF 1965.
4. WETLAND RESOURCE AREAS SHOWN HEREON WERE DELINEATED BY HORSLEY WITTEN GROUP ON 2/22/2023 AND 3/13/2023 AND LOCATED BY HANCOCK ASSOCIATES ON 3/17/2023.
5. UNDERGROUND UTILITIES SHOWN HEREON ARE COMPILED FROM FIELD LOCATIONS OF STRUCTURES AND FROM AVAILABLE RECORD INFORMATION ON FILE AT THE TOWN D.P.W. AND UTILITY COMPANIES. OTHER UNDERGROUND UTILITIES MAY EXIST. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, SIZE & ELEVATION OF ALL UTILITIES WITHIN THE AREA OF PROPOSED WORK AND TO CONTACT "DIG-SAFE" AT 811 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION OR CONSTRUCTION.
6. EVIDENCE OF UNDERGROUND ELECTRIC LINES EXIST ON SITE. NO UNDERGROUND ELECTRIC UTILITY INFORMATION WAS PROVIDED BY EVERSOURCE.
7. NO UNDERGROUND TELEPHONE INFORMATION WAS PROVIDED BY VERIZON.
8. BUILDING OFFSETS SHOWN HEREON ARE TO CORNER BRICK UNLESS OTHERWISE NOTED.
9. SEPTIC SYSTEM AND ROOF DRAIN SYSTEM SHOWN HEREON FROM PLAN ENTITLED "SITE PLAN UTILITIES, ELEMENTARY SCHOOL NO. 5" BY J. WILLIAMS BEAL, SONS, GRANGER & POSKUS, DATED 9/17/1965. BURLINGTON ENGINEERING DEPARTMENT HAS NO RECORD OF THE SEPTIC SYSTEM BEING INSTALLED AND NO SURFACE EVIDENCE EXISTS ON SITE.
10. FEMA FLOODPLAIN (ZONE X) SHOWN HEREON SCALED FROM FEMA FLOOD MAP 25017C0293E BEARING AN EFFECTIVE DATE OF 6/4/2010.
11. BORINGS SHOWN HEREON WERE PERFORMED BY NORTHERN DRILL SERVICES, INC. ON FEBRUARY 20 & 21, 2023, OBSERVED BY LAHLAF GEOTECHNICAL CONSULTING, INC., AND OBSERVED BY HANCOCK ASSOCIATES ON MARCH 16, 2023.
12. TEST PITS SHOWN HEREON WERE PERFORMED BY SAUNDERS CONSTRUCTION ON FEBRUARY 21, 2023, OBSERVED BY LAHLAF GEOTECHNICAL CONSULTING, INC., AND LOCATED BY HANCOCK ASSOCIATES ON MARCH 16, 2023.



▲	ELEVATION BENCH MARKS DATUM: NAVD88 (SEE NOTE 1)	
NO.	DESCRIPTION	ELEV.
1.	LIGHT POLE – SOUTHEAST BOLT 1' A.G.	171.03
2.	HYDRANT – BOLT WITH MARKER "X"	178.54
3.	HYDRANT – BOLT WITH MARKER "X"	177.09

SCALE: 1" = 80'
0 80 160 320

DINISCO DESIGN
architects + planners
99 Chauncy Street, Suite 901
Boston, MA 02111
(617) 426-2858

Horsley Witten Group
Civil Engineers
90 Route 6A, Unit 1
Sandwich, MA 02563
(508) 833-6600

Terraink, Inc.
Landscape Architects
7 Central Street, Suite 150
Arlington, MA 02476
(781) 316-1595

Foley Buhl Roberts & Assoc., Inc.
Structural Engineers
2150 Washington Street
Newton, MA 02462
(617) 527-9600

Crabtree McGrath Assoc., Inc.
Food Service Consultants
161 West Main Street
Georgetown, MA 01833
(978) 352-8500

VAV International, Inc.
Plumbing & Mechanical Engineers
400 West Cummings Park S. 4700
Woburn, MA 01801
(781) 935-7228

Thompson Engineering Company, Inc.
Electrical Engineers
89 Newbury Street
Danvers, MA 01923
(617) 886-9066

EdVance Technology Design, Inc.
Technology Consultants
300 Brickstone Square, Suite 201
Andover, MA 01880
(978) 256-9900

PARE Corporation
Traffic Engineers
8 Blackstone Valley Place
Lincoln, RI 02865
(401) 334-4100

LGCI
Geotechnical Engineers
100 Chelmsford Road, Suite 2
Billerica, MA 01862
(978) 330-5056

Hancock Associates
Surveyor
185 Centre Street
Danvers, MA 09123
(978) 777-3050

NORTH ARROW | LICENSE STAMP

Date: 11 MAY 2023

Drawn By: EME

Scale: 1"=80'

Revisions

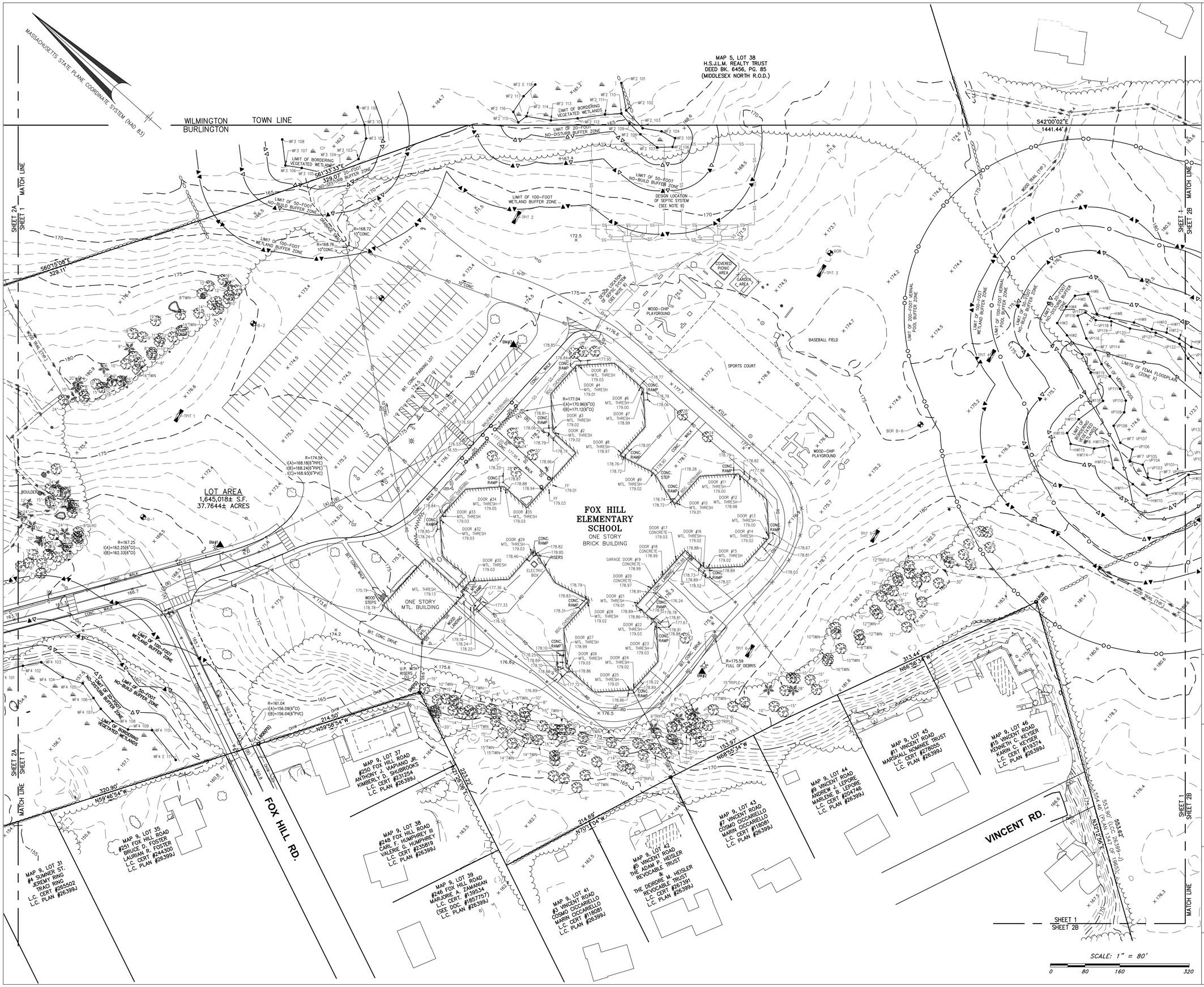
Number	Date	Description

PRELIMINARY DESIGN PROGRAM

KEY SHEET

1.0.00

© 2023 DiNisco Design - [30" x 42"] - 4/5/23



FOX HILL ELEMENTARY SCHOOL

BURLINGTON, MA

DINISCO DESIGN
architects + planners
99 Chauncy Street, Suite 901
Boston, MA 02111
(617) 426-2858

Horsley Witten Group
Civil Engineers
90 Route 6A, Unit 1
Sandwich, MA 02563
(508) 833-6600

Terraink, Inc.
Landscape Architects
7 Central Street, Suite 150
Arlington, MA 02476
(781) 316-1595

Foley Buhl Roberts & Assoc., Inc.
Structural Engineers
2150 Washington Street
Newton, MA 02462
(617) 527-9600

Crabtree McGrath Assoc., Inc.
Food Service Consultants
161 West Main Street
Georgetown, MA 01833
(978) 352-8500

VAV International, Inc.
Plumbing & Mechanical Engineers
400 West Cummings Park S. 4700
Woburn, MA 01801
(781) 935-7228

Thompson Engineering Company, Inc.
Electrical Engineers
89 Newbury Street
Danvers, MA 01923
(617) 886-9066

EdVance Technology Design, Inc.
Technology Consultants
300 Brickstone Square, Suite 201
Andover, MA 01880
(978) 256-9900

PARE Corporation
Traffic Engineers
8 Blackstone Valley Place
Lincoln, RI 02865
(401) 334-4100

LGCI
Geotechnical Engineers
100 Chelmsford Road, Suite 2
Billerica, MA 01862
(978) 330-5056

Hancock Associates
Surveyor
185 Centre Street
Danvers, MA 09123
(978) 777-3050

NORTH ARROW | LICENSE STAMP

Date: 11 MAY 2023

Drawn By: EME

Scale: 1"=40'

Revisions

Number	Date	Description

PRELIMINARY DESIGN PROGRAM

EXISTING CONDITIONS - CENTER

1.0.01

© 2023 DiNisco Design - [30" x 42"] - 4/5/23

FOX HILL ELEMENTARY SCHOOL

BURLINGTON, MA

DINISCO DESIGN
architects + planners

99 Chauncy Street, Suite 901
Boston, MA 02111
(617) 426-2858

Horsley Witten Group
Civil Engineers
90 Route 6A, Unit 1
Sandwich, MA 02563
(508) 833-6600

Terraink, Inc.
Landscape Architects
7 Central Street, Suite 150
Arlington, MA 02476
(781) 316-1595

Foley Buhl Roberts & Assoc., Inc.
Structural Engineers
2150 Washington Street
Newton, MA 02462
(617) 527-9600

Crabtree McGrath Assoc., Inc.
Food Service Consultants
161 West Main Street
Georgetown, MA 01833
(978) 352-8500

VAV International, Inc.
Plumbing & Mechanical Engineers
400 West Cummings Park S. 4700
Woburn, MA 01801
(781) 935-7228

Thompson Engineering Company, Inc.
Electrical Engineers
89 Newbury Street
Danvers, MA 01923
(617) 886-9066

EdVance Technology Design, Inc.
Technology Consultants
300 Brickstone Square, Suite 201
Andover, MA 01880
(978) 256-9900

PARE Corporation
Traffic Engineers
8 Blackstone Valley Place
Lincoln, RI 02865
(401) 334-4100

LGCI
Geotechnical Engineers
100 Chelmsford Road, Suite 2
Billerica, MA 01862
(978) 330-5056

Hancock Associates
Surveyor
185 Centre Street
Danvers, MA 09123
(978) 777-3050

NORTH ARROW | LICENSE STAMP

Date: 11 MAY 2023

Drawn By: EME

Scale: 1"=40'

Revisions

Number	Date	Description

PRELIMINARY DESIGN PROGRAM

EXISTING CONDITIONS - EAST & WEST

1.0.02

© 2023 DiNisco Design - [30" x 42"] - 4/5/23

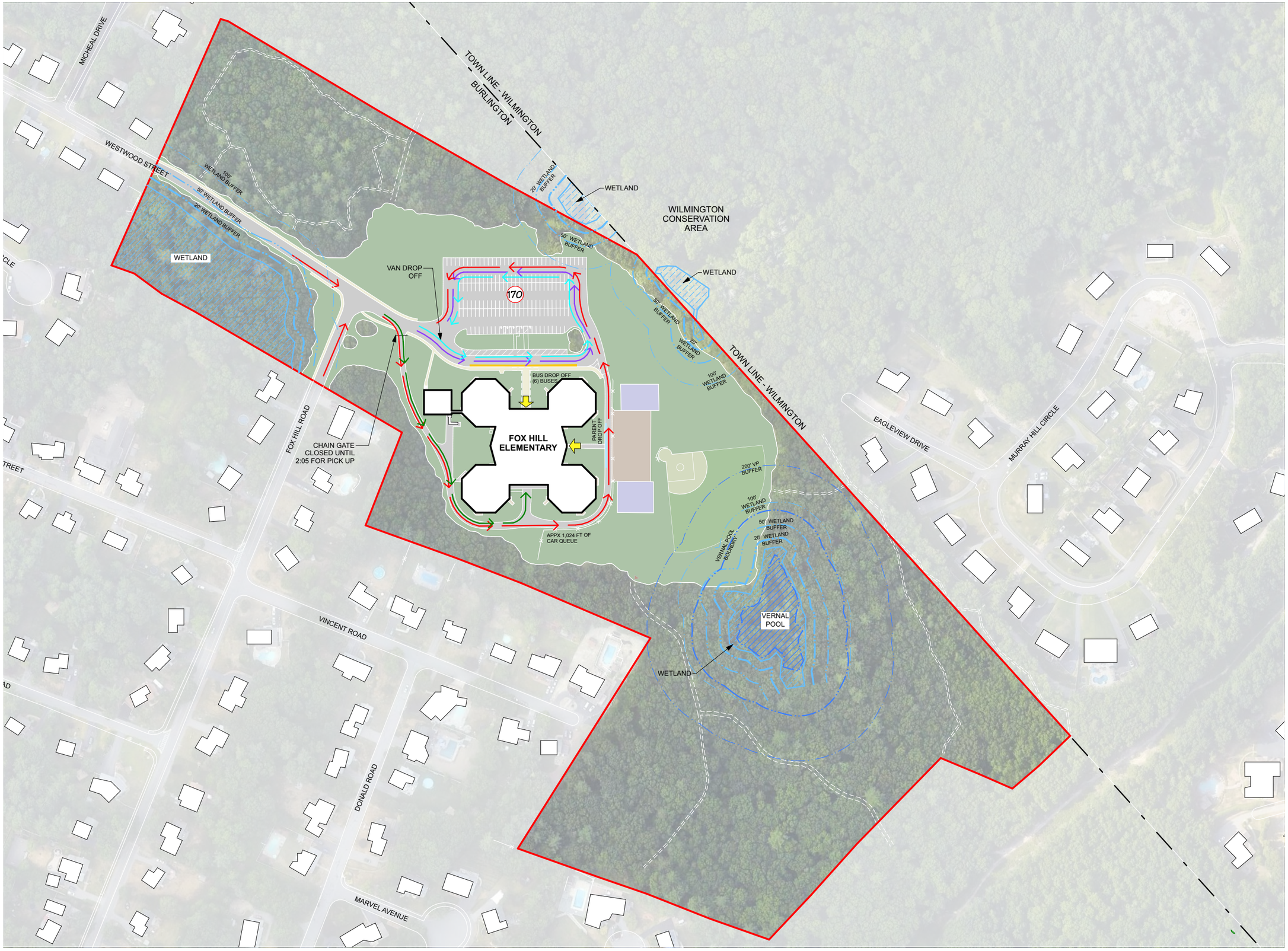
FOX HILL ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING PARKING & VEHICULAR CIRCULATION

- Site access and circulation
- Parking and paving



LEGEND

- BUSES
- VANS
- CARS
- SERVICE
- BUILDING ENTRANCE
- XX PARKING SPACES
- PARENT DROP-OFF/PICK-UP
- BUS DROP-OFF/PICK-UP

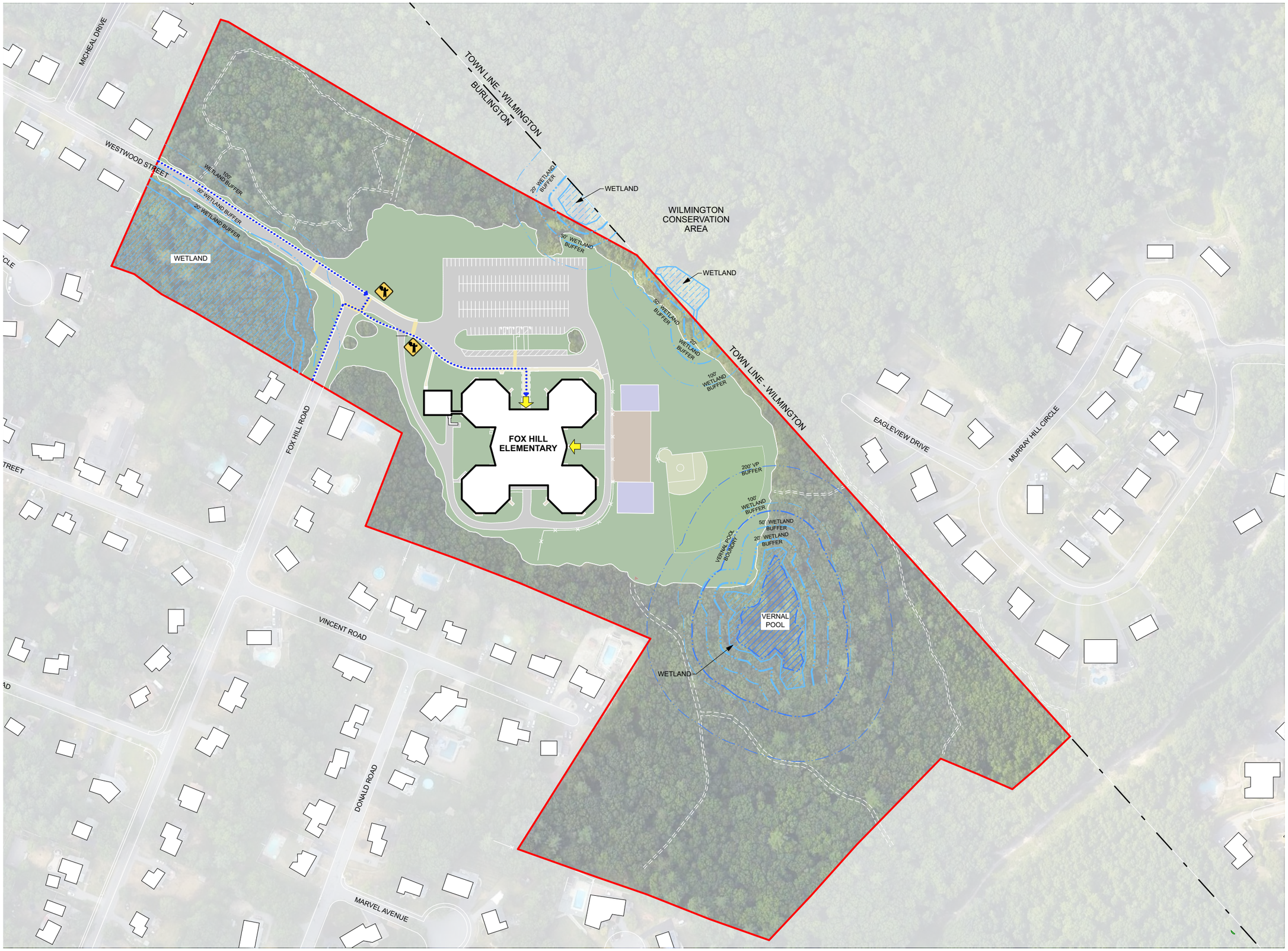
0 100 200

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



FOX HILL ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING PEDESTRIAN CIRCULATION

- Site access and circulation

LEGEND

- PEDESTRIAN CIRCULATION
- BUILDING ENTRANCE
- CROSSWALK
- INTERSECTIONS w/ CROSSING GUARDS

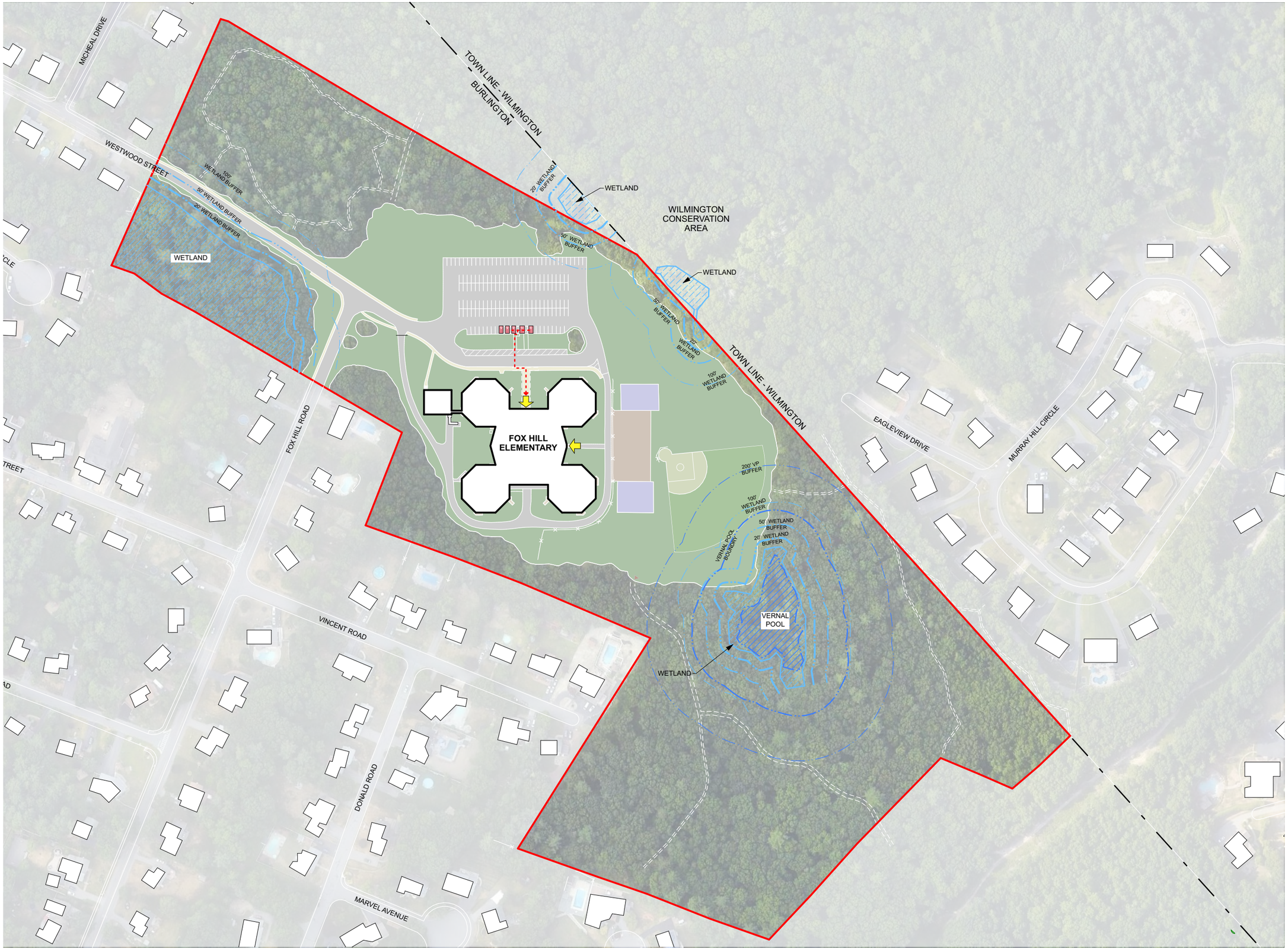
0 100 200

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



FOX HILL ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING ACCESSIBILITY

- Accessibility requirements

LEGEND

- ACCESSIBLE PARKING
- PATH OF TRAVEL
- BUILDING ENTRANCE

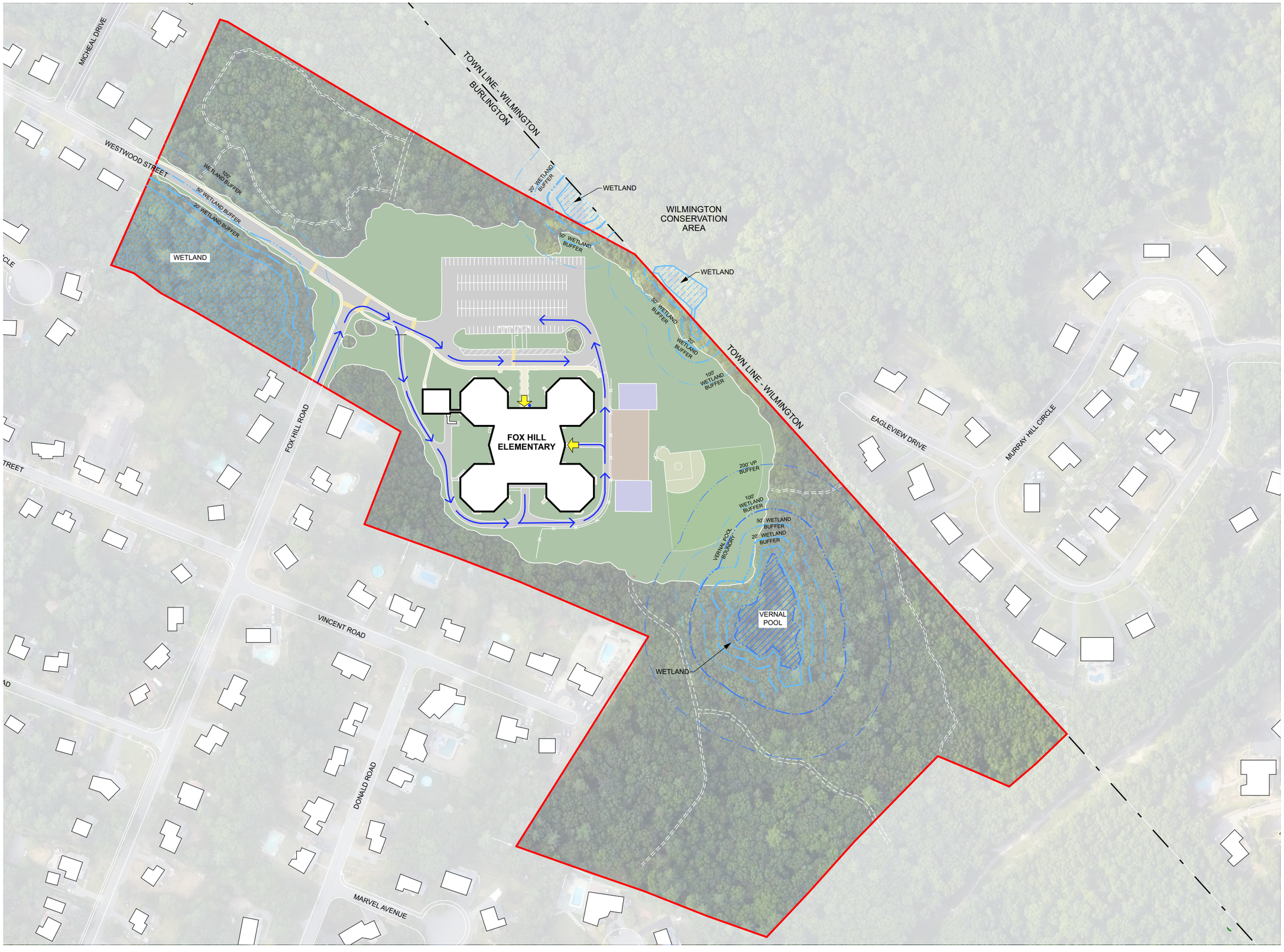
0 100 200

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



FOX HILL ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING SAFETY AND SECURITY

- Emergency vehicle access
- Site safety & security

LEGEND

- BUILDING ENTRANCE
- VIDEO PHONE
- CROSSWALK
- EMERGENCY VEHICLES

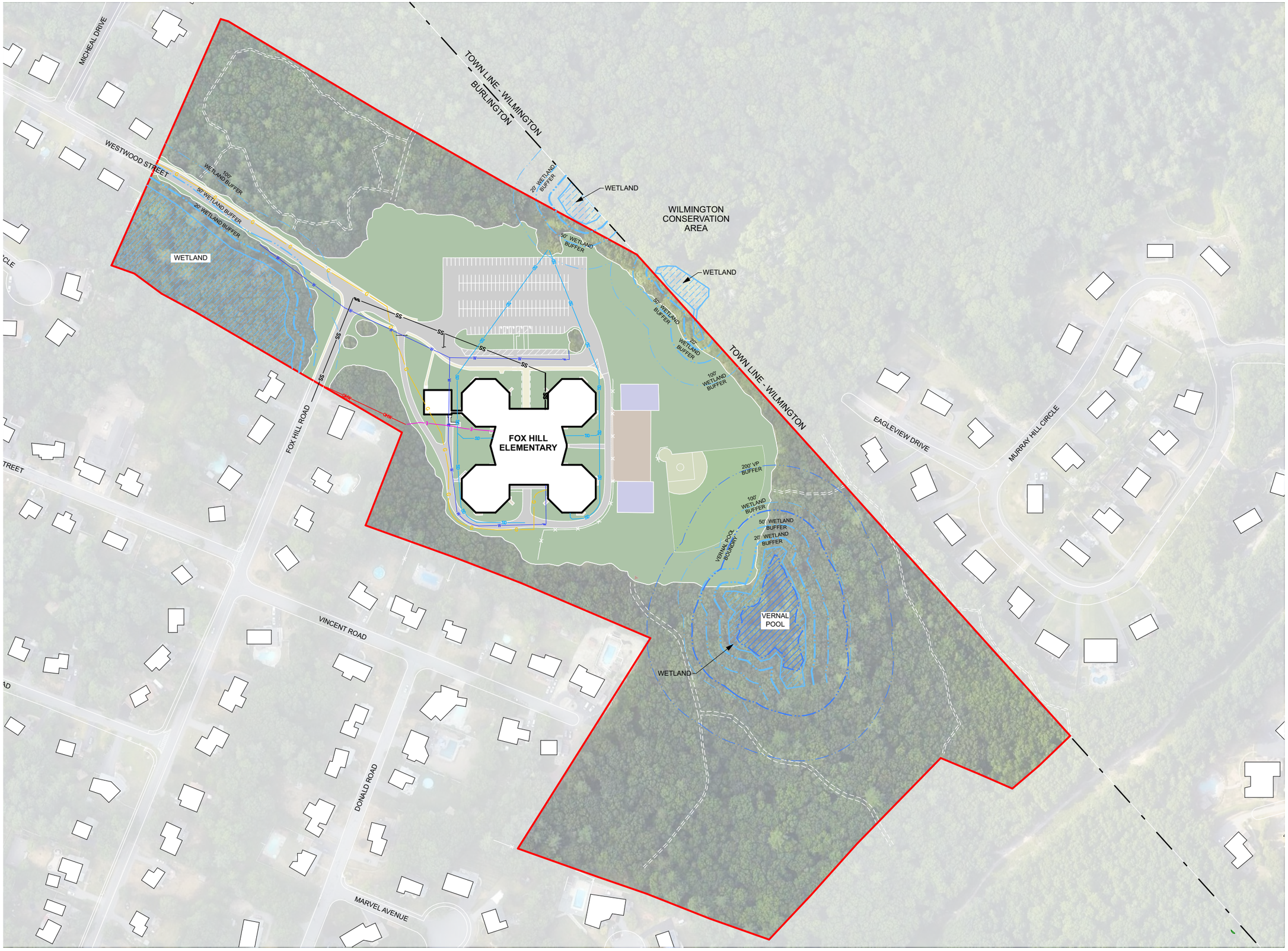
0 100 200

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



FOX HILL ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING UTILITIES

- Utilities

LEGEND

W	WATER LINE
G	GAS LINE
SS	SEWER LINE
OHW	OVERHEAD WIRE
E	ELECTRIC DUCTBANK
SD	STORM DRAIN

Notes:

1. For additional information on line sizes, meter/fixture locations, and additional underground structures, refer to Existing Conditions survey.

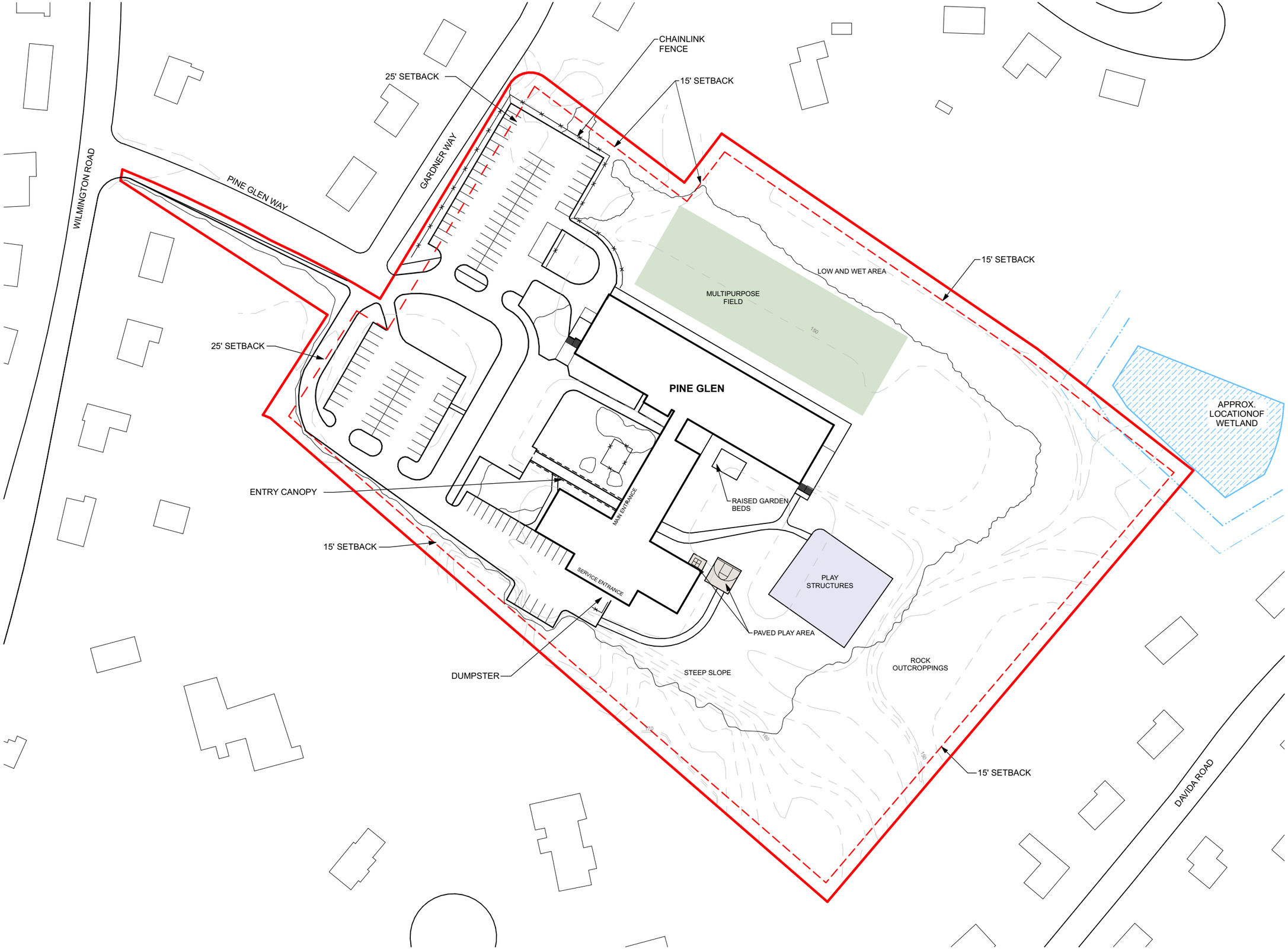
0 100 200

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



PINE GLEN ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING SITE SURVEY

- Structures and fences
- Code requirements
- Zoning setback and limitations
- Easements
- Wetlands and/or flood restrictions
- Athletic fields and outdoor educational space
- Site orientation

LEGEND

- PROPERTY LINE
- ZONING SETBACK
- FENCE
- WETLAND BUFFER
- WETLAND

NOTES:

1. The project site is located within the One-Family Dwelling (RO) zoning district. Abutting sites are also zoned RO Zoning district.

2. Dimensional regulations for RO District:
   Front Yard: 25' min setback
   Side Yard: 15' min setback
   Rear Yard: 15' min setback

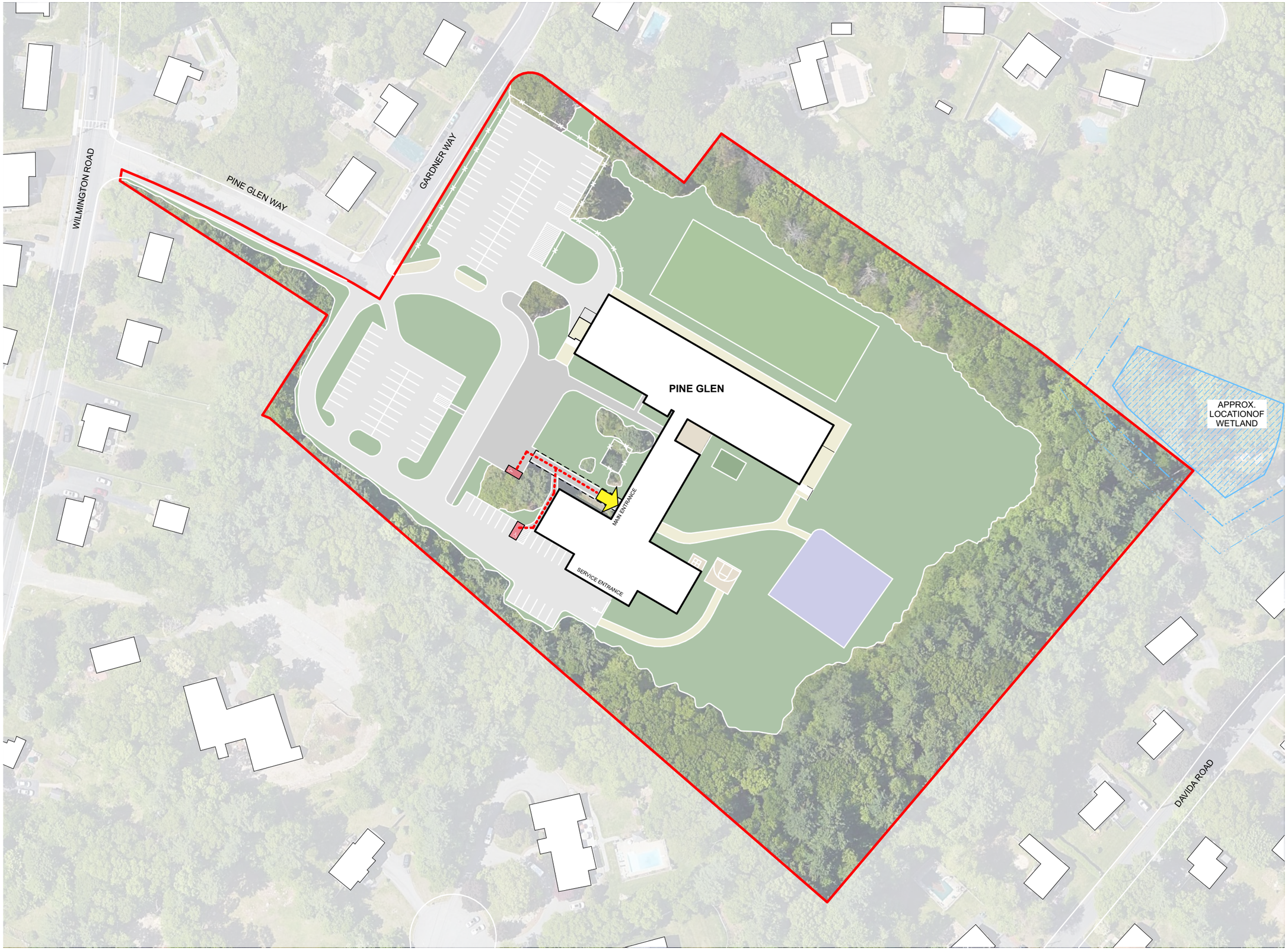
0 50 100

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



PINE GLEN ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING ACCESSIBILITY

- Accessibility requirements

LEGEND

ACCESSIBLE PARKING

PATH OF TRAVEL

BUILDING ENTRANCE

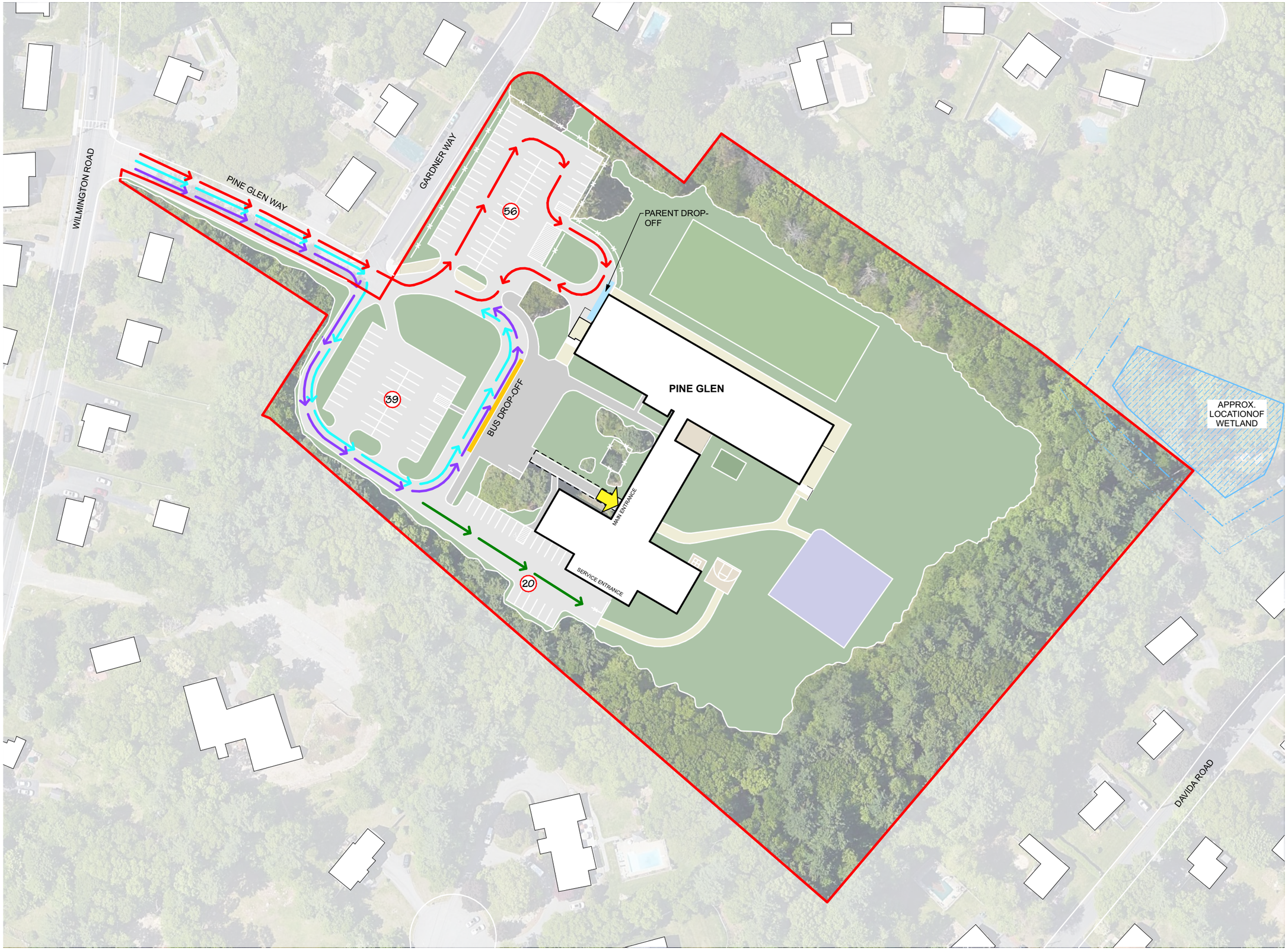
0 50 100

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



PINE GLEN ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING PARKING & VEHICULAR CIRCULATION

- Site access and circulation
- Parking and paving

LEGEND

- BUSES
- VANS
- CARS
- SERVICE
- BUILDING ENTRANCE
- XX PARKING SPACES
- PARENT DROP-OFF/PICK-UP
- BUS DROP-OFF/PICK-UP

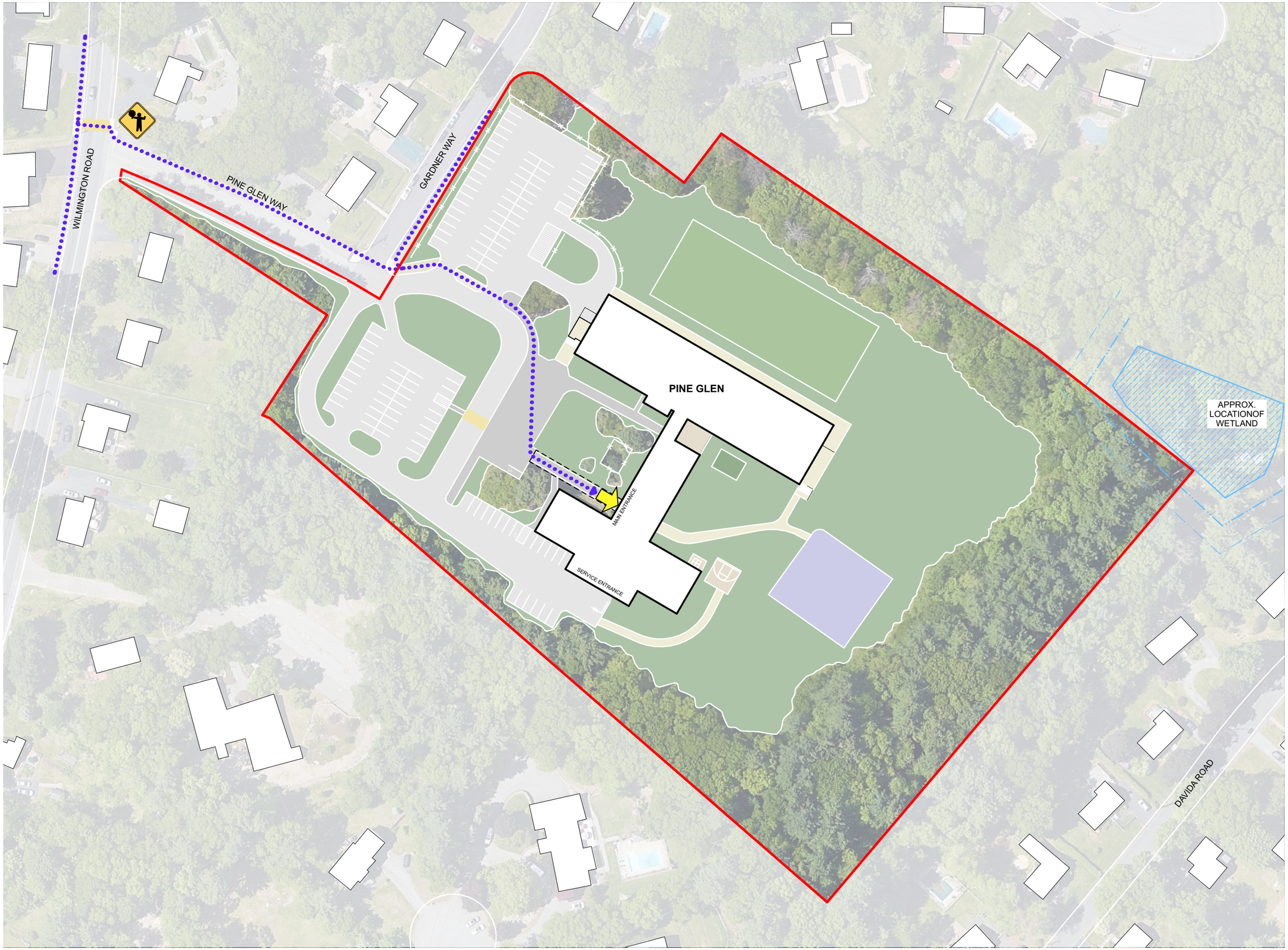
0 50 100

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



PINE GLEN ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING PEDESTRIAN CIRCULATION

- Site access and circulation

LEGEND

- PEDESTRIAN CIRCULATION
- BUILDING ENTRANCE
- CROSSWALK
- INTERSECTIONS w/ CROSSING GUARDS

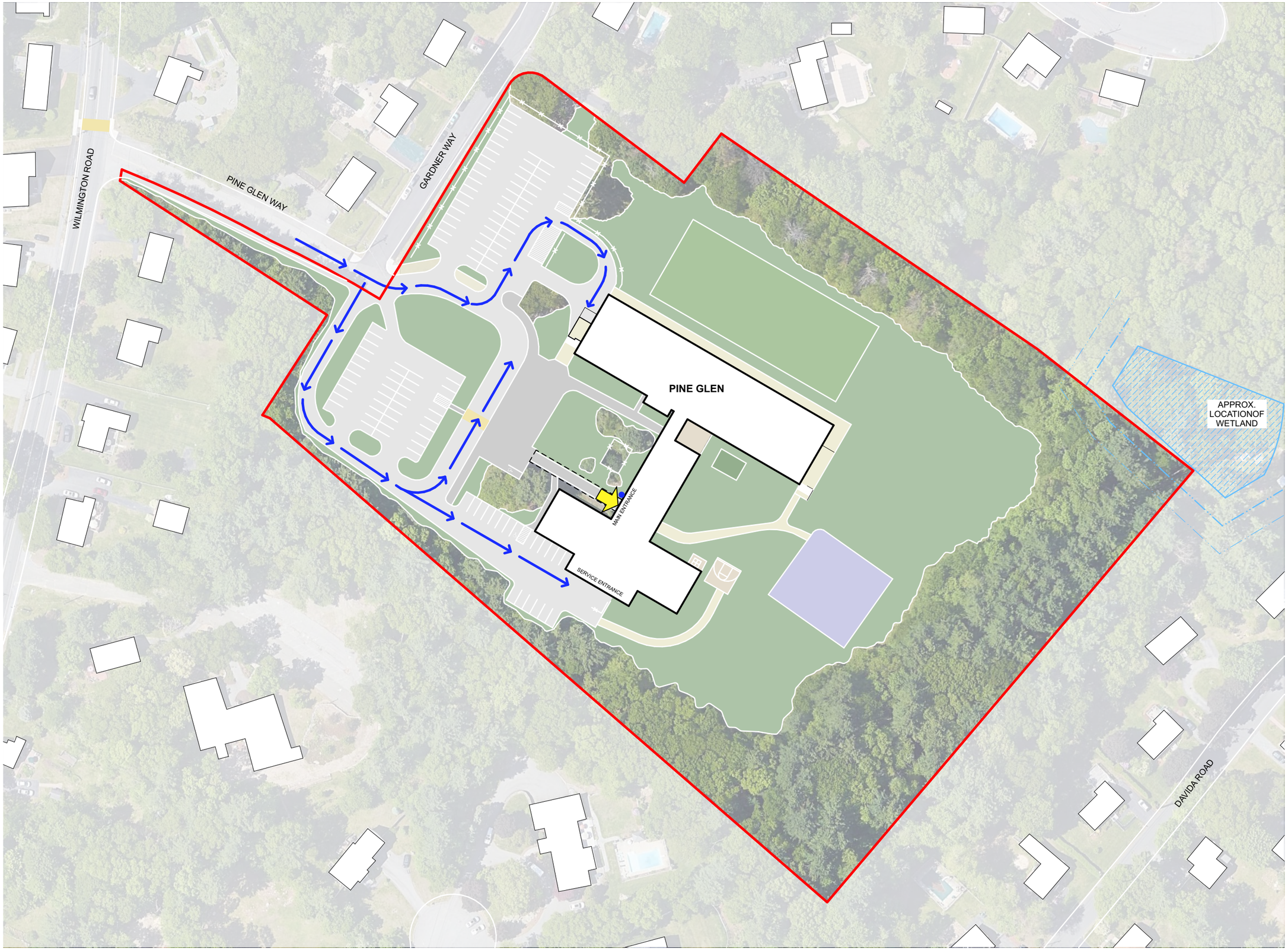
0 50 100

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



PINE GLEN ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING SAFETY AND SECURITY

- Emergency vehicle access
- Site safety & security

LEGEND

- BUILDING ENTRANCE
- VIDEO PHONE
- CROSSWALK
- EMERGENCY VEHICLES

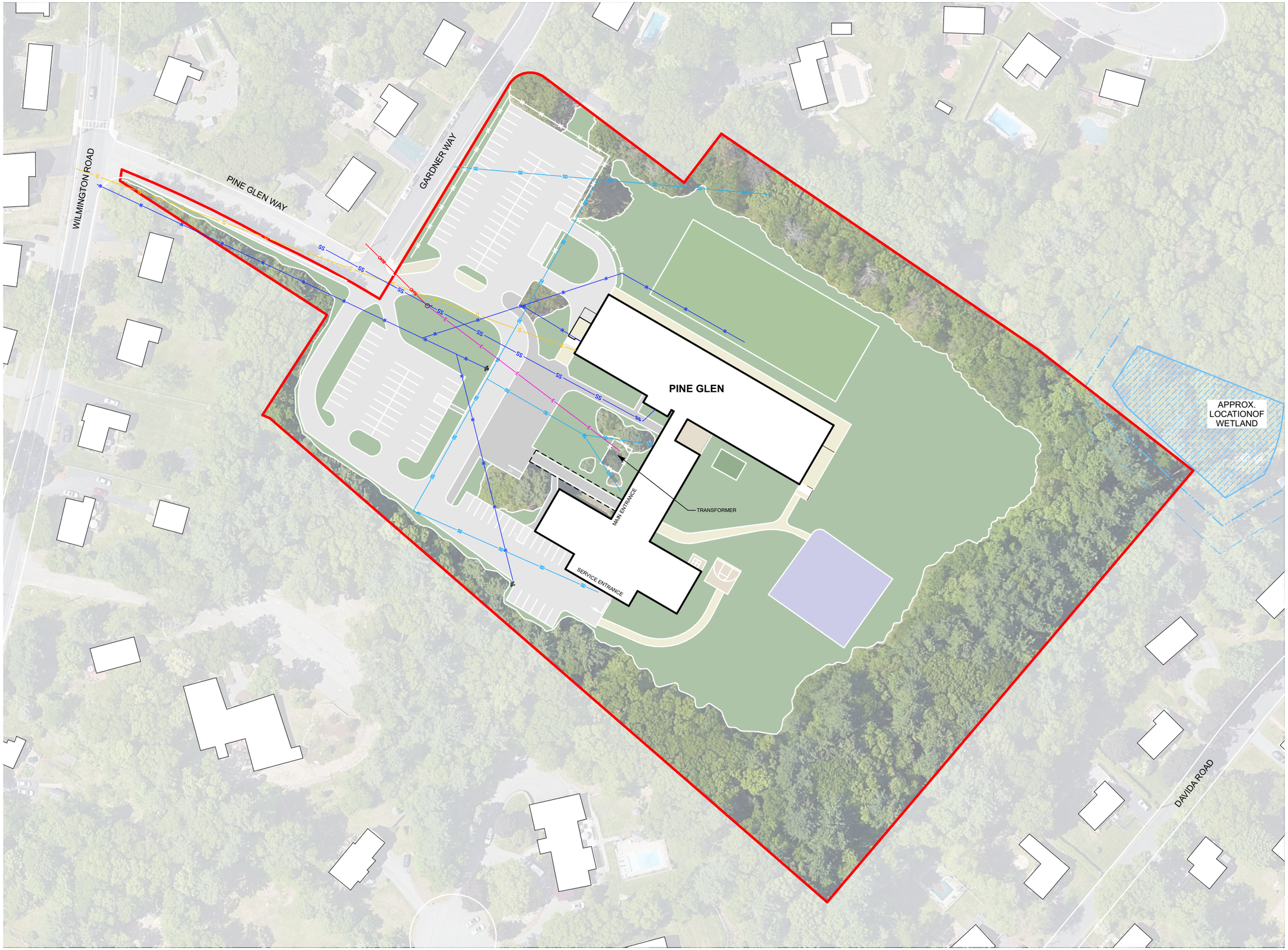
0 50 100

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners



PINE GLEN ELEMENTARY SCHOOL

Burlington, MA

PRELIMINARY DESIGN PROGRAM

EXISTING UTILITIES

- Utilities

LEGEND

- WATER LINE
- GAS LINE
- SEWER LINE
- OVERHEAD WIRE
- ELECTRIC DUCTBANK
- STORM DRAIN

0 50 100

N

14 JULY 2023

© 2022

DINISCO DESIGN
architects + planners

6 PRELIMINARY EVALUATION OF ALTERNATIVES

School Assignment Practices

Tuition Agreements

Rental or Acquisition of Existing Buildings

Code Upgrade Option

Renovation and/or Addition Options

New Building Options & Potential Locations

Cost Summary of Options

PRELIMINARY EVALUATION OF ALTERNATIVES

Introduction

The broad variety of possibilities for the Fox Hill Elementary School have been investigated and evaluated based upon the educational program, initial space summaries, existing conditions and site development requirements. The preliminary alternatives identify concepts that are educationally appropriate and cost effective, so further evaluation may be conducted prior to arriving at a preferred solution.

As part of the process, in addition to evaluating new construction and renovation/addition options, the following items were evaluated and considered.

School Assignment Practices

Burlington Public Schools (BPS) has four elementary schools in the district. Small neighborhood schools are important to the Town, where many students can walk to school. Looking at the overall enrollment and school capacity, alternatives such as re-districting or using vacant space in another school facility do not provide adequate capacity to accommodate the students at the Fox Hill Elementary School or the combined Fox Hill and Pine Glen School.

Tuition Agreements

Each year School Committee members consider whether Burlington should be in the School Choice Program and accept school choice pupils from other districts during the upcoming school year. The School Committee has never approved School Choice at the elementary school level. Burlington is currently a School Choice District for the 2022-23 school year for grades nine through twelve only.

Rental or Acquisition

As part of the analysis undertaken, there are no rental or existing buildings that could be made available that could be considered for the new school or for swing space during a renovation/addition option.

Preliminary Evaluation of Alternatives

Educational visioning sessions established the educational goals for the project. The visioning sessions included both educators and community members and are summarized below.

Educational Goals

- Safe and Welcoming
- Student Centered Learning
- Collaborative and Flexible Learning
- STE(A)M and Project Based Learning
- Inclusive/Differentiated Learning
- Community Connections and Partnerships
- Outdoor Learning Experiences
- Social Emotional Learning
- School Community and Culture
- Enrichment Opportunities
- Accessibility for all Students

In addition to the educational goals, the visioning sessions established architectural goals for the project.

Architectural Goals

- Safe and Welcoming
- Innovative and Flexible Learning Spaces
- Support for Differentiated Learning
- Robust Technology
- Sustainability
- Good Acoustics
- Teacher Professional Work and Support Spaces
- Ample Storage
- Bathrooms
- Inclusion and Access
- Classroom Neighborhoods
- Small Group and Meeting Spaces
- Collaborative Learning and Gathering Spaces
- Healthy Building
- Outdoor Learning Spaces
- Thermal Comfort and Natural Light

Furthermore, priorities have also been established along with criteria to weigh each alternative, which will occur with the remaining alternatives to be considered. The priorities include:

- Equity to Other Elementary Schools
- Cost and Schedule
- Educational Program Fit
- Sustainability
- Operating Costs
- Future Expansion & Flexibility
- Site Impacts
- Construction Impacts
- Traffic Impacts
- Community Use

How well each alternative meets the visioning goals, as well as the overall priorities for the project, will be fully evaluated to determine the best solution for the Fox Hill project in the coming months.

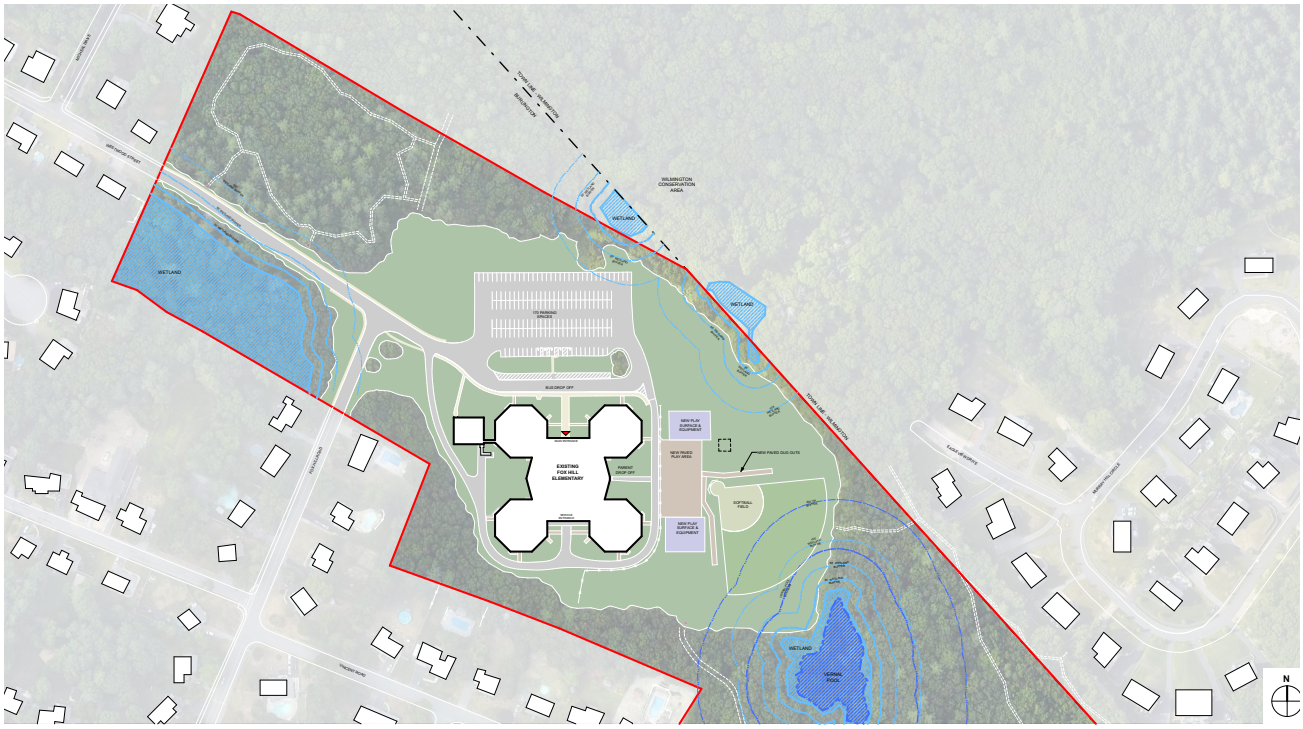
ALTERNATIVE NO. 1 CODE UPGRADES / REPAIRS @ FOX HILL (325 STUDENTS)

The code upgrades/repairs alternative includes replacement of building systems, envelope improvements, structural repairs and scope required for code compliance with no modification of existing spaces or their function. This option will not meet the program requirements for the Fox Hill Elementary School.

The existing 64,400 SF school was constructed in 1967 and is significantly smaller than what is required for the educational program. The building was designed in the shape of a snowflake, with a center core that houses the cafeteria/kitchen, gymnasium, library and administrative offices. Four smaller octagonal appendages are located at opposing corners of the core. Each octagon houses seven classrooms. The classrooms, shaped like trapezoids with operable (accordion-style) partitions, are all approximately 900 SF in size, but because of their shape and lack of acoustic separation, do not support effective classroom learning. Virtually every classroom suffers from severe interference from noise and distraction from adjacent classes. The result is that the instructional spaces are not conducive to learning, teaching, or academic work. Teachers and students often have a hard time hearing each other, and concentrating on assignments is difficult for many students.

In addition, many other educational spaces such as Art, Music, Library and the Gymnasium are significantly undersized, based on today's standards. Special education spaces, such as the LABBB Collaborative Program, speech and language, learning centers, and OT/PT are inappropriately sized. Refer to PART 3 | INITIAL SPACE SUMMARY for a detailed comparison of the existing spaces to the required needs of today's educational program. In order to complete code upgrades/repairs, the building will need to be vacated. Unfortunately, there is no temporary swing space in Burlington, so modular classrooms would be required during construction, which is expensive and will not address any of the programmatic deficiencies.

Despite this option's inability to meet the educational program, this alternative will be compared to the other alternatives and brought forward for final evaluation at the Preferred Schematic Report.



ALTERNATIVE NO. 2 RENOVATION / ADDITION @ FOX HILL (325 STUDENTS)

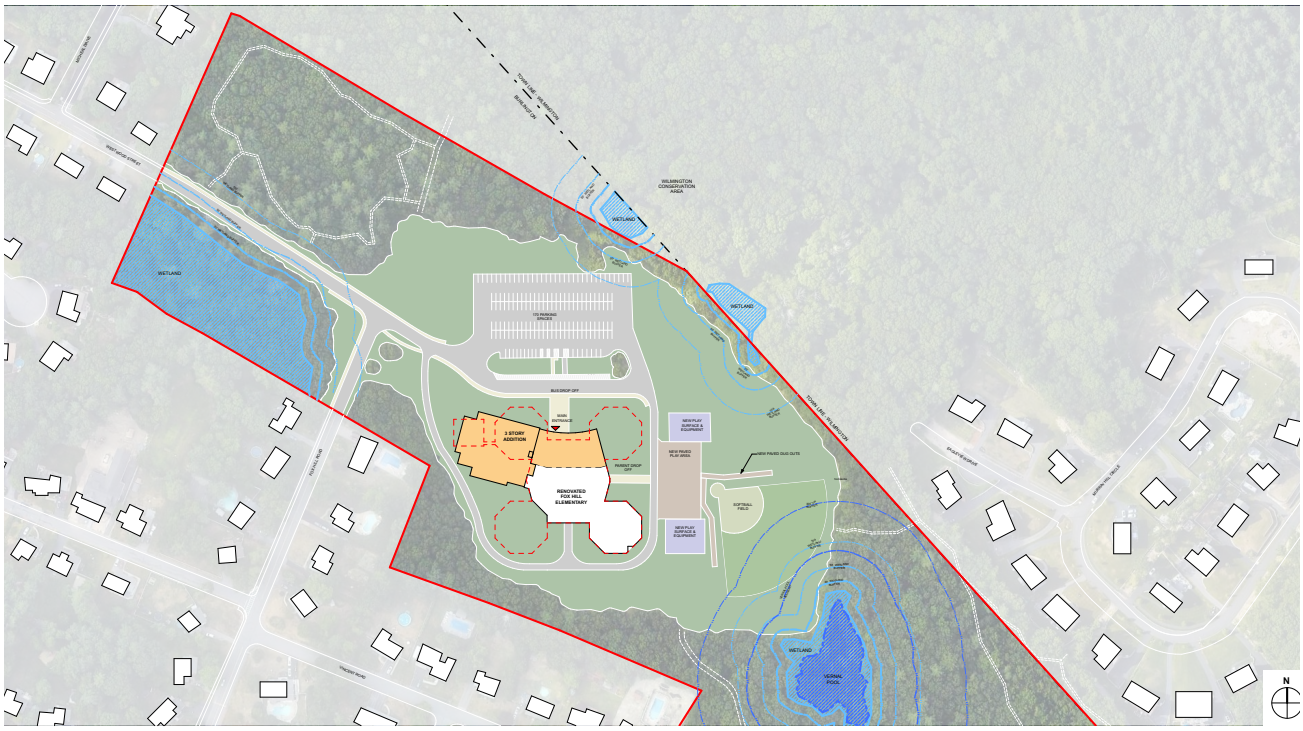
Concept plans have proven that a renovation/addition at the existing Fox Hill School is possible. To achieve this alternative, large portions of the existing building would need to be demolished, including three of the classroom octagonal pods, the entry lobby, main office, kitchen, and receiving. Significant renovations would be required to bring the remaining portions of the existing building up to current codes, standards, and sustainable requirements.

In the renovated areas, the existing cafetorium and gymnasium would be combined to provide an appropriately sized gymnasium, while a new cafetorium would be part of the addition.

To accommodate renovations and an addition, the existing building will need to be vacated. Since temporary swing space is unavailable, modular classrooms would be required for the duration of the construction.

This alternative would meet the educational program and achieves many, but not all, of the ideal spatial relationships and adjacencies. The site is also large enough to meet the exterior program requirements for parking, pedestrian access, gathering, outdoor learning and play areas, service/delivery, and emergency access; however, vehicular drop-off/pick-up cannot be altered in any meaningful way because of the location of the existing building.

This alternative will be brought forward for final evaluation at the Preferred Schematic Report.

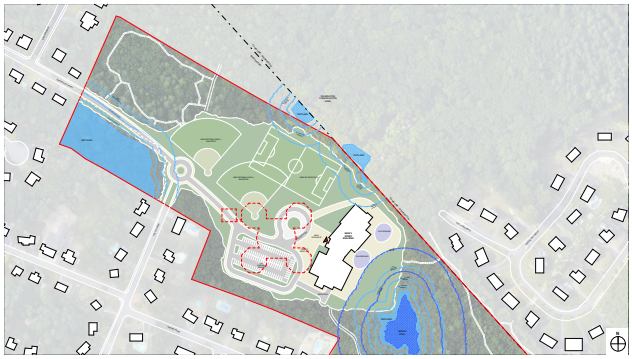


ALTERNATIVE NO. 3 NEW CONSTRUCTION @ FOX HILL (325 STUDENTS)

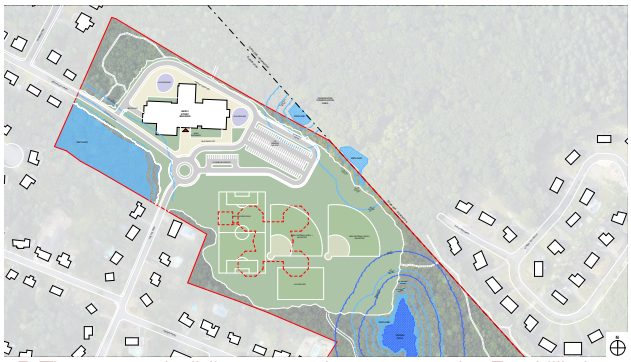
The current Fox Hill School site, at 37.9 acres, provides sufficient space for a new 91,000 SF school with appropriate configurations and relationships among educational spaces. Concept plans have verified that a new building can fit on the site while the existing school remains operational. While a vernal pool and wetlands impact the building location of this alternative, the site is large enough to meet the exterior program requirements for vehicular drop-off/pick-up, parking, pedestrian access, gathering, outdoor learning and play areas, service/delivery, as well as emergency access.

This alternative would fully construct the new school to the west or north of the existing building while maintaining the existing school during construction. After the new school is completed and occupied, the existing building would be demolished and the remaining site work would be completed. The existing fields will be replaced and augmented on the site, allowing for more community use. This alternative would benefit from a compact footprint (either a two-story or three-story school), maximizing the site for outdoor learning, play spaces and recreational activities. Even though this is a new facility, careful planning will be required to ensure the existing school is able to operate with limited disruption during construction.

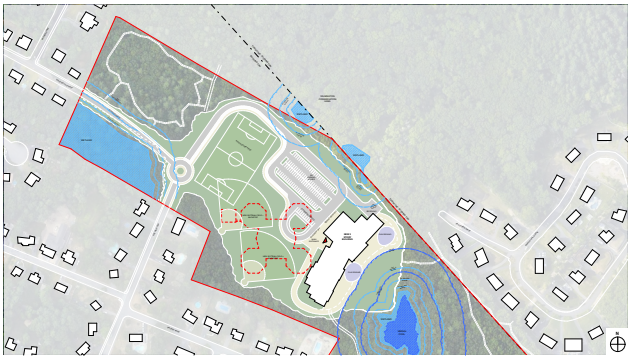
This alternative deserves further evaluation and will be brought forward for final evaluation at the Preferred Schematic Report.



3A Three-story building on eastern part of the Fox Hill site



3B Three-story building on northern part of the Fox Hill site



3C Two-story building on eastern part of the Fox Hill site

3D Two-story building on northern part of the Fox Hill site

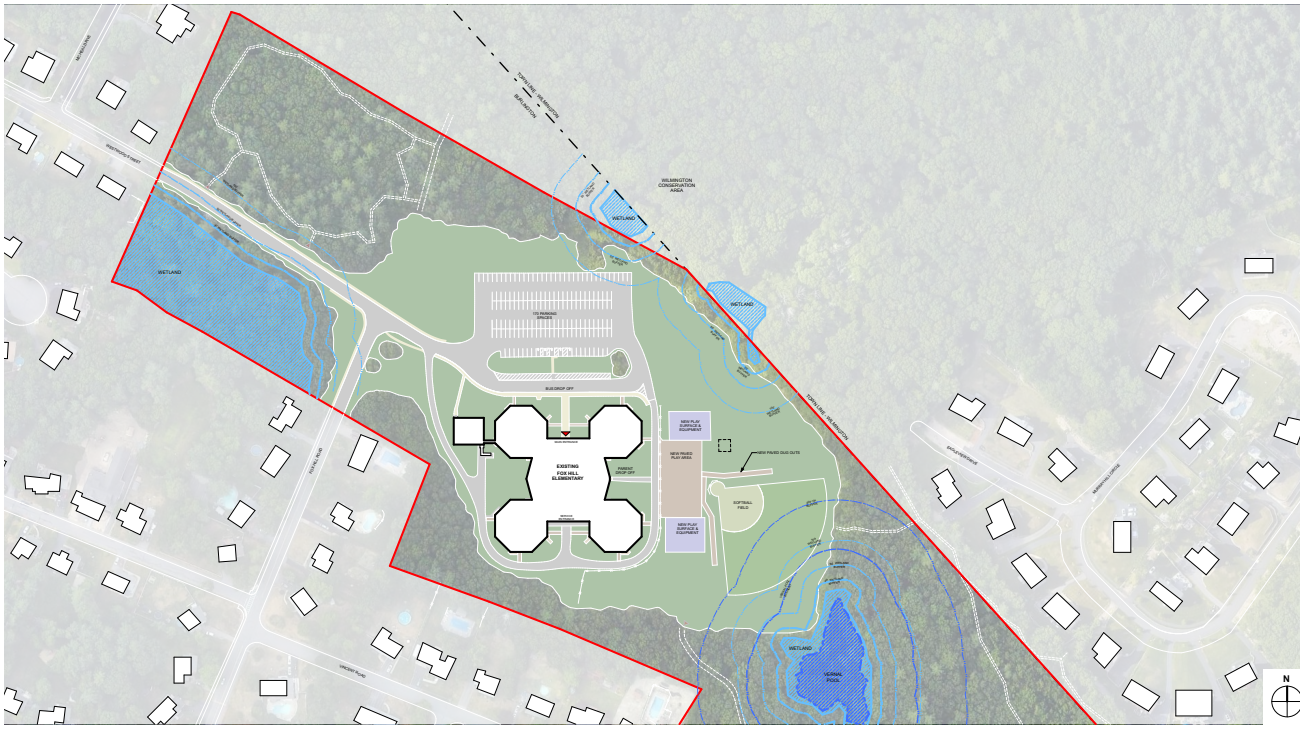
ALTERNATIVE NO. 4 CODE UPGRADES / REPAIRS @ FOX HILL (640 STUDENTS)

The code upgrades/repairs alternative includes replacement of building systems, envelope improvements, structural repairs and scope required for code compliance with no modification of existing spaces or their function. This option will not meet the program requirements for the Fox Hill Elementary School for 325 students, much less the consolidation of the Fox Hill and Pine Glen schools for 640 students.

The existing 64,400 SF school was constructed in 1967 and is significantly smaller than what is required for the educational program. The building was designed in the shape of a snowflake, with a center core that houses the cafeteria/kitchen, gymnasium, library and administrative offices. Four smaller octagonal appendages are located at opposing corners of the core. Each octagon houses seven classrooms. The classrooms, shaped like trapezoids with operable (accordion-style) partitions, are all approximately 900 SF in size, but because of their shape and lack of acoustic separation, do not support effective classroom learning. Virtually every classroom suffers from severe interference from noise and distraction from adjacent classes. The result is that the instructional spaces are not conducive to learning, teaching, or academic work. Teachers and students often have a hard time hearing each other, and concentrating on assignments is difficult for many students.

In addition, many other educational spaces such as Art, Music, Library and the Gymnasium are significantly undersized, based on today's standards. Special education spaces, such as the LABBB Collaborative Program, speech and language, learning centers, and OT/PT are inappropriately sized. Refer to PART 3 | INITIAL SPACE SUMMARY for a detailed comparison of the existing spaces to the required needs of today's educational program. In order to complete code upgrades/repairs the building will need to be vacated. Unfortunately, there is no temporary swing space, so modular classrooms would be required during construction, which is expensive and will not address any of the programmatic deficiencies.

Despite this option's inability to meet the educational program, this alternative will be compared to the other alternatives and brought forward for final evaluation at the Preferred Schematic Report.



ALTERNATIVE NO. 5 RENOVATION / ADDITION AT FOX HILL SCHOOL (640 STUDENTS)

Concept plans demonstrate that a renovation/addition for 640 students at the existing Fox Hill School is feasible, supporting the consolidation of the Fox Hill and Pine Glen Schools. To achieve this alternative, large portions of the existing building would need to be demolished, including three of the classroom pods, the entry lobby, main office, kitchen, and receiving. Significant renovations would be required to bring the remaining portions of the existing building up to current codes, standards and sustainable requirements.

In the renovated areas, the existing cafetorium and gymnasium would be combined to provide an appropriately sized gymnasium, while a new cafetorium would be part of the addition.

To accommodate renovations and an addition, the existing building will need to be vacated. Since temporary swing space is unavailable, modular classrooms would be required for the duration of the construction.

This alternative would meet the educational program and achieves many, but not all, of the ideal spatial relationships and adjacencies. The site is also large enough to meet the exterior program requirements for parking, pedestrian access, gathering, outdoor learning and play areas, service/delivery, and emergency access, but vehicular drop off/pick-up cannot be altered in any meaningful way because of the location of the existing building.

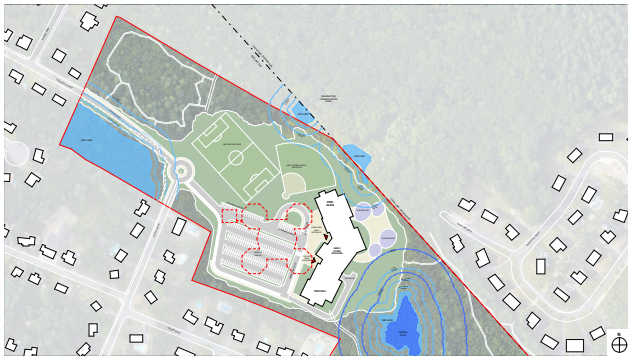
This alternative will be brought forward for final evaluation at the Preferred Schematic Report.

ALTERNATIVE NO. 6 NEW CONSTRUCTION AT FOX HILL SITE (640 STUDENTS)

The current Fox Hill School site, at 37.9 acres, provides sufficient space for a new 155,000 SF school with appropriate configurations and relationships among educational spaces. Concept plans have verified that a new building can fit on the site to support the consolidation of the Fox Hill and Pine Glen Schools for 640 students. While a vernal pool and wetlands impact the building location of this alternative, the site is large enough to meet the exterior program requirements for vehicular drop-off/pick-up, parking, pedestrian access, gathering, outdoor learning and play areas, service/delivery, as well as emergency access.

This alternative is to fully construct the new school to the north or west of the existing building while maintaining the existing school during construction. After the new school is completed and occupied, the existing building would be demolished, and the remaining site work would be completed. The existing fields will be replaced and reconfigured on the site, allowing for more community use. This alternative would benefit from a compact footprint maximizing the site for outdoor learning, play spaces and recreational activities. Even though this is a new facility, careful planning will be required to ensure the existing school is able to operate with limited disruption during construction.

This alternative deserves further evaluation and will be brought forward for final evaluation at the Preferred Schematic Report.



6A Three-story building on eastern part of the Fox Hill site

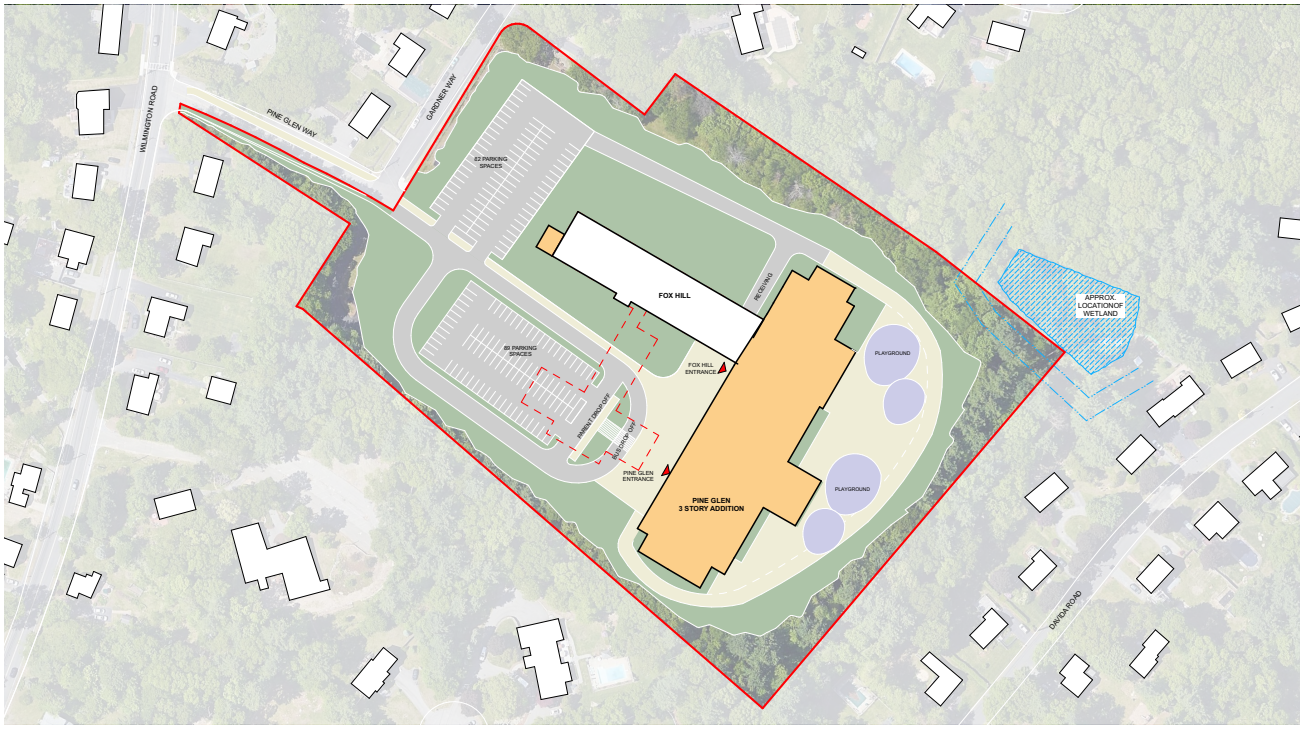
6B Three-story building on northern part of the Fox Hill site

ALTERNATIVE NO. 7 RENOVATION / ADDITION AT PINE GLEN SCHOOL (640 STUDENTS)

Concept plans have verified that a renovation/addition at the existing Pine Glen School is able to support a consolidation of the Fox Hill and Pine Glen Schools with 640 students. To achieve this alternative, the addition would be built while the existing school remains operational. After completion of the addition, students would be relocated to the addition, allowing renovations and demolition to commence in the existing building. Significant renovations would be required to bring the remaining portions of the existing building up to current codes, standards and sustainable requirements. The existing gymnasium, cafetorium, kitchen, main office and entry would be demolished as part of this second phase, making room for the bus drop-off and parking.

This alternative would meet the educational program and achieve many of the ideal spatial relationships and adjacencies. The site is large enough to meet the exterior program requirements for vehicular drop-off/pick-up, parking, pedestrian access, and gathering. Outdoor learning, play areas, service/delivery, and emergency access are limited by the buildable area behind the existing school and the size and configuration of the site limits the amount of vehicular queuing that can be accommodated.

This alternative will be brought forward for final evaluation at the Preferred Schematic Report.

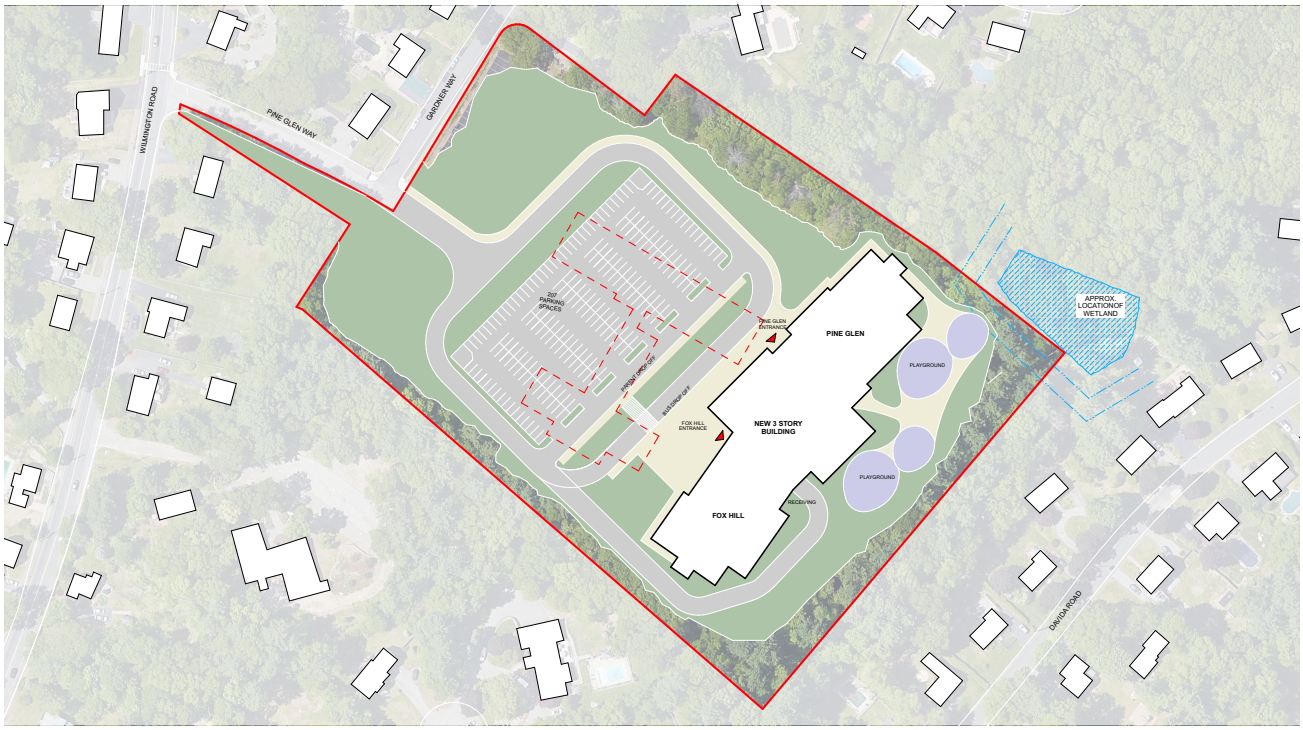


ALTERNATIVE NO. 8 NEW CONSTRUCTION AT PINE GLEN SITE (640 STUDENTS)

The current Pine Glen School site, at 11.8 acres, provides adequate space for a new 155,000 SF school with appropriate configurations and relationships among educational spaces. However, future expansion might be a challenge due to the width of the site. This alternative would meet MSBA space guidelines and would provide the ideal programmatic spatial relationships and adjacencies.

This alternative would fully construct the new school to the south of the existing, occupied school building. After the new school is completed and occupied, the existing building would be demolished and the remaining site work would be completed in this second phase. Parking and drop-off areas would be configured to incorporate queuing at the perimeter, but the site size limits the length of queuing that can be accommodated. Outdoor learning, play areas, service/delivery, and emergency access are limited by the buildable area behind the existing school. Careful planning will be required to ensure the existing school is able to operate with limited disruption during construction.

This alternative deserves further evaluation and will be brought forward for final evaluation at the Preferred Schematic Report.



COST SUMMARY

Cost considerations are important factors in determining the most cost-effective solution for the Fox Hill Elementary School Project. Below is a cost comparison of alternatives identified above based upon a CM@Risk Ch. 149a delivery method.

Alternative	# of Students	Program Area	Gross Square Footage	Construction Cost (CM@R)	Project Cost	Duration / Year Complete
Alt. No. 1 @ Fox Hill School Only Code Upgrades/ Repairs	325 Students	46,255 NFA	64,400 GSF	$39,394,566	$60,957,832	24 months (2028)
Alt. No. 2 @ Fox Hill School Only Renovation/ Addition	325 Students	60,652 NFA	101,400 GSF	$85,253,802	$113,008,065	42 months (2029)
Alt. No. 3 @ Fox Hill School Only New Construction	325 Students	60,652 NFA	91,000 GSF	$86,133,238	$102,406,225	28 months (2028)
Alt. No. 4 @ Fox Hill School Only Code Upgrades/ Repairs	640 Students	46,255 NFA	64,400 GSF	$39,394,566	$62,391,832	24 months (2028)
Alt. No. 5 Combined Fox Hill + Pine Glen @ Fox Hill Renovation/ Addition	640 Students	103,278 NFA	155,000 GFA	$121,362,971	$155,425,972	48 months (2029)

Alternative	# of Students	Program Area	Gross Square Footage	Construction Cost (CM@R)	Project Cost	Duration / Year Complete
Alt. No. 6 Combined Fox Hill + Pine Glen @ Fox Hill Site New Construction	640 Students	103,278 NFA	155,000 GFA	$122,667,012	$145,006,059	30 months (2028)
Alt. No. 7 Combined Fox Hill + Pine Glen @ Pine Glen School Renovation/ Addition	640 Students	103,278 NFA	108,000 GFA	$121,852,374	$144,081,444	48 months (2029)
Alt. No. 8 Combined Fox Hill + Pine Glen @ Pine Glen Site New Construction	640 Students	103,278 NFA	155,000 GFA	$119,445,764	$141,349,942	30 months (2028)

* Considerations for Construction Cost:

1. Construction Cost
   a. CM@Risk for all alternatives
   b. Schools and sites are occupied, except the code upgrades/repairs and renovation/addition options at the Fox Hill site.
   c. Abatement included for code upgrades/repairs, renovation/addition and new construction alternatives at both the Fox Hill and Pine Glen School sites
   d. Demolition included for renovation/addition and new construction alternatives at both the Fox Hill and Pine Glen School sites
2. Project Cost
   a. **Temporary modular classrooms are required** for students during construction for code upgrades/repairs and renovation/addition options at the Fox Hill site and are included in the project cost. Modular classrooms are not required for the Pine Glen renovation/addition or new construction alternatives.

There is a possibility to utilize Ch. 149 Design/Bid/Build for new construction alternatives. It is not recommended for the phased, occupied renovation/addition alternatives due to the complexities of the scope of work (alternative numbers one, two, four, five, and seven). This delivery method will be further evaluated in the coming months. The cost comparison for the new construction alternatives is as follows:

Alternative	# of Students	Program Area	Gross Square Footage	Construction Cost (Ch. 149)	Project Cost	Duration / Year Complete
Alt. No. 3 @ Fox Hill School Only New Construction	325 Students	60,652 NFA	91,000 GSF	$80,103,567	$98,527,387	28 months (2028)
Alt. No. 6 Combined Fox Hill + Pine Glen @ Fox Hill Site New Construction	640 Students	103,278 NFA	155,000 GFA	$114,080,321	$140,318,794	30 months (2028)
Alt. No. 8 Combined Fox Hill + Pine Glen @ Pine Glen Site New Construction	640 Students	103,278 NFA	155,000 GFA	$111,084,560	$136,634,009	30 months (2028)

* Considerations for Construction Cost:

1. Construction Cost
   a. Ch. 149 Design/Bid/Build
   b. Schools and sites are occupied
   c. Abatement included
   d. Demolition included

It is the desire of the Town to continue to evaluate the merits of the following alternatives prior to arriving at a Preferred Solution. Each Alternative is described below.

- Alternative No. 1 CODE UPGRADES / REPAIRS at Fox Hill School site (325 students)
- Alternative No. 2 RENOVATION / ADDITION at Fox Hill School site (325 students)
- Alternative No. 3 NEW CONSTRUCTION at Fox Hill School site (325 students)
- Alternative No. 4 CODE UPGRADES / REPAIRS at Fox Hill School site (640 students)
- Alternative No. 5 RENOVATION / ADDITION at Fox Hill School site (640 students)
- Alternative No. 6 NEW CONSTRUCTION at Fox Hill School site (640 students)
- Alternative No. 7 RENOVATION / ADDITION at Pine Glen School site (640 students)
- Alternative No. 8 NEW CONSTRUCTION at Pine Glen School site (640 students)

At the conclusion of PSR, the Town will bring forth a preferred solution to MSBA.

7 LOCAL ACTIONS & APPROVALS

Local Actions & Approvals Certification

Certified Copy of SBC Minutes for PDP Submission

Meeting Agendas & Minutes (See Appendix)

BURLINGTON
PUBLIC SCHOOLS

123 Cambridge Street
Burlington, MA 01803
(781) 270-1801
FAX (781) 270-1773

July 14, 2023

Mary Pichetti, Director of Capital Planning
Massachusetts School Building Authority
40 Broad Street
Boston, Massachusetts 02109

Re: Feasibility Study

Dear Ms. Pichetti:

The Burlington School Building Committee ("SBC") has completed its review of the Feasibility Study Preliminary Design Program for the Fox Hill Elementary school project (the "Project"), and on July 13, 2023, the SBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study related materials to the MSBA for its consideration. A certified copy of the SBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors invited the District to conduct a Feasibility Study on April 27, 2022, the SBC has held 16 meetings regarding the proposed project, in compliance with the state Open Meeting Law. These meetings include:

- August 15, 2022
- August 29, 2022
- August 30, 2022
- August 31, 2022
- November 1, 2022
- November 22, 2022
- January 11, 2023
- February 7, 2023
- March 7, 2023
- April 13, 2023
- May 2, 2023
- May 16, 2023
- May 30, 2023
- June 20, 2023
- June 28, 2023
- July 13, 2023

Notices for these meetings were posted and made available for public review in Burlington Town Hall (29 Center Street, Burlington, MA 01803), as well as on-line on the Town's municipal website: https://www.burlington.org/AgendaCenter. Notices were also made available on our project website: https://www.foxhillbuildingproject.com/committee.

In addition to the SBC meetings listed above, the district held 4 public meetings, which were posted in compliance with the state Open Meeting Law, at which the Project was discussed. These meetings include:

- May 18, 2023, at 7:00PM – Community Forum
- June 13, 2023, at 7:00PM – School Committee Meeting
- June 26, 2023, at 7:00PM – School Committee Meeting
- July 11, 2023, at 7:00PM – Community Presentation

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review at the project website at:

www.foxhillbuildingproject.com > Agenda & Minutes
(https://www.foxhillbuildingproject.com/committee)

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 et seq.

If you have any questions or require any additional information, please contact the Owner's Project Manager, Dore & Whittier Partners – Christina Dell Angelo, Project Manager, cdellangelo@doreandwhittier.com.

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

Paul F. Sagarino

By: Paul Sagarino
Title: Chief Executive Officer
Date: July 14, 2023

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: Eric M. Conti
Title: Superintendent of Schools
Date: July 14, 2023

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

Martha A. S

By: Martha Simon
Title: Chair of the School Committee
Date: July 14, 2023

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: June 28, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	6/28/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
✓	David Rosenblatt*	Fox Hill Principal	✓	Donna DiNisco	DiNisco Design
✓	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member	✓	Chris Campbell	
✓	Tara Carroll	SBC Member	✓	Melissa Ulliani	
	Audrey Boeri	SBC Member	✓	John Iler	
✓	George Papayannis	SBC Member	✓	Lauren Seeley	
✓	Katherine Bond*	Vice Chair of SBC	✓	Eileen Sickler	
✓	Jeremy Brooks*	SBC Member	✓	Nicci Kadilak	
✓	Christine Monaco*	SBC Member	✓	Adam Senesi	
✓	Martha Simon*	SBC Member	✓	Sarah Visocchi	
✓	Kristen Downie	Secretary	✓	Terry Orfanos	
✓	John Lyons*	Pine Glen Principal			
✓	Margo Bunker*	SBC Member			
✓	Amanda Hanafin	SBC Member			
✓	Melissa Gilberg	SBC Member			

* SBC Voting Member

Item No.	Description	Action
11.1	**Call to Order & Intro**: 6:02 pm meeting was called to order by SBC Chair M. Massardo with 14 of 15 voting members in attendance.	Record
11.2	**Previous Topics & Approval of June 20th, 2023, Meeting Minutes:** ➢ A motion to approve the 06/20/2023 meeting minutes[1] as submitted made by M. Simon and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – Yes - N. Coscia – Yes – J. Lyons – Yes – E. Conti – Yes – C. Monaco – Yes – M. Bunker – Yes – D. Rosenblatt - Yes. Abstention: D. Villano. Motion passes, minutes approved.	Record
11.3	**Responding to Previous SBC Comments:** ➢ C. Dell Angelo responds to Previous SBC comments. Talks about the emergency vehicle concerns due to Fox Hill current traffic pattern. New school options will provide for emergency vehicle access and improved traffic queuing onsite and alleviate traffic queuing on Fox Hill Rd and Westwood St. Safe routes to school work ongoing this summer to alleviate current traffic. Then talks about the Working groups not being listed on the website and says that they are now listed on the project website under the agendas & minutes tab. There is a comment page on the website and they welcome feedback from anyone. The meeting notes from the working groups are listed on the project website as well under the agendas & minutes tab. Says there have not been any trees spraypainted as part of this project and has nothing to do with this project. She says no decision has been made about the preferred school option. The decision will be required in November to select a preferred solution to submit to MSBA. The traffic report and educational programs are now on the website as well under the Official Documents tab. There also have been 2 story building options presented at the 6/20 and 6/28 SBC meetings. ➢ M. Simon talks about traffic issues in the neighborhood. A new building with a 640 enrollment would add 40% more traffic. All design solutions include putting more cars on the site and should alleviate some of the traffic issues. Encourages people in the neighborhood to go to the Selectboard to address the issue. Also to create a working group to address the issues in the neighborhood.	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

11.4	**Future Public Comment Format:** ➢ C. Dell Angelo speaks to the public comment format and opens it up for discussion. ➢ K. Bond says she would like it at the beginning. With the option for people to ask questions if it pertains to the agenda topics. ➢ C. Monaco agrees and wants the public comment at the beginning. If they would like to discuss an agenda item, they can raise their hand and ask. ➢ M. Simon isn't opposed to having it at the beginning. Also sees the benefit of having it at the end as well. Wanted to put the perspective out of having it at the end. ➢ M. Massardo also agrees that having it at the would be best. Says J. Priest suggested having 15 minutes at the beginning and capping it. ➢ K. Bond says it's a good idea to cap at the beginning and a good compromise.	Record
11.5	**Building Project Name**: ➢ C. Dell Angelo talks about the name of the project and the possibility of changing the name, she opens it up for discussion. ➢ M. Massardo speaks saying M. Simon suggested the name change. Clarifies that the name and the inclusion of Pine Glen is to include the representation and feedback of Pine Glen, and not to steamroll and say that they have decided to combine Pine Glen, but to make sure that Pine Glen's voice is represented in a decision to combine Pine Glen. ➢ M. Simon says she felt it was misleading to keep calling it the Fox Hill Building project when Pine Glen was also being considered. She thought it would be helpful to have a different name, with it involving so many other issues. ➢ A. Hanafin says it's a good idea to change the name but not the website link as it's already been pushed out to everyone. ➢ C. Monaco says it's been confusing but isn't opposed to any name they choose. ➢ M. Bunker says the name Fox Hill is confusing and agrees with M. Simon. Supports a name change as well. ➢ K. Bond says she's not opposed to the change. She thinks the root issue was that they weren't communicating as well as they are now to the community. ➢ A motion to change the working name of this committee to the Burlington Elementary School Building Committee made by M. Simon and seconded by M. Bunker. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes - N. Coscia – Yes – J. Lyons – Yes – E. Conti – Yes – C.	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	Monaco – Yes – M. Bunker – Yes – D. Rosenblatt – Yes – D. Villano - Yes. Abstention: K. Bond. Motion passes, minutes approved.	
11.6	**6/26 School Committee Update:** ➢ C. Dell Angelo gives a School Committee update on what happened at the 6/26 meeting. Says It was the second discussion on the educational programs and the space summaries for the enrollment of 325 and 640 students. It was reiterated that studying two enrollment options is an MSBA requirement and the final educational program and space summary will be submitted with the preferred solution to the MSBA. School Committee voted to submit both enrollments in the PDP submission pursuant to the MSBA process per the agreement.	Record
11.7	**Preliminary Design Program Options to be Evaluated:** ➢ D. DiNisco says per the MSBA agreement they are required to evaluate the eight options and goes over the PDP options slide[2]. Talks about options 1 & 4 which is for 325/640 students. The existing single-story building 64,400 GSF to remain and requires the building to be vacated. Upgrades include improvements for life-safety, building code compliance, accessibility compliance, mechanical, electrical, plumbing and fire protection systems replacement/installation, envelope replacement. This option does not meet educational requirements, and the traffic doesn't improve, and Pine Glen remains as is. ➢ Option 2 is to renovate the building for 325 students. The proposed building is 101,000 GSF and existing building to be partially demolished. Requires building to be vacated. 25,000 GSF of existing building to be renovated, 76,000 GSF 3-story building addition. Meets the educational program, traffic does not improve, and Pine Glen remains as is. ➢ Option 3 Fox Hill new construction for 325 students. Proposed 91,000 GSF and existing school remains operational during construction. Existing building to be demolished after new building is complete. This meets the educational program. Options provide for a 2-story or 3-story building. All options provide improved traffic with full on-site queuing. Pine Glen remains as is. ➢ M. Simon asks about option 3 and clarifying the four options within it. Asks if all of the option 3's are to build new construction for 325 new Fox Hill, the difference being two are 2-story options and two are 3-story options. D. DiNisco says yes that is correct. ➢ D. DiNisco talks about option 5. Which is an Addition/Renovation for 640 students, proposed 156,000 GSF. Existing building to be partially demolished, requires building to be vacated. 25,000 GSF of existing building to be renovated, 131,000 GSF 3-story building addition. This meets the educational program; traffic is worsened due to site	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

circulation. Pine Glen becomes available for alternative use such as temporary student space during HS construction project, BECC, or other.

- D. DiNisco talks about option 6, which is a proposed 3-story building 155,000 GSF. 2-story building option is challenging, existing school remains operational during construction. Existing building to be demolished after new building is complete. Meets educational program. Both options provide improved traffic with full on-site queuing. Pine Glen becomes available for alternative use such as temporary student space during HS construction project, BECC, and other.
- A. Hanafin asks about the square footage proportionally. Asking why the Fox Hill only option is 91,000 GSF and the combined option is only 155,000 GSF and not double the Fox Hill only option size. D. DiNisco responds saying there will be double the number of classrooms, no shared special ed spaces. The gym is shared, 7300 GSF for fox hill alone is the same for the combined school. The kitchen is larger but only proportionally larger, same with the media center its larger but not double the size. The classrooms are equal, 3 classrooms per grade.
- D. DiNisco talks about option 7. Pine Glen Addition/Renovation (640 Students). The proposed building 164,000 GSF, existing building to be partially demolished. Does not require building to be vacated. 48,000 GSF of existing building to be renovated, 112,000 GSF 3-story building addition. This meets the educational program. Site is extremely limited, cannot accommodate queuing and play fields. Fox Hill becomes available for alternative use such temporary student space during HS construction project, BECC, and others.
- D. DiNisco then goes over option 8 Pine Glen New Construction (640 Students). The proposed 3-story building 155,000 GSF, 2-story building option is not possible. Existing school remains operational during construction. Meets educational program, existing building to be demolished after new building is complete. Site extremely limited, cannot accommodate queuing and site amenities. Fox Hill becomes available for alternative use such temporary student space during HS construction project, BECC, and others.
- D. DiNisco talks about option 9, which is Pine Glen New Construction (325 students) non-MSBA. Proposed 3-story building 83,000 GSF, 3 classrooms per grade, K-5. 2-story building option challenging, meets the educational program. Existing building to be demolished after the new building is complete. Cost of the project solely borne by Town of Burlington.
- C. Monaco asks about how challenging it would be for a 2-story school on option 9. D. DiNisco says it's not impossible but challenging. Also asks about an option for one story building on existing Fox Hill site. D. DiNisco says it would be extremely challenging for a one-story building on the site.

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ M. Massardo speaks to enrollment. Says they do themselves a dis-service by only building 3 classrooms on a non MSBA project if that's the way the project goes and encourages to explore four classroom per grade on a Pine Glen site if its non-MSBA.	
11.8	**Preliminary Design Program Cost Estimate/Project Cost:** ➢ M. Burton talks to the cost estimate slide[2]. Developed the options to provide enough information for the cost estimator. Met with the estimating team last week. These are rough order magnitude costs will change and evolve as they continue the design process and ultimately select a preferred option. Future estimates will be at Preferred Schematic Report, Schematic Design, Design Development, 60% Construction Documents, 90% Construction Documents. ➢ M. Burton talks to the total project budget template slide[2]. The sheet allows to put in project information and tells how much the town will pay for the project. ➢ M. Burton shares the Potential Total Project Budget Form (this is posted to the project website under "Official Documents"). He clarifies these will not be the numbers for whatever option they go with. These numbers will evolve over time as it is more finely tuned. Says top section in blue is the GMP (Guaranteed Maximum Price) if they go Construction Manager at Risk. Will share the estimates and basis of design on the website as well. The soft costs (in orange) are everything outside the GMP which include designer, OPM, legal, modular classrooms etc. Typically, on MSBA projects OPM are capped at 3.5% and designers are capped at 10%. ➢ D. DiNisco says with modulars it is under the assumption they have to provide the same number of classrooms as they have now. ➢ M. Burton continues cost estimate and talks about the soft costs. ➢ E. Conti asks if estimates were conservative. M. Burton says they used a company AMF, saying that they know better than anybody what happened over the last two years in the construction world. They were conservative about the numbers. D. DiNisco follows saying the cost estimates look at the current market conditions when estimating. Says this cost is solely for comparative purposes. S. Brown talks to AMF experience estimating, says it's good to have someone who is local and knows the market. Purely a tool to help people make decisions from. ➢ M. Burton starts discussing the total price for Burlington for different options. The Fox Hill Only option with 325 students with the MSBA would cost the town an estimated $84,000,000. The combined 640 school with the MSBA would cost the town of Burlington an estimated $113,000,000. Fox Hill with MSBA and Pine Glen non-MSBA would cost the town an estimated $177,000,000.	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

- M. Bunker asks about breakdown to taxes**.** R. Riggs says there is a big range for the estimated cost for taxpayers. E. Parsons starts going over the numbers for taxpayers. The numbers M. Burton went over if they were to bond each in the same way. For the median taxpayer, the 325 Fox Hill school (MSBA) amounts to $260 per year. For the larger combined school (640 students) its $356 per year. For the Fox Hill 325 MSBA and Pine Glen non-MSBA it would be $552 per year for the median taxpayer. Says they could be talking about a debt override due to the number of projects in the pipeline.
- R. Riggs says those costs E. Parsons stated are on top of the growth in the town's operating budget. Which has been in the two hundreds consistently.
- M. Massardo talks to the process of voting. The school building committee will vote on the Preferred Design in November. Following that the elected town representatives of Burlington (Town Meeting) ultimately vote to fund the project. If any or part of these projects need a debt exclusion, the voters also will vote on the funding of the project. If the project does not pass, they don't get a school and have to go back in line to submit to the MSBA.
- R. Riggs says that we have time for these discussions to come to an agreement on the right option.
- C. Monaco asks about if they assumed that the numbers are based on both of the Fox Hill and Pine Glen projects being done relatively soon. M. Burton said yes that they assumed these projects would be done. She points out the numbers for Pine Glen are estimations and they don't know exact numbers until they get further along. She suggests sharing the excel file with the financial working group, and M. Burton agrees.
- J. Priest asks if option 9 included 4 classrooms per grade. M. Massardo says no it does not.
- J. Brooks clarifies that the taxes are just based on this project and not the other projects. Asks to project out what the BHS and the Police Station would be for taxpayers. E. Parsons says that will be done at a later date and not now. J. Brooks says they need to explore the range of options presented.
- M. Simon says the Financial working group will now begin to review the numbers and have meetings to discuss the plan.
- K. Bond asks to have the meeting link posted directly to the website.
- C. Monaco asks if all the working groups meetings will be virtual. M. Burton says they have all been virtual to date and will be posted to the website.
- J. Brooks says they can sign up for text alerts for the agenda center and whenever a new meeting is posted they will be notified.

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ M. Simon agrees with K. Bond about the website and would like the meeting link on the front page, would like more information on the front page. ➢ S. Brown says they need to maintain the town posting process and wants the convenience of the project website but can understand the confusion of posting in two places. ➢ S. Brown then goes over the schedule slide[2]. Says they intend to submit PDP to the MSBA on 7/13/23 (Correction: Will be submitted on July 14, 2023), then submit PSR to MSBA 12/20/23. After they will submit Schematic Design to MSBA 6/19/24, then the local vote in September 2024. Execute Project Funding Agreement in November 2024. Detailed design will happen October 2024 – February 2025, followed by construction documents March 2025 – November 2025. Bidding / GMP – November 2025 – January 2026, then begin Construction in Spring of 2026. Complete construction varies by the options with ranges from 24 months to 48 months. ➢ M. Massardo asks what happens in the majority of 2024. S. Brown says the MSBA takes time to review and comment on these different submittals. D. DiNisco says they start designing the option once the preferred option has been selected. ➢ G. Papayannis asks about where schedule is located. A. Place says it is located on the homepage of the website. ➢ J. Priest asks about the project funding agreement with the MSBA. M. Burton says they have to work with MSBA's board cycle. There have been instances where the town has voted before and after the MSBA. M. Burton says on their schedule he has town meeting voting then the MSBA vote.	
11.9	**Criteria Matrix Review and Discussion:** ➢ C. Dell Angelo talks to the criteria matrix. Says the tool used to define goals and priorities of the SBC. It's an evolving document that they will use throughout Preferred Schematic Report phase. It's a tool that will help identify the preferred solution. They will continue to reference and modify the matrix as they study, refine, and chose a preferred solution in November 2023. ➢ G. Papayannis asks what the committee needs to do before the 7/13 meeting and vote. M. Burton says they don't need to do anything before the 7/13 meeting. Says that meeting it just to approve the submission of the PDP. Says if they wanted to, they could review the matrix and fill it out. ➢ R. Riggs asks if its any new material in the PDP. S. Brown says correct there isn't any new material they are just packaging it into one document. D. DiNisco says there is no decision that needs to be made for the submission of the PDP.	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ G. Papayannis asks if the PDP submission all the options will go through then in November, they have to pick one. M. Burton says yes after the submission of the PDP they will start to narrow down the options and have meetings to discuss that.	
11.10	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ S. Brown asks about the project name of the website. ➢ G. Papayannis asks what the name was decided as. M. Simon says it is Burlington Elementary School Building Committee is the name of the committee she made a motion on.	Record
11.11	**Public Comment**: ➢ Laura Stone makes public comment that a smaller school is better than a bigger school. She asks about Vincent Road and the stakes that have been put on it. Asks about if any discussion of Vincent Road being changed. ➢ Katrina Boscetti makes a public comment that she is a taxpayer and that she believes everyone that spoke previously is one. She says she hasn't heard any facts or research that a mega school/campus would be better for the students. She has four kids that will be affected by this decision. She says that Burlington has been ranked 57th out of all the public schools in the Boston area since 2019, and they have dropped to 83rd in 2022. Billerica who was ranked 89th in 2019, has moved to 46th in 2022. Wilmington who was ranked 66th in 2019 has passed Burlington to 50th in 2022. These tax rates in these towns are much higher than Burlington's. Burlington has the lowest tax rates around, Billerica tax rate fell to below $12 just this past year, for the first time in five years, they did put a brand-new high school, which clearly has done a lot for their town. The taxpayers have been paying for their town and their children's future, it's clearly paying off there. They need to focus on our kid's foundation, which starts at elementary school. Clearly for the past four years, we have been failing our kids and we really need to put them first and stop with the bottom line. She has only seen research that speaks to the social, emotional, and educational development of smaller schools. She says as taxpayers they would like to see their ratings go up as that is a huge draw for families to come into our town. As for the Fox Hill neighbors who are also passionate about why we do not want a mega school or a mega campus, it's because the new environment will only affect them, they will be causing unsafe roads, more traffic and traffic at all hours due to the plan of more community events being held there. The neighbors who are taxpayers did not buy a home on or near a highway. They now do not want the town to make	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

their roads a highway. She asks for the building voters to vote to rebuild Fox Hill and maintain Pine Glen and having the four-school model.

- Chris Campbell makes public comment and says now that the glitz and the glam of the MSBA process has worn off. They find themselves at a critical juncture in their schools and their town and making much needed upgrades to their school buildings that have gone neglected for far too long. They find themselves in a situation where they feel like they are being forced and rushed into compromising on something that in any other situation they would not. By combining the Fox Hill and Pine Glen schools into one project, as most of the speakers have continued to speak up against this proposal, this will harm their students' education and the value and quality that they get, as well as the Fox Hill neighborhood itself. Putting such a large school and area together combining in this neighborhood that is already overwhelmed with it. The idea of the Butterfly School continues to be one of those that he cannot get over as the start of school, end of school, the gym schedule, lunch schedule will completely run the entire schools as well as there will be no autonomy between both schools. What happens in one school will affect the other. There'll be two separate student handbooks, but one school working as two different, it won't be good for their students. As everyone has said here, the education is there. We need small schools to have the best environment for all our students and continue to have those on IEPs. Additionally, none of our neighboring schools are doing this. There are roughly four schools within the state that have done this. If it is such a good idea, why are not more schools considering this he asks.
- Eileen Sickler makes public comment and says she would like to see a formal timeline shown 18 months out. Hopes that they will speak to town meeting in September about the current status of the project.
- Elizabeth Orfanos makes public comment. Says what she has noticed as of late that's greatly concerning to me is this shift in some of the language used in these meetings. They been told that this conversation about combining the schools is a requirement of MSBA and that we must explore this option. And for a time, it appeared they were exploring it and doing our due diligence. However, what she is now hearing from board members is a shift from exploring the option to supporting it. That concerns her, given that we know it is not the best educational model for our children. Some other words she has heard at the last school committee meeting regarding the combined school option was it seems feasible, and it may be a viable option. However, it's not the best educational option. She does not want to see the education of the children of this community degraded to options that are feasible and viable, that is not in alignment with the school's mission statement that promotes excellence. She spoken here before and she has referenced the research and she doesn't know whether those of them

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	in the decision-making seats are reading that research and understand the importance of small schools for their children and how the research speaks about the school within a school model. Those schools were created to solve the problems that came of building larger schools. They try to regain the benefits of small schools by creating them within larger schools. But what they are doing here is setting out to make a large school knowing that there are drawbacks to it to our children's education. And that's not in alignment with what our community values are. She encourages everyone to read the research, understand it particularly if they are not an educator themselves and they haven't been in a classroom and consider the needs of their children above the money side of it. Which is essentially what seems to have brought them to this place. She thanks everyone for their time and asks to keep bringing up things that are mentioned in public comment to the agenda. ➢ John Iler makes comment. Suggests in the cost summary to use 3D instead of 3C for the options. Asks if they decide to do a debt override, it looks like there is a short time after town meeting to do a town vote. Suggests considering where that would be fit in the schedule. Encourages to share the source spreadsheet for the cost summary. Asks if they do decide to do a 325 Fox Hill school and decide to do the Pine Glen School 10-15 years down the road, is there a chance for MSBA reimbursement.	
11.12	**Next Meetings**: ➢ Tuesday July 11th, 2023 – Community Presentation at 7:00PM ➢ Thursday July 13th, 2023 – School Building Committee at 6:00PM ➢ Tuesday August 1st, 2023 – School Building Committee at 6:00PM ➢ Monday August 21st, 2023 – School Building Committee at 6:00PM ➢ Executive Working Group – 6/28 ➢ Communications/Executive Working Group – 7/10 ➢ Sustainability Working Group – Late July/Early August ➢ M. Massardo says they talked about the community forum/town hall meeting to be in September, they do not have a date yet. ➢ M. Bunker asks about the format of the July 11 meeting. D. DiNisco says it's a combination of everything they have been presentation, its open for community input. ➢ M. Simon asks about the upcoming meetings for the sustainability group. Asks if its possible to meet before the end of July. M. Burton says they are focused on getting the PDP submission, M. Burton says they can schedule end of July.	Record
11.13	**Adjourn**: 8:28 pm A motion was made by K. Bond and seconded by M. Simon to adjourn the meeting, Discussion: None. Meeting adjourned.	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

Submitted: 7/13/23

Approved: 7/13/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

June 28, 2023

DORE + WHITTIER

DINISCO DESIGN
architects + planners

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #11

June 28, 2023, 6:00 PM

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Previous Meeting Minutes

1. June 20th, 2023, Minutes

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Response to Previous SBC Comments

- **Emergency vehicle concerns due to Fox Hill current traffic pattern**
  - New school options will provide for emergency vehicle access and improved traffic queuing onsite and alleviate traffic queuing on Fox Hill Rd and Westwood St
  - Safe routes to school work ongoing this summer to alleviate current traffic
- **Working groups not listed on website** Agendas & Minutes | Fox Hill ES (foxhillbuildingproject.com)
  - Working groups are listed on the website
- **Meeting notes from working groups not listed on website** Agendas & Minutes | Fox Hill ES (foxhillbuildingproject.com)
  - Notes after 6/1 are posted on website
- **Spray painted trees and markings to remove trees**
  - Not part of this project
- **Decision about the preferred school option has been made**
  - No decision has been made. Decision is required in November to select a preferred solution to submit to MSBA
- **Traffic report and educational programs not on website** Official Documents | Fox Hill ES (foxhillbuildingproject.com)
  - Traffic report and educational programs posted on website
- **Have not presented 2 story building options** Agendas & Minutes | Fox Hill ES (foxhillbuildingproject.com)
  - Presented 2 story options at SBC meeting on 6/20 and 6/28

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

6/26/23 School Committee Update

- Second discussion on the educational programs and space summaries for enrollments of 325 and 640 students
- Reiterated studying two enrollment options is an MSBA requirement
- Final educational program and space summary will be submitted with the Preferred Solution to MSBA
- School Committee voted to submit both enrollments in the PDP submission pursuant to the MSBA process per the agreement

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Cost Estimate

- Developed the options to provide enough information for the cost estimator
- Met with estimating team last week
- These **rough order magnitude costs** will change and evolve as we continue the design process and ultimately select a preferred option
- Future estimates:
  - Preferred Schematic Report
  - Schematic Design
  - Design Development
  - 60% Construction Documents
  - 90% Construction Documents

Total Project Budget Template

Insert District and School

DRAFT

Enter Budget Values for Ineligible Costs in light yellow highlighted cells.

NOTE that ineligible costs can not exceed Estimated Budget Cost for any individual line item, distribute across multiple lines if needed.

Template Revised: March 2023
Incorporates revisions to MSBA's project funding limits policy, which was approved at the December 21, 2022 MSBA Board of Directors Meeting.

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Estimated Basis of Maximum Facilities Cost	Estimated Basis of Maximum Total Facilities	Estimated Maximum Total Facilities Grant[1]
		Enter Budget Values for all light yellow highlighted cells.	Enter Budget Values for Ineligible Costs in light yellow highlighted cells.	
Feasibility Study Agreement				
OPM Feasibility Study	$0	$0	$0	
A&E Feasibility Study	$0	$0	$0	
Environmental & Site	$0	$0	$0	
Other	$0	$0	$0	
Feasibility Study Agreement Subtotal	**$0**	**$0**	**$0**	**$0**
Administration				
Legal Fees	$0	$0	$0	$0
Owner's Project Manager				
Design Development	$0	$0		
Construction Contract Documents	$0	$0		
Bidding	$0	$0		
Construction Contract Administration	$0	$0		
Closeout	$0	$0		
Extra Services	$0	$0	$0	
Reimbursable & Other Services	$0	$0	$0	
Cost Estimates	$0	$0	$0	
Advertising	$0	$0	$0	
Permitting	$0	$0	$0	
Owner's Insurance	$0	$0	$0	
Other Administrative Costs	$0	$0	$0	
Administration Subtotal	**$0**	**$0**	**$0**	**$0**
Architecture and Engineering				
Basic Services				
Design Development	$0	$0		
Construction Contract Documents	$0	$0		
Bidding	$0	$0		
Construction Contract Administration	$0	$0		
Closeout	$0	$0		
Other Basic Services	$0	$0		
Basic Services Subtotal	**$0**	**$0**	**$0**	
Reimbursable Services				
Construction Testing	$0	$0	$0	
Printing (over minimum)	$0	$0	$0	
Other Reimbursable Costs	$0	$0	$0	
Hazardous Materials	$0	$0	$0	
Geotechnical & Geo-Environmental	$0	$0	$0	
Site Survey	$0	$0	$0	
Wetlands	$0	$0	$0	
Traffic Studies	$0	$0	$0	
Architectural / Engineering Subtotal	**$0**	**$0**	**$0**	**$0**
CM at Risk Pre-Construction Services				
Pre-Construction Services	$0	$0	$0	$0
Site Acquisition				
Land / Building Purchase	$0	$0	$0	
Appraisal Fees	$0	$0	$0	
Recording fees	$0	$0	$0	
Site Acquisition Subtotal	**$0**	**$0**	**$0**	**$0**
Construction Costs				
SUBSTRUCTURE				
Foundations	$0			
Basement Construction	$0			
SHELL				
Super Structure	$0			
Exterior Closure	$0			
Exterior Walls	$0			
Exterior Windows	$0			
Exterior Doors	$0			
Roofing	$0			
INTERIORS				
Interior Construction	$0			
Staircases	$0			
Interior Finishes	$0			
SERVICES				
Conveying Systems	$0			
Plumbing	$0			
HVAC	$0			
Fire Protection	$0			
Electrical	$0			
EQUIPMENT & FURNISHINGS				
Equipment	$0			
Furnishings	$0			
SPECIAL CONSTRUCTION & DEMOLITION				
Special Construction	$0			
Existing Building Demolition	$0	$0		
In-Building Hazardous Material Abatement	$0	$0		

Cell C13 - Scope Excluded OPM Fees (Cell I40)

Cell C15 - Costs beyond MSBA funding cap for OPM Basic Services (Cell K48)

Cell C28 - Scope excluded Designer Fees (Cell I43)

Cell C30 - Costs beyond MSBA funding cap for Designer Basic Services (Cell K52)

Soft Cost Reimbursement

Category	Estimated Budget	Excluded Costs	Eligible Soft Costs
Administration:	$0	$0	$0
A/E Services:	$0	$0	$0
Site Acquisition:	Ineligible, therefore not included in calculation		
Miscellaneous Project Costs:	$0	$0	$0
FFE:	$0	$0	$0
Owners Contingency:	Not included in this calculation		
		Total Eligible Soft Costs =	$0

Construction Costs associated with Soft Cost Cap Calculation

Category	Estimated Budget	
CM Pre-Construction Services:	$0	
Construction Cost:	$0	
Construction Contingency:	Not included in this calculation	
Total Construction Cost:	$0	
Soft Cost Allowance:	20%	
Reimbursable Soft Cost:	$0	
Eligible minus Reimbursable =	$0	If >0 enter into Cell C116

-If Eligible minus Reimbursable is negative; OK.
-If Eligible minus Reimbursable is positive enter value into "Soft Costs that exceed 20% of Construction Cost" below in the Ineligible column.

Scope Excluded OPM & Designer Costs associated with Scope Excluded Building Costs

Scope Excluded Aud/PE (GSF):		0	#DIV/0!
Total (GSF):		0	
	Estimated Budget	Excluded (%)	Scope Excluded Costs
OPM Basic Services:	$0	#DIV/0!	#DIV/0!
Designer Basic Services:	$0	#DIV/0!	#DIV/0!

Scope Excluded OPM & Designer Costs associated with Scope Excluded Site Work

Scope Excluded Direct Construction Cost ($):		$0	#DIV/0!
Total Direct Construction Costs ($):		$0	
	Estimated Budget	Excluded (%)	Scope Excluded Costs
OPM Basic Services:	$0	#DIV/0!	#DIV/0!
Designer Basic Services:	$0	#DIV/0!	#DIV/0!
Total Scope Excluded OPM Fees ($):			#DIV/0! Enter in Cell C13
Total Scope Excluded Designer Fees ($):			#DIV/0! Enter in Cell C28

Ineligible Fees associated with OPM (3.5%) & Designer (10%) Fee Caps

Upper Limit:		$0	0	$550 /sf	
Construction Budget:		$0			
Basis of OPM & Designer Fee Caps:		$0			
OPM Services Estimated Budget		Ineligible Costs	Eligible Costs	OPM Value @ 3.50%	Value > 3.5%
Basic Services:	$0	$0	$0	$0	$0
Extra Services:	$0	$0	$0		If >0 enter into Cell C15
Designer Services Estimated Budget		Ineligible Costs	Eligible Costs	Designer Value @ 10.00%	Value > 10%
Basic Services:	$0	$0	$0	$0	$0
Extra Services:	$0	$0	$0		If >0 enter into Cell C30

Ineligible Building Area	Ineligible NSF	Ineligible Aud/PE GSF	Other Ineligible GSF	Estimated District Cost
Core Academic:			-	#DIV/0!
Special Education:			-	#DIV/0!
Art & Music:			-	#DIV/0!
Vocations & Technology:			-	#DIV/0!
Chapter 74 CTE:			-	#DIV/0!
Health & Physical Education:		-		#DIV/0!
Media Center:			-	#DIV/0!
Auditorium / Drama:		-		#DIV/0!
Dining & Food Service:			-	#DIV/0!
Medical:			-	#DIV/0!
Administration & Guidance:			-	#DIV/0!
Custodial & Maintenance			-	#DIV/0!
Other:			-	#DIV/0!
	Total:	-	-	#DIV/0!
Grossing Factor:	1.50			

Mark Up Ratio

Construction Budget	$0	#DIV/0!	= Mark Up Ratio
Construction Trades Subtotal	$0		

Demolition and Abatement Costs

Total Demolition and Abatement Costs:	$0

Total Project Budget Template

Asbestos Containing Floor Material / Ceiling Tile Abatement	$0	$0		
Other Hazardous Material Abatement	$0	$0		
BUILDING SITE WORK				
Site Preparation	$0	$0		
Site Improvements	$0	$0		
Site Civil / Mechanical Utilities	$0	$0		
Site Electrical Utilities	$0	$0		
Scope Excluded Site Work	$0	$0		
Construction Trades Subtotal	$0	$0		
Contingencies (Design and Pricing)	$0	#DIV/0!		
Sub-Contractor Bonds	$0	#DIV/0!		
D/B/B Insurance	$0	#DIV/0!		
General Conditions	$0	#DIV/0!		
D/B/B Overhead & Profit	$0	#DIV/0!		
GMP Insurance	$0	#DIV/0!		
GMP Fee	$0	#DIV/0!		
GMP Contingency	$0	#DIV/0!		
Escalation to Mid-Point of Construction	$0	#DIV/0!		
Construction Cost over Funding Cap		$0		
Construction Budget	$0	#DIV/0!		#DIV/0!
Alternates				
Ineligible Work Included in the Base Project	$0	$0	$0	
Alternates Included in the Total Project Budget	$0	$0	$0	
Alternates Excluded from the Total Project Budget	$0		$0	
Subtotal to be Included in Total Project Budget	$0	$0	$0	$0
Miscellaneous Project Costs				
Utility Company Fees	$0	$0	$0	
Testing Services	$0	$0		
Swing Space / Modulars	$0	$0		
Other Project Costs (Mailing & Moving)	$0	$0		
Miscellaneous Project Costs Subtotal	$0	$0		$0
Furnishings and Equipment				
Furniture, Fixtures, and Equipment	$0	$0		
Technology	$0	$0		
FF&E Subtotal	$0	$0		$0
Soft Costs that exceed 20% of Construction Cost		$0		
Project Budget	$0	#DIV/0!		#DIV/0!

Update: Item was "Other Site Construction".

"Site Cost over Allowance" line below has been removed.

Cell C86 - Scope Excluded Sitework Costs such as a stadium, out buildings, concession stand etc. (Enter Direct Construction Costs)

Cell C98 - Represents construction costs over MSBA funding limits (Cell H103)

Cell C112 - Represents the amount exceeding the $1,200 per student allowance for FF&E (Cell J109)

Cell C113 - Represents the amount exceeding the $1,200 per student allowance for Technology (Cell J110)

Cell C116 - Soft costs that exceed 20% of the construction cost (Cell G21)

Ineligible Demolition and Abatement Costs:	$0
Eligible Demolition and Abatement Costs:	$0
Marked Up Eligible Costs:	#DIV/0!

Eligible Site Work Cost

Total Direct Site Work Costs:	$0	
Ineligible Site Work Costs:	$0	0 Eligible Building GSF
Potentially Eligible Direct Site Work Costs:	$0	**$39 Site Work Cost Limit ($/sf) includes Mark Up**
Potentially Eligible Marked Up Site Work Costs:	#DIV/0!	$0 Site Work Cost Allowance includes Mark Up
Marked Up Eligible Site Work Costs:	#DIV/0!	

Construction Costs and Funding Cap

Total Building Area (GSF):	0
Ineligible Excess Auditorium/PE Areas (GSF):	0
Other Ineligible Building Areas (GSF):	0
Eligible Building GSF:	0
Building Cost Funding Limit ($/sf):	**$393**
Eligible Building Costs:	$0
Eligible Site Work Costs:	#DIV/0!
Eligible Demolition & Abatement Costs:	#DIV/0!
Basis of Construction Costs:	**#DIV/0!**
Construction Budget:	$0
Basis of Construction Costs:	#DIV/0!
Ineligible Construction Costs:	#DIV/0!
Construction Cost over Funding Cap:	#DIV/0!
If > 0 enter value into Cell C98	

Ineligible Cost Breakdown

Scope Excluded Site Work:	$0
Site Work Cost beyond Funding Limit:	#DIV/0!
Ineligible Demo & Abatement:	#DIV/0!
Scope Excluded Aud/PE Areas:	#DIV/0!
Other Ineligible Building Areas:	#DIV/0!
Construction Cost over Funding Cap:	#DIV/0!

Construction Cost Breakdown

Total Construction Cost ($/sf):	#DIV/0!
Reimbursable Construction Cost ($/sf):	#DIV/0!
Marked Up Building Costs ($/sf):	#DIV/0!
Marked Up Site, Building Takedown & Haz Mat ($/sf):	#DIV/0!
Direct Building Cost ($/sf):	#DIV/0!

FF&E Reimbursement

Eligible Enrollment: Enter Eligible Enrollment

	Funding Limit	Estimated Budget	Eligible Costs	Ineligible Costs
Furniture, Fixtures & Equipment:	$1,200/student	$0	$0	$0 If >0 enter in Cell C112
Technology:	$1,200/student	$0	$0	$0 If >0 enter in Cell C113

Incentive Points

0.00	(0-2) Maintenance		
0.00	(0-6) Newly Formed Regional School District		
0.00	(0-5) Major Reconstruction or Reno/Reuse type in rounded to 2 decimal places		
	#DIV/0!	0 gsf Renovated or Existing to Remain	If Cell G117 > 0 enter value into Cell F116
		0 gsf Total at Conclusion of Project	
0.00	(0-1) Overly Zoning 40R and 40S		
0.00	(0-0.5) Overlay Zoning 100 units or 50% of units 1,2, or 3 family structures		
0.00	(0-2) Energy Efficiency - "Green Schools"		
			Owner's Contingency Cap: 0.50%
0.00	**Total Incentive Points**		Construction Contingency Cap: 1.00%

0.00	Reimbursement Rate Before Incentive Points
0.00	Total Incentive Points
0.00%	MSBA Reimbursement Rate

Board Authorization

Design Enrollment	0
Total Building Gross Floor Area (GSF)	0
Total Project Budget (excluding Contingencies)	$0
Scope Items Excluded or Otherwise Ineligible	#DIV/0!
Third Party Funding (Ineligible)	- $0
Estimated Basis of Maximum Total Facilities Grant[1]	#DIV/0!
Reimbursement Rate[1]	0.00%
Est. Max. Total Facilities Grant (before recovery)[1]	#DIV/0!
Cx Costs associated with Ineligible Building Area[2]	#N/A
Cost Recovery associated with Prior Projects[2]	- $0
Estimated Maximum Total Facilities Grant[1]	#DIV/0!

Construction Contingency[3]	$0
Ineligible Construction Contingency[3]	$0
"Potentially Eligible" Construction Contingency[3]	$0
Owner's Contingency[3]	$0
Ineligible Owner's Contingency[3]	$0
"Potentially Eligible" Owner's Contingency[3]	$0
Total Potentially Eligible Contingency[3]	$0
Reimbursement Rate	0.00%
Potential Additional Contingency Grant Funds[3]	$0
Maximum Total Facilities Grant	#DIV/0!
Total Project Budget	$0

NOTES

This template was prepared by the MSBA as a tool to assist Districts and consultants in understanding MSBA policies and practices regarding potential impact on the MSBA's calculation of a potential Basis of Total Facilities Grant and potential Total Maximum Facilities Grant. This template does not contain a final, exhaustive list of all evaluations which the MSBA may use in determining whether items are eligible for reimbursement by the MSBA. The MSBA will perform an independent analysis based on a review of information and estimates provided by the District for the proposed school project that may or may not agree with the estimates generated by the District using this template.

1 - The Estimated Basis of Total Facilities Grant and Estimated Maximum Facilities Grant amounts do not include any potentially eligible contingency funds and are subject to review and audit by the MSBA.

2 - Costs associated with the commissioning of ineligible building area is estimated to result in the recovery of a portion of the overall commissioning cost. The OPM has estimated this recovery of funds to be $_____. The proposed demolition of the _____ School is expected to result in the MSBA recovering a portion of state funds previously paid to the District for the _____ project at the existing facilities completed in _____. The MSBA will perform an independent analysis based on a review of its records and information and estimates provided by the District for the proposed school project that may or may not agree with the estimated cost recovery generated by the District and its consultants using this template.

3 - Pursuant to Section 3.21 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

Commissioning (Cx) Costs associated with Ineligible Building Area

Building GSF:	0
Cx Fee per GSF:	#N/A
Ineligible GSF:	0
Ineligible Cx Costs:	#N/A If >0 enter in Cell B128

Commissioning Fee Schedule

Cost Recovery associated with Prior Projects

Prior Project ID Number:	
Prior Project Total Grant:	
Propose School Opens:	
Prior Project Substantial Completion:	
Beneficial use (years):	0.00
Unused Years:	20.00
Unused Years as % of 20:	100.00%
Prior Project Cost Recovery:	$0 If >0 enter in Cell B128

Enter Date. Assume 15th of August if new school opens in September. For example if turnover is June, new school will not be used until September by students.

Enter Date. If only month is known, assume 15th of the month.

Total Project Budget Template

Draft - 3011 overview analysis - Burlington PDP

Potential Total Project Budget

	ID	Description	Base Repair	Renovation Addition - 325	New 3 Story - 325	New 3 Story - 325	New 2 Story - 325	New 2 Story -325	Repair only 640	Renovation Addition - 640	New 3 Story - 640 at Fox Hill	New 3 Story - 640 at Fox Hill	Renovation Addition - 640 at Pine Glen	New 3 Story - 640 at Pine Glen	Pine Glen only New 3 Story 325
			1	2	3A	3B	3C	3D	4	5	6A	6B	7	8	9
CO		Total Construction	40,038,566	85,503,802	81,736,871	82,292,495	85,823,548	86,202,370	40,038,566	121,612,971	122,667,012	122,448,619	122,041,074	119,234,464	74,535,080
		Construction Cost per SF	$ 621.72	$ 843.23	$ 898.21	$ 904.31	$ 943.12	$ 947.28	$ 621.72	$ 779.57	$ 791.40	$ 789.99	$ 744.15	$ 777.28	$ 898.01
Sof		Total Soft Costs	21,650,206	27,788,013	15,679,478	15,754,487	16,231,179	16,282,320	23,084,206	34,096,751	22,339,047	22,309,564	34,154,545	21,875,653	14,588,236
		Soft Cost % (Less contingencies) compared to Total Construction	54%	32%	19%	19%	19%	19%	58%	28%	18%	18%	28%	18%	20%
		Total Construction and Soft Cost	**61,688,772**	**113,291,815**	**97,416,349**	**98,046,982**	**102,054,727**	**102,484,690**	**63,122,772**	**155,709,722**	**145,006,059**	**144,758,183**	**156,195,619**	**141,110,117**	**89,123,316**
		Feasibility & Schematic design appropriation	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**675,000**
		Remaining funding required	**60,188,772**	**111,791,815**	**95,916,349**	**96,546,982**	**100,554,727**	**100,984,690**	**61,622,772**	**154,209,722**	**143,506,059**	**143,258,183**	**154,695,619**	**139,610,117**	**88,448,316**
		Project Cost (Less contingencies)	$ 958	$ 1,117	$ 1,071	$ 1,077	$ 1,121	$ 1,126	$ 980	$ 998	$ 936	$ 934	$ 952	$ 920	$ 1,074
REI		Assumed Reimbursement Rate	53.2%	50.7%	48.2%	48.2%	48.2%	48.2%	53.2%	50.7%	48.2%	48.2%	50.7%	48.2%	0.0%
		Ineligible Total	$ 15,717,264	$ 49,426,686	$ 50,553,102	$ 51,183,532	$ 52,177,147	$ 55,620,186	$ 16,245,264	$ 64,863,190	$ 66,553,027	$ 66,305,187	$ 61,299,044	$ 63,467,943	$ 45,586,609
		Construction Contingency (5%)	$ 2,001,928	$ 4,275,190	$ 4,086,844	$ 4,114,625	$ 4,291,177	$ 4,310,119	$ 2,001,928	$ 6,080,649	$ 6,133,351	$ 6,122,431	$ 6,102,054	$ 5,961,723	$ 3,726,754
		Owner's Contingency (Soft Costs @ 3%)	$ 649,506	$ 833,640	$ 470,384	$ 472,635	$ 486,935	$ 488,470	$ 692,526	$ 1,022,903	$ 670,171	$ 669,287	$ 1,024,636	$ 656,270	$ 437,647
		Total Project Cost	**$ 64,340,207**	**$ 118,400,646**	**$ 101,973,576**	**$ 102,634,241**	**$ 106,832,840**	**$ 107,283,278**	**$ 65,817,227**	**$ 162,813,273**	**$ 151,809,581**	**$ 151,549,900**	**$ 163,322,309**	**$ 147,728,109**	**$ 93,287,717**
		MSBA Estimated Max Reimbursement	$ 24,998,750	$ 33,040,478	$ 23,186,232	$ 23,190,349	$ 24,669,303	$ 23,219,138	$ 25,480,923	$ 46,995,645	$ 38,710,355	$ 38,708,757	$ 49,053,084	$ 38,294,531	
		Total District share ($1.5 already appropriated for F&S Study)	**39,341,457**	**85,360,167**	**78,787,344**	**79,443,892**	**82,163,537**	**84,064,141**	**40,336,304**	**115,817,628**	**113,099,226**	**112,841,143**	**114,269,225**	**109,433,578**	**93,287,717**
		Effective Reimbursement	**39%**	**28%**	**23%**	**23%**	**23%**	**22%**	**39%**	**29%**	**25%**	**26%**	**30%**	**26%**	**0%**
		Total Project $psf	**$ 999**	**$ 1,168**	**$ 1,121**	**$ 1,128**	**$ 1,174**	**$ 1,179**	**$ 1,022**	**$ 1,044**	**$ 979**	**$ 978**	**$ 996**	**$ 963**	**$ 1,124**

Cost Summary

Burlington Elementary School Project

Summary of PDP options

#	Description	Total Project Cost		District Share	
		Medium		Medium	
1	Base Repair	$	64,000,000	$	39,000,000
2	Renovation Addition - 325	$	118,000,000	$	85,000,000
3A	New 3 Story - 325	$	102,000,000	$	79,000,000
3B	New 3 Story - 325	$	103,000,000	$	79,000,000
3C	New 2 Story - 325	$	107,000,000	$	82,000,000
3D	New 2 Story -325	$	107,000,000	$	84,000,000
4	Repair only 640	$	66,000,000	$	40,000,000
5	Renovation Addition - 640	$	163,000,000	$	116,000,000
6A	New 3 Story - 640 at Fox Hill	$	152,000,000	$	113,000,000
6B	New 3 Story - 640 at Fox Hill	$	152,000,000	$	113,000,000
7	Renovation Addition - 640 at Pine Glen	$	163,000,000	$	114,000,000
8	New 3 Story - 640 at Pine Glen	$	148,000,000	$	109,000,000
9	Pine Glen only New 3 Story 325	$	93,000,000	$	93,000,000

Overall summary	Total Project cost		District share	
Fox Hill Only 325	$	107,000,000	$	84,000,000
Combined school 640	$	152,000,000	$	113,000,000
New Fox Hill 325 (MSBA) + Pine Glen 325 (non-msba)	$	200,000,000	$	177,000,000

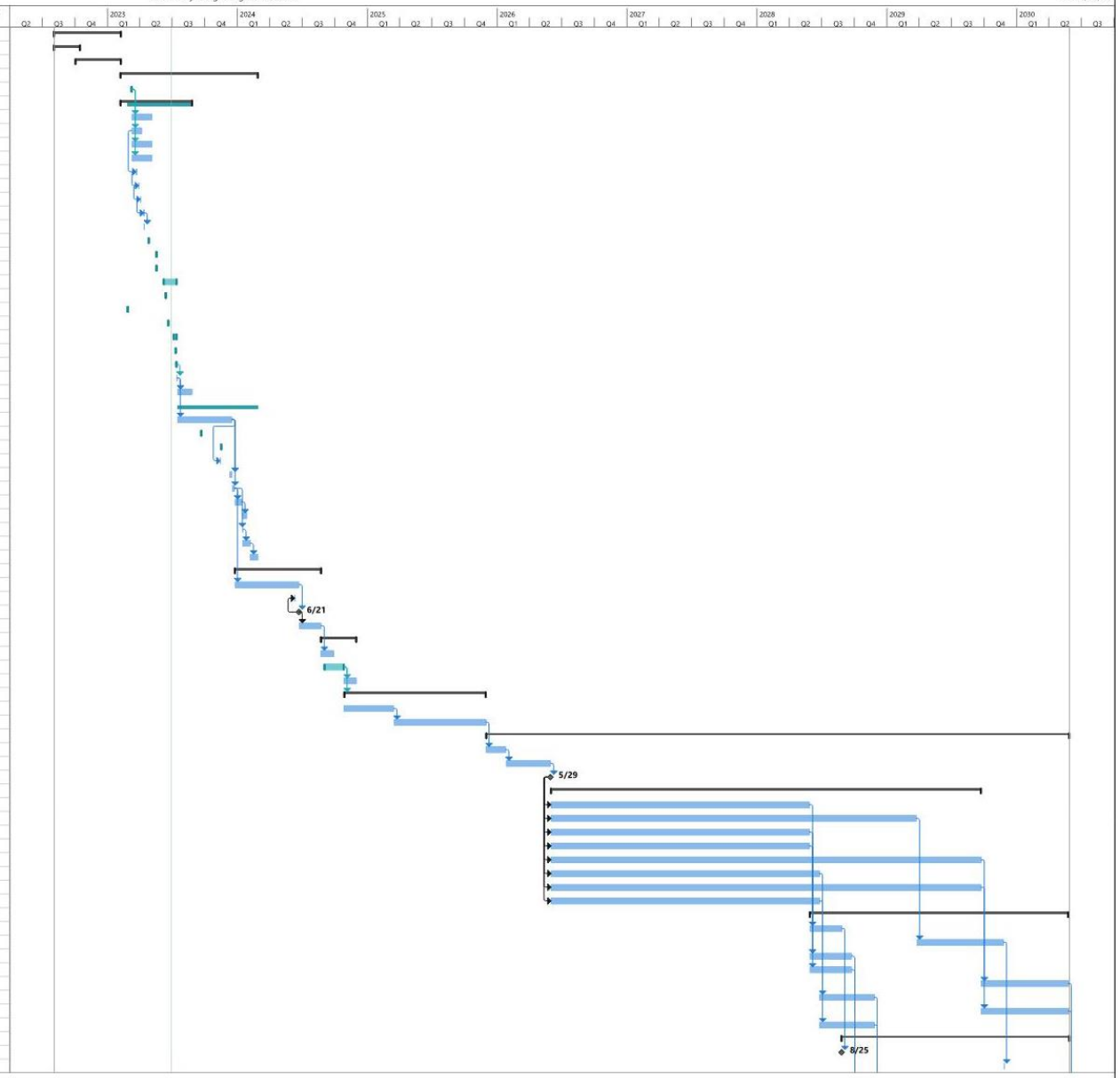
Next Steps

- Financial Working Group
  - Schedule a time to go through total project budget and assumptions
  - Establish local actions and approvals process
  - Town Administrators, Finance, Ways and Means, etc.
  - Establish bonding strategy and identify taxpayer impact
    - Nichole Coscia
    - Paul Sagarino
    - John Danizio
    - Eric Conti
    - Roger Riggs

Schedule Review

Town of Burlington — Preliminary Design Program Schedule — Wed 6/28/23

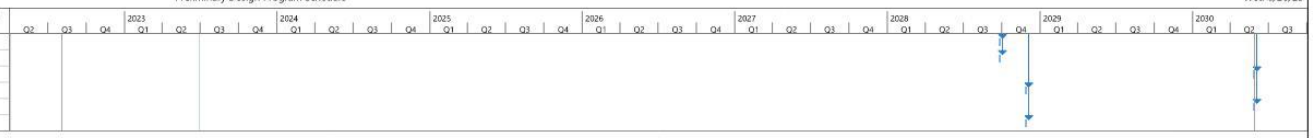
ID	Task Name	Duration	Start	Finish	Predecessors	Notes	Resource Names
1	**Module 2: FORMING THE TEAM**	**134 days?**	**Wed 8/3/22**	**Mon 2/6/23**			
2	**OPM Selection**	**53 days**	**Wed 8/3/22**	**Fri 10/14/22**			
10	**Designer Selection**	**91 days?**	**Mon 10/3/22**	**Mon 2/6/23**			
25	**Module 3: FEASIBILITY STUDY**	**276 days?**	**Mon 2/6/23**	**Mon 2/26/24**			
26	MSBA & Team Kick off Meeting	1 day	Thu 3/9/23	Thu 3/9/23			
27	**Preliminary Design Program (PDP)**	**145 days?**	**Mon 2/6/23**	**Fri 8/25/23**			
28	Educational Program Standards, and Policies	40 days	Fri 3/10/23	Thu 5/4/23	26		
29	Initial Space Summary	20 days	Fri 3/10/23	Thu 4/6/23	26		
30	Evaluation of Existing Conditions	40 days	Fri 3/10/23	Thu 5/4/23	26		
31	Site Development Requirements	40 days	Fri 3/10/23	Thu 5/4/23	26		
32	Educational Visioning Session No. 1	1 day	Wed 3/22/23	Wed 3/22/23	29SS+8 days		
33	Educational Visioning Session No. 2	1 day	Wed 3/29/23	Wed 3/29/23	32SS+5 days		
34	Community Visioning Session No. 1	1 day	Mon 4/3/23	Mon 4/3/23	33SS+2 days		
35	Educational Visioning Session No. 3	1 day	Wed 4/12/23	Wed 4/12/23	34SS+7 days		
36	Community Visioning Session No. 2	1 day	Thu 4/13/23	Thu 4/13/23	35		
37	Lincoln Elementary School Building Tour	1 day	Wed 4/26/23	Wed 4/26/23			
38	Maria Hastings Elementary School Building Tour	1 day	Thu 5/18/23	Thu 5/18/23			
39	Community Forum No. 1	1 day	Thu 5/18/23	Thu 5/18/23			
40	Preliminary Evaluation of Options	26 days	Thu 6/8/23	Thu 7/13/23			
41	SC Review of Ed. Program and Space Summary	1 day	Tue 6/13/23	Tue 6/13/23			
42	SC support of Ed. Program and Space Summary	1 day	Sun 2/26/23	Sun 2/26/23			
43	SBC Review of criteria and options	1 day	Tue 6/20/23	Tue 6/20/23			
44	PDP Draft Available to SBC and the Public	6 days	Thu 7/6/23	Thu 7/13/23			
45	Community Forum No. 2	1 day	Tue 7/11/23	Tue 7/11/23			
46	SBC PDP Approval	1 day	Thu 7/13/23	Thu 7/13/23			
47	Submit PDP to MSBA	1 day	Fri 7/14/23	Fri 7/14/23	46		
48	MSBA Review	6 wks	Mon 7/17/23	Fri 8/25/23	47		
49	**Preferred Schematic Report (PSR)**						
50	PSR Submittal Development	110 days	Mon 7/17/23	Fri 12/15/23	47		
51	Community Forum No. 3	1 day	Thu 9/21/23	Thu 9/21/23			
52	Community Forum No. 4	1 day	Thu 11/16/23	Thu 11/16/23			
53	Final SC Approval of Educational Plan and Space Summa	1 day	Mon 11/13/23	Mon 11/13/23	50FS-25 days		
54	SBC Submittal Approval Date	5 days	Mon 12/11/23	Fri 12/15/23	50FS-5 days		
55	Submit PSR to MSBA	5 days	Mon 12/18/23	Fri 12/22/23	50		
56	MSBA Staff Review	15 days	Mon 12/25/23	Fri 1/12/24	55		
57	Respond to MSBA PSR Comments	10 days	Mon 1/15/24	Fri 1/26/24	56		
58	FAS Presentation	1 day?	Mon 1/15/24	Mon 1/15/24	55FS+3 wks		
59	Address FAS Comments	15 days	Tue 1/16/24	Mon 2/5/24	58		
60	MSBA PS Board Approval	3 wks	Tue 2/6/24	Mon 2/26/24	59		
61	**MODULE 4: SCHEMATIC DESIGN**	**174 days?**	**Mon 12/25/23**	**Thu 8/22/24**			
62	Schematic Design Binder Development	26 wks	Mon 12/25/23	Fri 6/21/24	55		
63	SD Notification Email Sent	1 day?	Mon 6/10/24	Mon 6/10/24	64SS-10 days		
64	Submit to MSBA	0 days	Fri 6/21/24	Fri 6/21/24	62		
65	MSBA Board Meeting TBD	44 days	Mon 6/24/24	Thu 8/22/24	64		
66	**MODULE 5: PROJECT FUNDING APPROPRIATION**	**71 days**	**Fri 8/23/24**	**Fri 11/29/24**			
67	Project Scope and Budget Agreement	25 days	Fri 8/23/24	Thu 9/26/24	65		
68	Local Vote	8 wks	Mon 9/2/24	Fri 10/25/24			
69	Execute Project Funding Agreement	25 days	Mon 10/28/24	Fri 11/29/24	68		
70	**MODULE 6: DETAILED DESIGN**	**285 days**	**Mon 10/28/24**	**Fri 11/28/25**	**68**		
71	DD	20 wks	Mon 10/28/24	Fri 3/14/25			
72	CD	37 wks	Mon 3/17/25	Fri 11/28/25	71		
73	**MODULE 7: CONSTRUCTION**	**1171 days**	**Mon 12/1/25**	**Mon 5/27/30**			
74	Bidding/GMP	40 days	Mon 12/1/25	Fri 1/23/26	72		
75	Submittals/Shops	90 days	Mon 1/26/26	Fri 5/29/26	74		
76	Mobilize	0 days	Fri 5/29/26	Fri 5/29/26	75		
77	**Phase 1 Building**	**865 days**	**Mon 6/1/26**	**Fri 9/21/29**			
78	Option 1 Base Repair	104 wks	Mon 6/1/26	Fri 5/26/28	76SS		
79	Option 2 Add Reno 325	147 wks	Mon 6/1/26	Fri 3/23/29	76SS		
80	Option 3A & 3B 325 (3 story)	104 wks	Mon 6/1/26	Fri 5/26/28	76SS		
81	Option 3C & 3D 325 (2 story)	104 wks	Mon 6/1/26	Fri 5/26/28	76SS		
82	Option 5 Add Reno 640 (@Fox Hill)	173 wks	Mon 6/1/26	Fri 9/21/29	76SS		
83	Option 6A & 6B 640 (@Fox Hill)	108 wks	Mon 6/1/26	Fri 6/23/28	76SS		
84	Option 7 Add Reno 640 (@Pine Glen)	173 wks	Mon 6/1/26	Fri 9/21/29	76SS		
85	Option 8 New 640 (@Pine Glen)	108 wks	Mon 6/1/26	Fri 6/23/28	76SS		
86	**Phase 2 - site/demo**	**520 days**	**Mon 5/29/28**	**Fri 5/24/30**			
87	Option 1 Base Repair	13 wks	Mon 5/29/28	Fri 8/25/28	78		
88	Option 2 Add Reno 325	35 wks	Mon 3/26/29	Fri 11/23/29	79		
89	Option 3A & 3B 325 (3 story)	17 wks	Mon 5/29/28	Fri 9/22/28	80		
90	Option 3C & 3D 325 (2 story)	17 wks	Mon 5/29/28	Fri 9/22/28	81		
91	Option 5 Add Reno 640 (@Fox Hill)	35 wks	Mon 9/24/29	Fri 5/24/30	82		
92	Option 6A & 6B 640 (@Fox Hill)	22 wks	Mon 6/26/28	Fri 11/24/28	83		
93	Option 7 Add Reno 640 (@Pine Glen)	35 wks	Mon 9/24/29	Fri 5/24/30	84		
94	Option 8 New 640 (@Pine Glen)	22 wks	Mon 6/26/28	Fri 11/24/28	85		
95	**Final Completion**	**456 days**	**Fri 8/25/28**	**Mon 5/27/30**			
96	Option 1 Base Repair	0 days	Fri 8/25/28	Fri 8/25/28	87		
97	Option 2 Add Reno 325	1 day	Mon 11/26/29	Mon 11/26/29	88		



Schedule Review

Town of Burlington — Preliminary Design Program Schedule — Wed 6/28/23

ID	Task Name	Duration	Start	Finish	Predecessors	Notes	Resource Names
98	Option 3A & 3B 325 (3 story)	1 day	Mon 9/25/28	Mon 9/25/28	89		
99	Option 3C & 3D 325 (2 story)	1 day	Mon 9/25/28	Mon 9/25/28	90		
100	Option 5 Add Reno 640 (@Fox Hill)	1 day	Mon 5/27/30	Mon 5/27/30	91		
101	Option 6A & 6B 640 (@Fox Hill)	1 day	Mon 11/27/28	Mon 11/27/28	92		
102	Option 7 Add Reno 640 (@Pine Glen)	1 day	Mon 5/27/30	Mon 5/27/30	93		
103	Option 8 New 640 (@Pine Glen)	1 day	Mon 11/27/28	Mon 11/27/28	94		



Schedule Review

- Submit PDP to MSBA 7/14/23
- Submit PSR to MSBA 12/20/23
- Submit Schematic Design to MSBA 6/19/24
- Local Vote September 2024
- Execute Project Funding Agreement November 2024
- Detailed Design October 2024 – February 2025
- Construction Documents March 2025 – November 2025
- Bidding / GMP – November 2025 – January 2026
- Begin Construction – Spring 2026
- Complete construction varies by options with ranges from 24 months to 48 months

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Criteria Matrix Review

- Tool used to define goals and priorities of the SBC
- Evolving document that we will use throughout Preferred Schematic Report phase
- Tool that will help identify the preferred solution
- Will continue to reference and modify matrix as we study, refine, and chose a preferred solution in November 2023

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Next Meetings

- July 11th, 2023 Community Meeting No. 2 @ 7:00pm (update on concepts, criteria and options)
- July 13th, 2023 School Building Committee Meeting @6:00pm (Approve PDP and submit to MSBA)
- August 1, 2023 School Building Committee Meeting @6:00pm (further refinement and evaluation of the options)
- August 21, 2023 School Building Committee Meeting @6:00pm

- Executive Working Group
  - 6/28-Reviewed upcoming SBC meetings

- Communications/Executive Working Group
  - 7/10-review community forum presentation

- Sustainability Working Group
  - Late July early August

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	7/13/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member		Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
✓	David Rosenblatt*	Fox Hill Principal	✓	Donna DiNisco	DiNisco Design
✓	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member		Neil Harrigan	DiNisco Design
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member		Chris Campbell	
✓	Tara Carroll	SBC Member		Melissa Ulliani	
	Audrey Boeri	SBC Member		John Iler	
✓	George Papayannis	SBC Member		Lauren Seeley	
✓	Katherine Bond*	Vice Chair of SBC		Eileen Sickler	
✓	Jeremy Brooks*	SBC Member		Nicci Kadilak	
✓	Christine Monaco*	SBC Member		Adam Senesi	
✓	Martha Simon*	SBC Member		Sarah Visocchi	
	Kristen Downie	Secretary		Terry Orfanos	
✓	John Lyons*	Pine Glen Principal			
✓	Margo Bunker*	SBC Member	✓	Bill Boivin	
	Amanda Hanafin	SBC Member	✓	Meghan Nawoichik	
	Melissa Gilberg	SBC Member			

* SBC Voting Member

Item No.	Description	Action
12.1	**Call to Order & Intro**: 6:01 pm meeting was called to order by SBC Chair M. Massardo with 15 of 15 voting members in attendance.	Record
12.2	**Previous Topics & Approval of June 28th, 2023, Meeting Minutes:** ➢ A motion to approve the 06/28/2023 meeting minutes[1] as submitted made by M. Simon and seconded by J. Brooks. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – Yes - N. Coscia – Yes – J. Lyons – Yes – E. Conti – Yes – C. Monaco – Yes – M. Bunker – Yes – D. Rosenblatt – Yes – D. Villano - Yes. Abstention: P. Sagarino. Motion passes, minutes approved.	Record
12.3	**Public Comment (15 Minutes):** ➢ None.	Record
12.4	**Approval of Preliminary Design Program (Vote Expected):** ➢ A motion to authorize OPM Dore & Whittier Management Partners to submit the Preliminary Design Program on behalf of the Town of Burlington to the Massachusetts School Building Authority made by E. Conti and seconded by M. Simon. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – Yes - N. Coscia – Yes – J. Lyons – Yes – E. Conti – Yes – C. Monaco – Yes – M. Bunker – Yes – D. Rosenblatt – Yes – D. Villano – Yes – P. Sagarino – Yes. Abstention: None. Motion passes, submission approved.	Record
12.5	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ A motion to approve DiNisco Invoice No. 9830 for Basic Services in the amount of $29,545.00, DiNisco Invoice No. 9831 for Survey in the amount of $3,245.00, DiNisco Invoice No. 9832 for Existing Conditions Report and Traffic Study in the amount of $6,561.50, DiNisco Invoice No. 9833 for Wetlands/ANRAD in the amount of $2,769.25, and Dore + Whitter Invoice No. 09 in the amount of $31,712.50. made by M. Simon and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – Yes - N. Coscia – Yes – J. Lyons – Yes – E.	Record

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	Conti – Yes – C. Monaco – Yes – M. Bunker – Yes – D. Rosenblatt – Yes – D. Villano – Yes – P. Sagarino – Yes. Abstention: None. Motion passes, invoices approved.	
12.6	**Public Comment (15 Minutes)**: ➢ B. Boivin congratulates the group on getting to this point. They have patiently listened to all the public input. He thinks it's been an outstanding process and congratulates the group.	Record

12.7	**Next Meetings**:
	
	➢ August 1, 2023, School Building Committee Meeting at 6:00PM
	➢ August 21, 2023, School Building Committee Meeting at 6:00PM
	➢ Sustainability Working Group – Late July / Early August
	➢ Executive Working Group
	  ○ July 26, 2023
	  ○ August 9, 2023
	  ○ August 23, 2023
	➢ R. Riggs asks about the Criteria Matrix and if they expect any input before the August 1st meeting. C. Dell Angelo says no they do not.
		Record

12.8	**Adjourn**: 6:14 pm A motion was made by J. Priest and seconded by K. Bond to adjourn the meeting, Discussion: None. Meeting adjourned.	Record

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] June 20, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

8 APPENDIX

Burlington Fox Hill Elementary School Statement of Interest

MSBA Feasibility Study Invitation

Design Enrollment Certification

Capital Budget Statement

Project Directory

Project Schedule

SBC Agendas & Meeting Minutes

Educational Visioning Workshop Notes and Highlights

ATTACHMENT A
STATEMENT OF INTEREST

Name of School Fox Hill

Massachusetts School Building Authority **Next Steps to Finalize Submission of your FY 0 Statement of Interest**

Thank you for submitting your FY 0 Statement of Interest (SOI) to the MSBA electronically. **Please note, the district's submission is not yet complete**. The district is required to mail all required supporting documentation, which is described below.

VOTES: Each SOI must be submitted with the proper vote documentation. This means that (1) the required governing bodies have voted to submit each SOI, (2) the specific vote language required by the MSBA has been used, and (3) the district has submitted a record of the vote in the format required by the MSBA.

School Committee Vote: Submittal of all SOIs must be approved by a vote of the School Committee. For documentation of the vote of the School Committee, Minutes of the School Committee meeting at which the vote was taken must be submitted with the original signature of the Committee Chairperson. The Minutes must contain the actual text of the vote taken which should be substantially the same as the MSBA's SOI vote language.

Municipal Body Vote: SOIs that are submitted by cities and towns must be approved by a vote of the appropriate municipal body (e.g., City Council/ Aldermen/Board of Selectmen) in addition to a vote of the School Committee.

Regional School Districts do not need to submit a vote of the municipal body.
For the vote of the municipal governing body, a copy of the text of the vote, which shall be substantially the same as the MSBA's SOI vote language, must be submitted with a certification of the City/Town Clerk that the vote was taken and duly recorded, and the date of the vote must be provided.

ADDITIONAL DOCUMENTATION FOR SOI PRIORITIES #1 AND #3: If a District selects Priority #1 and/or Priority #3, the district is required to submit additional documentation with its SOI.

If a District selects Priority #1, Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of the school children, where no alternative exists, the MSBA requires a hard copy of the engineering or other report detailing the nature and severity of the problem and a written professional opinion of how imminent the system failure is likely to manifest itself. The district also must submit photographs of the problematic building area or system to the MSBA.

If a District selects Priority #3, Prevention of a loss of accreditation, the SOI will not be considered complete unless and until a summary of the accreditation report focused on the deficiency as stated in this SOI is provided.

ADDITIONAL INFORMATION: In addition to the information required above, the district may also provide any reports, pictures, or other information they feel will give the MSBA a better understanding of the issues identified at a facility.

If you have any questions about the SOI process, please contact the MSBA at 617-720-4466 or

SOI@massschoolbuildings.org.

Name of School Fox Hill

Massachusetts School Building Authority

School District Contact Name of School Submission Date

Burlington
Eric M Conti TEL: (781) 270-1821

Fox Hill 5/5/2020

SOI CERTIFICATION

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.

The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.

The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for any portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.

The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students and that the facility for which the SOI is being submitted does not serve a solely early childhood or Pre-K student population.

After the district completes and submits this SOI electronically, the district must mail hard copies of the required documentation described under the "Vote" tab, on or before the deadline.

The district will schedule and hold a meeting at which the School Committee will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is required for cities, towns, and regional school districts.

Prior to the submission of the SOI, the district will schedule and hold a meeting at which the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is not required for regional school districts.

On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and the vote will specifically reference the school and the priorities for which the SOI is being submitted. The minutes will be signed by the School Committee Chair. This is required for cities, towns, and regional school districts.

The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline. This is not required for regional school districts.

The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation in a format acceptable to the MSBA. If Priority 1 is selected, your SOI will not be considered complete unless and until you provide the required engineering (or other) report, a professional opinion regarding the problem, and photographs of the problematic area or system. If Priority 3 is selected, your SOI will not be considered complete unless and until you provide a summary of the accreditation report focused on the deficiency as stated in this SOI.

LOCAL CHIEF EXECUTIVE OFFICER/DISTRICT SUPERINTENDENT/SCHOOL COMMITTEE CHAIR (E.g., Mayor, Town Manager, Board of Selectmen)

Chief Executive Officer *

Paul Sagarino Town Manager

(signature)

Date
5/5/2020 12:36:01 PM

School Committee Chair

Chris Monaco

(signature)

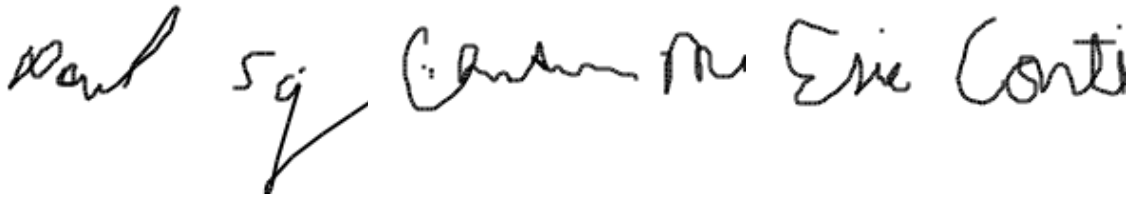
Date
5/5/2020 12:51:03 PM

Superintendent of Schools

Eric Conti

(signature)

Date
5/5/2020 1:11:41 PM



* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note,

in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.

Massachusetts School Building Authority

School District District Contact Name of School Submission Date

Burlington

Eric M Conti TEL: (781) 270-1821 Fox Hill 5/5/2020

Note
The following Priorities have been included in the Statement of Interest:

1. Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
2. Elimination of existing severe overcrowding.
3. Prevention of the loss of accreditation.
4. Prevention of severe overcrowding expected to result from increased enrollments.
5. Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
6. Short term enrollment growth.
7. Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
8. Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

SOI Vote Requirement

I acknowledge that I have reviewed the MSBA's vote requirements for submitting an SOI which are set forth in the Vote Tab of this SOI. I understand that the MSBA requires votes from specific parties/governing bodies, in a specific format using the language provided by the MSBA. Further, I understand that the MSBA requires certified and signed vote documentation to be submitted with the SOI. I acknowledge that my SOI will not be considered

complete and, therefore, will not be reviewed by the MSBA unless the required accompanying vote documentation is submitted to the satisfaction of the MSBA.

SOI Program: Core
Potential Project Scope: Potential New School **Is this a Potential Consolidation?** Yes

If "YES", Please describe Potential Consolidation that is anticipated at the school.

Burlington has two relatively smaller elementary schools, Fox Hill and Pine Glen, which were both built in the 1960's. While the Town of Burlington has invested heavily in maintaining both buildings, they each lack physical learning spaces and are pressured with growing enrollment. These buildings are within close proximity to each other, being less than 2 miles apart. The Fox Hill property, at approximately 38 acres, could accommodate multiple building configurations.

Is this SOI the District Priority SOI? School name of the District Priority SOI:

Is this part of a larger facilities plan?

Yes
2020 Fox Hill

Yes

If "YES", please provide the following:
Facilities Plan Date: 3/24/2017
Planning Firm: Knight, Bagge & Anderson (KBA)
Please provide a brief summary of the plan including its goals and how the school facility that is the subject of this SOI fits into that plan:

The Burlington School Master plan purpose was to provide the system with the following: • Demographic and enrollment projections • Educational and programmatic issues relating to facilities • Documentation of Physical Plant Needs • System-wide options for enrollment, programmatic and physical plant needs • Identification of long-term facilities master plan • Provide planning for short term needs outside master plan. Burlington Fox Hill renovations were the first project identified in the master plan. Replacement and renovation of the Memorial School and Marshall Simonds Middle School respectively, identified in the master plan have been accomplished.

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 21 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 20 students per teacher

Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District? Yes

If "YES", please provide the author and date of the District's Master Educational Plan.

Knight Bagge & Anderson (KBA) 6 Thirteenth Street Charlestown, MA. 02129 March 27,2017

Is there overcrowding at the school facility? Yes
If "YES", please describe in detail, including specific examples of the overcrowding.

Fox Hill has seen steady enrollment growth for many years. In 2005, four modular Classrooms were installed to provide additional learning spaces. Replacing another elementary school in 2011 allowed a redistrict of students and provided Fox Hill some enrollment relief. Since then, continued growth has meant fabricating walls to divide classrooms and building offices in hallway spaces to accommodate instructional needs as they arise. These actions have resulted in a patchwork of classroom sizes that require changing classroom assignments to account for the size of the classroom

Has the district had any recent teacher layoffs or reductions? No

If "YES", how many teaching positions were affected? 0
At which schools in the district?
Please describe the types of teacher positions that were eliminated (e.g., art, math, science, physical education, etc.).

Has the district had any recent staff layoffs or reductions? No

If "YES", how many staff positions were affected? 0
At which schools in the district?
Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

Please provide a description of the program modifications as a consequence of these teacher and/or staff reductions, including the impact on district class sizes and curriculum.

Does Not Apply

Please provide a description of the local budget approval process for a potential capital project with the MSBA. Include schedule information (i.e., Town Meeting dates, city council/town council meetings dates, regional school committee meeting dates). Provide, if applicable, the district's most recent budget approval process that resulted in a budget reduction and the impact of the reduction to the school district (staff reductions, discontinued programs, consolidation of facilities).

Budget guidelines are established by an appointed Ways & Means Committee, Board of Selectmen and Town Manager. A financial summit of all elected boards is held in mid-November detailing the financial picture of the Town from a revenue and expense perspective. Once established, a budget template, complete with anticipated budget guidelines, is distributed to School Department personnel for submission to Central Office. The budget submissions are compiled into a Draft Budget for submission to the School Committee in mid-January. The School Committee reviews the Draft submission during January through March with public presentations. In late March a public hearing is held and the School Committee votes a total budget for submission and vote by Town Meeting members in May. The approved budget for FY 20 was $ 65,486,358. The anticipated budget guideline for FY 21 is three point seven five (3.75%) above fiscal 2020. There are no anticipated program reductions or class size increases anticipated with the FY 2021 budget submission.

General Description

BRIEF BUILDING HISTORY: Please provide a detailed description of when the original building was built, and the date(s) and project scopes(s) of any additions and renovations (maximum of 5000 characters).

Fox Hill was built in 1967, with a square footage of approximately 59,150 square feet. New windows and doors installed in 1997. Portable classrooms were added to the site in 2005 and connected to the existing building to accommodate growth in enrollment. 2013 and 2014 corridor floor tiles were replaced. Also, in 2014 the library air conditioning unit was replaced, and a vestibule was installed at the main entrance for additional security. The entire roof was replaced in 2015.

TOTAL BUILDING SQUARE FOOTAGE: Please provide the original building square footage PLUS the square footage of any additions.

59150

SITE DESCRIPTION: Please provide a detailed description of the current site and any known existing conditions that would impact a potential project at the site. Please note whether there are any other buildings, public or private, that share this current site with the school facility. What is the use(s) of this building(s)? (Maximum of 5000 characters).

The property the building sits on is approximately 37.8 acres. There are no buildings on this site besides the school. Approximately 10 acres of the site have been cleared for use. Within the 10 acres include the school, parking lot, playground, and grass fields. There are no known environmental or other issues that would impact the identified project. The site is not shared.

ADDRESS OF FACILITY: Please type address, including number, street name and city/town, if available, or describe the location of the site. (Maximum of 300 characters)

1 Fox Hill Road, Burlington MA 01803. The site is approximately 37.8 acres with approximately 10 acres cleared for use. The remaining 27 plus acres are wooded terrain with local trees and vegetation.

BUILDING ENVELOPE: Please provide a detailed description of the building envelope, types of construction materials used, and any known problems or existing conditions (maximum of 5000 characters).

The exterior of Fox Hill elementary school is brick and has an overall unique shape. The main body of the building is rectangle and consists of the main office, gymnasium and cafeteria. At each corner of the main building, sits an eight-sided pod. Each pod has 7 learning spaces which are triangular in shape. The building sits on a concrete foundation and does not have a basement. Aluminum Framed window units and doors with low E glass windows replacing original installation in 1997.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS? NO **Year of Last Major Repair or Replacement:(YYYY)** 1967
Description of Last Major Repair or Replacement:
not applicable

Roof Section A
Is the District seeking replacement of the Roof Section? NO
Area of Section (square feet) 50000
Type of ROOF (e.g., PVC, EPDM, Shingle, Slate, Tar & Gravel, Other (please describe) fully adhered epdm
Age of Section (number of years since the Roof was installed or replaced) 5 **Description of repairs, if applicable, in the last three years. Include year of repair:**
roof was replaced in 2015

Window Section A
Is the District seeking replacement of the Windows Section? NO
Windows in Section (count) 160
Type of WINDOWS (e.g., Single Pane, Double Pane, Other (please describe)) Aluminum Frame with Low E Insulated Glass
Age of Section (number of years since the Windows were installed or replaced) 23 **Description of repairs, if applicable, in the last three years. Include year of repair:** windows were replaced in 1997

MECHANICAL and ELECTRICAL SYSTEMS: Please provide a detailed description of the current mechanical and electrical systems and any known problems or existing conditions (maximum of 5000 characters).

Mechanical (HVAC System) consist of gas fired tube type boilers (2) with circulation pumps to two heating zones. Classrooms are provided with unit ventilators for heat and ventilation. The Main office area is air conditioned with a through wall unit, the library is air conditioned by a roof top unit. Controls for all systems are by individual thermostats with no central control. The electrical service and panels are original to the building and consists of a 1200-amp main circuit breaker. A backup generator provides emergency power to designated lighting and critical building components. The existing system (HVAC) has exceeded life expectancy for all boilers and compressor units. The backup generator does not “pick up “current needs during emergency situations. The electrical service and distribution are less than adequate for current needs.

Boiler Section 1
Is the District seeking replacement of the Boiler? YES
Is there more than one boiler room in the school? NO
What percentage of the school is heated by the Boiler? 100
Type of heating fuel (e.g., Heating Oil, Natural Gas, Propane, Other)
natural gas
Age of Boiler (number of years since the Boiler was installed or replaced) 21 **Description of repairs, if applicable, in the last three years. Include year of repair:** no repairs in the last 3 years

Has there been a Major Repair or Replacement of the HVAC SYSTEM? YES
Year of Last Major Repair or Replacement:(YYYY) 2014
Description of Last Major Repair or Replacement:
Roof top air conditioning unit for the library was replaced in 2014. Prior to that, hot water pumps and the boilers were replaced in 1999.

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? NO
Year of Last Major Repair or Replacement:(YYYY) 1967
Description of Last Major Repair or Replacement:

Backup generator and automatic transfer switch were installed in 2015.

BUILDING INTERIOR: Please provide a detailed description of the current building interior including a description of the flooring systems, finishes, ceilings, lighting, etc. (maximum of 5000 characters).

Interior walls are CMU block construction between corridors and classrooms. Most classroom-to-classroom walls are CMU block construction. There exist some drywall construction and retractable partitions in selective classrooms. Ceilings are metal spline tiles in all corridors and acoustical tile and exposed concrete in classrooms. Floor finishes consist of VCT tiles in all classrooms and corridor areas. Most lighting fixtures are original, consisting of LED four-foot tubes in most areas. The gymnasium area is comprised of CMU block walls, wood flooring and tectum deck ceilings.

Name of School Fox Hill

PROGRAMS and OPERATIONS: Please provide a detailed description of the current grade structure and programs offered and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc. (maximum of 5000 characters).

Fox Hill (Grades k-5) offers a full complement of course offerings in-line with the Massachusetts Department of Elementary and Secondary Education (DESE). Currently there are square footage constraints

EDUCATIONAL SPACES: Please provide a detailed description of the Educational Spaces within the facility, a description of the number and sizes (in square feet) of classrooms, a description of science rooms/labs including ages and most recent updates, a description of the cafeteria, gym and/or auditorium and a description of the media center/library (maximum of 5000 characters).

The main body of the building is rectangle and consists of the main office, gymnasium and cafeteria. At each corner of the main building, sits an eight-sided pod. Each pod contains 7 learning spaces which are triangular in shape. Within each learning space is a retractable wall made of carpet material. There are 21 classrooms, gymnasium, cafeteria, and library.

CAPACITY and UTILIZATION: Please provide the original design capacity and a detailed description of the current capacity and utilization of the school facility. If the school is overcrowded, please describe steps taken by the administration to address capacity issues. Please also describe in detail any spaces that have been converted from their intended use to be used as classroom space (maximum of 5000 characters).

Four Modular Classrooms were installed in 2005, addressing enrollment concerns. Redistricting in 2011 provided Fox Hill enrollment relief which lasted only a few years. In recent years, creativity was needed to meet enrollment demands. Walls Dividing classrooms were fabricated and office spaces were installed in hallway spaces.

MAINTENANCE and CAPITAL REPAIR: Please provide a detailed description of the district's current maintenance practices, its capital repair program, and the maintenance program in place at the facility that is the subject of this SOI. Please include specific examples of capital repair projects undertaken in the past, including any override or debt exclusion votes that were necessary (maximum of 5000 characters).

The Burlington School Department currently employs a crew of thirty-one custodians system-wide with four custodians assigned to Fox Hill. The custodial assignments utilize two overlapping shifts so as to maximize efficiency and insure a clean learning environment. General maintenance and repairs are performed by in house maintenance department along with outside trade contractors under a Buildings and Grounds budget. Fiscal 2020 the School Department budget earmarked $ 635,200 for repairs and supplies for school facilities. In addition to the operating budget the School Department has a ten-year capital plan. Working with the Town Administration the School Department prioritizes capital needs with available capital monies and submits warrant articles. During the last 20 years Burlington has invested in excess of 2 million dollars on capital projects at Fox Hill. This has been accomplished without the need of a Debt exclusion or override.

Priority 2

Question 1: Please describe the existing conditions that constitute severe overcrowding.

Burlington Public Schools currently has four, K-5 elementary schools distributed throughout the community. With the assistance of the MSBA, Burlington replaced one of these elementary schools in 2011. This new school was double the square footage of the school it replaced. As a result, the school system re-drew all of the attendance zones across town. The Fox Hill School enrollment was initially reduced as a part of this process. The redistricting provided Fox Hill with some enrollment relief. Ten years later, the Fox Hill enrollment has surpassed the number when the larger elementary school was added and redistricting occurred. Burlington's 3 additional elementary schools do not have enough capacity to support redistricting.

The Fox Hill design does not allow for easy expansion. The snowflake design came out of the 1960's. The trapezoidal rooms and largely inoperable movable walls originally designed for an open classroom concept allow no room for redesign or expansion. Every available space has been utilized. Starting 14 years ago, we had to install modular classrooms, which are currently in need of significant repair and/or replacement. These four classrooms have been maintained, but they are past their useful life. We have constructed offices in what used to be hallways. Student interventions and services are being provided in inadequate spaces. We will soon need to move art and music onto carts because we will have need for their classrooms. In addition, teachers have been asked to move classrooms every year due to the logistics of class size and the growing enrollment.

Inadequate space for student services has led to multiple small groups of students being serviced in one space which inhibits specialized instruction and pushes the limits on grouping regulations. The space for occupational therapy is small which limits the activities that can be utilized for services.

Conference room space is needed for IEP meetings and 504 meetings as well as data team meetings and other parent meetings. Space is limited for these meetings currently.

Priority 2

Question 2: Please describe the measures the School District has taken to mitigate the problem(s) described above.

The school district has installed four modular classrooms. These classrooms were meant to provide space for the short term as they were purchased used and retrofitted to work with our building. These modular classrooms have been in use for 14 years and are in need of repair or replacement. In addition, offices have been added to hallway spaces and classrooms have been divided in half to accommodate additional learning spaces.

The district has divided classrooms in half and built office spaces in hallways. A warrant article in 2014 allowed us to reconstruct the front entrance and office area for security purposes and to create the one meeting room currently in use. This space came at the expense of the principal’s office and the nurse’s room. Both of these work spaces had to be reduced in size.

Priority 2

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

The district has had to reconfigure and divide classrooms into two. These actions have resulted in a patchwork of classroom sizes that require changing the classroom assignments to account for the size of the classroom. Specifically, last year a fourth-grade class section needed to be limited because of the size of the classroom. This adjustment resulted in a larger fourth grade classroom. Parents and the teacher in the larger classroom perceived the arrangement as inequitable.

The foundation of our educational program is built on the collaboration of the professionals in the building. The snowflake design and limited space erodes collaboration. Grade level teams are divided. There are no appropriate, large gathering spots for student performances or exhibitions. Offices have been built in hallways to accommodate the need for privacy and special services, like counseling and English Language Learner support.

Our hope is that with the MSBA's help that the building will no longer be the limiting factor in promoting collaboration, and ultimately, student achievement.

Please also provide the following:

Cafeteria Seating Capacity:
Number of lunch seatings per day:
Are modular units currently present on-site and being used for classroom space? NO

If "YES", indicate the number of years that the modular units have been in use: Number of Modular Units:
Classroom count in Modular Units:
Seating Capacity of Modular classrooms:

What was the original anticipated useful life in years of the modular units when they were installed? Have non-traditional classroom spaces been converted to be used for classroom space? NO

If "YES", indicate the number of non-traditional classroom spaces in use:
Please provide a description of each non-traditional classroom space, its originally-intended use and how it is currently used (maximum of 1000 characters).:

Please explain any recent changes to the district's educational program, school assignment polices, grade configurations, class size policy, school closures, changes in administrative space, or any other changes that impact the district's enrollment capacity (maximum of 5000 characters).:
What are the district's current class size policies (maximum of 500 characters)?:

Priority 7

Question 1: Please provide a detailed description of the programs not currently available due to facility constraints, the state or local requirement for such programs, and the facility limitations precluding the programs from being offered.

The Fox Hill School snowflake design was completed in 1960. The design at the time allowed for open classroom instruction and other educational concepts of the time. The building has been adapted to over the decades to better serve the instructional needs of the time. The design features of the 1960's are not serving our students well in 2020. Most of these features, like movable walls, are no longer functioning. In addition to not working, these walls provide little sound mitigation between classrooms.

Many of the classroom sinks are no longer functioning and have no hot water. With the current normal, having ample sinks and hot water to wash hands is critical.

In addition to open classroom design no longer being viable, the library space is too small. There is no defined technology space so an already undersized library has to double as a technology classroom. Our most recent elementary school, designed and built with the support of MSBA, has a library space that is large enough and flexible to accommodate instruction and maker areas. The inequity across town is significant.

The music and art rooms are being divided in half to accommodate the growing enrollment. As stated, the nonfunctioning, movable walls are not soundproof and create a problem for neighboring classrooms.

The occupational therapy and physical therapy spaces are undersized and difficult to keep clean given the number of students being served, the humidity in the room and the use of mats and other equipment necessary for instruction in these programs.

The cafeteria was originally designed to be expanded into the gymnasium with the opening and closing of a movable wall. This wall has not been operable or repairable for 10 years. The result is that the cafeteria space is too small. Moreover, there is no gathering or performance spaces appropriate for a large audience.

Finally, there is one private meeting room available throughout the school. Every other meeting space has been converted into an instructional space. Frequent meetings that require confidentiality often need to be postponed because there is no place to appropriately host these critical conversations.

Priority 7

Question 2: Please describe the measures the district has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

Burlington has invested millions of dollars to maintain the Fox Hill School. The district has replaced the roof, windows, and boilers. We have added office and classroom partitions to increase the number of each of these areas. The district also invested in modular classrooms that have been used for music and art classrooms and currently house an Emotionally Disturbed/Behaviorally Disturbed Program (ED/BD Program) in partnership with the LABBB Collaborative.

1997 New Windows and Doors $105K 2004 Chimney replacement $15K 2005 Modular classrooms $104K 2011 Cafeteria Flooring $30K

2012 Bathroom Upgrades $80K
2013 Bathroom Upgrades $80K
2013 and 2014 Floor Tiles $30K
2014 Library Air Conditioner $22K
2014 Main Entrance Security Vestibule $131K 2015 Roof $655K

2015 Roof $386K
2015 Boiler replacement $225K 2015 Parking lot $215K
2017 Kitchen Renovation $135K 2019 Office space renovation $20 2020 Classroom renovation $25K

Priority 7

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

The original Fox Hill building is as impractical an elementary school design as I have seen in 25 years as a school district administrator. The snowflake design appears to be more about the architect and the aerial shots that he promoted rather than the education that is needed in 2020. The open classroom model does not work. The oddly shaped classrooms do not allow for redesign or repurposing. The broken flexible walls mean that any initial thought in creating spaces that enhance instruction has been lost.

The four pods prevent grade level teams from working collaboratively - which is a priority in Burlington. Several grade level classrooms need to be located across the building isolating these students and teachers from their grade level peers and colleagues.

Specifically, we have instituted a multi-tiered reading program in line with the DESE model. The multiple tiers require students to switch classrooms to narrow the teachable range of students within the classroom or so that a teacher can focus on a particular reading skill. Having some grade level classrooms in different pods because of a lack of space limits the ability to fully implement this multi-tiered system of instruction.

The levels of collaboration across town in the new Memorial Elementary School, designed and built-in partnership with MSBA, is much greater. This design was identified as a model elementary school by the MSBA and we are interested in replacing the Fox Hill snowflake with this model.

REQUIRED VOTES

Vote

REQUIRED FORM OF VOTE TO SUBMIT AN SOI

If the SOI is being submitted by a City or Town, a vote in the following form is required from both the City Council/Board of Aldermen **OR** the Board of Selectmen/equivalent governing body **AND** the School Committee.

If the SOI is being submitted by a regional school district, a vote in the following form is required from the Regional School Committee only. FORM OF VOTE Please use the text below to prepare your City's, Town's or District's required vote(s).

FORM OF VOTE

Please use the text below to prepare your City's, Town's or District's required vote(s).

Resolved: Having convened in an open meeting on _____, prior to the closing date, the _____*[City Council/Board of Aldermen, Board of Selectmen/Equivalent Governing Body/School Committee]* of _____*[City/Town]*, in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts

School Building Authority the Statement of Interest dated _____ for the _____*[Name of School]* located at _____*[Address]* which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future _____ __ _____ __ _____ __ _____ __ _____ __ _____; *[Insert a description of the priority(s) checked off on the Statement of Interest Form and a brief description of the deficiency described therein for each priority];* and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building

Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the City/Town/Regional School District to filing an application for funding with the Massachusetts School Building Authority.

Massachusetts School Building Authority 16 Statement of Interest

Name of School Fox Hill

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

Chief Executive Officer *

Paul Sagarino Town Manager

(signature)

Date
5/5/2020 12:36:01 PM

School Committee Chair

Chris Monaco

(signature)

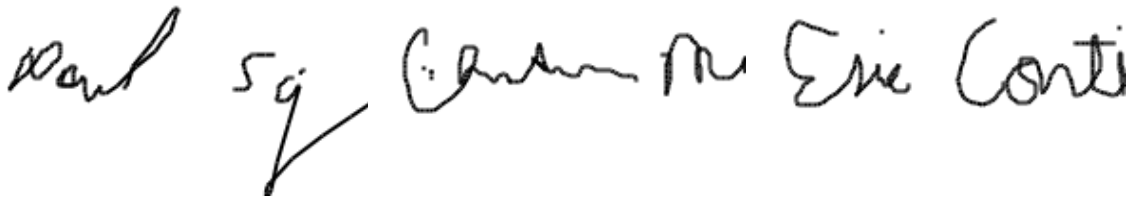
Date
5/5/2020 12:51:03 PM

Superintendent of Schools

Eric Conti

(signature)

Date
5/5/2020 1:11:41 PM



* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.

Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

April 27, 2022

Mr. Paul F. Sagarino, Jr., Town Administrator
Town of Burlington
Burlington Town Hall
29 Center Street
Burlington, MA 01803

Re: Town of Burlington, Fox Hill Elementary School

Dear Mr. Sagarino:

I am pleased to report that the Board of the Massachusetts School Building Authority (the "MSBA") has voted to invite the Town of Burlington (the "Town") to partner with the MSBA in conducting a Feasibility Study for the Fox Hill Elementary School. The Board's vote follows the Town's timely completion of all of the requirements of the MSBA's Eligibility Period.

I do want to emphasize that this invitation to partner on a Feasibility Study is ***not*** approval of a project but is strictly an invitation to the Town to work with the MSBA to explore potential solutions to the problems that have been identified. Moving forward in the MSBA's process requires collaboration with the MSBA, and communities that "get ahead" of the MSBA without MSBA approval will not be eligible for grant funding. To qualify for any funding from the MSBA, local communities must follow the MSBA's statute, regulations, and policies which require MSBA collaboration and approval at each step of the process.

During the Feasibility Study phase, the Town and the MSBA will partner pursuant to the terms of the Feasibility Study Agreement to find the most fiscally responsible and educationally appropriate solution to the problems identified at the Fox Hill Elementary School. The Feasibility Study, which will be conducted pursuant to the MSBA's regulations and policies, requires the Town to work with the MSBA on the procurement of an Owner's Project Manager and Designer, which will help bring the Town's Feasibility Study to fruition.

We will be contacting you soon to discuss these next steps in more detail. In the meantime, however, I wanted to share with you the Board's decision and provide a brief overview of what this means for the Town of Burlington.

I look forward to continuing to work with you as part of the MSBA's grant program. As always, feel free to contact me or my staff at (617) 720-4466 should you have any questions.

Sincerely,

John K. McCarthy
Executive Director

Cc: Legislative Delegation
Nicholas Priest, Chair, Burlington Select Board
Thomas F. Murphy Jr., Chair, Burlington School Committee
Dr. Eric Conti, Superintendent, Burlington Public Schools
Robert Cunha, Director of Operations, Burlington Public Schools
File: 10.2 Letters (Region 4)

Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

February 22, 2022

Mr. Paul F. Sagarino, Jr., Town Administrator
Town of Burlington
Burlington Town Hall
29 Center Street
Burlington, MA 01803

Re: Town of Burlington, Fox Hill Elementary School

Dear Mr. Sagarino:

I would like to thank representatives of the Town of Burlington (the "District") for meeting with Massachusetts School Building Authority (the "MSBA") staff on November 30, 2021, January 6, 2022, and January 26, 2022, to review enrollment projections and methodologies for the Fox Hill Elementary School project (the "Proposed Project"). As discussed, the next critical step is for the MSBA and the District to agree on an enrollment for the Fox Hill Elementary School.

The MSBA works with local communities to create affordable, sustainable, and energy efficient schools across Massachusetts. A critical early component in achieving these objectives begins with an appropriate design enrollment that positions the District to efficiently meet space capacity needs throughout potential future enrollment variations.

The MSBA uses a data driven enrollment projection methodology based on the widely accepted modified grade-to-grade cohort survival methodology (the "enrollment methodology"). The MSBA's enrollment methodology generates a baseline enrollment projection as discussed during the November 30, 2021, enrollment meeting, and as further described on the MSBA's website found under the 'Building With Us', 'MSBA Enrollment Methodology' section.

Based on information supplied by the District, data from sources such as the Department of Elementary and Secondary Education ("DESE") and Department of Public Health, and discussion with the District, the MSBA has been able to create an enrollment projection for the Fox Hill Elementary School project, as follows.

The Fox Hill Elementary School presently serves the District's grades K-5 enrollment. The MSBA understands that the District would like its feasibility study to also examine options that explore consolidation with the Pine Glen Elementary School, which also serves students ingrades K-5. Accordingly, this analysis will be focused on the enrollment projections for grades K-5.

The table below illustrates the District's K-12 enrollment during the most recent ten-year period, including enrollment for the 2021-2022 school year as reported by DESE.

School Year	K-5	6-8	9-12	Total
2012-2013	1,637	840	1,029	3,506
2013-2014	1,591	853	1,017	3,461
2014-2015	1,528	855	988	3,371
2015-2016	1,542	844	986	3,372
2016-2017	1,605	821	977	3,403
2017-2018	1,664	801	961	3,426
2018-2019	1,689	787	951	3,427
2019-2020	1,699	770	937	3,406
2020-2021	1,671	751	893	3,315
2021-2022	1,681	763	907	3,351

The total grade K-5 enrollment as reported by the District for the 2021-2022 school year was 1,681 students, which reflects a decrease of 18 students (- 1%) from the grade K-5 enrollment reported in the 2019-2020 school year, which was the maximum grade K-5 enrollment reported in the preceding ten years. Additionally, the current year's grade K-5 enrollment reflects an increase of approximately 50 students (+ 3%) from the average grade K-5 enrollment reported during the preceding ten-year period. The MSBA understands that the District is proposing an enrollment of approximately 600 students in grades K-5 at the Fox Hill Elementary School.

With respect to future enrollments, the MSBA's base enrollment projection indicates the District's grade K-5 enrollment will continue to experience a declining trend through the 2031-2032 school year. In accordance with the MSBA's Enrollment Methodology, the baseline enrollment is calculated using the ten-year average of projected enrollments. As such, the average grade K-5 base enrollment projection through the 2031-2032 school year is 1,590 students.

As a result of a sensitivity analysis performed by the MSBA on this base enrollment projection and further discussion with the District, the following adjustment has been made to the base enrollment projection:

- Out-of-District Enrollment
  - In order to adjust for fluctuations to the out-of-district enrollment patterns of the District's residents over time, the MSBA has made an additional adjustment to the base enrollment projection.
  - In order to make this adjustment, the MSBA adjusted the grade-to-grade survival ratios for grades K-5 by a total of 3.3 % throughout a four-year period in the projection.
  - This adjustment added the following totals to the projected averages for the District's proposed options as compared to the base enrollment projection:

- For the Fox Hill Elementary School, the adjustment added approximately 15 students.
- For the consolidated Fox Hill Elementary School and the Pine Glen Elementary School, the adjustment added approximately 20 students.

In order to recommend an enrollment for an appropriately sized Fox Hill Elementary School project, the MSBA reviewed use of the District's K-5 elementary schools using "school use" plans as provided by the District, discussions held on January 6, 2022 between the MSBA and the District, and additional information provided on January 18, 2022. The following non-project schools were included in the MSBA's capacity review because they also serve grades K-5: the Francis Wyman Elementary School, the Memorial Elementary School, and the Pine Glen Elementary School (the "non-project schools"). A total of 71 general classrooms, exclusive of Special Education, Art, Music, or "other" spaces were identified and multiplied by historic students per classroom (18) resulting in space for 1,278 students in the K-5 non-project schools identified above. The assumed K-5 enrollment in the non-project schools is 1,280 (rounded to the nearest five students).

The exercise above was repeated to support the District's interest in studying options that consider the consolidation of the Fox Hill Elementary School student enrollment with the Pine Glen Elementary School enrollment. The following non-project schools were included: the Francis Wyman Elementary and the Memorial Elementary, resulting in a total of 54 general classrooms, yielding space for 972 students in the K-5 non-project schools identified above, or an assumed K-5 enrollment in the non-project schools of 970 (rounded to the nearest five students).

As a result of analysis on the average base enrollment projection, the adjustment to the base projection described above, and based on the historical enrollment trends and students per classroom across the District, the MSBA recommends study enrollments for the Fox Hill Elementary School project as follows:

- Fox Hill Elementary School: 325 students, grades K-5 (1,590 students + 15 Out of District Adjustment – 1,280 spaces in non-project schools)
- Consolidated Fox Hill and Pine Glen Elementary Schools: 640 students, grades K-5 (1,590 students + 20 Out of District Adjustment – 970 spaces in non-project schools)

Please note that these recommendations for the study enrollments do not represent an affirmation by the MSBA for approval and/or funding of any of these options and are intended only to provide a framework to inform the feasibility study to be conducted as a means of determining the most cost effective and educationally sound solution to be agreed upon by the District and the MSBA.

If the Preferred Schematic is based on the consolidation of the Fox Hill and Pine Glen Elementary Schools, the District will be required to establish in the Preferred Schematic Report

the proposed future use or disposition of any facilities vacated or otherwise reprogrammed as a result of this potential project and provide a description of the changes needed to the vacated schools and sites to accommodate the proposed use including conceptual budgets, and schedules. Further, the MSBA will require a written plan from the District describing the process for determining local support for the consolidated Preferred Schematic and the potential work required to prepare the vacated school buildings for the proposed use once the proposed Fox Hill Elementary School project opens.

Please note that all other potential work beyond the cost of the preliminary analysis associated with estimating potential work required to prepare the vacated school facilities such as planning, design, fit-out, construction etc. beyond the Preferred Schematic design phase of the MSBA grant program would be considered separate from the Fox Hill Elementary School project, and therefore would require a separate procurement, separate contracts, and separate funding and authorization.

The MSBA believes that this study enrollment recommendation will position the District to efficiently meet space capacity needs throughout future enrollment variations. Please sign and return the attached certification within 21 calendar days to confirm agreement on this study enrollment. If the District feels that this study enrollment does not meet the needs of the District, please respond to this letter via e-mail to Brittany Gomes and propose three meeting/conference call times for which the District can be available to discuss enrollment.

If you have any questions regarding this matter, please do not hesitate to contact me or Brittany Gomes (Brittany.Gomes@MassSchoolBuildings.org) at 617-720-4466.

Sincerely,

Mary Pichetti
Director of Capital Planning

Cc: Legislative Delegation
James M. Tigges, Chair, Burlington Select Board
Thomas Murphy, Chair, Burlington School Committee
Dr. Eric Conti, Superintendent, Burlington Public Schools
Robert Cunha, Director of Operations, Burlington Public Schools
File: 10.2 Letters (Region 4)

MASSACHUSETTS SCHOOL BUILDING AUTHORITY
TOWN OF BURLINGTON
FOX HILL ELEMENTARY SCHOOL
STUDY ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the Fox Hill Elementary School (the "Proposed Project"), the Town of Burlington hereby acknowledges and agrees that the design of alternatives, which may be evaluated as a part of the feasibility study for the Fox Hill Elementary School, shall be based in accordance with the following:

Enrollment for Grades K-5, at Fox Hill Elementary School	**Enrollment for Grades K-5, at a Consolidated Fox Hill Elementary School and Pine Glen Elementary School**
325 students	640 students

The Town of Burlington further acknowledges and agrees that pursuant to 963 CMR 2.00 *et seq.*, the MSBA shall determine the square feet per student space allowance and total square footage according to the enrollments noted above. The Town of Burlington acknowledges and agrees that it has no right or entitlement to any particular design enrollment, square feet per student space allowance, or total square footage and that it has no right or entitlement to a design enrollment any greater than any of the enrollments noted above, and further acknowledges and agrees that it shall not bring any claim or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the design enrollment for the Proposed Project that it has acknowledged and agreed to herein. The Town of Burlington further acknowledges and agrees that, among other things, the design enrollment, square feet per student space allowance, and total square footage of the Proposed Project shall be subject to the approval of the MSBA's Board and that the final approval of a Proposed Project shall be within the sole discretion of the MSBA's Board.

The undersigned, for themselves and the Town of Burlington, hereby certify that they have read and understand the contents of this study enrollment certification and that each of the above statements is true, complete and accurate. The undersigned hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the Town of Burlington to bind the Town of Burlington to its terms.

Paul F. Sagan Jr.
Chief Executive Officer

2/28/2022
Date

Superintendent of Schools

3/8/22
Date

Duly Authorized Representative of School Committee

March 8, 2022
Date

TOWN OF BURLINGTON

Proposed Operating Budget
&
10-Year Capital Plan

Fiscal Year 2024

July 1, 2023 - June 30, 2024

Prepared by the Accounting Department

Select Board

Michael Runyan, Chair
Joseph Morandi, Vice Chair
Michael Espejo
Nicholas Priest
James Tigges

Ways and Means Committee

John Iler, Chair
Doug Davison, Vice Chair
Shayan Bhattacherya
Bradford Bond
Christopher Campbell
Christian Delaney
Michael Hardy
Frank Monaco
Steve Morin
Meghan Nawoichik
Robert Neufield
Ed Parsons
Roger Riggs
Sonia Rollins
David Tait

Capital Budget Committee

Mark Woods, Chair
Gary Kasky
Gary Mercier
Maria Margarita Prajapati
Myrna Saltman
Salvana Shakaib
Ernest Zabolotny

Town Administration

Paul Sagarino, Town Administrator
John Danizio, Assistant Town Administrator
Whitney Haskell, Budget Director
Juiling De Los Reyes, Town Accountant

This Page Intentionally Left Blank

TABLE OF CONTENTS

SECTION 1. GENERAL INFORMATION

Ways and Means Budget Recommendation..... 11
Town Administrator's Budget Message..... 13
Organizational Chart..... 19
Town Information..... 20
Budget Process..... 21
Budget Cycle..... 22
FY24 Budget Overview..... 23
Five Year Budget Summary..... 24
Recurring Expenditures..... 25
- Accommodated Accounts..... 25
- General Government..... 25
- Education..... 26
- Allowance for Abatements 26
- State Assessments (Cherry Sheet)..... 26
- State Offset Items (Cherry Sheet)..... 26

Non Recurring Expenditures..... 27
- Deficit Accounts..... 27
- Special Warrant Articles..... 27

Recurring Revenues..... 27
- Taxes Budget to be Levied..... 27
- Local Receipts..... 28
- State Receipts (Cherry Sheet)..... 29

Non Recurring Revenues..... 30
- Free Cash..... 30
- Special Revenue Funds..... 31
- Prior Unexpended Appropriations..... 31
- Overlay Surplus..... 31

SECTION 2. OPERATING BUDGETS

General Government..... 35
- Town Meeting and Reports..... 35
- Other Legislative Committees..... 36
- Town Administrator/Select Board..... 38

Town Accountant..... 41
Assessors..... 44
Treasurer/Collector..... 46
Central Administration..... 48
Legal..... 50
Human Resources..... 51
Management Information Systems..... 54
Town Clerk..... 57
Board of Registrars..... 60
Conservation..... 61
Planning..... 63
Board of Appeals..... 66
Town Facilities..... 67
Public Safety..... 68
Police..... 68
Fire..... 72
Building 76
Sealer of Weights and Measures..... 78
Emergency Management..... 79
Education..... 80
Local Education..... 80
Regional School Assessments..... 81
Public Works..... 82
Engineering..... 82
Administration..... 82
Highway..... 83
Water and Sewer..... 84
Buildings and Cemeteries..... 86
Central Maintenance..... 87
Human Services..... 89
Board of Health..... 89
Council on Aging..... 93
Veterans' Services..... 96
Youth and Family Services..... 99
Disability Access..... 101
Culture and Recreation..... 102
Public Library..... 102
Recreation..... 105
Historical Commission..... 108
Debt Service..... 109

Other Accounts..... 110
Reserve Fund..... 110
County Retirement..... 110
Negotiated Settlements..... 110
Local Transportation..... 110
Capital Improvements..... 110

SECTION 3. SUPPLEMENTAL INFORMATION

Personnel Chart (FTEs)..... 113
Statistical Information..... 119
Local Economy..... 121
Revenue Trends..... 123
New Growth and Excess Capacity..... 124
Community Comparison..... 125
Share of Value v. Share of Levy..... 126

SECTION 4. CAPITAL IMPROVEMENT PLAN

Overview..... 128
10 Year Plan..... 129

SECTION 5. GLOSSARY OF TERMS

Glossary of Terms..... 133

This Page Intentionally Left Blank

SECTION 1:
GENERAL INFORMATION

This Page Intentionally Left Blank

Town of Burlington

Ways and Means Committee

Annual Budget Recommendation
Fiscal Year 2024

Dear Town Meeting Members,

The Ways and Means Committee is pleased to present the proposed budget for FY23 for your consideration. The Committee has worked with the Town's financial team and elected bodies to prepare the budget since early January. This budget supports the level of services expected by Burlington residents and is supported by Burlington's elected boards and commissions.

In my message to you last year, I wrote that we had a long way to go before we fully understood what the full impact of the pandemic would be to the Town's finances. A year later, clarity is starting to emerge. If you've been Dear Town Meeting Members,

The budget process each year is both lengthy and thorough. Departments develop draft budgets in January. Budgets are then reviewed by either the Town Administrator or supervising Board/Committee. Next, each department reviews their budget first with a Ways & Means subcommittee, and then with the full Ways & Means committee. The result of this process is the budget on which you will be voting at Town Meeting. Warrant articles go through a similar process, with additional review by the Capital Budget Committee. I thank the Administration, all of the Boards, Commissions, Departments, Committees, and my Ways and Means colleagues for their diligence in creating a budget that balances the often competing needs and desires of the Town.

We enter FY24 with several large projects previously approved by Town Meeting coming to completion. The second of two buildings for the DPW, and Parks & Recreation project was completed and put into service. The Mill Pond treatment plant PFAS filter construction is complete and will be coming online shortly. Phase 2A of our MWRA connection is just a few months from bringing online an additional 3.5 million gallons per day of water capacity.

In January, Town Administration, the School Committee and Department, and Ways & Means agreed to a budget increase guideline of 3.75% for operating budgets (similar to previous years) and 9.0% for Accommodated Accounts (larger than usual). With salary expenses increasing at approximately 5% per year, operating targets are difficult to achieve, particularly in light of the Town's desire to minimize taxes, but not at the expense of reduced services. In some areas, services have expanded which puts pressure on the operating budget. The Schools in particular are addressing increased English Language Learner needs, a free lunch for all students program, and expanded mental health needs in the wake of the pandemic. The end of our favorable refuse disposal contract along with large Special Education and Shawsheen assessment increases helped drive a larger-than-usual FY24 Accommodated Accounts increase. The number of Full Time Equivalent (FTE) employees is unchanged for the Town, while Schools have added 8 FTEs and converted four part time employees to full time. It is noteworthy that the presented budget achieves the target guidelines on the Town side, while the School operations budget (not finalized at press time) is slightly over at 4.0%.

We have several planning challenges ahead of us. In particular, the Town has several large, near term, projects to consider. The Police station is in need of replacement and Town Meeting has already approved

funds for studying the best approach. The Fox Hill elementary school is slated for replacement. The High School requires, at a minimum, significant renovation. Finally, the MWRA project Phase 2B will expand our connection by an additional 3.0 million gallons per day. With all of these multi-million dollar projects coming up, the Town must carefully manage the resulting debt service to ensure our budget does not become overwhelmed by debt payments. Additionally, the uncertainty of a possible recession adds to our planning challenges.

There is much cause for optimism, and the Town has many financial accomplishments to be proud of. Our free cash ($23.6 million after January 2023 Town Meeting) and stabilization ($10.2 million in July 2022) balances are strong. If all warrant articles are approved, it is expected that a healthy $13.4 million in free cash will carry into FY24. We have significant unused levy capacity ($13.2 million) in reserve. Additionally, Burlington still has $6 million unallocated from the $8.5 million we received via the American Rescue Plan Act (ARPA). It is also heartening to see that the COVID pandemic's casualty rate has generally dropped during FY23. While hotel tax local receipts are still depressed, concerns about property tax base reductions due to the pandemic were fortunately not realized. Our continuing OPEB contributions, as per plan, helps ensure we do not have runaway liabilities. Finally, local receipt revenue and state aid is expected to continue to grow modestly. In total, the Town's responsible financial stewardship has resulted in a continued AAA bond rating and has left us well positioned for our future needs.

Respectfully submitted,

John K. Iler, Chair

The Ways and Means Committee
Fiscal Year 2024

John K. Iler, Chair	Christian Delaney	Rob Neufeld
Doug Davison, Vice Chair	Michael J. Hardy	Ed Parsons
Shayan Bhattacherya	Frank P. Monaco	Roger S. Riggs
Brad D. Bond	Steve Morin	Sonia Rollins
Christopher Campbell	Meghan Nawoichik	David S. Tait

Town of Burlington

Town Administrator

Town Administrator's Budget Message
Fiscal Year 2024

Town Meeting Members:

Enclosed please find the FY24 proposed operating budget and capital plan for the Town of Burlington and Burlington Public Schools.

As always, I would like to begin with expressing my gratitude to Town and School staff and our appointed and elected officials who have worked hard to continue to provide the highest level of service to the community.

The Administration's overarching goal with this budget as presented, is to continue to build a sustainable financial model, which is designed to maintain a high level of service and allow for continued investments in critical infrastructure, while controlling the increase in the tax levy, maintaining reasonable fees, and addressing long-term liabilities and reserves.

Operating Budget

This FY24 budget proposal represents a commitment to conservative budgeting and careful financial planning. The Administration requested that each department level fund their budget, with the exception of pre-existing contractual obligations.

The Administration maintains its commitment to controlling the increase on the tax levy. The finance team initially proposed an operating budget guideline of 3.75%.

The proposed operating budget totals $168,408,828 which represents a 5.53% (3.72% General Government, 4.0% Education, and 8.39% Accommodated) increase over the prior year. This increase was driven primarily by financial obligations largely outside the control of the Administration such as waste removal, special education tuition, regional school assessments and health insurance. These accounts are referred to as "Accommodated Accounts" also known as "Fixed Costs", which have been separated from department budgets because they are universally applicable, mandated expenses, or would unfairly impact the ability of the department to meet guidelines.

Capital Improvement Plan

The Town's Capital Improvement Plan (CIP) was developed as a mechanism to ensure the continued maintenance of infrastructure and assets, while actively planning for future needs. This year's plan contains a variety of projects and purchases designed to meet that goal.

Infrastructure:

This year's plan includes a number of projects geared towards maintaining and improving the Town's water and sewer, and road and sidewalk infrastructure. Starting in 2001, the plan has included funding for drainage improvements and stream cleaning in an effort to relieve localized flooding of residents' property,

and clean accumulated sediment from various streams. The plan also includes a long-range schedule for maintaining and improving the Town's pump stations. This year's requests are for design work for the Douglas Avenue pump station, along with a number of sewer station replacements and equipment. For example, we are requesting a sewage grinder for Terrace Hall Station that will prevent the force main from clogging and overflowing through the sewer system.

The Department of Public Works (DPW) has also developed a long range plan of investing in roads and sidewalks and water main repair and replacement. In alternating fiscal years, the plan will contain either a request to bond for roads and sidewalks or water mains. This year's plan contains $1.5 million dollars for water mains.

Asset Preservation and Maintenance:

The DPW maintains a carefully constructed vehicle replacement program aimed at maximizing the useful life of equipment and vehicles, while replacing before the associated maintenance costs outweigh their value. This budget includes requests for five DPW vehicles, a Fire department pickup, and Recreation dump truck that meet that standard.

The plan also includes a number of items relating to building maintenance and repair. Requests run the gamut from energy conservation measures to a roof replacement at the Pine Haven Cemetery. The Town is working to improve energy conservation in all Town buildings in order to reduce the Town's overall energy output by 20% in 5 years (starting in FY19). We have accomplished many energy efficient upgrades since becoming a designated Green Community, but there remains more work to be done.

Public Safety:

This year's plan also demonstrates the Town's continued commitment to public safety. The plan includes requests for the replacement of an aerial tower fire truck and ambulance. The new ambulance would be the frontline ambulance, the current ambulance would become the backup, and the third ambulance will be held in reserve in case of repair or maintenance of the other units. The current aerial apparatus is deteriorating, and the costs of maintenance and emergency repairs are climbing. The aerial truck is critical to the department's operations and the safety of the community and our residents.

Big Projects on the Horizon:

Over the next several years the Town will consider two major investments in the replacement of buildings. A feasibility study is now underway to consider the size, location, and potential cost of a new Police Station. The current station (a converted school) is well past its useful life and the layout is not up to standard for modern policing. Town Meeting has also provided funding for the feasibility phase of the Fox Hill School Building Project. A building Committee is in place and currently studying several possibilities related to the future of the Fox Hill/ Pine Glen districts. Both of these projects are much needed investments in the Town's infrastructure and will serve the Town for the next 50 years. This will impact our debt service budget as we move forward and this upward pressure may have an impact on operating budget guidelines in the future.

General Goals and Objectives

As always, the main goal of the Administration is to provide quality service at the best value to the taxpayer. Our approach to financial planning and the guideline setting process is aimed at carefully

managing the tax levy increase, now and into the future. Beyond that, there are a number of other goals and initiatives that are reflected in the FY24 proposed budget that I would like to highlight for the community.

Optimizing Organizational Structure:

The Town of Burlington is a complex community. As the community's needs evolve the Town government must evolve accordingly to meet those needs. Over the past several years the Administration has been systematically undertaking a review of the organizational structure of the Town and implementing incremental changes aimed at achieving an optimal and sustainable structure.

This review began in FY19, when the Administration engaged the services of the Department of Revenue Division of Local Services to analyze the Town's financial departments and provide recommendations. As a result of those recommendations, over the course of several years the position of Budget Analyst was converted to Budget Director and Chief Procurement Officer, and the position of Purchasing Analyst, then housed in the Select Board's Office was transferred to the oversight of the Budget Director/CPO. During the time the Town also transitioned from and elected to an appointed Town Treasurer/Collector. The final piece of the puzzle was completed in FY23, when the position of Assistant Town Administrator/Town Accountant was split into two positions, with Assistant Town Administrator now providing proper oversight of all financial departments.

In FY22 and FY23 a similar analysis was conducted for the Department of Public Works. As a result, the DPW was reorganized to manage the department in a more efficient way, providing support to all divisions both operationally and administratively. The Business Manager (formerly Operations Analyst) and Operations Manager report to the Director and oversee the Superintendents of the other divisions. Due to the careful and measured way in which these changes were implemented these changes were accomplished without affecting the Department's FTE (full-time equivalent) headcount.

Now the Administration is turning its attention to the structure of the Town's Land Use departments (Building, Planning, Conservation, and Economic Development). Burlington's Land Use departments are critical to the success and prosperity of the Town. These departments work tirelessly to provide the best services to the residents, businesses, and visitors and any other entity that interacts with the Town.

Revising the Town's Administrative and Professional (Management Level) Compensation Plan:

In concert with the organizational structure review, the Administration is seeking to revise the Town's compensation plan for our Administrative and Professional employees. This group, which is not a formal collective bargaining unit, is a collection of the Town's management and mid-management level employees. In the current plan, each position is assigned to a group and each group consists of a number of steps, which the employee moves through on an annual basis. The constraints of this plan have made it difficult for the Administration to attract and retain employees. The talent pool of qualified municipal leadership positions is small, and the competition is fierce. Burlington is falling behind, and revising this compensation plan is the key to righting that ship. Simply put, shortcomings in compensation pose a serious threat to the long term success of the Town.

The Town has engaged the services of a professional Human Resources consultant, and been awarded a Community Compact Grant from the state in order to fund the cost of those services. The purpose of this analysis is to create a new compensation plan for these employees that is designed to allow for the ability to attract and retain qualified employees and ensure that compensation is adequate and competitive.

Financial Goals and Objectives

Maintain Bond Rating:

The Administration aims to maintain the Town's AAA bond rating. This rating, which is the highest rating assigned by S&P Global Ratings, is used to demonstrate the creditworthiness of a municipality, ensuring that we receive the most favorable rates for borrowing. This rating is a testament to the Administration's commitment to stable financial management, and sustainable budgeting.

Manage Debt and Reduce Liabilities:

The Administration strives to continue to effectively manage the Town's debt. As infrastructure needs grow and capital costs rise, the financial team will work to address those needs while controlling increases in debt services.

One of the major long-term liabilities for Town, and all other municipalities in the state, continues to be funding Other Post-Employment Benefits (OPEB). Since 2016, the Town has engaged the services of an actuarial firm to address that liability. As a result, a voluntary recommended payment schedule was developed. The Administration has consistently made the recommended payments. The schedule was revised in December of 2020 and the Administration commits to continue following the schedule.

Infrastructure Goals and Objectives

One of the greatest challenges currently facing the Town is the management of our water supply system. The reduction in water treatment capacity due to groundwater contamination and the need to stay ahead of increasingly stringent, and constantly changing water quality requirements, has created a strain on the system. Years of planning a response to this issue are finally coming to fruition.

In May 2018, Town Meeting approved joining the MWRA (Massachusetts Water Resources Authority) and appropriated funds for the construction of the Phase 1 connection project. Phase 1 was designed to tap into the Town of Lexington's water distribution system to increase our capacity temporarily while a new water main is being constructed that will connect directly with the MWRA's water system. Lexington gets all of its drinking water from the MWRA.

In December 2020, after a lengthy environmental permitting process, the Phase 1 pipe connection was established on Adams Street through Lexington. This connection allows the Town to take up to 1 million gallons per day (MGD). The Town's current daily demand is 3 MGD.

The Phase 1 connection has been open since May 19, 2021, and provides 1 million gallons of water per day.

We are currently in Phase 2A of our MWRA connection project. The Phase 2A contract was awarded and is on schedule to be completed in May 2023. Once complete, we will be able to take a total of 3.5 MGD of water from the MWRA in combination with the connection of Phase 1.

Phase 2B will be completed in 2025, and will extend the pipe connection down Middlesex Turnpike from Adams Street to Mall Road. As a separate project, the MWRA will complete a meter interconnection project in 2026. The total supply capacity with both projects completed will be 6.5MGD, which will accommodate Burlington's future Maximum Daily Demand of 6.45 MGD by the year 2041.

Once Phase 2A is completed, the Town will abandon the Vine Brook Water Treatment Plant, but will continue to utilize water produced at the Mill Pond Treatment Plant.

Economic Development Goals and Objectives

A diverse and thriving local economy remains a priority for Town Administration. To that end, the goals are similar to the year prior: 1) promote Burlington and support existing businesses, 2) enhance the ecosystems that support life sciences and other innovative research, 3) invest in the Town Center and support our small businesses, and 4) proactively plan for the long-term growth with an eye on infill and mixed-use development opportunities.

Developing an online presence with a commercially focused website has been a key strategy of promoting Burlington beyond our borders. BringMeToBurlington.com highlights the Town's locational advantages and industry clusters such as healthcare, additive manufacturing, and life sciences as well as our community's rich amenity base. The website has seen over 2,000 visitors in 2022. We met last year's goal to add more value to the site by providing an aggregated list of available commercial properties online to engage with potential businesses. In addition, the Town has implemented a social media program with content targeting key audiences and sharing the ingenuity of our residents and local businesses. The goal this upcoming year is to enhance the amenities-section of the website with video content and sample itineraries as well as augment the followings on our social media platforms.

Regarding ecosystems that foster innovation, Town Meeting has approved various new land use policies over the years that have amplified the message that Burlington is open and ready for the research and development industries. These efforts have resulted in renewed interest in the Town's office properties. For instance, this past year Fractyl Laboratories, a company focused on therapies that target type two diabetes, executed a large lease for nearly 80,000SF at 3 Van De Graaff Drive. In addition, Montana Avenue Capital Partners acquired 5 Burlington Woods, 103,380SF, for $32.8M to reposition the building for life sciences. And earlier in 2022, the Broad Institute and Vericel broke ground on a new 230K SF life sciences building at Network Drive -- renamed to "Blue Sky Drive" which reflects the growing innovation cluster in the area. These companies and investments complement our local retail and hospitality industries that continue to recover from the pandemic, staffing shortages, and inflation. This year the Town also adopted the Property Assessment Clean Energy program; a financing mechanism to encourage investments in energy efficient upgrades. This program works in concert with MassDevelopment allowing for a betterment assessment on a property, sufficient to repay the financing for the upgrades that improve the buildings and reduce impacts on our environment.

Regarding the Town Center, the goal is to bring new foot traffic to the area and develop plans for the improvement to the 3A corridor. Last year, the Town worked with local businesses to host a beer garden series every Thursday for the month of September, which totaled over 1,200 attendees. The pocket park in Town Center also remains – this was a collaboration between the Town and Murray Hills Realty to convert four vehicle parking spaces into outdoor seating for the area's businesses. The goal for next year is to continue with placemaking efforts, enhance the appearance of the pocket park, and install a mural on the exterior wall of one of the main commercial buildings in the Center.

Lastly, as we look to the future, our goal is to create a new vision and regulatory framework for the community's key commercial district along Mall Road and Middlesex Turnpike. In the summer of 2022 we completed the "Burlington 128 Concept Plan" with MassDevelopment. Our goal for the upcoming year is to refine the vision and craft a new zoning proposal for Town Meeting to consider in September 2023. This is

a long-term effort designed to set the stage for a more walkable village-oriented form that would evolve incrementally over the next 20 years.

Planning for the Future

The Administration is committed to continuing to budget conservatively, while maintaining high quality services. We anticipate the most critical future needs will be related to Town and School buildings and water infrastructure. The Town maintains a robust 20 year debt planning document which includes all major projects anticipated. The schedule is regularly adjusted as needs and priorities change, but it provides a roadmap which has proven to be invaluable in allowing to plan for, and fund large projects without adversely impacting the tax levy or service levels.

The Town has several major capital projects to contemplate over the next decade and we will work diligently to bring these projects forward in a manner that will not be disruptive to Town and School operating budgets. Much of the timeline will be determined once the picture becomes clearer on the costs associated with the Fox Hill School Project. In the meantime we will continue to free up borrowing capacity on the debt schedule by using free cash to fund capital warrant articles and keep long term debt off the schedule, refunding and refinancing existing debt for lower interest rates, and delaying the start date of future projects.

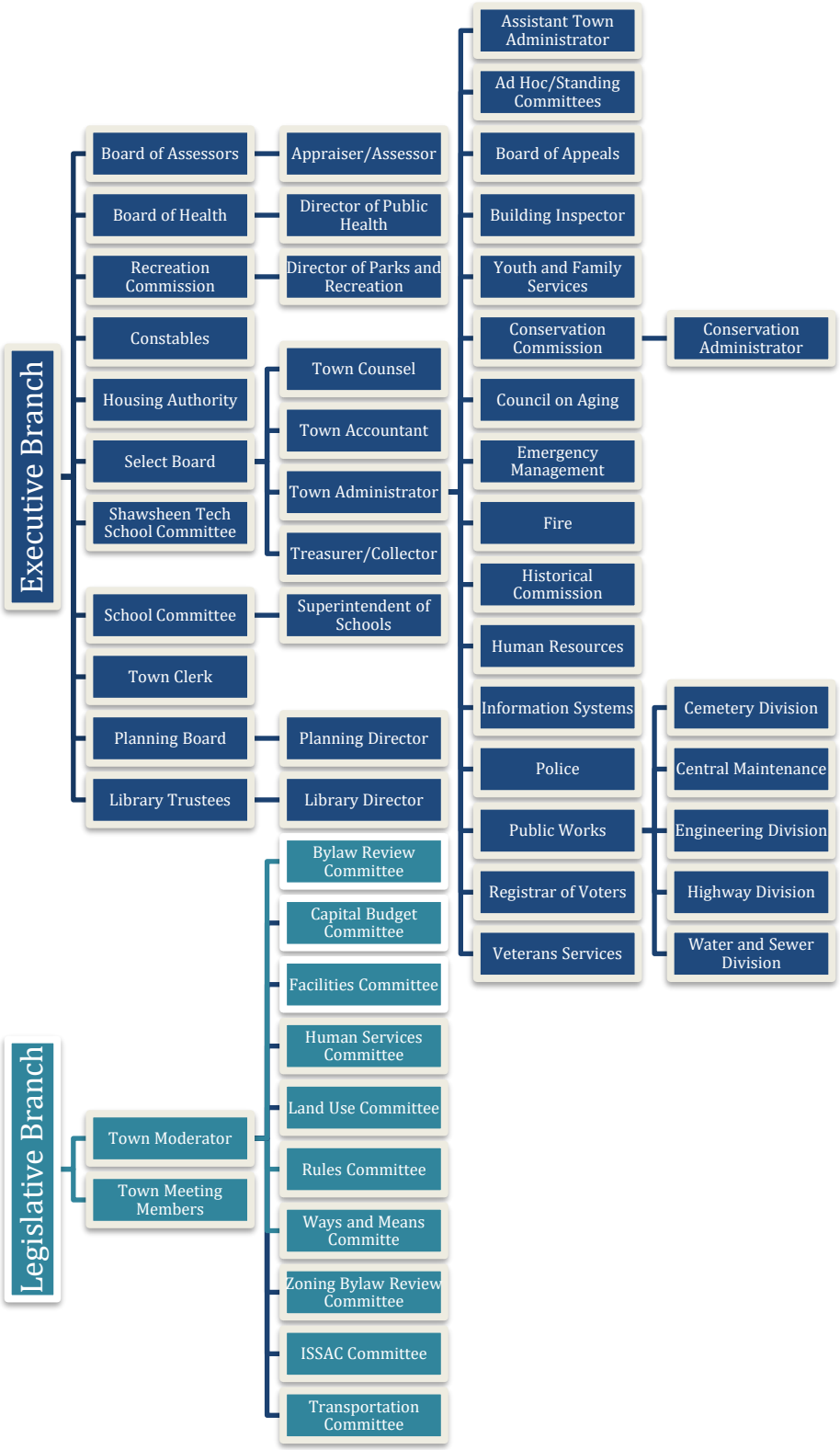
Conclusion

This document presented for your consideration is really a representation of all of the work done by our department heads, town and school staff, and board and committee members throughout the year. Although every year I am increasingly impressed by and grateful for all that they do for this community, the extraordinary circumstances from the past few years have shown that our team is second to none.

Sincerely,

Paul F. Sagarino Jr.
Town Administrator

Town Organizational Chart



TOWN PROFILE

The Town of Burlington is located in Middlesex County, approximately 14 miles from Boston. It is bordered to the west by the Town of Bedford, to the northwest by the Town of Billerica, to the northeast by the Town of Wilmington, and to the south/southeast by the City of Woburn and the Town of Lexington. Established as a Town in 1799, Burlington occupies a land area of 11.88 square miles. According to the 2021 U.S. Census, the popluation is 25,989.

The Town is governed by a 126 member representative Town Meeting, and a five member Select Board assisted by a Town Administrator. Local school affairs are administered by a School Committee of five members, elected for three years on a staggered basis. Local taxes are assessed by a Board of Assessors elected for staggered three-year terms.

The Town of Burlington provides general government services for the territory within its boundaries, including police and fire protection, collection and disposal of solid waste and recycling, public education for grades PK-12, sewer services, street maintenance, public libraries, parks, and recreational facilities. The principal services provided by the Commonwealth of Massachusetts are: jails and houses of correction and registries of deeds and probate.

The Shawsheen Valley Regional Technical-Vocational School District provides vocational technical education for the Town.

The Burlington Housing Authority provides housing for eligible low-income families and handicapped persons. The Massachusetts Bay Transportation Authority provides rail and bus service. The Town of Burlington has its own wells and water treatment system, and is a member of Massachusetts Water Resource Authority (MWRA) for sewer services and partial water services, supplemented by Town water plants.

TOWN DATA

Official Name:	Town of Burlington
Year Settled:	1641
Year Incorporated:	1799
County:	Middlesex
Form of Government:	Representative Town Meeting
Total Area:	11.9 square miles
Land	11.8 square miles
Water	.01 square miles
Population	25,989 (2021)
Households:	10,093 (2021)
Owner Occupied:	74.8% (2021)
Median Household Income:	$124,755 (2021)
Per Capita Income:	$60,260
School Enrollment	3,412 (2022-23)

Terri Keene, Burlington DPW

Source: US Census, MA Dept. of Elementary and Secondary Education

BUDGET PROCESS

The Town of Burlington is governed by representative Town Meeting and a five member Select Board assisted by a Town Administrator. Local school affairs are administered by a School Committee of five persons, elected for three years on a staggered basis. Local taxes are assessed by a Board of Assessors elected for staggered three-year terms.

The Town Administrator is responsible for the preparation and format of a uniform budget document, which is acceptable to the Ways and Means Committee; for all departments or agencies under the Select Board's jurisdiction.

Select Board

The Select Board reviews all requests and presents the budget to Town Meeting for approval.

Ways and Means

The members of the Ways and Means Committee are appointed by the Town Moderator. Ways and Means is responsible for reviewing all financial aspects of the Town government and providing a recommendation to Town Meeting on the operating budget or any warrant articles

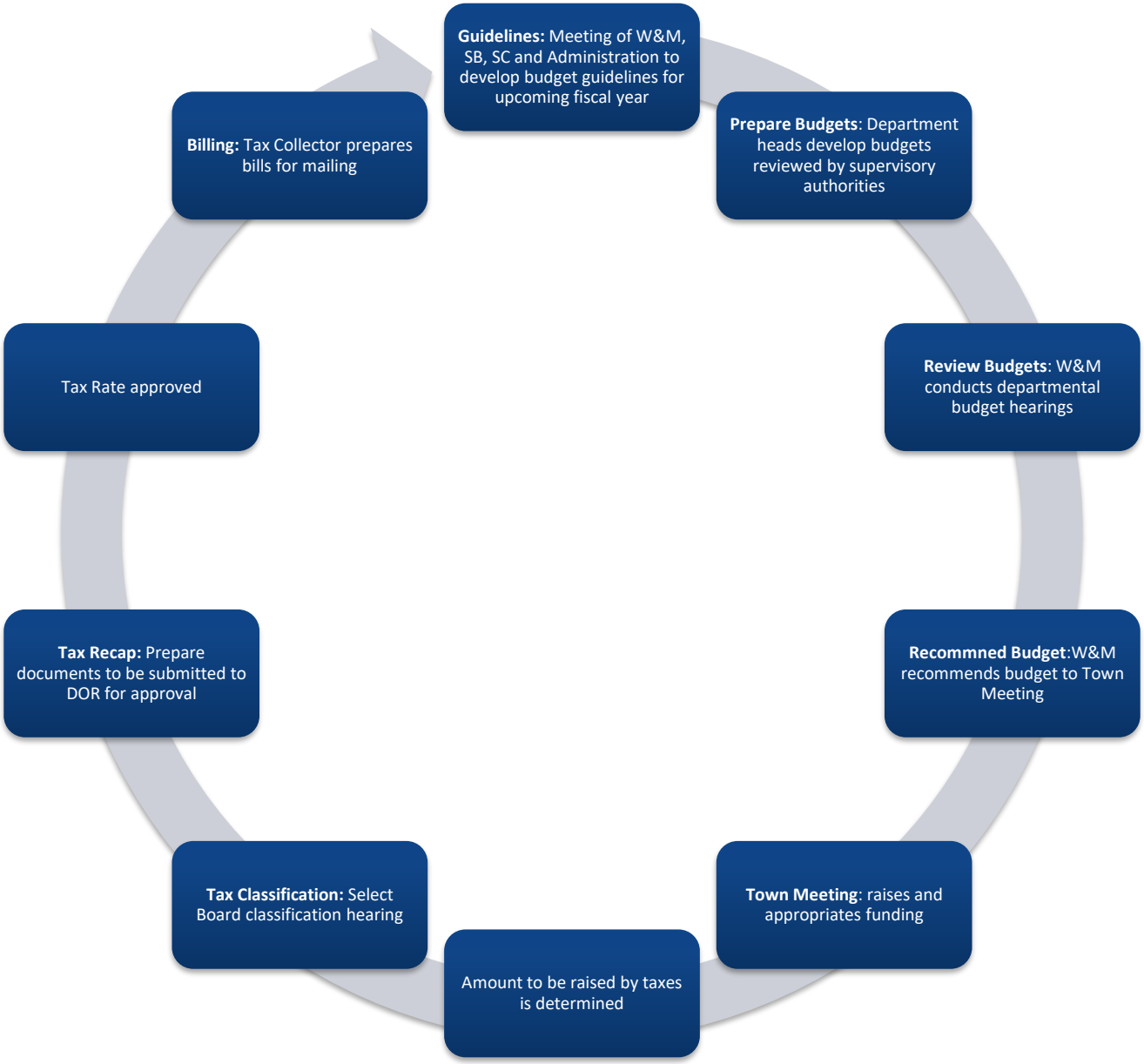
Capital Budget Committee

The members of the Capital Budget Committee are also appointed by the Town Moderator and consider all matters relating to proposed expenditures of money by the Town for capital items and projects.

BUDGET CALENDAR

July	Fiscal year begins on July 1.
September	Amount to be raised by taxation, for current fiscal year, is determined.
November	Select Board determines current fiscal year tax rate. Town officials prepare and submit tax rate to Department of Revenue.
December	Current fiscal year tax rate is approved by Department of Revenue. Ways and Means, Board of Select Board and, School Committee, and the Administration develop budget guidelines for next fiscal year.
January	Department heads develop budgets with supervisory authority.
February-April	Departments present budgets to Ways and Means.
May	Annual Town Meeting votes to raise and appropriate funds for next fiscal year.
June	Fiscal year ends June 30.

THE BUDGET CYCLE



FY2024 OVERVIEW

REVENUES

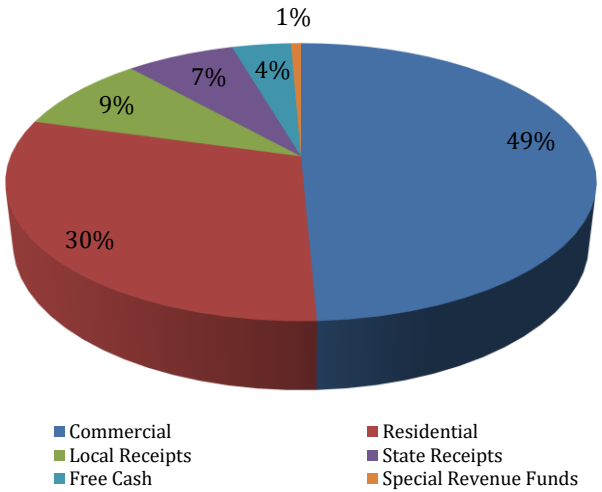
Recurring Revenues

Tax Levy	**141,940,563**
Commercial	88,145,090
Residential	53,795,473
State Receipts	**12,675,344**
School Chapter 70	9,285,068
Charter School Reimbursement	5,276
School Offset Programs	106,000
Unrestricted General Govt. Aid	3,094,311
Veterans Benefits Reimbursement	61,030
Veterans Blind & Surviving Spouse	70,285
Public Libraries	53,374
Local Receipts	**16,138,404**
Motor Vehicle Excise	4,214,976
Other Excise	1,500,000
Local Meals Tax	1,750,000
Penalties and Interest	334,750
In Lieu of Taxes	520,000
Water Usage Charges	3,708,000
Ambulance User Charges	600,000
Rentals	412,000
Licenses & Permits	865,200
Department Revenues	1,250,000
Fines & Forfeits	4,120
Interest of Invested Cash	211,558
Medical Assistance Reimbursement	267,800
Other (ARPA)	500,000

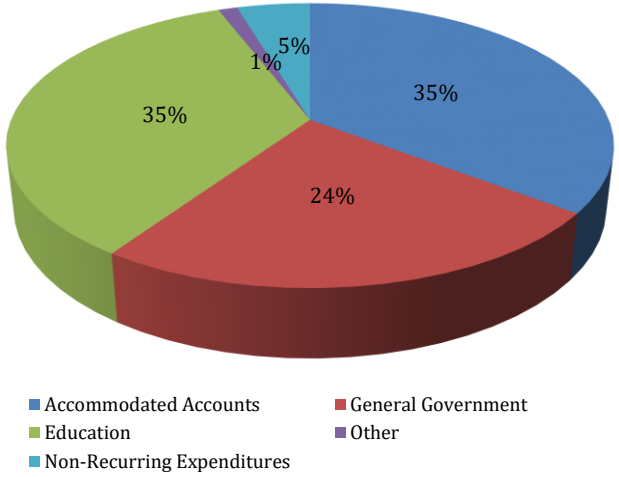
Non-Recurring Revenues

Free Cash	**6,917,136**
Special Revenue Funds	**1,179,400**
Prior Appropriations Transferred	**0**
Overlay Excess	**0**
TOTAL	**178,850,847**

Revenues by Source



Expenditures by Category



EXPENDITURES

Recurring Expenditures

Accommodated Accounts	**63,221,703**
Unemployment	100,000
Health Insurance	16,248,398
FICA/Medex	1,389,291
Retirement Contribution	0
General Town Insurance	1,364,219
Audit	60,000
Waste Removal	3,159,710
Street Lights	360,500
DEP Drinking Water Assessment	15,000
Hazardous Waste Collection	50,000
Mosquito Control	45,743
Debt Principal	4,963,473
Debt Interest	3,225,197
Middlesex Retirement	13,403,482
SPED Tuition & Transportation	14,202,037
Regional School-Shawsheen	2,976,385
Regional School-Essex Tech/Minute	139,838
Local Transportation	100,000
OPEB	1,018,430
Capital Improvements	400,000
General Government	**43,269,228**
Education	**61,917,897**
Other	**2,145,483**
State Assessments	986,109
Allowance for Abatements	1,000,000
Cherry Sheet Offsets	159,374

Non-Recurring Expenditures

Deficit Accounts (Snow & Ice)	**200,000**
Special Warrant Articles	**8,096,536**
TOTAL	**178,850,847**

FIVE YEAR BUDGET SUMMARY

	Budget FY 2020	Projection FY 2021	Projection FY 2022	Projection FY 2023	Projection FY 2024	% Increase
Tax Levy Limit	**$ 130,007,611**	**$ 136,366,075**	**$ 141,619,356**	**$ 147,733,018**	**$ 152,926,343**	
RECURRING REVENUES						
Taxes levied or Budgeted to be levied	$ 117,292,075	$ 123,791,535	$ 129,801,144	$ 134,491,166	$ 141,940,563	5.54%
Local Receipts	$ 16,692,758	$ 14,592,758	$ 15,062,209	$ 15,061,606	$ 16,138,404	7.15%
State Receipts (Cherry Sheet)	$ 9,991,068	$ 10,146,226	$ 10,315,584	$ 12,511,792	$ 12,675,344	1.31%
TOTAL REVENUES	**$ 143,975,901**	**$ 148,530,519**	**$ 155,178,937**	**$ 162,064,564**	**$ 170,754,311**	**5.36%**
RECURRING EXPENDITURES						
Accommodated Accounts	$ 51,114,054	$ 52,567,844	$ 55,333,645	$ 58,328,873	$ 63,221,703	8.39%
General Government	$ 37,655,496	$ 38,665,631	$ 40,171,044	$ 41,716,324	$ 43,269,228	3.72%
Education	$ 53,468,307	$ 55,204,938	$ 57,387,111	$ 59,539,128	$ 61,917,897	4.00%
Allowance for Abatements (overlay)	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	0.00%
State Assessments (Cherry Sheet)	$ 836,734	$ 1,001,304	$ 1,013,969	$ 1,061,326	$ 986,109	-7.09%
State Offset Items (Cherry Sheet)	$ 155,937	$ 163,375	$ 164,603	$ 158,609	$ 159,374	0.48%
Sub-total - Recurring Expenditures	*$ 144,230,528*	*$ 148,603,092*	*$ 155,070,372*	*$ 161,804,260*	*$ 170,554,311*	5.41%
NON-RECURRING EXPENDITURES						
Deficit Accounts	$ 176,025	$ 67,428	$ 208,565	$ 360,304	$ 200,000	-44.49%
Special Warrant Articles	$ 7,300,857	$ 3,764,310	$ 5,504,044	$ 7,838,401	$ 8,096,536	3.29%
TOTAL EXPENDITURES	**$ 151,707,410**	**$ 152,434,829**	**$ 160,782,981**	**$ 170,002,965**	**$ 178,850,847**	**5.20%**
SURPLUS/(DEFICIT)	*$ (7,731,509)*	*$ (3,904,310)*	*$ (5,604,044)*	*$ (7,938,401)*	*$ (8,096,536)*	
NON-RECURRING REVENUES						
Free Cash	$ 5,819,576	$ 2,522,544	$ 4,234,005	$ 6,769,589	$ 6,917,136	2.18%
Non Recurring Local Receipts	$ -	$ -	$ -	$ -	$ -	
Special Revenue Funds	$ 1,201,281	$ 1,231,766	$ 1,170,039	$ 1,168,812	$ 1,179,400	0.91%
Prior Unexpended Appropriations	$ 330,652	$ -	$ -	$ -	$ -	
Excess Allowance for Abatements	$ 380,000	$ 150,000	$ 200,000	$ -	$ -	#DIV/0!
TOTAL NON-RECURRING REVENUES	**$ 7,731,509**	**$ 3,904,310**	**$ 5,604,044**	**$ 7,938,401**	**$ 8,096,536**	**1.99%**
SURPLUS/(DEFICIT)	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	

RECURRING EXPENDITURES

Accommodated Accounts

This category is utilized by the Town to classify several types of budgets. The first type is expenditures that are applicable to all departments such as employee benefit costs, general insurance, and debt service. Another is expenditures that have proven difficult to control which have been broken out of Town and School operating budgets as their inclusion would put those departments at an unfair disadvantage in meeting the Town's budget guidelines. Examples of these budgets would be Special Education from the School Department and Trash Removal from Public Works. Another common attribute of budgets classified as Accommodated is that they are typically mandated expenditures for which the Town has little control over the cost. This year's budget includes the seventh year of the Town's scheduled payment to address it's liability for Other Post Employments Benefits (OPEB) in accordance with the plan that was presented at Town Meeting in February of 2015. The Town continues to evaluate the funding schedule biannually as the actuarial study is updated. The next actuarial study for OPEB is in progress and should be completed by fall of 2023. Accommodated Accounts are denoted with an (AA) in the detail of the budget document section of this book. The chart below illustrates a five year comparison of these budgeted costs.

Accommodated Accounts – 5 Year Comparative

	Budget FY 2020	Projection FY 2021	Projection FY 2022	Projection FY 2023	Projection FY 2024	% Increase
Unemployment	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	0.00%
Health Insurance	$ 13,739,380	$ 14,222,730	$ 15,028,422	$ 15,633,054	$ 16,248,398	3.94%
F.I.C.A./Medex	$ 1,142,979	$ 1,200,128	$ 1,260,128	$ 1,323,134	$ 1,389,291	5.00%
Retirement Contribution	$ 1,256	$ 1,256	$ -	$ -	$ -	#DIV/0!
General Town Insurance	$ 1,006,273	$ 1,106,273	$ 1,156,399	$ 1,214,219	$ 1,364,219	12.35%
Audit	$ 80,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000	0.00%
Waste Removal	$ 2,113,530	$ 2,198,030	$ 2,244,200	$ 2,322,124	$ 3,159,710	36.07%
Street Lights	$ 370,500	$ 370,500	$ 370,500	$ 360,500	$ 360,500	0.00%
DEP Drinking Water Assessment	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	0.00%
Hazardous Waste Collection	$ 32,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	0.00%
Mosquito Control	$ 43,953	$ 44,846	$ 45,743	$ 45,743	$ 45,743	0.00%
Debt Principal	$ 4,623,222	$ 4,348,634	$ 4,386,593	$ 4,833,144	$ 4,963,473	2.70%
Debt Interest	$ 2,259,025	$ 2,200,743	$ 2,390,179	$ 2,772,553	$ 3,225,197	16.33%
Middlesex Retirement System	$ 9,987,321	$ 10,675,811	$ 11,757,449	$ 12,543,435	$ 13,403,482	6.86%
Special Ed Tuition & Transportation	$ 12,018,051	$ 12,615,139	$ 12,333,456	$ 12,873,799	$ 14,202,037	10.32%
Shawsheen Regional School	$ 2,389,971	$ 2,516,373	$ 2,593,065	$ 2,667,214	$ 2,976,385	11.59%
Regional School - Other	$ 58,000	$ 217,424	$ 240,018	$ 133,179	$ 139,838	5.00%
Local Transportation	$ 120,000	$ 120,000	$ 50,000	$ 50,000	$ 100,000	100.00%
Other Post Employment Benefits T/	$ 713,593	$ 104,957	$ 852,493	$ 931,775	$ 1,018,430	9.30%
Capital Improvements	$ 300,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	0.00%
Total	**$ 51,114,054**	**$ 52,567,844**	**$ 55,333,645**	**$ 58,328,873**	**$ 63,221,703**	**8.39%**

General Government

This category is utilized by the Town to budget for all aspects of Town operations with the exception of Education. These areas include General Government, Public Safety, Public

Works, Human Services, Culture and Recreation, and the Ways and Means Reserve Fund. Within the category of General Government budgets individual department budgets may exceed the operating budget guideline, but it is the intention of management that the overall General Government percentage increase will meet the guideline. The Town administration is happy to report that the Town Operating budget increase is approximately 3.72% which is in line with the operating budget guideline of 3.75% set by the Ways and Means Committee for FY24.

Education

This category is utilized by the Town to budget for all of the operating costs of the Burlington Public Schools with the exception of the Shawsheen Regional High School Assessment, the non-member tuition for Essex North Shore Agricultural and Technical School and Minuteman High School, and the tuitions and transportation portion of Special Education which are included as Accommodated Accounts. The School Committee is expected to approve an overall operating budget increase of 4.0% for FY24. (Not voted at time of printing.)

Allowance for Abatements & Exemptions (Overlay)

The Allowance represents funds reserved for property tax abatements and statutory exemptions. This estimate is subject to the approval of the Board of Assessors. Approximately $300,000 of this amount is used annually to fund the statutory exemptions that are granted to the elderly, the infirmed, and veterans as well as the Senior Property Tax Work-off Program. Our elected officials and town staff continue to make access to all available abatements and exemptions a high priority. To that end, the Select Board submitted letters of support for several bills that are making their way through the State House approval process. These bills are aimed at increasing access to existing abatements and exemptions by increase the income and asset limits. Along the same lines the Board of Assessors and their staff have submitted two articles on this Town Meeting warrant. One of them they hope will help with these same qualifying limitations, and the second will allow the Town to provide some relief to those in need.

State Assessments (Cherry Sheet)

State Assessments represent charges that are levied for services provided to the Town by state and other governmental agencies. The Town budgets for State Assessments based upon the most current information provided to us from our legislative delegation. This estimate is subject to change as the State budget progresses through the legislature.

State Offset Items (Cherry Sheet)

State Offset Items are various state programs for which the Town receives funding as a component of State Revenue (Cherry Sheet). These funds are not available to support the Town's operating budget as they can only be spent for a particular purpose. Since these

estimates are included as part of the revenue portion of the Town's budget, the state requires that we "offset" (**) an equal amount as an expenditure during the budget process.

State Assessments and Offsets – 5 Year Comparative

	Budget FY 2020	Projection FY 2021	Projection FY 2022	Projection FY 2023	Projection FY 2024	% Increase
Air Pollution Dist (C.676)	$ 11,102	$ 11,801	$ 12,198	$ 11,994	$ 12,235	2.01%
RMV Non-renewal	$ 18,780	$ 15,429	$ 15,771	$ 11,540	$ 16,780	45.41%
MBTA	$ 587,098	$ 643,774	$ 648,351	$ 609,104	$ 630,324	3.48%
Metro Area Planning Council	$ 13,880	$ 15,080	$ 15,080	$ 14,732	$ 15,061	2.23%
Tuition Assessments	$ 205,874	$ 315,220	$ 322,569	$ 413,956	$ 311,709	-24.70%
School Offsets **	$ 123,469	$ 120,000	$ 120,000	$ 110,000	$ 106,000	-3.64%
Public Libraries (C78,S19A) **	$ 32,468	$ 43,375	$ 44,603	$ 48,609	$ 53,374	9.80%
Total	**$ 992,671**	**$ 1,164,679**	**$ 1,178,572**	**$ 1,219,935**	**$ 1,145,483**	**-6.10%**

NON RECURRING EXPENDITURES

Deficit Accounts

This amount represents an estimate for the Town's projected deficit for Snow and Ice Removal from FY23. The Town annually provides for $350,000 in the Public Works budget for this purpose; however it typically costs between $700,000 and $800,000. Due to the unpredictability of this budget from year to year it is common practice within the state to budget for Snow and Ice Removal in this manner.

Special Warrant Articles

Special Warrant Articles totals all of the individual requests within the Town Meeting Warrant that require financial funding. These articles are separately numbered in the warrant and the supporting documents related to these requests are provided separately from this budget book. The administration has included assumptions on warrant article funding for illustrative purposes.

RECURRING REVENUES

Taxes Budgeted to be Levied

Under Massachusetts General Law, property taxes on the whole are restricted to increases of 2.5% plus tax revenues derived from New Growth. This is referred to as the annual "levy limit". New Growth is the additional tax revenue generated by new construction, renovations and other increases in the property tax base during the calendar year.

The amount shown for the FY24 projection is an estimate based upon consultation with the Assessing and Building Departments. The actual value of New Growth will be certified by the Department of Revenue in the fall prior to the Town tax rate setting process. To date,

the Town has not passed an override or debt exclusion which would have additional ramifications for the calculation of the annual "levy limit".

The following chart details the past several years of this calculation.

Property Taxes Levy Actual and Budgeted – Five Year Comparative

	Budget FY 2020	Projection FY 2021	Projection FY 2022	Projection FY 2023	Projection FY 2024
Previous Levy Limit	$ 123,645,874	$ 130,007,611	$ 136,366,075	$ 141,619,356	$ 147,733,018
2.5% Limit	$ 3,091,147	$ 3,250,190	$ 3,409,152	$ 3,540,484	$ 3,693,325
New Growth	$ 3,270,590	$ 3,108,274	$ 1,844,130	$ 2,573,178	$ 1,500,000
Override	$ -	$ -	$ -	$ -	$ -
Subtotal	**$ 130,007,611**	**$ 136,366,075**	**$ 141,619,357**	**$ 147,733,018**	**$ 152,926,343**
Exclusion Debt	$ -	$ -	$ -	$ -	$ -
Exclusion - Capital Asset	$ -	$ -	$ -	$ -	$ -
Tax Levy Limit	**$ 130,007,611**	**$ 136,366,075**	**$ 141,619,357**	**$ 147,733,018**	**$ 152,926,343**
Excess Capacity	$ 12,715,535	$ 12,574,540	$ 11,818,212	$ 13,241,852	$ 10,985,779
Property Taxes Levied	***$ 117,292,075***	***$ 123,791,535***	***$ 129,801,145***	***$ 134,491,166***	***$ 141,940,564***
% levy increase over prior year	4.87%	4.61%	4.85%	3.61%	5.54%

It should be noted that the Town has not taxed up to its maximum annual "Levy Limit". The difference between what the Town actually levies and the annual "Levy Limit" is called "Excess Taxing Capacity". This is an important reserve for Burlington and is looked upon favorably by the rating agencies.

Local Receipts

This category includes locally generated revenue other than real and personal property taxes and makes up approximately 9.45% of the Town's recurring revenues. These amounts are budgeted based upon the prior year actual receipts, five year averages, and specific recommendations from department heads responsible for a particular revenue. These estimates are subject to the approval of the Department of Revenue.

For several years before the pandemic the Town had been able to utilize increases in local receipts provided by a robust local economy to offset increases to the tax levy. During FY21, the economic effects of the global pandemic resulted in a midyear budget reduction of $2.1M. After several years of flat budget projections the local receipts budget is starting to rebound, and while not quite making back to pre-pandemic levels yet, the estimates for FY24 are encouraging.

The following chart details the previous five years of budgeted local receipts.

Budgeted Local Receipts – Five Year Comparative

	Budget FY 2020	Projection FY 2021	Projection FY 2022	Projection FY 2023	Projection FY 2024
Motor Vehicle Excise	$ 4,097,758	$ 4,097,758	$ 4,097,758	$ 4,092,209	$ 4,214,976
Hotel Excise	$ 2,710,000	$ 1,400,000	$ 1,415,000	$ 1,415,000	$ 1,500,000
Local Meals Tax	$ 1,750,000	$ 1,260,000	$ 1,300,000	$ 1,400,000	$ 1,750,000
Penalties & Interest (Tax & Excise)	$ 400,000	$ 325,000	$ 325,000	$ 325,000	$ 334,750
In Lieu of Taxes (Limited)	$ 520,000	$ 520,000	$ 520,000	$ 520,000	$ 520,000
Water User Charges	$ 3,505,000	$ 3,505,000	$ 3,600,000	$ 3,600,000	$ 3,708,000
Ambulance User Charges	$ 775,000	$ 775,000	$ 594,451	$ 500,000	$ 600,000
Rentals	$ 450,000	$ 400,000	$ 400,000	$ 400,000	$ 412,000
Departmental Revenues	$ 900,000	$ 840,000	$ 840,000	$ 840,000	$ 865,200
Licenses & Permits	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,250,000
Fines & Forfeits	$ 25,000	$ 10,000	$ 10,000	$ 4,000	$ 4,120
Investment Earnings	$ 300,000	$ 200,000	$ 200,000	$ 205,397	$ 211,558
Medical Assistance Reimbursements	$ 260,000	$ 260,000	$ 260,000	$ 260,000	$ 267,800
Other (ARPA)		$ -	$ 500,000	$ 500,000	$ 500,000
TOTAL LOCAL RECEIPTS	**$ 16,692,758**	**$ 14,592,758**	**$ 15,062,209**	**$ 15,061,606**	**$ 16,138,404**

State Receipts (Cherry Sheet)

State Aid represents approximately 7.4% of the Town's recurring revenues. The Town receives revenue for both General Government and Education purposes. All of these funds with the exception of "offsets" (**) are available to be used to support any Town purpose and are not earmarked for one department's use. The Town normally forecasts State Receipts based upon the most current information available from the State as of the time of Annual Town Meeting.

It is important to note that there is a significant increase included for Chapter 70 aid. This increase is the result of the State's commitment to continuing to implement the formula change put in place by the Student Opportunity Act. These amounts are subject to change as the State's budget process progresses. The following chart details a five year history of the various types of State Receipts.

State Receipts – Five Year Comparative

	Budget FY 2020	Projection FY 2021	Projection FY 2022	Projection FY 2023	Projection FY 2024	% Increase
School Chapter 70	$ 6,851,477	$ 7,002,131	$ 7,104,731	$ 9,149,844	$ 9,285,068	1.48%
Charter Tuition Assess Reimb	$ 30,436	$ 33,549	$ 6,566	$ 13,728	$ 5,276	-61.57%
School Offset Programs **	$ 123,469	$ 120,000	$ 120,000	$ 110,000	$ 106,000	-3.64%
Subtotal Education	$ 7,005,382	$ 7,155,680	$ 7,231,297	$ 9,273,572	$ 9,396,344	1.32%
Unrestricted General Govt Aid	$ 2,780,883	$ 2,780,883	$ 2,878,214	$ 3,033,638	$ 3,094,311	2.00%
Veterans Benefits Reimbursed	$ 66,584	$ 59,544	$ 79,937	$ 79,359	$ 61,030	-23.10%
Vets, Blind & Surviving Spouse (C59)	$ 105,751	$ 106,744	$ 81,533	$ 76,614	$ 70,285	-8.26%
Public Libraries (C78,S19A) **	$ 32,468	$ 43,375	$ 44,603	$ 48,609	$ 53,374	9.80%
Subtotal General Government	$ 2,985,686	$ 2,990,546	$ 3,084,287	$ 3,238,220	$ 3,279,000	1.26%
TOTAL STATE RECEIPTS	**$ 9,991,068**	**$ 10,146,226**	**$ 10,315,584**	**$ 12,511,792**	**$ 12,675,344**	**1.31%**

NON RECURRING REVENUES

Free Cash

Free Cash is defined as the remaining, unrestricted funds from operations of the previous fiscal year. Free Cash is the result of collecting revenue in excess of estimates and expending less than what was appropriated, added to any unexpended Free Cash from the previous fiscal year. Unpaid property taxes and certain deficits reduce the amount that can be certified as Free Cash. The Town submits its June 30 Balance Sheet to the Department of Revenue for certification on an annual basis. Free Cash is not "available" for appropriation until it is certified by the State.

Due to the unpredictability and wide fluctuation of certified Free Cash amounts, it is suggested that Free Cash be used to fund one-time expenditures as opposed to annual operating budgets. The following chart shows a history of the Town's certified Free Cash over the last eight fiscal years. The FY2024 Projection specifies approximately $5.5M of Free Cash to fund the "pay as you go" capital plan and other recurring financial warrant articles. Additionally, the Administration and the Ways and Means committee are recommending the use of $3.5M of Free Cash to help keep some larger capital items appearing on the warrant from being included in the debt plan. This will allow for continued financial flexibility in the Town's borrowing program for large construction projects. This amount would be adjusted down with the postponement of any warrant articles referenced in the non-recurring expenditure section.

Certified Free Cash – Recent History

June 30 2013	June 30 2014	June 30 2015	June 30 2016	June 30 2017	June 30 2018	June 30 2019	June 30 2020	June 30 2021	June 30 2022
$ 9,021,382	$ 9,162,834	$ 9,774,949	$ 11,250,328	$ 12,732,930	$ 11,672,567	$ 13,359,958	$ 16,778,709	$ 18,749,255	$ 24,975,130

Special Revenue Funds

The Special Revenue Fund category of revenues summarizes all revenue from special funds used to either offset the operating budget or provide funding for a warrant article. The following chart details the proposed use of special revenue funds for this Town Meeting.

Sewer Inlow Infiltration	$ 107,975
Chapter 90 Highway	$ 1,071,425
Total	$ 1,179,400

Prior Unexpended Appropriations

This category of revenue represents any appropriation previously approved by Town Meeting which is unspent. These amounts are considered available funds and can be appropriated for any lawful purpose. The Town does not propose to utilize any prior unexpended appropriations at this meeting.

Overlay Surplus

Overlay surplus is declared by the Board of Assessors when it is determined that the Town's potential liability for abatements and exemptions in any fiscal year has been extinguished. Once the Board is satisfied that the funds are no longer needed, a surplus is declared and these funds are available to be appropriated by Town Meeting.

If the overlay surplus is not appropriated by the end of the fiscal year, it closes out to undesignated fund balance and will eventually become part of free cash. For FY24 the Board of Assessors have not declared any funds as surplus. The amount of overlay surplus declared surplus and appropriated over the past five fiscal years is as follows:

Projection FY 2020	Projection FY 2021	Projection FY 2022	Projection FY 2023	Projection FY 2024
$ 380,000	$ 150,000	$ 200,000	$ -	$ -

This Page Left Intentionally Blank

SECTION 2:
OPERATING BUDGETS

This Page Intentionally Left Blank

113 - TOWN MEETING AND REPORTS

DESCRIPTION OF SERVICES/MISSION

This budget is comprised of costs associated with the preparation and administration of Town Meeting. The salary portion of the budget funds the checkers and public address workers. The expense budget includes the printing and mailing of official Town Meeting documents, such as the warrant, backup, annual operating and capital budgets, and any other costs associated with the meetings.

This budget also reflects the costs associated with the printing and binding of the Town's annual report as required by M.G.L. Ch. 40 §49.

STAFFING

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Part Time	3,297	7,521	3,333	3,333	3,333	3,333	
1-	**TOTAL SALARIES**	**3,297**	**7,521**	**3,333**	**3,333**	**3,333**	**3,333**	
	Expenses							
	Contracted Services	11,807	15,531	12,575	12,575	12,575	12,575	
2-	**TOTAL EXPENSES**	**11,807**	**15,531**	**12,575**	**12,575**	**12,575**	**12,575**	
	GRAND TOTAL	**15,104**	**23,052**	**15,908**	**15,908**	**15,908**	**15,908**	**0.00%**

119 - LEGLISLATIVE COMMITTEES

DESCRIPTION OF SERVICES/MISSION

The Legislative Committees budget represents a consolidation of the Town Moderator budget and the budgets of committees appointed by the Town Moderator.

Town Moderator is responsible for directing the Town's three Town Meetings in accordance with Massachusetts General Law and Roberts Rules.

Information Systems Security Advisory Committee (ISSAC) works with Town Administration and Superintendent of Schools regarding technology issues facing the Town.

Land Use Committee is charged with reviewing zoning proposals for Town Meeting.

Ways and Means Committee is responsible for reviewing all financial matters and providing recommendations to Town meeting.

Capital Budget Committee is responsible for reviewing all funding requests for capital purchases and providing recommendations to Town Meeting.

Zoning Bylaw Review Committee is responsible for monitoring, reviewing and making recommendations to Town Meeting regarding any zoning bylaws.

General Bylaw Review Committee is responsible for reviewing general and special bylaws and making recommendations to Town Meeting.

SIGNIFICANT CHANGES

None.

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Part Time (ISAC)	0	0	1,500	1,500	1,500	1,500	
	Part Time (Land Use)	0	0	1,500	1,500	1,500	1,500	
	Part Time (WM)	5,218	1,154	3,756	3,756	3,756	3,756	
	Part Time (CBC)	0	0	838	838	838	838	
	Part Time (ZBRC)	474	779	1,400	1,400	1,400	1,400	
	Part Time (BLR)	702	599	1,500	1,500	1,500	1,500	
	Elect/Appoint (MOD)	150	150	150	150	150	150	
3-	**TOTAL SALARIES**	**6,544**	**2,682**	**10,644**	**10,644**	**10,644**	**10,644**	
	Expenses							
	Materials & Supplies	0	0	373	373	373	373	
4-	**TOTAL EXPENSES**	**0**	**0**	**373**	**373**	**373**	**373**	
	GRAND TOTAL	**6,544**	**2,682**	**11,017**	**11,017**	**11,017**	**11,017**	**0.00%**

112 SELECT BOARD/TOWN ADMINISTRATOR

DESCRIPTION OF SERVICES/MISSION

The Select Board is the Chief Executive Officer of the Town of Burlington. The Board appoints a Town Administrator as the Chief Administrative Officer to run the day to day operations of the Town.

The Board issues all licenses as authorized by statute, approves all payroll and vendor warrants, signs all major contracts within the Town, not otherwise provided for in the Town's By-Laws, oversees all departments under its control, and is responsible for all Town assets. The Select Board also prepares and approves all warrants for Town Meetings under the provisions of Chapter 686 of The Acts of 1970.

The Town Administrator is responsible for all day to day operations of the agencies/departments under the control of the Select Board. Additional responsibilities include management of all policies, directives and votes of the Select Board.

The Town Administrator is the appointing authority for all departments under the jurisdiction of the Select Board, negotiates all collective bargaining agreements with employee unions, prepares the overall Town operating budget in consultation with the Budget Director and the Ways and Means Committee, and assures compliance with all provisions of Massachusetts General Laws, federal statues and Town regulations.

Specific duties and responsibilities of the Town Administrator are further described in Chapter 549 of the Acts of 1978 and Article IV, Section 2.0 of the Town bylaws.

In 2020, Burlington's Economic Development Office was established under the purview of the Town Administrator. The EDO is responsible for a wide range of activities that strives for a vibrant, innovative, diverse, and thriving economic base. The Economic Development Office leads long-range land use and economic development plans, supports existing businesses through permitting processes, and leads marketing and promotion efforts to keep Burlington top-of-mind site selection decisions for companies considering the Boston area market

SIGNIFICANT CHANGES

None.

FY23 ACCOMPLISHMENTS

- Awarded Community Compact Grant to analyze Administrative and Professional (A&P) Compensation plan.

- Awarded 3rd place in Massachusetts Municipal Association (MMA) Town Report Contest for Towns with a population greater than 15,000.
- Awarded the two grants from the Commonwealth's "One Stop for Growth" grant that helped to fund the rezoning initiative for the Mall Road corridor
- Completed the MassDevelopment economic and land use concept plan for Middlesex Turnpike and Mall Road that developed a vision for the corridor.
- Adopted the Property Assess Clean Energy program. This program in concert with MassDevelopment supports investment in upgrading commercial spaces to become more energy efficient.
- Enhanced Burlington's commercially focused website (BringMeToBurlington.com) by enhancing adding and webpages that highlight "things to do" as well as available commercial spaces in Town
- Executed Town Center placemaking efforts and hosted a community beer garden with 16 small businesses involved and over 1,200 attendees.

FY24 GOALS

- Maintain a sustainable multi-year financial plan and sustain AAA Bond Rating
- Improve internal collaboration and coordination between departments to improve efficiencies.
- Complete development of communications plan, and initiate implementation.
- Conduct analysis and implement compensation plan aimed at attracting and retaining talent.
- Finalize a proposal for new land use regulations that unlocks new development opportunities along the Mall Road corridor for Town Meeting to consider.
- Develop a business permitting guide and update the online permitting process to facilitate the process for new businesses to establish in Town.
- Create a public realm and infrastructure financing plan for the Mall Road corridor to identify improvements and direct public and private investments.

STAFFING

(1) Town Administrator, (1) Assistant Town Administrator, (1) Economic Development Director, (1) Office Manager, (1) Administrative Assistant II (2) Administrative Assistant I

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	590,248	733,195	762,866	787,188	787,188	787,188	
	Part Time	3,726	2,400	3,048	3,048	3,048	3,048	
	Elected/Appointed	4,000	4,000	5,500	5,500	5,500	5,500	
	Overtime	0	0	500	500	500	500	
5-	**TOTAL SALARIES**	**597,974**	**739,595**	**771,914**	**796,236**	**796,236**	**796,236**	
	Expenses							
	Contracted Services	7,000	25,289	51,000	51,000	51,000	51,000	
	Materials & Supplies	14,979	4,977	40,000	56,900	49,300	49,300	
	M.E.L.T.	26,035	9,453	17,015	17,015	17,015	17,015	
6-	**TOTAL EXPENSES**	**48,014**	**39,719**	**108,015**	**124,915**	**117,315**	**117,315**	
	Special Accounts							
	Misc. Expenses	17,500	11,617	17,500	17,500	17,500	17,500	
7-	**TOTAL SPECIAL**	**17,500**	**11,617**	**17,500**	**17,500**	**17,500**	**17,500**	
	GRAND TOTAL	**663,488**	**790,931**	**897,429**	**938,651**	**931,051**	**931,051**	**3.75%**

135 - ACCOUNTING

DESCRIPTION OF SERVICES/MISSION

The Town Accountant is appointed by, and subject to the supervision and control of, the Select Board. This appointed authority works collaboratively and effectively with the Town Administrator and the administrative team.

Performs financial management duties in accordance with Massachusetts General Laws, Town bylaws, and all "Generally Accepted Accounting Principles" (GAAP).

Maintains a complete set of financial records for all town accounts, appropriations, debts, and contracts; maintains a general ledger and journal for the recording of all transactions. Has full audit responsibility for all departmental receipts and expenditures; coordinates the Town's outside audit.

Manages expenditures of all Town funds; examines all vouchers, department bills and payrolls for appropriateness of expenditure and for accuracy and availability of funds before payment by Treasurer; reconciles Treasurer/Collector's cash and receivables balances with the general ledger; oversees preparation of weekly payroll and accounts payable warrants for review by the Select Board.

Oversees and participates in the posting of weekly warrants in ledger; posts cash receipts in ledger as received and monthly entries in journal. Assists other town officials in monitoring the town's financial condition; notifies departments of expenditures and account balances monthly; makes recommendations to improve financial condition.

Compiles and submits required state and federal reports during and at the close of the fiscal year; prepares annual balance sheet and breakdown of cash receipts; prepares annual reports for town report.

The Accounting Department prepared, for the fifth time, an Annual Comprehensive Financial Report (ACFR), for the year ended June 30, 2022. This report took the place of the basic financial statement report issued in prior years. The issuance of an ACFR had been a long-term goal of the department. In addition, the department continues to make annual improvements to the budget document with a goal of providing decision makers with superior information for their deliberations.

The Budget Director is responsible for development, preparation, and monitoring of the Town's annual operating budget and ten-year capital improvement plan. The Office assists departments, Town boards and committees, residents and other stakeholders with information, support and analysis of fiscal matters, and works to ensure that the budget reflects the goals of the Administration and community.

The purchasing function of the office is responsible for ensuring that all goods and services, construction, and real property is procured/acquired, or disposed of, in accordance with Massachusetts General Law and applicable local regulations.

SIGNIFICANT CHANGES

None.

FY23 ACCOMPLISHMENTS

- Received the GFOA Award for *Excellence in Financial Reporting* for the Annual Comprehensive Financial Report for the year ending June 30, 2022
- Continued to provide support to all the Town departments
- Enhanced staff cross-training

FY24 GOALS

- Continue to safeguard the financial assets of the Town and maintain appropriated legal levels of control over revenues and expenditures
- Continue to provide timely and accurate financial reporting
- Implement upgraded version of financial software MUNIS and assist the training for the upgrade
- Work to ensure staff continue to grow with professional development training and seminars
- Continue to improve content and presentation of the budget book, and online budget resources.

STAFFING

(1) Town Accountant, (1) Budget Director, (1) Purchasing/Financial Analyst, (1) Assistant Town Accountant, (1) Accounting Specialist, (1) Part-Time Accounting Technician (20 hours)

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	421,218	416,290	425,325	453,483	453,483	453,483	
	Part Time	1,991	12,503	23,763	28,178	28,178	28,178	
8-	**TOTAL SALARIES**	**423,209**	**428,793**	**449,088**	**481,661**	**481,661**	**481,661**	
	Expenses							
	Materials & Supplies	966	159	425	425	425	425	
	M.E.L.T.	1,255	2,514	4,870	4,870	4,870	4,870	
9-	**TOTAL EXPENSES**	**2,221**	**2,673**	**5,295**	**5,295**	**5,295**	**5,295**	
	GRAND TOTAL	**425,430**	**431,466**	**454,383**	**486,956**	**486,956**	**486,956**	**7.17%**

141 - ASSESSORS

DESCRIPTION OF SERVICES/MISSION

The Board of Assessors determines the value of all taxable real and personal property within the Town.

The Department also administers all Motor Vehicle Excise Bills, Real Estate Exemptions and Real Estate/ Personal Property Abatements.

The office maintains permanent records of all real estate transactions/ ownership information within the Town.

Mail annual "Form of List" to business owners and analyze the resulting data provided to value all business personal property.

Income and Expense Forms are mailed to commercial property owners at the beginning of the year. The returns are data entered and analyzed to determine values on commercial and industrial properties.

The office also mails exemption applications annually to residents who have previously qualified for an exemption and processes the applications when they are returned.

The Board of Assessors reviews all abatements for real estate and personal property.

The Town Appraiser represents the Town at the Appellate Tax Board on real estate and personal property tax values that are disputed.

The office also maintain the Databases for Patriot, MUNIS, GIS, and the website.

SIGNIFICANT CHANGES

Contracted with Patriot Properties to perform data collection and permit inspections, resulting in over $20,000 in savings.

FY23 ACCOMPLISHMENTS

- Helped establish Elderly and Disabled Taxation Fund.

FY24 GOALS

- Restart the annual workshop with the Council on Aging regarding exemptions, which was unfortunately cancelled due to the COVID-19 pandemic.
- Assist administration in development of economic development strategic plans

STAFFING

(1) Department Head, (1) Administrative Assistant 2, (1) Administrative Assistant 1

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	288,763	327,604	277,719	285,302	285,302	285,302	
	Elected/Appointed	2,600	2,600	2,600	2,600	2,600	2,600	
10-	**TOTAL SALARIES**	**291,363**	**330,204**	**280,319**	**287,902**	**287,902**	**287,902**	
	Expenses							
	Contracted Services	74,330	94,330	181,330	180,980	180,980	180,980	
	Materials & Supplies	2,975	2,826	3,150	3,150	3,150	3,150	
	M.E.L.T.	2,501	1,957	6,965	7,315	7,315	7,315	
	Capital Outlay	0	0	1,530	1,530	1,530	1,530	
11-	**TOTAL EXPENSES**	**79,806**	**99,113**	**192,975**	**192,975**	**192,975**	**192,975**	
	GRAND TOTAL	**371,169**	**429,317**	**473,294**	**480,877**	**480,877**	**480,877**	**1.60%**

145 – TREASURER/COLLECTOR

DESCRIPTION OF SERVICES/MISSION

The Treasurer/Collector performs all duties as outlined in the Town's General Bylaws Article VII, Sections 1.0 – 5.0 "Town Treasurer/Collector".

The Department's mission is to provide efficient, timely collection of monies due to the Town of Burlington. This includes, but is not limited to Real Estate Tax, Personal Property Tax, Water & Sewer Tax and Motor Vehicle Excise Tax.

The Treasurer/Collector is responsible for the safeguarding of all of the funds of the Town of Burlington and issuing debt as authorized by Town Meeting.

This Department also oversees fund expenditures as well as payroll and benefits for Town employees and retirees, and all employee benefits, which include-health, life, disability, dental, deferred compensation, tax shelter, pension, flexible spending, and other related accounts that support such benefits.

The Department administers weekly payroll for all employees, including Federal and State Tax withholdings, as well as the quarterly and annual reporting and payment of those taxes. Issues and reports W-2s for all employees.

SIGNIFICANT CHANGES

None.

FY23 ACCOMPLISHMENTS

- Cleared all management comments from the FY21 audit report
- Received no new comments in the FY22 audit report
- Restructured positions to facilitate a clearer structure within the Treasurer/Collector Team.

FY24 GOALS

- Integrate updated MUNIS into the operating efficiencies of the Department
- Initiate "Time and Attendance" upgrades to the payroll system.
- Continue to promote online payment options for residents

STAFFING

(1) Appointed Treasurer/Collector, (1) Deputy Treasurer Collector, (1) Assistant Treasurer,
(1) Benefits Administrator, (1) Payroll Administrator, (1) Senior Collector (1) Accounting Specialist, (1) Collector Specialist (1) Administrative Assistants I.

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	630,395	638,191	688,673	713,226	713,226	713,226	
12-	**TOTAL SALARIES**	**630,395**	**638,191**	**688,673**	**713,226**	**713,226**	**713,226**	
	Expenses							
	Contracted Services	2,345	0	2,500	4,250	4,250	4,250	
	Materials & Supplies	7,906	17,719	22,150	22,150	22,150	22,150	Typo in book
	M.E.L.T.	3,125	2,030	6,100	6,100	6,100	6,100	
13-	**TOTAL EXPENSES**	**13,376**	**19,749**	**30,750**	**32,500**	**32,500**	**32,500**	
	Special Accounts							
	Misc. Expenses	0	0	100	100	100	100	
14-	**TOTAL SPECIAL**	**0**	**0**	**100**	**100**	**100**	**100**	
	GRAND TOTAL	**643,771**	**657,940**	**719,523**	**745,826**	**745,826**	**745,826**	**3.66%**

149 – CENTRAL ADMINISTRATION

DESCRIPTION OF SERVICES/MISSION

The Central Administration budget is comprised of various expense accounts that impact all Town departments.

Unemployment Compensation funds all Town and School unemployment claims as directed by Massachusetts General Law.

Chapter 32B Benefits funds health insurance and other employee benefits. The Administration and union representatives, work closely with a professional consultant to monitor and analyze trends in claims to review and propose plan design changes in order to control cost increases.

Other Post-Employment Benefits (OPEB) represents the Town's contribution to the OPEB Trust fund. The amount of the appropriation corresponds to the amount identified in the Town's funding schedule. The Town engages the services of an actuary every two years to update the plan.

Town Insurance funds all Town and School property, casualty, auto, and professional liability insurance. In addition, the budget also supports the Town's self-insured Workers' Compensation Program for all Town and School employees other than public safety officers (Police and Fire) which is funded in those departmental budgets.

Financial Services covers the cost of the Town's annual audit, as well as any other targeted audits, or financial analysis that may be required.

The Central Supply and Central Machine appropriations cover the cost of general office supplies, paper, and postage, as well as the annual lease payments and maintenance agreements of office equipment.

SIGNIFICANT CHANGES

None.

STAFFING

None.

BUDGET ISSUES

Chapter 32B – Health and other employee benefits continue to be a challenging component of the overall budget. The Town has worked very closely with employee unions to monitor trends in health claims and review plan design changes to keep the cost increases to the program at a modest level with some success over the past several years. Past performance is no guarantee of future success and we will continue to work diligently in tandem with our employees to contain costs wherever possible. This budget line item will require a 3.94% increase for FY24.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
15-	**Unemployment Comp. (A)**	84,193	4,840	100,000	100,000	100,000	100,000	
16-	**Ch. 32B Benefits (A)**	13,235,137	13,813,600	15,633,054	16,248,398	16,248,398	16,248,398	
17-	**Medicare (A)**	1,161,854	1,207,993	1,323,134	1,389,291	1,389,291	1,389,291	
18-	**Transfer to OPEB (A)**	104,957	852,493	931,775	1,018,430	1,018,430	1,018,430	
19-	**Town Insurance (A)**	1,106,273	1,156,399	1,214,219	1,364,219	1,364,219	1,364,219	
20-	**Financial Services (A)**	60,000	60,000	60,000	60,000	60,000	60,000	
21-	**Central Supply**	110,000	110,000	110,000	110,000	110,000	110,000	
22-	**Central Machine**	26,550	26,550	27,920	28,000	28,000	28,000	
	TOTAL ACCOMODATED	**15,752,414**	**17,095,325**	**19,262,182**	**20,180,338**	**20,180,338**	**20,180,338**	**4.77%**
	TOTAL OPERATING	**136,550**	**136,550**	**137,920**	**138,000**	**138,000**	**138,000**	**0.06%**
	GRAND TOTAL	**15,888,964**	**17,231,875**	**19,400,102**	**20,318,338**	**20,318,338**	**20,318,338**	**4.73%**

151 - LEGAL

DESCRIPTION OF SERVICES/MISSION

The Town utilizes third-party counsel for its legal needs. This budget is for the majority of town-wide legal expenses (with the exception of certain specialty areas). This budget reflects the anticipated costs related to both general counsel and labor counsel.

STAFFING

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Expenses							
	Contracted Services							
	Legal Fees	102,198	76,510	125,000	125,000	125,000	125,000	
	Labor	22,660	30,656	72,000	72,000	72,000	72,000	
	Cable TV Negotiations	18,400	1,170	1,500	1,500	1,500	1,500	
	Tax Title	7,469	51,520	3,500	3,500	3,500	3,500	
23-	**TOTAL EXPENSES**	**150,727**	**159,856**	**202,000**	**202,000**	**202,000**	**202,000**	
	GRAND TOTAL	**150,727**	**159,856**	**202,000**	**202,000**	**202,000**	**202,000**	**0.00%**

152 – HUMAN RESOURCES

DESCRIPTION OF SERVICES/MISSION

The Human Resources Department serves as a partner to all Town and School employees, and provides support in the areas of recruitment and selection, compensation, employee relations, labor relations, as well as organization and employee development.

Examples of the Human Resources Department's responsibilities include:

- Monitors, reviews, and interprets current personnel policies, job classifications, salary structures, and collective bargaining agreements.
- Oversees personnel records and data for all employees, and maintains a complete file for each employee.
- Plans and coordinates recruitment and selection procedures for exempt and non-exempt employees including: Preparation and placement of recruitment announcements and advertising; recommendation of appropriate recruitment process; assisting department heads and school administrators with screening of applications and identification of most highly qualified candidates; and assisting departments in developing interviews and other selection procedures, and performance of reference/background checks.
- Provides support in the administration of the municipality's and school department's classification and pay plans including: Making recommendations on reclassification of existing positions; assisting in the conducting of classification studies; assisting in the conducting of salary surveys to evaluate positions and make recommendations on salary schedules in preparation for collective bargaining, and to ensure the municipality and school department is paying market-competitive wages and offering benefits comparable to other geographic communities similar in demographics.
- Coordinates workers compensation claims.
- Maintains personnel policies and procedures, ensuring consistent interpretation and application to collective bargaining agreements, and local, state and federal laws. Ensures the Town and School Department employment practices are in accordance with all applicable state and federal requirements.
- Assists in the preparation of civil service correspondence and forms in accordance with Chapter 31 of the General Laws of the Commonwealth of Massachusetts.
- Assists municipal and school management teams in the annual renewal of the Town's health insurance and dental plans; discusses premium increases, plan design changes and records minutes of meetings with the Insurance Advisory Committee.
- Coordinates in-house training sessions for staff as necessary, and assists with selecting appropriate external training opportunities. Assists and participates in annual new teacher orientation.
- Acts as a liaison with the Employee Assistance Program.

- Assists in the administration, as appropriate, of collective bargaining agreements and preparing recommendations for the Town Administrator and Superintendent of Schools prior to commencement of negotiations. Assists with negotiations where appropriate. Involvement with grievance hearings and arbitrations as necessary.
- Serves as the information resource for town and school personnel in the areas of personnel policies, hiring practices, dispute resolution and employee assistance. Meets, as appropriate, with employees to discuss individual job-related issues.
- Promotes Equal Opportunity Employment (EEO) and diversity in the workplace as well as the prevention of sexual harassment, discrimination and claims of hostile work environment. Oversees the preparation of the Affirmative Action Report, EEO-4 Report, and other required workforce documents.

SIGNIFICANT CHANGES

None.

FY23 ACCOMPLISHMENTS

- Participated in collective bargaining process for all union contracts within the Town departments.
- Increased diversity equity and inclusion initiatives.
- Introduced efficiencies in services and communications, including processing of personnel changes.
- Introduced a Management Academy consisting of management-level training for department heads and others in a supervisory role.
- Partnered with the Town of Lexington to jointly hire a Sealer of Weights & Measures to serve both communities – providing efficiency and cost savings to both communities

FY24 GOALS

- Continue diversity equity and inclusion initiatives to include training opportunities for all staff.
- Continue to explore efficiencies in services and communications, including processing of personnel changes and onboarding.
- Explore methods to increase awareness of career opportunities with the Town of Burlington.
- Work with department heads and IT to enhance onboarding and offboarding process.
- Continue to provide health and wellness education to our employees with the goal of receiving maximum benefit from the plans offered while encouraging decisions that keep claims costs at a minimum.
- Continue to provide health and wellness education to our employees with the goal of receiving maximum benefit from the plans offered while encouraging decisions that keep claims costs at a minimum.

STAFFING

(1) Human Resources Director, (1) Human Resources Coordinator

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	139,915	145,198	154,176	154,176	154,176	154,176	
24-	**TOTAL SALARIES**	**139,915**	**145,198**	**154,176**	**154,176**	**154,176**	**154,176**	
	Expenses							
	Contracted Services	0	0	450	450	450	450	
	Materials & Supplies	809	1,062	1,250	1,250	1,250	1,250	
	M.E.L.T.	2,298	677	2,690	2,755	2,755	2,755	
25-	**TOTAL EXPENSES**	**3,107**	**1,739**	**4,390**	**4,455**	**4,455**	**4,455**	
	Special Accounts							
	BMEA Education	5,000	939	5,000	7,500	7,500	7,500	
	Staff Training	3,975	2,755	4,000	6,310	6,310	6,310	
	Recruitment/Retention	4,238	5,395	5,500	6,000	6,000	6,000	
26-	**TOTAL SPECIAL**	**13,213**	**9,089**	**14,500**	**19,810**	**19,810**	**19,810**	
	GRAND TOTAL	**156,235**	**156,026**	**173,066**	**178,441**	**178,441**	**178,441**	**3.11%**

155 – MANAGEMENT INFORMATION SYSTEM

DESCRIPTION OF SERVICES/MISSION

The purpose of the Management Information Systems (MIS) Department is to provide the entire Town's municipal organizations with the information and technology it needs to support its operations, make strategic decisions, and achieve its goals. This include tasks such as maintaining servers and networks, troubleshooting and resolving technical issues, implementing and maintaining software and hardware, and ensuring that the organizations' technology is secure and compliant with relevant regulations. Additionally, evaluating new technologies and recommending systems that can improve the organization's performance and providing guidance and training on the use of technology is another one of our regular tasks. In summary, the MIS department is responsible for the management of information and technology, and to support the organizations' goals and objectives by providing relevant and timely information.

Our infrastructure is based on 10Gb network with wireless access in most of the Town Buildings. The department continues to maintain the VOIP (Voice Over IP) phone system for all other departments town-wide, and a separate mass notification system for alerting residents of emergencies and unexpected events. The backbone of the Town's network is an extensive fiber optic cable plant connecting town facilities, schools, water towers, & sewer pumps; and carries all data, telephone, & video involving Town business at significant savings over alternative methods of data transport. Installed over 15 years ago and connecting 54 sites.

Many proprietary software applications, unique to the public sector, are necessary for the smooth operation of the town's day-to-day function, among those, without mentioning them specifically, are:

> Our Enterprise Resource Planning system that combines and manages the financial system keeping track of the town's receivables/collectibles, payroll, and budgets.
>
> Computer Assisted Mass Appraisal solution employed by the Assessor's office to maintain accurate commercial & residential property records and values. The public is welcome to access this data at https://burlington.patriotproperties.com
>
> Supervisory control and data acquisition that *assists* the Department of Public Works in controlling, direct, record and monitoring their systems.
>
> The permitting application software that improves the town's productivity by facilitating the workflow by routing, approving and issuing permits electronically in a timely manner.

The Recreation Management application used to track activity reservations and programs at the Recreation Department; available in the cloud for residents www.burlingtonrecreation.org

These systems, and many others, are maintained, updated, and backed up by MIS department. They are all large and complex; each sporting their own quirks. Some utilize security certificates; require multiple servers; or connection to state/federal agencies.

SIGNIFICANT CHANGES

None.

FY23 ACCOMPLISHMENTS

- Supported the Town's extensive fiber optic cable plant network backbone to connect different Town facilities, schools, water towers, & sewer pumps that carries all data, telephone, & video involving Town business has been a critical role that demands designing, implementing and maintaining the network infrastructure, ensuring network security, managing network bandwidth and providing technical support to organizations connected to the network.
- In accordance with our Towns/Schools Network Infrastructure/ Enterprise Security Solutions 5-year plan replaced and upgraded existing network equipment that reached its end of life, or support.
- Assisted the Town's Department of Public Works with the technology installation and deployment during construction of the new facility at 1 Great Meadow Rd

FY24 GOALS

- Continue with the implementation of Cybersecurity Awareness Program to all Town's personnel. Our goal carries on fostering a culture of security within an organization by encouraging employees to think about security in everything they do. We all know how important is to protect sensitive data, prevent cyber-attacks, meet compliance requirements and be cost-effective.
- Work together with all organizations on upgrading their applications server/software as well as the implementation of new software modules that automates many financial tasks such as billing, accounts payable, budgeting and financial reporting, that helps the Town's municipality to improve their efficiency and reduce the burden on staff.
- Collaborate with the Board of Health implementing a new Shared Services Workspace with other entities, for Food Safety and Environment Health record inspection, code violations and observations.
- Assess, assist and work with the Fire & Police Departments to implement their new system that provides automation, flexibility, reporting and analytics, security, scalability, compliance, customer support and integrates with other software systems, such as GIS, permitting, and land records, providing a more comprehensive and streamlined solution to their requirement and administrative needs.

STAFFING

(1) Critical Systems/Applications Administrator; (1) System/Application Administrator; (2) Network/Repair Technician

BUDGET ISSUES

The budget reflects the town's 4-5 year replacement cycle of desktops and laptops, along with robust backup and server solutions. Another significant burden placed on the department is the increasing cost to protect and secure our data infrastructure from cyber threats. The department is also addressing the recommendations as presented through the Information Systems Security Advisory Committee (ISSAC).

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	344,483	345,729	369,573	373,709	373,709	373,709	
	Part Time			25,000	25,000	25,000	25,000	
27-	**TOTAL SALARIES**	**344,483**	**345,729**	**394,573**	**398,709**	**398,709**	**398,709**	
	Expenses							
	Network and Web	89,737	103,236	127,826	143,035	132,235	132,235	
	MUNIS Support/Licenses	117,612	122,469	129,917	138,269	138,269	138,269	
	Materials and Supplies	981	469	1,000	1,000	1,000	1,000	
	Capital Outlay	97,767	101,273	101,000	101,000	101,000	101,000	
28-	**TOTAL EXPENSES**	**306,097**	**327,447**	**359,743**	**383,304**	**372,504**	**372,504**	
	GRAND TOTAL	**650,580**	**673,176**	**754,316**	**782,013**	**771,213**	**771,213**	**2.24%**

161 – TOWN CLERK

DESCRIPTION OF SERVICES/MISSION

Vital Records: Record, index, and, in some instances, create the town's "vital records" (births, deaths, marriages); issue certified copies thereof; serve as burial agent.

Elections: Conduct all elections in conformance with federal and state laws and regulations, train poll workers, prepare the ballot for local elections, certify and report results, administer campaign finance laws for local elections, administer oaths of office and provide officials with copies of the State's Conflict of Interest and Opening Meeting Laws.

Town Meeting: Serve as clerk to the Town Meeting, take attendance and minutes, certify votes, submit bylaw articles to the Attorney General for approval, and publish and codify the town's zoning and general bylaws.

Public Records: Receive applications and certify decisions for special permits, variances, subdivisions, minor engineering changes, and Approval Not Required; record and renew Business Certificates (DBA's); record, index, and invoice utility pole/conduit locations; oversee the Town's Archives and Records Management Program; provide copies of public records upon request; post meetings of all town boards, commissions, and committees. The Clerk is also the Records Access Officer for the Town which handles the management of all FOIA requests.

Census and Voter Registration: Conduct an annual listing of all residents/voters and maintain the State's Central Voter Registry; initiate voter registration outreach; publish the Annual Street List; prepare and distribute annual reports to schools, veterans, jury commission, Council on Aging and police; provide demographic data to various town departments and the general public. Also, oversees the Board of Registrar's budget and is the Clerk for the Board.

Elections: As the Chief Elections office, the Town Clerk oversees the running of all the elections for the Town. Working with the office we manage the distribution of Absentee Ballots, both local and overseas, for the 3 weeks prior to the election; for Federal elections run Early Voting for 1 or 2 weeks prior and then set up and execute the processes on Election Day. Afterward for 5-7 days we work on the processing and certifying of the election.

Licensing/Permits: Dogs, storage of flammable materials, raffles.

Public Information and Services: Maintain a high level of customer service providing general information (using press releases, postings, internet, office, and phone) to both the general public and other town departments; serves as Web Master for the Town, overseas the

content editing for the Town calendar and various other sections on the Town website; serves as Record Access Officer, Notary Public, Justice of the Peace, and Commissioner to Qualify Public Officers.

In the calendar year 2021, the Clerk's office brought in $170,091 in revenue, an increase of 3% which was turned into the Treasurer's office and goes into the General Fund.

FY23 ACCOMPLISHMENTS

- Continued to run an efficient and effective front door for the Town of Burlington, the Clerk's office is the place where whether it's on the phone or in person people come to get an answer. Many times on the phone people will say "I know this is not the department to handle this but can you help me with . . . "
- Ran 3 Elections with constant changes on the legal requirements from the State Legislature. Implement efficient processes for Vote by Mail and Early In-Person Voting. Handled over 5,000 application for Vote by Mail for the Primary and State Elections.
- The office has processed over 1,700 vital records registration which includes Births, Deaths and Marriages. These are permeant records that are processed and the archived by our office, bringing our archives to over 66,000 vital records.
- We continue to handle a large number of record requests from vital records only we brought in $120,000 on revenue. As well as over 2,500 dog license and 1100 Business certificates
- We have handled over 400 FOIA requests in the year
- Implemented New Voting and Electronic Check tools for Elections

FY24 GOALS

- Major goal for this year will be to review and update processes and procedures for all office tasks
- Further Implement ViewPoint/OpenGov workflows and tools to help us work "smarter not harder"
- As well as the continued high level of customer service that we provide for all the residents and businesses of the Town and all of the above listed services!

STAFFING

(1) Department Head, (1) Archivist/Records Manager, (1) Administrative Assistant II, (2) Administrative Assistant I.

BUDGET ISSUES

The Elections special account fluctuates from year to year depending on the federal, state, and local election cycle.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	246,162	265,409	283,029	296,395	296,395	296,395	
	Part Time	517	0	0	0	0	0	
	Elected/Appointed	97,362	101,986	106,382	118,720	118,720	118,720	
29-	**TOTAL SALARIES**	**344,041**	**367,395**	**389,411**	**415,115**	**415,115**	**415,115**	
	Expenses							
	Contracted Services	12,589	12,160	12,500	13,300	13,300	13,300	
	Materials & Supplies	2,329	2,423	3,000	3,000	3,000	3,000	
	M.E.L.T.	4,065	3,825	3,700	3,900	3,900	3,900	
	Capital Outlay	1,118	1,135	1,500	1,500	1,500	1,500	
30-	**TOTAL EXPENSES**	**20,101**	**19,543**	**20,700**	**21,700**	**21,700**	**21,700**	
	Special Accounts							
	Elections	83,537	28,551	94,287	78,680	78,680	78,680	
31-	**TOTAL SPECIAL**	**83,537**	**28,551**	**94,287**	**78,680**	**78,680**	**78,680**	
	GRAND TOTAL	**447,679**	**415,489**	**504,398**	**515,495**	**515,495**	**515,495**	**2.20%**

162 – BOARD OF REGISTRARS

DESCRIPTION OF SERVICES/MISSION

The Registrars of Voters responsibilities include:

- Census and Voter Registration: Conduct an annual listing of all residents/voters and maintain the State's Central Voter Registry; initiate voter registration outreach; publish the Annual Street List in conjunction with the Town Clerk's Department; conducts hearings on challenges to residents' eligibility to vote.
- Petitions and Nominations: Certify names of registered voters who sign state and local petitions and nomination papers, in conjunction with the Town Clerk's office.
- Overseeing voter issues during and following elections.
- Recounts: Conduct recounts of contested election races.

STAFFING

(1) Town Clerk*, (3) Appointed Board Members

*Town Clerk serves as Clerk to, and as member of, the Board of Registrars.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Elected/Appointed	1,150	1,250	1,250	1,250	1,250	1,250	
32-	**TOTAL SALARIES**	**1,150**	**1,250**	**1,250**	**1,250**	**1,250**	**1,250**	
	Expenses							
	Contracted Services	9,372	9,721	11,000	11,000	11,000	11,000	
	Materials & Supplies	851	869	900	900	900	900	
33-	**TOTAL EXPENSES**	**10,223**	**10,590**	**11,900**	**11,900**	**11,900**	**11,900**	
	GRAND TOTAL	**11,373**	**11,840**	**13,150**	**13,150**	**13,150**	**13,150**	**0.00%**

171 - CONSERVATION

DESCRIPTION OF SERVICES/MISSION

Provides technical support to the appointed Conservation Commission in their role as regulators and enforcers of the MA Wetlands Protection Act (MGL Chapter 131, section 40), the MA wetland regulations (310 CMR 10.00), the Burlington Wetland Bylaw/Regulations (Article XIV, section 1.0) and the Burlington Erosion & Sediment Control Bylaw (Article XIV, section 6.0).

Provides administrative and logistical support for the Conservation Commission,

Reviews and provides comments on projects and proposals to Planning Board and other boards on wetlands and/or environmental issues.

Manages several parcels of Town-owned land under the Conservation Commission's jurisdiction. These include the Mill Pond, Sawmill Brook, Marion Road and Little Brook Conservation Areas, in addition to several smaller parcels. This includes the hiring of a part-time worker to do land-management tasks, including trail maintenance and enhancing the security of the conservation areas.

Promotes the acquisition of additional open space throughout the Town through several means, including conservation restrictions, land donations, land transfers, and outright purchases.

Manages seasonal hand stream-cleaning program, for which 2-4 seasonal workers are hired.

Coordinates the Town's National Pollutant Discharge Elimination System (NPDES) compliance program with several other departments (DPW, Engineering, and Health). Two seasonal stormwater interns will perform the water quality sampling.

SIGNIFICANT CHANGES

None.

FY23 ACCOMPLISHMENTS

- Managed Town compliance with minimum control measures of EPA NPDES Phase 2 MS4 permit
- Continued stormwater outfall monitoring to comply with EPA permit.
- Coordinated Conservation Commission hybrid meetings and site visits.
- Updated Stormwater Bylaw.
- Completed MA MVP Grant project for climate resiliency planning.
- Continued to educate the public and business community about the importance of wetlands and about managing stormwater and reducing pavement and other impervious cover.

FY24 GOALS

- Enhance resource areas and groundwater quality by protecting and increasing green space and reducing discharge of untreated stormwater in streams and wetlands.
- Continue to educate the public and business community about the importance of wetlands and about managing stormwater and reducing pavement and other impervious cover.
- Explore additional MVP climate resiliency planning projects

STAFFING

(1) Conservation Administrator (Department Head), (1) Assistant Conservation Administrator, (1) Administrative Assistant I, (1) Part-Time Recording Clerk, (2) Part-Time Stormwater Interns, (1) Part-Time Land Management Intern and (3-4) Seasonal Stream Cleaners

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	223,313	232,682	245,856	263,614	263,614	263,614	
	Part Time	6,784	3,237	15,130	15,583	15,583	15,583	
34-	**TOTAL SALARIES**	**230,097**	**235,919**	**260,986**	**279,197**	**279,197**	**279,197**	
	Expenses							
	Materials & Supplies	641	635	5,700	5,700	5,700	5,700	
	M.E.L.T.	1,411	2,004	4,350	4,350	4,350	4,350	
35-	**TOTAL EXPENSES**	**2,052**	**2,639**	**10,050**	**10,050**	**10,050**	**10,050**	
	Special Accounts							
	Land Management	5,073	5,047	8,320	8,320	8,320	8,320	
	Stream Cleaning	6,822	5,743	11,000	11,000	11,000	11,000	
36-	**TOTAL SPECIAL**	**11,895**	**10,790**	**19,320**	**19,320**	**19,320**	**19,320**	
	GRAND TOTAL	**244,044**	**249,348**	**290,356**	**308,567**	**308,567**	**308,567**	**6.27%**

175 – PLANNING BOARD

DESCRIPTION OF SERVICES/MISSION

Responsibilities include the review of development proposals, long-range planning, direct assistance to the Planning Board, assistance to the public, and as needed assistance to other Town departments and committees. Day-to-day responsibilities include: long-range planning, permit coordination, economic development, consensus building, GIS data management, addressing citizen inquiries and concerns, monitoring construction activity, and conducting research to provide the Planning Board with background information.

The Planning Department reviews all commercial and multi-family development proposals for compliance with Town Bylaws and regulations, as well as statutory conformance. The department's 'Site Plan Review' process is defined in Article 9 of the Zoning Bylaw, as well as the Planning Board Site Plan Rules and Regulations. In addition, uses defined in the Zoning Bylaw, which have a potential detrimental impact on the environment, traffic, town infrastructure, or the water supply, require special permit review. The process of special permit review is a statutory requirement outlined in MGL Chapter 40A section 9, as well as the Planning Board Special Permit Rules and Regulations. By State Law, the department is responsible for the exercise of the Subdivision Control Law (MGL Chapter 41), which affects all divisions and boundary modification of property in Burlington. The department advises the Planning Board of local bylaw conformance, applicable state and federal laws, and case law, which affect land-use decisions.

Comprehensive master planning is mandated under MGL Chapter 41 Section 81-D. The planning department is required to undertake planning studies, and research to identify existing and future land use issues and opportunities, as well as, monitors innovative state and national planning initiatives and applicable case law. The department proposes courses of action to address such issues and opportunities to guide the comprehensive master planning process. The department initiates the implementation of master plan recommendations by such courses of action as the drafting of bylaw and regulation revisions, facilitating public forums and hearings, required for adoption of such amendments. The department also has assisted many town committees over the years such as the Land Use Committee and Housing Partnership, Small Cell Committee and Zoning Bylaw Review Committee.

SIGNIFICANT CHANGES

No significant changes for FY24. The Department is still actively seeking to fill the Senior Planner and Development Coordinator positions.

FY23 ACCOMPLISHMENTS

- Life Science Innovation rezonings and conversions continued. These buildings command top value in the market as well as support an industry where people are coming to work, which greatly supports our existing hospitality, retail and restaurant industries. We of course could not do any of this alone and thank all departments especially the Board of Health and Town Meeting for their support.

- Passage of a groundwater separation bylaw requiring the basement elevation of all new construction be above the estimated seasonal high water mark. The bylaw provides additional protection for existing homeowners by reducing the amount of groundwater displacement. This displaced water disproportionately effects neighboring properties and those at lower elevations.

FY24 GOALS

- Focus on long-range planning efforts to encourage and support a more diversified tax base.
- Continue working towards achieving compliance with Section 3A of MGL c. 40A, also known as the MBTA Communities Law. The law requires every community within the MBTA catchment area to provide at least one zoning district that allows multi-family housing by-right.
- Continue to attract companies that require employees be on-site in Burlington such as, R&D, medical device, additive manufacturing in our growing 3D printing sector.
- Effective land use policy to increase commercial property value in the Town of Burlington.
- Advance the Mall Road/Middlesex Turnpike Form Based Code zoning initiative in conjunction with the Economic Development department.
- Pursue providing Burlington with access to the state's existing bike network. We are specifically looking at providing a connection to the Minuteman Bikeway for both commuter and recreational use.
- Support the ZBRC Sign Bylaw subcommittee in their pursuit to reimagine how signage is managed within the town.
- Review "Wireless" from a regulatory and legal as well as infrastructure perspective. How can we best control the roll out and regulate without litigation? Our bylaws are out of date and not in compliance with federal regulations, you will see proposed zoning changes to address these concerns as well as a report about what is coming and how best to embrace and more importantly control what's next.

STAFFING

(1) Department Head, (1) Senior Planner, (1) Assistant Planner, (1) Planning Assistant, (1) Development Coordinator (1) Recording Clerk

BUDGET ISSUES

GIS Coordination - To date, each development department has utilized their own budgets and their own consultants to manage mapping, GIS software licensing and GIS data. This fragmented approach results in redundancies, increased costs, and underutilization of GIS as a tool to provide better services to the community. Long term, the Town should investigate the addition of dedicated GIS staff, or centralized consultant to manage the Geographic Information System within the town. Currently, development departments, including Planning, Engineering, Conservation and the Assessors departments all utilize ESRI's ArcGIS mapping software to inform current and future land use, facility and infrastructure decisions. The Planning Department already provides the public with an online parcel map viewer through

a contract with AppGeo. The company provides an array of spatial data services including a managed services program that builds organizational capacity to use geospatial platform technologies and location intelligence more effectively. Implementation would require centralized funding through the IT department and a coordinated on-boarding effort. The consolidation of this software system will result in both savings and the opportunity to provide better services to the town. It should be prioritized.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	310,473	316,964	416,330	401,914	401,914	401,914	
	Part Time	2,846	2,210	4,986	4,986	4,986	4,986	
	Elected/Appointed	4,400	4,336	4,400	4,400	4,400	4,400	
	Overtime	734	739	0	2,394	2,394	2,394	
37-	**TOTAL SALARIES**	**318,453**	**324,249**	**425,716**	**413,694**	**413,694**	**413,694**	
	Expenses							
	Contracted Services	22,832	22,832	22,832	39,652	39,652	39,652	
	Materials & Supplies	1,419	709	1,500	1,800	1,800	1,800	
	M.E.L.T.	4,387	4,472	9,016	10,506	10,506	10,506	
38-	**TOTAL EXPENSES**	**28,638**	**28,013**	**33,348**	**51,958**	**51,958**	**51,958**	
	GRAND TOTAL	**347,091**	**352,262**	**459,064**	**465,652**	**465,652**	**465,652**	**1.44%**

176 – BOARD OF APPEALS

DESCRIPTION OF SERVICES/MISSION

Established under Section 9.5.1 of the Zoning By-Law pursuant to Chapter 40A of the Massachusetts General Laws; Appointed by the Select Board.

The Board is charged with the following duties; to hear and decide appeals from an adverse decision of the Building Inspector or any Town Board, to make determinations in Flood Hazard Districts, to hear and decide petitions for variances, to issue comprehensive permits under MGL Chapter 40B, and to permit signs in particular instances.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Part Time	13,481	19,353	13,481	13,481	13,481	13,481	
39-	**TOTAL SALARIES**	**13,481**	**19,353**	**13,481**	**13,481**	**13,481**	**13,481**	
	Expenses							
	Materials & Supplies	105	0	250	250	250	250	
40-	**TOTAL EXPENSES**	**105**	**0**	**250**	**250**	**250**	**250**	
	GRAND TOTAL	**13,586**	**19,353**	**13,731**	**13,731**	**13,731**	**13,731**	**0.00%**

192 – TOWN FACILITIES

This budget is considered part of the Department of Public Works budget, and includes occupancy costs for the Library, as that classification results in an indirect cost savings. Although building occupancy is presented in the Town Facilities budget, Ways and Means continues to monitors these costs and take them into consideration when reviewing the Library's budget as a whole. For further explanation, please reference the budget narrative of the Library, contained in this document.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Expenses							
	Occupancy	62,796	63,629	98,163	98,163	98,163	98,163	
41-	**TOTAL EXPENSES**	**62,796**	**63,629**	**98,163**	**98,163**	**98,163**	**98,163**	
	GRAND TOTAL	**62,796**	**63,629**	**98,163**	**98,163**	**98,163**	**98,163**	**0.00%**

210 - POLICE

DESCRIPTION OF SERVICES/MISSION

The mission of the Burlington Police Department is to work with all citizens of the community to create a safe and secure environment with an emphasis on equality, fairness, integrity and professionalism.

The Department is comprised of a very dedicated group of professionals that have made it their calling to serve the public. The Department is structured into various divisions, made up of units and described in more detail below.

Office of the Chief of Police: the Chief of Police oversees the department and is responsible for the day to day operations of the department, policy formulation and enforcement, and fiscal responsibility for the department. Assisted by a Deputy Chief of Police, ultimate authority of the police department falls within this Office.

Operations Division: managed by a Captain. This division encompasses patrol, traffic and detectives. Additionally, the following units fall under this Division:

Patrol Unit-is an operational component of the Burlington Police Department. Its main function is to provide all law enforcement patrol and related duties to the citizens of Burlington.

Bike Unit - works to increase patrol coverage in areas where traditional vehicles cannot access. Bike officers on their mount can easily maneuver parks, alleys, and shopping districts.

Detective Unit- is responsible for the investigation of serious crimes.

Domestic Violence Unit- focuses on the victims of domestic violence in order to offer services to help them recover from and escape their abusive situations.

Drone Unit- utilizes the advantages of aerial drone capabilities in many various situations. The unit started in 2017, and continues to grow as the use of drones evolves in law enforcement. Not only is the unit used to assist law enforcement within Burlington, it is also utilized through the regional SWAT team, NEMLEC.

K-9 Unit-assists in the general duties of patrol officers. Handlers and their K-9 partners go through vast specialized trainings to both fulfil the duties of patrol officers and specialized duties of the K-9 Unit.

Traffic-is a specialized division within the Operations Bureau of the department.

Administrative Division: managed by a Captain. This division encompasses training, Information technology, line of duty injuries, off the job injuries, grants, mental health and substance abuse clinicians, budget and other ancillary services. The following units also fall under this Division:

Community Service Unit- is responsible for implementing community policing initiatives, in addition to accident and incident reporting requests and animal control services. The Unit also handles firearms licensing.

Crime Analysis Unit- is tasked with providing crime statistics, intelligence information and analysis of crime trends and patterns.

Information Technology Unit-addresses information technology needs of the Department.

Mental Health, Elder Services and Substance Abuse-provides resources, and assists individuals and families with a broad range of issues.

Records-maintains records and responds to requests for records.

Departmental Statistics	2019	2020	2021	2022
Documented calls for service	28,333	33,494	29,427	41,190
Uniform crimes reported	526	473	371	496
Arrests	186	165	225	377
Traffic Citations issues	4,588	1,742	1,414	2,190
Animal Complaints	437	406	332	450

SIGNIFICANT CHANGES

The department had two high ranking command officers retire in 2022 resulting in promotions of two Captains, three Lieutenants and two Sergeants.

FY23 ACCOMPLISHMENTS

- The department brought back a police motorcycle and now has deployed this in the field. The motorcycle unit has been extremely beneficial in both our outreach and enforcement efforts.
- We have also begun a transition to ProPhoenix, a new Records Management/Computer-Aided Dispatch software program that will work in tandem with the Fire Department.
- We are also in the process of bringing body-worn cameras into the workplace and expect to have both new systems in place by the summer.

FY24 GOALS

- Completion of the radio system upgrades, along with Burlington Fire, which will include new portable radios and better coverage in town for the entire radio system.
- Final implementation of the ProPhoenix and Body-Worn camera systems. We are also aiming to recruit and hire to backfill sworn positions left vacant through attrition.

STAFFING

(1) Chief, (1) Deputy Chief, (2) Captains, (5) Lieutenants, (9) Sergeants, (50) Patrol, (3) Civilian Dispatchers, (7) Traffic Supervisors, (1) Animal Control Officer, (1) Administrative Secretary, (2) Administrative Assistants, (1) Mental Health Clinician, (1) Recovery Coach (1) Crime Analyst.

BUDGET ISSUES

With the addition of ProPhoenix and the Body-Worn cameras, the department's budget needs to increase for the annual support and maintenance contracts that come with the software. The ProPhoenix software contract calls for increases in years 2-6, inclusive, of the implementation of the software. The Body-Worn camera program also calls for support and maintenance fees. These are static across a five-year period from implementation.

The cost of cruisers is going to increase again this year substantially. We have opted to purchase gas combustible cruisers. This past year, we bought three hybrid cruisers and have lost significant time and money due to down time. Many departments have had negative experiences with the hybrid vehicles as they do not stand up to the high demand of being part of a patrol fleet. They are also expensive to repair and the time they spent out of service put a higher demand on the other vehicles.

The FY 24 budget reflects these necessary increases.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	7,407,338	7,299,111	8,115,512	8,204,507	8,143,255	8,143,255	
	Part Time	110,953	119,908	222,151	226,484	226,484	226,484	
	Overtime	853,959	807,834	605,200	605,200	605,200	605,200	
42-	**TOTAL SALARIES**	**8,372,250**	**8,226,853**	**8,942,863**	**9,036,191**	**8,974,939**	**8,974,939**	
	Expenses							
	Occupancy	140,859	101,115	167,678	167,678	167,678	167,678	
	Contracted Services	175,537	188,174	148,240	226,789	226,789	226,789	
	Materials & Supplies	72,636	66,507	68,988	118,988	118,988	118,988	
	M.E.L.T.	3,325	3,325	3,325	3,325	3,325	3,325	
	Capital Outlay	202,874	199,216	251,400	283,500	283,500	283,500	
43-	**TOTAL EXPENSES**	**595,231**	**558,337**	**639,631**	**800,280**	**800,280**	**800,280**	
	Special Accounts							
	Education/Tuition	159,279	139,006	129,500	129,500	129,500	129,500	
	111F Payments	19,650	32,023	40,000	40,000	40,000	40,000	
	Uniform Allowance	98,081	74,918	80,810	80,810	80,810	80,810	
	Animal Disposal	5,029	4,676	1,000	1,000	1,000	1,000	
	Gasoline	41,750	114,877	94,000	94,000	94,000	94,000	
	NEMLEC	0	5,500	6,500	6,500	6,500	6,500	
44-	**TOTAL SPECIAL**	**323,789**	**371,000**	**351,810**	**351,810**	**351,810**	**351,810**	
	GRAND TOTAL	**9,291,270**	**9,156,190**	**9,934,304**	**10,188,281**	**10,127,029**	**10,127,029**	**1.94%**

220 - FIRE

DESCRIPTION OF SERVICES/MISSION

The Fire Department (FD) protects and preserves life and property in the community through code enforcement, incident response to fires and medical emergencies and a myriad of other calls for service.

The FD provides code and regulation enforcement of local, state and federal statutes, regulations, and bylaws pertaining to fire safety. We inspect commercial properties and participate in quarterly inspections in all hotels, schools, and health care facilities. The FD works and trains with other municipal public safety departments such as the PD, DPW, Board of Health and Building Department to ensure the safest possible environment for residents and visitors of our community. We make safety recommendations to other boards and departments during the plan review process. We ensure compliance of all underground and above ground storage tanks for fuels or other hazardous fluids when required.

The FD is a Massachusetts Approved Community EMS Provider. This allows our department to participate in home safety evaluations, fire and burn prevention education, Flu vaccines, Narcan information and training and behavioral health community referrals. We train both members of the general public and town departments in CPR. We conduct Blood Pressure clinics and assist in Stop the Bleed programs. The FD participates in special programs such as providing smoke and CO detectors to our seniors when funding is available. This program is conducted by both the FD and Council on Aging. The FD consults with commercial property managers regarding fire drills and emergency planning.

The FD maintains the municipal fire alarm system, emergency radio communications system, and computerized state and federal fire incident reporting system. Four Civilian Dispatchers operate our Fire Dispatch Center. Our Dispatchers handle a large volume of Fire and EMS calls as well as an increasing number of business related calls. All of our members are trained Emergency Medical Dispatchers that are capable in determining the most appropriate EMS response as well as being able to provide medical instruction to the caller.

The FD provides emergency medical services at the Advanced Life Support (ALS) level. The FD responds to, extinguishes and investigates all fires and their causes. We respond to fire alarm activations in both residential and commercial properties. We also respond to utility emergencies such as electrical and gas emergencies. The FD responds to rescue calls such as motor vehicle crashes, workplace accidents, and elevator rescues. The department is also trained in ice and water rescue. The FD is trained to the Operational Level in regards to hazardous materials response. For hazardous materials incidents beyond our capability, the department relies on the MA State Hazardous Materials Team. Our department responds to a large number of service calls in which we assist the public in mitigating a variety of issues, for example; water, electrical, and odor calls.

In addition to responding to an increasing number of calls for service, Firefighters receive weekly training, participate in residential and business safety inspections, and maintain all emergency apparatus and equipment on a daily basis. As well as protecting our own community, our Firefighters respond to our neighboring Mutual Aid communities when requested for either Fire or EMS assistance.

Departmental Statistics	2019	2020	2021	2022
Emergency responses	7,597	7,203	7,262	8,247
Inspections	729	738	779	887
Plan reviews	47	326	240	67
Permits/certificates issued	731	680	716	733

SIGNIFICANT CHANGES

- In FY23 the Chief of the Department retired, taking with him over a decade of administrative experience. This led to a series of promotions and hiring from Chief of Department on down.
- Phase 1 of the Public Safety Communications upgrade has been completed. The goal of this important upgrade project is improve public safety communication reliability throughout the town, making FD and PD operations safer and more efficient.
- The FD continues to work on increasing our staffing levels to 15 personnel per group.

FY23 ACCOMPLISHMENTS

- The FD advanced life support (ALS) ambulance service continues to provide the community a superior level of service. Run numbers have not only returned to pre-COVID amounts but have surpassed any prior year's numbers.
- COVID-19 responses and impacts continue to ebb and flow, and effect FD operations. The policies and procedures that were implemented have minimized but not completely eliminated the impact to our members both out in the field and in the fire stations. These impacts did not affect our response capabilities.
- Phase Two of the Public Safety Communications upgrade is in motion. Radio equipment is being purchased and sites for the equipment have been identified.
- The Police and Fire Department's new software system that includes computer aided dispatch, incident reporting, and data management is being set up for use.

FY24 GOALS

- Continue to manage COVID-19 impacts as we see variants emerge.
- Achieve the objective of staffing each of our four groups with 15 fire personnel.
    - Fill vacancies more rapidly to reduce the impacts on the budget and personnel.
    - Make our hiring process more competitive
- Continue to build on our highly successful paramedic program.
- Complete Phase Two of the Public Safety Communications upgrade.
- Fully implement the Police and Fire Department's new software system that includes computer aided dispatch, incident reporting, and data management

STAFFING

(1) Chief, (1) Assistant Chief, (6) Captains, (14) Lieutenants, (44) Firefighters, (4) Civilian Dispatchers, (1) Emergency Vehicle Technician, (1) Administrative Secretary, (1) Administrative Assistant and (1) Part-time Office Assistant (30 hours)

BUDGET ISSUES

- The department continues to work on bringing our staffing levels up to full complement. The hiring process takes 6-12 months. It is also very competitive. Fortunately, the BFD is a desirable Department to join.
- Injuries and illnesses can limit a firefighter's ability to perform the duties. When this occurs it impacts the overtime and medical payments budget.
- The department has minimum staffing requirements in order to provide an adequate number of personnel for firefighting, emergency medical services and a wide range of other emergencies. This is beneficial to both the community and the firefighters.
- Contractual obligations for the accrued time off are predictable. These can be forecasted and a reasonable budget can be calculated. Vacancies and long-term injuries and illnesses create an unpredictable strain on the budget.
- A minimum of 7 members of the department will be retiring in FY24. Along with the vacancies that these will generate for potentially months, we will have to fund their Termination Buybacks. Typically, there have been 0 to $10 in this line item. If there are funds available in Full Time Salaries, those funds have been used. If hiring occurs more rapidly, then less of those funds would be available, causing a strain on the budget in other areas.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	6,838,452	7,162,363	7,487,433	7,639,430	7,639,430	7,639,430	
	Part Time	48,023	50,755	54,082	57,663	57,663	57,663	
	Overtime	1,164,764	1,453,408	1,099,282	1,999,000	1,422,620	1,422,620	
45-	**TOTAL SALARIES**	**8,051,239**	**8,666,527**	**8,640,796**	**9,696,093**	**9,119,713**	**9,119,713**	
	Expenses							
	Occupancy	85,296	97,599	117,238	117,238	117,238	117,238	
	Contracted Services	109,606	67,540	134,750	163,020	163,020	163,020	
	Materials & Supplies	248,578	267,126	232,210	265,300	265,300	265,300	
	M.E.L.T.	11,664	12,000	12,000	12,000	12,000	12,000	
	Capital Outlay	60,900	60,530	62,754	64,877	64,877	64,877	
46-	**TOTAL EXPENSES**	**516,044**	**504,795**	**558,952**	**622,435**	**622,435**	**622,435**	
	Special Accounts							
	Termination Buyback	0	0	10	10	10	10	
	Education/Tuition	3,655	12,000	17,000	17,000	17,000	17,000	
	Recertification of EMTs	8,242	9,633	8,700	8,700	8,700	8,700	
	Fire Prevention	4,700	4,700	4,700	4,700	4,700	4,700	
	Arson Investigation	1,191	0	1,200	1,200	1,200	1,200	
	Training	19,043	26,103	25,000	25,000	25,000	25,000	
	Training and Management	6,300	6,299	6,300	6,300	6,300	6,300	
	Licenses & Certifications	3,363	2,628	2,500	2,500	2,500	2,500	
	111F Payments	73,750	51,089	42,000	72,000	42,000	42,000	
	Clothing Allowance	86,063	92,650	92,650	92,650	92,650	92,650	
	Wellness Program	2,752	3,598	11,000	11,000	11,000	11,000	
	Community Risk Reduction	0	0	3,500	3,500	3,500	3,500	
47-	**TOTAL SPECIAL**	**209,059**	**208,700**	**214,560**	**244,560**	**214,560**	**214,560**	
	GRAND TOTAL	**8,776,342**	**9,380,022**	**9,414,308**	**10,563,088**	**9,956,708**	**9,956,708**	**5.76%**

241 - BUILDING

DESCRIPTION OF SERVICES/MISSION

The Building Department ensures public safety throughout the Town of Burlington in the built environment through plan reviews, daily inspections and code enforcement.

This office is responsible for managing plan reviews, permits and inspections relating to new construction, additions and remodeling projects. As such, the Building Department reviews building plans submitted to the town and approves them based on compliance with planning and zoning approvals as well as the Massachusetts State building Code. The Building Department is also responsible for annual inspections of certain public assembly occupancies (e.g. theaters, schools and restaurants) and responds to complaints regarding potential code violations and work done without the proper permits.

The office staff works diligently with state agencies and public safety departments going through a continuation of certification classes, meetings and training exercises. These agencies include the Local Emergency Planning Committee (LEPC), Massachusetts Emergency Management Agency (MEMA), the Board of Building Regulations and Standards (BBRS) and the Commonwealth of Massachusetts Department of Fire Services (DFS).

The Building Departments goals for the future are: (1) hire enough staff to perform the duties of the office in an efficient and effective manner and time including new hires to replace long term staff that will be retiring over the next few years, (2) plan for future growth, and (3) continue the expansion of the department's records in electronic format were the public can access those records in an effective and efficient manner. We have been trying to attain these goals we have set, however with the continued economic construction growth within the town; it has been extremely difficult and at times impossible to keep up with the demand on services.

Departmental Statistics	2019	2020	2021	2022
Permits issued	4,173	3,269	3,561	3,945

SIGNIFICANT CHANGES

- Local Inspector promoted to Senior Inspector
- New Microfiche computer system for older plans (able to email, print or download onto a USB)

FY23 ACCOMPLISHMENTS

- An uninterrupted flow of plan reviews, permits and inspections for the citizens of Burlington.
- Issued over 3,000 permits to date (an increase of over 500 at this time last year)

FY24 GOALS

- Have all property files fully scanned into the online software system

- Encouraging anticipation of all departments, as well as the public to utilize ViewPoint software
- Improve online software system, known as ViewPoint.

STAFFING

One (1) Inspector of Buildings, (1) Senior Building Inspector, (1) Local Building Inspector, (1) Inspector of Wires, (1) Plumbing and Gas Inspector, (2) Administrative Assistants.

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	652,863	661,666	609,008	723,515	633,647	633,647	
	Overtime	3,478	4,869	48,000	48,000	48,000	48,000	
48-	**TOTAL SALARIES**	**656,341**	**666,535**	**657,008**	**771,515**	**681,647**	**681,647**	
	Expenses							
	Contracted Services	11,274	12,942	21,448	21,448	21,448	21,448	
	Materials & Supplies	4,837	4,835	6,250	6,700	6,700	6,700	
	M.E.L.T.	6,540	12,612	13,425	13,425	13,425	13,425	
	Capital Outlay	0	0	1,400	1,400	1,400	1,400	
49-	**TOTAL EXPENSES**	**22,651**	**30,389**	**42,523**	**42,973**	**42,973**	**42,973**	
	GRAND TOTAL	**678,992**	**696,924**	**699,531**	**814,488**	**724,620**	**724,620**	**3.59%**

244 – SEALER OF WEIGHTS AND MEASURES

DESCRIPTION OF SERVICES/MISSION

Historically (since 2012), the Town contracted with the State to perform the Sealer of Weights and Measures function. The operating budget included half the cost of that contract and materials and supplies for the billing and mailing of invoices. (The other half of the contract was funded through the Sealer of Weights and Measures revolving fund.)

Partway through Fiscal Year 2023, the State announced that it would no longer be providing this service. In response, the Town partnered with the Town of Lexington, through and intermunicipal agreement to hire a Part Time Sealer of Weights and Measures to serve both communities.

This budget now represents Burlington's portion of that employee's salary.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Part Time	0	0	0	16,848	16,848	16,848	
50-	**TOTAL SALARIES**	**0**	**0**	**0**	**16,848**	**16,848**	**16,848**	
	Expenses							
	Contracted Services	7,500	7,500	7,500	0	0	0	
	Materials & Supplies	0	0	300	0	0	0	
51-	**TOTAL EXPENSES**	**7,500**	**7,500**	**7,800**	**0**	**0**	**0**	
	GRAND TOTAL	**7,500**	**7,500**	**7,800**	**16,848**	**16,848**	**16,848**	**116.00%**

291 – EMERGENCY MANAGEMENT

DESCRIPTION OF SERVICES/MISSION

Duties are prescribed as per Town Bylaws 3.0 Civil Defense and MGL Ch639 §1 of the Acts of 1950.

SIGNIFICANT CHANGES

None.

STAFFING

(1) Appointed Director

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Elected/Appointed	10,000	10,000	10,000	10,000	10,000	10,000	
52-	**TOTAL SALARIES**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	
	Expenses							
	Materials & Supplies	8,081	8,100	8,100	8,100	8,100	8,100	
53-	**TOTAL EXPENSES**	**8,081**	**8,100**	**8,100**	**8,100**	**8,100**	**8,100**	
	Special Accounts							
	Education/Tuition	5,500	5,500	5,500	5,500	5,500	5,500	
54-	**TOTAL SPECIAL**	**5,500**	**5,500**	**5,500**	**5,500**	**5,500**	**5,500**	
	GRAND TOTAL	**23,581**	**23,600**	**23,600**	**23,600**	**23,600**	**23,600**	**0.00%**

300-LOCAL EDUCATION

The School Committee's recommended FY 2024 Operating Budget is attached for your review and consideration. This budget is being sent to all Town Meeting Members as a guide to better understand the details contained in the comprehensive budget document which was reviewed in detail by the School Committee and the Ways and Means Subcommittee over the last several months.

The FY24 budget includes:

- Funding to support our contractual obligations.
- Funding to maintain class sizes and programming.
- Funding for the known legal commitments for Special Education and English Language Learner support and tuitions.

All of our labor contracts are settled for this fiscal year. Next year we will need to negotiate new contracts across all of our local unions as well as a new transportation contract. A significant impact on this year's budget is the state's decision to increase tuition for students placed in programs outside of the district by 14%. This increase can be seen in our accommodated account request.

While our enrollment has been relatively steady in numbers, we continue to see a growing number of students needing language and learning support. We currently have 57 languages spoken by students throughout the district. We are asking for several positions to create a Newcomer Academy to better serve these students when they first enroll at the high school level.

As mentioned last year, the students in some of our successful, elementary district programs and LABBB Collaborative programs are becoming middle school students. As a result, we are continuing to expand our district program for students with autism into the middle school. We will be working to continue this expansion into high school in the coming years as these students get older.

Eric M. Conti, Ph.D.
Superintendent

	ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M* 2024	
Local Education							
Operating	53,859,531	56,773,660	59,539,128	61,917,897	61,904,445	61,904,445	**3.97%**
Special Education (A)	12,217,361	11,846,521	12,873,799	14,202,037	14,202,037	14,202,037	**10.32%**
55- TOTAL LOCAL ED.	**66,076,892**	**68,620,181**	**72,412,927**	**76,119,934**	**76,106,482**	**76,106,482**	**5.10%**
GRAND TOTAL	**66,076,892**	**68,620,181**	**72,412,927**	**76,119,934**	**76,106,482**	**76,106,482**	**5.10%**

301-REGIONAL SCHOOL ASSESSMENTS

Shawsheen Regional School District provides vocational technical education area youth (grades 9-12) and residents. The Town pays and assessment to cover the operating and capital costs of the district based upon local student enrollment.

Prior to FY17 the Town's portion of the funding for the Essex North Shore Agricultural and Technical School was taken as an assessment by the Commonwealth directly from state aid. Changes to organizational structure of the school now require that Town Meeting appropriate funds in the same manner as the Shawsheen Regional School. Since FY21, funding for the Minuteman Technical School is also included in this budget.

	ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M* 2024	
Regional School Assessments							
Shawsheen	256,373	2,593,065	2,667,214	2,976,385	2,976,385	2,976,385	
Essex North Shore	93,877	82,276	106,865	112,208	106,865	106,865	
Minuteman	72,792	48,559	26,314	27,630	0	0	
56- TOTAL REG. SCHOOL (A)	**350,250**	**2,675,341**	**2,800,393**	**3,116,223**	**3,083,250**	**3,083,250**	
GRAND TOTAL	**350,250**	**2,675,341**	**2,800,393**	**3,116,223**	**3,083,250**	**3,083,250**	**10.10%**

DEPARTMENT OF PUBLIC WORKS

The goal of the Department of Public Works is to provide high quality services to all residents as well as to offer support to boards, commissions and other town departments. To accomplish this goal the department is made up of six divisions including Administration, Buildings and Cemeteries, Central Maintenance, Engineering, Highway, and Water and Sewer. With its 75 employees: 65 full-time, 1 part-time and 9 seasonal employees the department maintains the Town's roadways, drainage, water, sewer, street lights, traffic lights, town buildings and cemetery infrastructure. In addition the department provides daily services such as water, sanitary sewer, trash pick-up and winter maintenance operations. Following it's a description of each division responsibilities:

411 – ENGINEERING DIVISION

The Engineering Division evaluates, designs, bids, and manages Town funded infrastructure improvement projects. Engineering staff manages consulting engineers hired to design projects outside the expertise of the division. In addition, the division provides support to other Public Works Divisions as well as any Town Department that requests technical assistance. This office maintains and updates infrastructure plans, and project files

DESCRIPTION OF SERVICES/MISSION

Maps, Project Management such as roadway, water main and sewer inflow & infiltration, Street Lights, Surveyor List, Utility Permits, Pavement Management

STAFFING

(1) Town Engineer, (1) Assistant Town Engineer (2) Senior Engineers, (1) Civil Engineer, (1) Engineering Aide.

420 – ADMINISTRATION DIVISION

Provide citizens, boards and commissions and other town departments with exceptional service and support through the consistently managed efforts of the department.

DESCRIPTION OF SERVICES/MISSION

Water & Sewer Billing, Trash Collection & Recycle Contract Management, 1st and 2nd Meter Management, Cross Connection Program, Accounts Payable for entire DPW Dept., Green Communities Coordination, and Maintenance of Personnel records for entire DPW Dept.

STAFFING

(1) Dept. Head, (1) Operations Manager, (1) Business Manager, (1) Administrative Assistant II, (2) Accounting Specialists, (1) Office Assistant.

421 – HGHWAY DIVISION

The Highway Division is responsible for the maintenance of 105 miles of roadways including drainage systems and culverts. The division is also responsible for winter maintenance operations.

DESCRIPTION OF SERVICES/MISSION

- Street signs and line painting
- Weed spraying
- Street sweeping
- Pot holes, road paving, sidewalk and berm repair
- Drain manholes and catch basin repairs
- New drainage lines or repair to existing drainage lines
- Rod clogged drain lines
- Brush cutting on overgrown streets
- Guard rail repairs
- Sweep sidewalk
- Oil spills
- Tree maintenance and clean up after storms
- Assist other departments with various projects and special events
- Snow and Ice Maintenance operations and all other roadway emergencies

STAFFING

(1) Superintendent, (1) Lead Foreman, (1) Working Foreman, (1) Time Keeper, (10) Special Equipment Operators

451 – WATER AND SEWER DIVISION

WATER AND SEWER DIVISION: WATER TREATMENT SECTION

The Town of Burlington's drinking water system contains two separate water treatment plants drawing water from both surface and ground water sources. The Mill Pond Water Treatment Plant treats water from the Mill Pond reservoir. The Mill Pond Treatment Plant has the capacity to treat up to 4.5 million gallons of water per day. The Vine Brook Water Treatment Plant treats water from seven ground wells located within the Vine Brook Aquifer. The Vine Brook Water Treatment Plant has the capacity to treat 3 million gallons of water per day.

Both plants filter and clarify the water to remove contaminants, and provide fluoridation, corrosion control and disinfection.

The Water Treatment Section also performs the following testing:

- Inorganic testing (manganese, ph, alkalinity, etc.)
- Organic testing (trichlorethylene, THM's, HAA5's, etc.)
- Synthetic Organic Chemicals (herbicides, pesticides, etc.)
- Bacteriological test
- Nitrate-Nitrite testing
- Radiological testing
- Normal quality control and quality assurance testing at all facility operational points
- Lead and copper testing for corrosion control
- Maintain a state certified Cross Connection testing and plan approval program

The Water Treatment Section oversees maintenance and security at three water storage tanks, seven (7) ground water wells and one diversion station on the Shawsheen River. This section also oversees maintenance of a pressure booster station on Wellesley Ave, and a water level control station located at Mill Pond main dam

STAFFING

Plant Manager, (1) Chief Operator, (6) Plant Operators, (1) Meter/Backflow Prevention Device Technician

WATER AND SEWER DIVISION: WATER DISTRIBUTION SECTION

The Water Distribution Sections maintains the water distribution system including hydrants.

DESCRIPTION OF SERVICES/MISSION

- Hydrant repairs and replacements
- Water main maintenance and repair of water main breaks and leaks
- Water gate maintenance or replacements as needed
- Water metering - repairs, installations, security seals and testing
- Handle courtesy leak and pressure testing for residents
- Coordinate work with private contractors on private jobs
- Landscape in and around water stations and water breaks
- Assist Sewer section and Treatment Plant as needed
- Available for emergencies 24/7
- Personnel are licensed by State with minimum Grade 2D for distribution work

WATER AND SEWER DIVISION: SEWER COLLECTION SECTION

The Sewer Collection Sections maintains the sewer collection system including 14 pump stations and metering station.

DESCRIPTION OF SERVICES/MISSION

- General preventative rodding of sewer mains and cleaning of sewer manholes
- Landscape sewer pump station grounds
- Repair and replace broken or leaking pipes in stations or at sewer main breaks
- Sewer section assists other sections as needed
- Operate in house shop where repairs or rebuilds of department owned parts for Water and Sewer use
- Handle all station alarms, sewer blockages and resident complaints
- Operate heavy equipment and Vactor truck
- Available for all emergencies 24/7

STAFFING

(1) Superintendent, (1) Lead Foreman, (1) Working Foreman, (3) Sewer Pumping Operators, (3) Water Service Craftsmen, (2) Laborers.

490 – CENTRAL MAINTENANCE DIVISION

Maintain entire fleet of vehicles for the Town of Burlington, excluding Fire Department. Various types of repairs from welding, metal fabrication, brazing, making hydraulic lines, fixing snow plows, and all other repairs as needed. In the spring we host the Animal Clinic for Rabies shots.

The following is a list of over 150 items serviced:

Board of Health:	1 vehicle
Building:	5 vehicles
Council On Aging:	2 vehicles
Conservation:	1 vehicle
Police:	34 vehicles
Recreation:	12 vehicles, 4 off road pieces of equipment, 1 air compressor, 1 wood chipper
Town Hall:	2 vehicles
Youth and Family	1 vehicle
School Department	3 vehicles, 1 off road piece of equipment

DPW

Engineering:	4 vehicles
Buildings/Cemeteries:	7 vehicles, 1 backhoe, 1 bobcat, 1 Kubota Utility Vehicle, and 11 generators
Central Maintenance:	4 vehicles
Highway:	18 vehicles, 13 off road pieces of equipment, 1 sweeper, 1 compressor, 1 wood chipper, 1 generator
Water:	8 vehicles, plus 1 backhoe, 1 compressor, 1 light tower
Sewer:	3 vehicles, 11 generators, 4 water pumps, and 2 portable generators

STAFFING

(1) Superintendent, (1) Master Mechanic, (2) Mechanics

491 – BUILDINGS AND CEMETERY DIVISION

In order to provide maintenance to town facilities, the Cemetery Division merged with the Facilities and Custodial Department creating the Buildings and Cemeteries Division. In addition to the maintenance of the cemeteries, the new division maintains town owned buildings that fall under the Board of Selectmen.

BUILDINGS SECTION

The Buildings section is responsible for the daily maintenance, repair and custodial services for the following buildings:

Town Hall, Town Hall Annex, Fire Station, Library, Police Station, Human Services, Grandview, 33 Center Street, Fire Station #2, Museum, Carpenter House, West School, Vine Brook Treatment Plant, Mill Pond Treatment Plant, Terrace Hall Pump Station, Wilmington Road Pump Station, Chestnut Hill Office, Pine Haven Chapel, 1 Great Meadow Rd, and 10 Great Meadow Rd.

The division also coordinates repairs and maintenance contracts performed by private contractors. In addition, the division manages the facilities capital improvements program.

CEMETERY SECTION

The Cemetery Section maintains three non-denominational cemeteries, Pine Haven, Chestnut Hill and Ye Olde cemetery.

DESCRIPTION OF SERVICES/MISSION

Personnel are available 24/7 to meet with funeral homes and families to make burial arrangements and locate graves. Cemetery personnel prepare gravesites for burials.

Work closely with Engineering Division to lay out new gravesites. Also work with Highway Division to plow streets in Town as well as the roads within the cemetery.

Work with monument companies regarding headstone specifications and foundations. Personnel layout and dig the foundations for the headstones and markers.

Perform perpetual care of all three cemeteries including grass cutting, weed whacking, trimming of trees and bushes, and spring and fall leaf clean up. Maintain and repair sprinkler systems at Pine Haven and Chestnut Hill Cemeteries.

Prepare cemetery for special events held in Cemetery throughout the year such as Memorial Day and Veterans Day.

STAFFING

(1) Superintendent, (1) Lead Foreman, (1) Working Foreman, (1) Senior Craftsman/laborer (3) Craftsman/laborers, (1) Special Equipment Operator (1) Head Custodian, (2) Lead Custodians, (3) Custodians, (1) Administrative Assistant I.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024
	Salaries						
	Fulltime	4,878,305	5,004,966	5,472,548	5,644,521	5,644,521	5,644,521
	Part Time	59,749	27,568	87,934	87,934	87,934	87,934
	Overtime	538,154	444,464	432,021	349,425	349,425	349,425
57-	**SALARIES TOTAL**	**5,476,208**	**5,476,998**	**5,992,503**	**6,081,880**	**6,081,880**	**6,081,880**
	Expenses						
	Occupancy	922,747	974,190	1,031,600	977,600	977,600	977,600
	Contracted Services	1,762,172	1,545,020	1,470,844	1,755,046	1,755,046	1,755,046
	Materials & Supplies	965,087	1,130,782	977,725	1,026,760	1,026,760	1,026,760
	M.E.L.T.	22,124	28,053	30,615	32,115	32,115	32,115
	Capital Outlay	63,023	57,429	38,500	43,000	43,000	43,000
58-	**EXPENSES TOTAL**	**3,735,153**	**3,735,474**	**3,549,284**	**3,834,521**	**3,834,521**	**3,834,521**
	Special Accounts						
	License Renewal	18,007	16,518	18,000	18,000	18,000	18,000
	Clothing Allowance	30,888	31,568	35,700	37,300	37,300	37,300
	Well Cleaning & Sludge Removal	108,917	135,000	112,500	120,000	120,000	120,000
	Well Seal & Parco	8,765	10,000	10,000	0	0	0
	Highway I	164,947	162,691	165,000	110,000	110,000	110,000
	Sign & Lane Painting	66,660	67,194	69,500	105,000	105,000	105,000
	Tree Care	34,738	35,000	35,000	45,000	45,000	45,000
	Snow & Ice	558,564	710,304	350,000	350,000	350,000	350,000
	Physical Exam	3,863	5,708	6,000	6,500	6,500	6,500
59-	**SPECIAL TOTAL**	**995,349**	**1,173,983**	**801,700**	**791,800**	**791,800**	**791,800**
	Accommodated						
60-	**Rubbish & Garbage (A)**	**2,193,085**	**2,154,752**	**2,322,124**	**3,159,710**	**3,159,710**	**3,159,710**
61-	**Street Lights (A)**	**370,229**	**368,544**	**360,500**	**360,500**	**360,500**	**360,500**
62-	**DEP Assessment (A)**	**9,776**	**9,792**	**15,000**	**15,000**	**15,000**	**15,000**
	TOTAL ACCOMDATED	**2,573,090**	**2,533,088**	**2,697,624**	**3,535,210**	**3,535,210**	**3,535,210**
	TOTAL OPERATING	**10,206,710**	**10,386,455**	**10,343,487**	**10,708,201**	**10,708,201**	**10,708,201**
	THE GRAND TOTAL	**12,779,800**	**12,919,543**	**13,041,111**	**14,243,411**	**14,243,411**	**14,243,411**

510 – BOARD OF HEALTH

DESCRIPTION OF SERVICES/MISSION

The mission of the Burlington Board of Health is to protect, promote, and prepare for all public health issues or potential crises that occur within the community. The Board of Health enforces state-mandated and local public health regulations, conducts inspections as required by its Health Agent, Associate Health Inspector, Environmental Engineer, Supervising Nurse, or Director; issues town permits, investigates community-based complaints or concerns, and supports the goals of public health by providing education and community programs. In addition, the Board of Health is responsible for the review of many aspects of proposed land use and development issues--including drainage, safety and quality of life—and thus is a protector of town natural resources as well (i.e., its aquifers). The Board of Health specifically oversees and regulates (but is not limited to) town food service establishments, mobile food trucks, swimming pools, recombinant DNA-use industries, and any necessary actions that may occur as a consequence of communicable disease surveillance.

The Board of Health has and continues to play a critical role in both the investigation and coordination of care required for short and long-term remediation of the multiple "historical" contaminated sites within the community. Through local programming, routine investigations, establishment of by-laws and policies, as well as overseeing a bi-annual, household hazardous waste (HHW) program, the Board of Health is the organization for the protection of the Burlington environment.

The Board continues ongoing work as the leader in preparation for and response to any and all public health emergencies that may arise in the town. The Board focuses on the needs of the community with specific programming and education for emergency preparedness, including "drills," a Community Health Fair, and a medical sharps disposal program. The Board also works with the boards of surrounding towns, when needed, to promote public health safety and wellness as well.

One of the goals of the Burlington Board of Health, for the next five to fifteen years, includes an emphasis in public health-focused training, exercises and drills, and programming for both Board staff and the Burlington Volunteer Reserve Corps (BVRC), a unique, independent volunteer group that is sponsored by the Board itself. Specifically, the BVRC will be key in advocating and improving the town's capabilities in emergency preparedness, providing health-related information and services to residents, and maintaining the current level of regulatory oversight required to protect the Burlington community.

SIGNIFICANT CHANGES

The Special Commission on Local and Regional Public Health was created by a legislative resolve signed by Governor Charles Baker. The Commission was a 25-member body charged to "assess the effectiveness and efficiency of municipal and regional public health systems and to make recommendations regarding how to strengthen the delivery of public health services and preventive measures." The

Commission completed a Blueprint for Public Health Excellence report and one of the recommendations in this report was to increase cross-jurisdictional sharing of public health services to strengthen capacity. In April, 2020, the State Action for Public Health Excellence (SAPHE) Act was passed creating the Public Health Excellence Grant Program.

In FY23, the Burlington Board of Health, in collaboration with the Lexington and Wilmington Boards of Health, was awarded $300,000 per year for three years in grant funding from the Massachusetts Department of Public Health (DPH) Public Health Excellence (PHE) Grant program. The purpose of this grant is to increase cross-jurisdictional sharing of public health services to strengthen capacity. Burlington will serve as the lead agency for the grant which includes responsibility for overall budget and program management and supervision of grant staff. One of the specifications of the grant is that funding must be used to augment, and not replace, the work currently being done by the three public health departments. The grant will allow coalition municipalities to share resources and staff, such as a Health Inspector, Community Service Worker, Public Health Nurse, and Epidemiologist.

The Board of Health will continue to be prepared to provide the services, resources, and guidance that our residents, businesses, and Town departments require and need and to appropriately respond to future needs. In the upcoming years, it is expected that the number of biological safety laboratories will increase in Burlington. The Board of Health has been preparing to respond through the enactment and revision of local regulations on biological safety and hazardous material storage & disposal.

FY23 ACCOMPLISHMENTS

Throughout FY23, the Board of Health continued to enforce all state mandated and local public health regulations as well as provide public health programs for our residents. Also, in addition to the PHE grant funding, the Board of Health has received approximately $100,000 in additional funding from other grants. Some specific accomplishments include:

- **National Food Regulatory Standards:** The Board of Health received grant funding to work on meeting the Food & Drug Administration (FDA) Voluntary National Retail Food Regulatory Program Standards, a highly effective and responsive program for the regulation of foodservice and retail food establishments. Meeting the standards helps health departments improve and build upon existing programs and provides a framework for both traditional and emerging approaches to food safety.
- **Revisions of Local Regulations**: The Board of Health Regulations Restricting the Sale of Tobacco Products and Regulations Prohibiting Smoking in the Workplace and Other Public Places were revised to incorporate the MA minimum standards 105 CMR 665.000: Minimum Standards for Retail Sale of Tobacco and Electronic Nicotine Delivery Systems
- **Burlington Volunteer Reserve Corps Training:** Extensive training for the Burlington Volunteer Reserve Corps was provided through the funding of a grant from the National Association of City and County Health Officers Association. Trainings included, but were not limited to, “Cultural Considerations in Disaster Mental Health”, “Increasing Cultural Awareness and Responsiveness in Clinics’, “Psychological First Aid”, and “Vicarious/Secondary Trauma and Compassion Fatigue/Burnout”.

FY24 GOALS

- Goals for the Board of Health include an emphasis in public health-focused training, exercises and drills, and programming for both Board staff and the Burlington Volunteer Reserve Corps (BVRC), a unique, independent volunteer group that is sponsored by the Board itself.
- The Board of Health will strive to improve the town's capabilities in emergency preparedness, provide health-related information and services to residents, and maintain the current level of regulatory oversight required to protect the Burlington community.
- In addition, the Board of Health will work towards strengthening the coalition with the Wilmington and Lexington Boards of Health through the shared services program

STAFFING

(5) Elected Members of three year terms, (1) Director of Public Health, (1) Associate Director of Public Health (1) Health Agent/Sanitarian, (1) Environmental Engineer, (1) Associate Health Inspector (1) Supervising Public Health Nurse, (1) Administrative Assistant, and (1) Part-time Administrative Assistant (30 hours)

BUDGET ISSUES

In FY24 all accounts have been level funded. Major budget drivers, as in previous years, include enforcement of local and state mandated public health regulations and services to citizens, including vaccination clinics, blood pressure clinics, household hazardous waste collections, and mosquito control.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	479,136	554,118	628,596	656,062	656,062	656,062	
	Part Time	6,554	35,057	38,086	43,597	43,597	43,597	
	Elected/Appointed	3,562	7,682	7,182	7,182	7,182	7,182	
	Overtime	4,127	1,869	10,330	10,330	10,330	10,330	
63-	**TOTAL SALARIES**	**493,379**	**598,726**	**684,194**	**717,171**	**717,171**	**717,171**	
	Expenses							
	Contracted Services	3,236	4,181	11,896	11,897	11,897	11,897	
	Materials & Supplies	5,486	5,501	5,500	5,500	5,500	5,500	
	M.E.L.T.	4,399	11,578	12,400	12,400	12,400	12,400	
	Capital Outlay	2,150	2,150	2,150	2,150	2,150	2,150	
64-	**TOTAL EXPENSES**	**15,271**	**23,410**	**31,946**	**31,947**	**31,947**	**31,947**	
	Special Accounts							
	Volunteer Reserve Corps	1,000	1,000	1,000	1,000	1,000	1,000	
65-	**TOTAL SPECIAL**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	
	Accommodated							
66-	**Hazardous Waste (A)**	**40,755**	**25,886**	**50,000**	**50,000**	**50,000**	**50,000**	
67-	**Mosquito Control (A)**	**44,846**	**44,846**	**45,743**	**45,743**	**45,743**	**45,743**	
	TOTAL ACCOMODATED	**85,601**	**70,732**	**95,743**	**95,743**	**95,743**	**95,743**	**0.00%**
	TOTAL OPERATING	**509,650**	**623,136**	**717,140**	**750,118**	**750,118**	**750,118**	**4.60%**
	GRAND TOTAL	**595,251**	**693,868**	**812,883**	**845,861**	**845,861**	**845,861**	**4.06%**

541 – COUNCIL ON AGING

DESCRIPTION OF SERVICES/MISSION

The Council on Aging (COA) is committed to helping seniors of all ages and stages remain active, engaged and independent members of the community. The Department is here to help through times of crisis as well as providing a wide range of activities and services to prevent crisis from happening and help seniors remain healthy and in their homes as long as possible.

The COA works with other Town departments and outside agencies that have contact with seniors in both emergency and nonemergency situations. The goal is to provide information and services to Burlington's older residents and to ensure their safety and well-being by advocating for their needs.

The COA provides information and referral for both callers and walk-ins. The outreach workers are social workers who conduct in-home visits to assist elders in defining their needs and to facilitate access to services. They make appropriate referrals with follow-up visits to ensure adequacy of assistance and provide advocacy in areas such as legal issues, social security, SNAP (formerly food stamps), health, housing, medical and fuel assistance. Medical advocacy consists of helping the client prepare for medical appointments, reminding clients of issues to speak with the physician about, speaking with the physician to be sure the physician understands issues and understanding the physicians instructions in order to assist the client in understanding any health issues and/or treatment, and setting up necessary appointments for clients who are unable to do so themselves. The social workers also help elders and their family members fill out appropriate assistance forms and ensure seniors don't fall "through the cracks". The COA social workers seek/accept referrals from private individuals, other social service agencies, religious, fraternal and community organizations and are in contact with hospital discharge planners, Visiting Nurse Associations, Minuteman Senior Services and mental health facilities. The social works are often the coordinator between various agencies assisting an elder. The social workers facilitate support groups and workshops such as caregiver groups and our memory café for people living with memory issues and their care partners.

The COA puts out a monthly newsletter, The Spotlight, which is the town's primary link to its older residents. We also provide educational presentations and workshops. Serving Health Information Needs of Everyone (SHINE) counselors are available to meet with clients once a week. An attorney and podiatrist come once a month. Volunteers through AARP provide seniors with tax assistance February through April. The COA manages the 'Property Tax Work-off Program', which gives seniors the opportunity to work in order to obtain abatement on their property taxes. We have a contract with the Department of Transitional Assistance as Outreach Partners for SNAP, which allows us to better assist our clients who need help with food security through better visual access to their SNAP accounts as well as getting reimbursed for any applications that are approved.

The COA offers a variety of classes and workshops to promote health and fitness. Social activities allow opportunities for otherwise isolated seniors to remain engaged with their community. The COA hosts the home delivered meals and congregate meal site via Minuteman Senior Services. The COA offers transportation services to medical appointments, grocery stores and to the senior center, and provides advocacy on a local, state, and national level. Grants pay for fitness classes, one part-time outreach worker and one van driver.

When a senior or family member(s) isn't sure where to call on an issue, we are one of the first points of contact… a reflection of the level of trust and dependability put in the COA.

SIGNIFICANT CHANGES

The Department hired a temporary social worker to assist with the caseload. We did have a part-time social worker before the pandemic and with an increase in mental health issues post-pandemic there is a larger case load.

FY23 ACCOMPLISHMENTS

- We continue to offer hybrid activities, all activities can be participated in via an online platform by request, giving people a choice while still remaining engaged with the senior center community. From Fitness classes to coffee hour seniors can join activities whether you are immunocompromised or completely healthy.
- Participation in the "Burlington Community Transportation Program" utilizing rideshare and concierge service continues to be robust. Criteria for this program include being over 60, being disabled and having an income of less than 300% of the Federal Poverty level.

FY24 GOALS

- We will continue to assess programming and build on what we have done so far. We hope to have new technology in place to improve the hybrid experience. We also hope to discover how much larger the social workers caseload is so we can figure out how to best serve our clients going forward.
- We will be hiring for our 20-hour van driver position that has not been needed since the pandemic began. As participation continues to increase so does the need for rides to the senior center for those that don't drive.

STAFFING

(1) Director, (2) Full-Time Social Workers, (1) Part-Time Social worker (1) Full-Time Administrative Assistant I, (2) Part-Time Front Desk Clerk (19 hours, 15 hours), (3) PT Van Drivers (30 hours, 20 hours, as needed), (1) Part-Time Program & Activity Coordinator (15-19 hours)

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	302,001	314,011	334,435	343,391	343,391	343,391	
	Part Time	83,840	71,568	108,893	109,103	109,103	109,103	
68-	**TOTAL SALARIES**	**385,841**	**385,579**	**443,328**	**452,494**	**452,494**	**452,494**	
	Expenses							
	Contracted Services	0	3,730	7,200	7,400	7,400	7,400	
	Materials & Supplies	644	821	1,050	1,050	1,050	1,050	
	M.E.L.T.	0	0	1,300	1,350	1,350	1,350	
69-	**TOTAL EXPENSES**	**644**	**4,551**	**9,550**	**9,800**	**9,800**	**9,800**	
	Special Accounts							
	Minuteman Home Health	6,942	6,942	6,942	0	0	0	
	Emergency Assistance	0	0	500	500	500	500	
70-	**TOTAL SPECIAL**	**6,942**	**6,942**	**7,442**	**500**	**500**	**500**	
	GRAND TOTAL	**393,427**	**397,072**	**460,320**	**462,794**	**462,794**	**462,794**	**0.54%**

543 – VETERANS SERVICES

DESCRIPTION OF SERVICES/MISSION

Veterans' Agent

The Veterans' Agent processes applications for emergency State Chapter 115, 108 CMR assistance benefits that are paid to veterans and/or their dependents for short periods of time when they may not be able to support themselves. Chapter 115 benefits are also administered to eligible, low-income veterans and/or their dependents for longer durations of time, as required. Veterans' Agents also administer State benefits for burial expenses of veterans and their dependents who die without sufficient means to pay for funeral expenses. All benefits need to be applied for. No benefit is automatic.

As the Graves Officer in Burlington, The Veterans Agent ensures that only eligible veterans are given consideration, through application procedure, for the purchase of a grave in the Veterans Section of our Burlington cemeteries and ensures that every eligible veteran has a new flag on his or her grave each Memorial Day, and all year long.

The U.S. Department of Veterans Affairs provides a wide range of benefits to U.S. veterans and their families, and the Veterans Agent provides the local assistance needed to apply for the myriad of federal benefits available.

Veterans Services – State Benefits– Chapter 115, 108 CMR

Interview and counsel veterans to determine eligibility and determine needs. Collects all State required supporting documentation: military separation documents, various certificates, asset verification, income, savings, expenses, shelter and medical expenses, proof of residency, court records, etc. Use State Website VS-MIS Program for forms to complete for the State within required timelines in order to receive 75% reimbursement from the State: application (VS1), request for authorization (21A), certification of expenditures co-signed by Treasurer (5&6) for request of reimbursement from the State, notice of various determination to veteran and/or widow. Indigent and poor deceased veterans: request authorization of burial expenses for reimbursement from the State.

Record and index veterans recently discharged or released from active duty.

Assist with applications for eligible discharged veterans to receive bonus for their service.

Assist and advise veterans about sales and excise and property tax exemptions.

Assist with application to apply for State annuity to eligible veterans and/or surviving family members. Assist veterans and families in applying to other permanent sources of income (Aid & Attendance, SS disability, Supplemental income Federal low-income pension, etc.)

U.S. Department of Veterans Affairs, Federal VA Benefits

The VA offers its benefit system through three major units: the Veterans Benefits Administration, National Cemetery Administration, and the Veterans Healthcare System. In addition to medical centers, the healthcare system includes nursing homes, domiciliary, and Vet Centers offering readjustment counseling.

The Veterans Agent guides eligible veterans and their dependents to appropriate benefits. The Agent assists in completing the various Federal VA forms to apply for care at VA Hospital, receipt of low-income pension, disability compensation, Aid & Attendance, education, etc. Assists surviving spouses in applying for a low-income pension, final burial expenses and cemetery markers and conducts consultations advising veterans about retirement and pension issues, employment, education, health care, rehab, etc.

Memorial Day, Veterans Day and Special Ceremonies
Seek out and secure speakers, chaplains, and honor guards, rifle/musket squads, buglers, high school band, chorus, BCAT, sound system, bagpiper, photographer, refreshments, and more as required. Write and distribute press releases, guide speakers with their words to gathering for ceremony themes, prepare wreaths (order bows/flowers) for memorials to veterans honored throughout the community, and coordinate with service organizations for placement around town. Collect death certificates and obituaries to track passing of Burlington veterans for annual roll call on Memorial Day and for permanent office record as well as on website. Order new flags for all graves of Burlington veterans (3500), and seek out volunteers to assist cemetery staff with annual placement of new flags for each veteran's grave as well as new flag holders as needed.

Meetings attended
Allied Veterans Council, Northeast Veterans Services Officers Association, Massachusetts Veterans Service Officers Association meetings and annual training, Marine Corps League, DAV, VFW, American Legion.

Youth Assistance
Help steer High School students thinking about the military in the right direction. Talk to parents seeking honest information about military service for their son or daughter. Take on interns already committed to joining the military in the 4th quarter of the school year (Through the Guidance and Associate Principles Offices). Speak to every Junior and Senior Class at the High School about common recruiting practices from the Military Branches. Speak at the High School Career day. Provide the Schools with guest speakers throughout the year on topics related to military service.

Other general responsibilities
Payroll, Filing, Phone calls, assist clients who show up here with information and direction with other basic needs and services, maintain website – burlington.org and click on Veterans under "Your Government"→ "Departments"
Maintain a current Facebook.com page.

SIGNIFICANT CHANGES

The reason for a significant increase in Materials & Supplies is partially due to large increases in flag prices, but more so because our office is looking to streamline the acquisition process of purchasing and distributing the flags to the Town's departments. Previously, the department purchased all the flags for the Town. Departments then reimburse our office for the flags that their department manages. Our office has budgeted this process in the past, expecting to be reimbursed. The proposed increase allows this department to purchase the flags and distribute them to the departments, eliminating the need to be reimbursed. This is save the town money in both man hours and treasury costs of cutting inter-department transfers and checks.

FY23 ACCOMPLISHMENTS

- Our office continued to increase our VA case development in 2023, totaling over $125,000.00 in new aid.
- Our office increased our MA case development by 5% in 2023, totaling over $3,000.00 in new aid.

FY24 GOALS

- The office will strive to continue to assist with applying for all benefits to which a client is entitled in accordance with strict state and federal laws, rules and regulations.
- Outreach will continue to be a priority for the office, as we are committed to counsel each veteran, their families, and surviving dependents.
- Continue to assess the benefits of Federal aid over State aid, and the other way around. Look to facilitate transitions from either benefit to better benefit the Veteran or their families.

STAFFING

(1) Department Head, (1) Administrative Assistant I

BUDGET ISSUES

None.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	133,954	143,001	152,014	161,505	161,505	161,505	
71-	**TOTAL SALARIES**	**133,954**	**143,001**	**152,014**	**161,505**	**161,505**	**161,505**	
	Expenses							
	Materials & Supplies	2,439	2,314	2,349	3,697	3,697	3,697	
	M.E.L.T.	599	710	760	760	760	760	
72-	**TOTAL EXPENSES**	**3,038**	**3,024**	**3,109**	**4,457**	**4,457**	**4,457**	
	Special Accounts							
	Memorial & Veterans Days	2,127	2,000	3,000	3,000	3,000	3,000	
	Veteran's Aid	110,781	87,790	112,000	115,000	115,000	115,000	
73-	**TOTAL SPECIAL**	**112,908**	**89,790**	**115,000**	**118,000**	**118,000**	**118,000**	
	GRAND TOTAL	**249,900**	**235,815**	**270,123**	**283,962**	**283,962**	**283,962**	**5.12%**

549 – YOUTH AND FAMILY SERVICES

DESCRIPTION OF SERVICES/MISSION

The primary function of BYFS is to provide counseling and social work for children (target ages of 9-25) and their parents with individual, family, and group therapy modalities. Included in our functions are violence and suicide risk assessments for the schools, crisis intervention, and community education.

We provide other social work, consultation, and case management functions for other town departments, clergy, and community groups around problematic issues for residents. We are also charged with screening residents who are experiencing financial emergencies and need access to the resources of the state and local non-profit and volunteer groups such as People Helping People, Helpis and Salvation Army.

Staff also provide prevention services to the freshman health classes on teen depression and suicide prevention.

In 2019, BYFS organized a new initiative – The Community Response Team. Participating in this initiative are the Police, Fire, Council on Aging, Board of Health, Building Department, and Youth & Family Services. The group has worked together to address some of the more complex issues and needs in the community.

We also provide training for 3-4 unpaid graduate interns who work at the center each academic year.

SIGNIFICANT CHANGES

With the increased need for mental health services, BYFS is looking to add a Spanish speaking clinician using ARPA funds.

FY23 ACCOMPLISHMENTS

- BYFS secured a 2-year, $700K federal grant aimed at preventing youth homelessness. The grant will provide funding and support for youth between the ages of 17 and 25. This is a new federal grant. Recipients that are successful in providing housing will continue to receive funding annually provided the federal government continues funding the program.
- We continue to provide a variety of services that address the emotional and social needs of Burlington youth and their families. We also continue to provide social services for all residents of Burlington. This year we have provided both in person and Telehealth services
- We have continued to expand our group program. This summer, we added a Yoga Therapy group for kids with anxiety, depression and ADHD. The group will continue to run throughout the school year.

FY24 GOALS

- Research cost/effectiveness of third party billing. Implementing changes necessary.

- Conduct a community wide needs assessment to help determine the types of mental health services needed and how we can best meet those needs.
- Continue to expand our group program.
- Develop creative ways to reach community members in need of services

STAFFING

(1) Department Head, (1) Clinical Supervisor, (1) Group Work Coordinator, (2) Social Workers, (2) Part Time Social Workers (19 hours, 22 hours), (1) Administrative Secretary

BUDGET ISSUES

An increase in funding is needed to provide INTERFACE support for mental health. In addition, an increase is needed for training and consultation. We continue to have difficulty finding skilled trainers who accept the current fee.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	324,905	377,041	402,700	407,144	407,144	407,144	
	Part Time	82,180	66,830	84,134	86,212	86,212	86,212	
74-	**TOTAL SALARIES**	**407,085**	**443,871**	**486,834**	**493,356**	**493,356**	**493,356**	
	Expenses							
	Contracted Services	10,225	12,140	11,500	22,800	22,800	22,800	
	Materials & Supplies	5,167	8,716	6,850	6,850	6,850	6,850	
	M.E.L.T.	4,352	2,624	5,106	6,106	6,106	6,106	
	Capital Outlay	0	776	800	800	800	800	
75-	**TOTAL EXPENSES**	**19,744**	**24,256**	**24,256**	**36,556**	**36,556**	**36,556**	
	GRAND TOTAL	**426,829**	**468,127**	**511,090**	**529,912**	**529,912**	**529,912**	**3.68%**

590 – DISABILITY ACCESS

DESCRIPTION OF SERVICES/MISSION

In accordance with MGL Ch. 40 § 8J, responsibilities include:

- Advising and assisting municipal officials and employees in ensuring compliance with state and federal laws and regulations that affect people with disabilities
- Reviewing and making recommendations about policies, procedures, services, activities, and facilities of departments, boards and agencies of the Town as they affect people with disabilities
- Coordinating activities of other local groups organized for similar purposes
- Maintain DAC website and Facebook pages
- Have a Burlington Disability Access Commission logo created and received Select Board approval to utilize the new "moving forward" HP symbol.

STAFFING

(5) Members appointed by the Town Administrator to one year terms, (1) Recording Clerk

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Part Time	405	608	565	608	608	608	
76-	**TOTAL SALARIES**	**405**	**608**	**565**	**608**	**608**	**608**	
	Expenses							
	Materials & Supplies	0	392	400	400	400	400	
77-	**TOTAL EXPENSES**	**0**	**392**	**400**	**400**	**400**	**400**	
	GRAND TOTAL	**405**	**1,000**	**965**	**1,008**	**1,008**	**1,008**	**4.46%**

610 – PUBLIC LIBRARY

The Burlington Public Library is a community hub that promotes lifelong learning, exploration, and innovation.

Statistics of note for fiscal year 2022:

238,759	Items checked out from the collection
17,836	Reference transactions
84,113	Visits to the library recorded
533	Library programs
8,323	Attendees of library programs
2,996	Hours the library was open
627	Meeting room use (library and outside qualifying groups)
3,380	Study room use

DESCRIPTION OF SERVICES/MISSION

Services include the following:

- Borrowing of books, large print books, audio books, music cd's, videos, DVD's, playaways, magazines, educational kits, puppets, and museum passes
- Professional staff to assist with research needs of the public
- Access to free databases both in the library and remotely
- Free internet access from public computers
- Free wireless access
- Free access to downloadable audio books, e-books, magazines, music and videos
- Educational, recreational, and cultural programs offered for both children and adults
- Summer reading programs for children and adults
- Free technology workshops
- Meeting rooms available to qualifying groups and organizations
- Museum passes to more than a dozen area museums and attractions
- Collection point for People Helping People

- The library maintains a very dynamic website that can be considered a "branch" of our library. The site allows the community to access databases, check their accounts, renew items, reserve museum passes, download e-books, audio books, magazines, music, and videos and check for information about the library and its programs any time day or night.
- The library has a strong social media presence which includes our Facebook page, Twitter account, YouTube channel and a teen Instagram page. Other social media options will continue to be investigated and added as needed to further connect with our community.

SIGNIFICANT CHANGES

The library made great strides towards returning to pre-COVID levels of service while improving upon other levels, with checkout and programming levels comparable or greater than pre-2020 statistics.

FY23 ACCOMPLISHMENTS

- The Holds Hub debuted, providing patrons 24/7 access to their library holds and expanding library availability for those who cannot visit during the Library's operating hours or wish for expanded convenience.
- Installation began on an upgraded audio-visual system in the Fogelberg Area, allowing for hybrid (both in-person and online) participation in library programs for the public and expanded technology access for meeting room users.
- Partnerships with local organizations expanded, such as the StoryWalk at the Village at Burlington Mall; sharing online library programs with local libraries; the return of ESL/ELL classes provided by volunteers from English At Large; and ongoing partnerships with assisted living communities, Town Departments, and other notable local organizations.
- Library facilities continue to improve, with a repainting project on the second floor providing a current and fresh look.
- A $5,000 donation to the Friends of the Burlington Public Library established the Nash Fund, recognizing Millie Nash, a notable resident and providing ongoing funding for cultural programming directed towards adults.
- The Library began a new round of Strategic Planning, looking forward to the 2025-2029 fiscal years.

FY24 GOALS

- Become a leader among local libraries in hybrid programming for adults, utilizing strengths of local partners to expand coverage and access for library programs.
- Provide increased access to technology for meeting room users, including installation of electronic room dividers for greater flexibility and ease of use.
- Wrap up goals from FY20-24 Strategic Plan and prepare for the FY25-29 Strategic Plan.

STAFFING

(1) Library Director, (1) Assistant Library Director, (7) Librarians, (1) Circulation ILL Assistant, (1) Administrative Assistant I, (1) Part-Time Circulation/Tech Services Assistant (32 hours), (3) Part-Time Assistant to Child Librarians (20 hours), (2) Part-Time Senior Library Techs (26 hours)

BUDGET ISSUES

The Library budget is presented with a slight increase to accommodate the addition of a Programming and Marketing Coordinator position. This full-time position is subsidized in part through a reduction in staffing among Library Pages, which represents the adjusting use of the Library as programming numbers increase (with adult programming participation more than doubling in the past five years) and marketing of Library services in need of a single coordinator.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	860,188	929,254	907,293	959,577	959,577	959,577	
	Part Time	382,745	426,484	445,899	435,589	435,589	435,589	
	Overtime	35,779	52,171	75,600	82,650	82,650	82,650	
78-	**TOTAL SALARIES**	**1,278,712**	**1,407,909**	**1,428,792**	**1,477,816**	**1,477,816**	**1,477,816**	
	Expenses							
	Contracted Services	63,586	69,972	76,135	75,206	75,206	75,206	
	Materials & Supplies	14,827	8,819	14,250	14,250	14,250	14,250	
	M.E.L.T.	729	631	2,870	2,870	2,870	2,870	
79-	**TOTAL EXPENSES**	**79,142**	**79,422**	**93,255**	**92,326**	**92,326**	**92,326**	
	Special Accounts							
	Library Materials	192,196	189,888	206,180	214,111	214,111	214,111	
80-	**TOTAL SPECIAL**	**192,196**	**189,888**	**206,180**	**214,111**	**214,111**	**214,111**	
	GRAND TOTAL	**1,550,050**	**1,677,219**	**1,728,227**	**1,784,253**	**1,784,253**	**1,784,253**	**3.24%**

630/631 - RECREATION

DESCRIPTION OF SERVICES/MISSION

The Parks and Recreation Department's mission is to enhance the quality of life for the people of Burlington by providing the best possible recreation programs, facilities, and services for residents of all ages and abilities.

The Program Division provides programs for residents, from infants to senior citizens, in a variety of areas including STEM, athletic, social, adult fitness, free summer park programs and trips and tours. They plan, organize and implement a special event every month throughout the year, including Celebrate Burlington which draws over 8,000 people annually. They are a leader in recreation throughout the region and state. The Therapeutic Recreation Division is a leader in providing meaningful recreation opportunities and services for people with a disability.

	FY 2019	FY 2020	FY 2021	FY 2022
Programs Offered	401	316	288	293
Attendance: Programs and Events	51,132	46,664	36,746	42,378

The Maintenance Division is responsible for maintaining and improving all parks, playgrounds, athletic fields, school grounds, the Town Common, grass islands, municipal building grounds, tennis courts, basketball courts, wading pool, and all other outdoor recreation facilities.

The Maintenance Division grooms and lines athletic fields for all high school sports, youth baseball, youth softball, youth soccer, youth lacrosse, Pop Warner football, and adult sports leagues. The total acreage of grounds currently being maintained is 285. The Maintenance Division also performs repairs and maintenance on all equipment used to preserve Parks & Recreation and School facilities.

The Parks and Recreation Department charges fees for most activities and for facility use. Scholarships are available for residents in need of financial assistance.

Community support is vital to the success of the Parks & Recreation Department. We could not possibly provide such a wide range of programs and facilities were it not for the generosity of local businesses, organizations, and individuals.

SIGNIFICANT CHANGES

- We developed Core Values in 2022 that are reflective of the Department's mission statement.
    - Everyone Belongs in Burlington
    - We Can Always be Better

    - Together, We Have it All
    - We Put Safety First, Every Time
- The program staff initiated a comprehensive staff hiring and retention program to attract new seasonal staff based on the Core Values that were developed.
- We have shifted to a fully digital seasonal program brochure. We will no longer be printing and mailing brochures or post cards to residential households.
- Our maintenance division enjoyed their first year in the new facility at 10 Great Meadow Road.
- Established the Assistant Director of Parks & Recreation position. When the department was reorganized under one director back in 2009 a lot of the administrative work fell to the program division. The added responsibility, along with the continued growth of the programs and events, made the need for an Assistant Director critical.

FY23 ACCOMPLISHMENTS

- Established a partnership with the Burlington Public Schools to offer Extended School Year services at Burlington Parks & Recreation summer programs, allowing students to continue to receive their school services while allowing them to participate in our summer programs.
- Added communication boards to three of our playgrounds to bring awareness to the use of Augmentative and Alternative Communication (AAC) as well as encourage those who have learning and communication difficulties to use AAC in a community setting or to communicate more effectively with their neuro-typical peers.
- Through a disbursement from the Simonds Trust and a generous donation from the Gillingham sons, in memory of their parents, Natalie and Gordon Gillingham, a universally accessible treehouse was constructed at Simonds Park.
- Renovated the Simonds Park basketball courts including a new surface, basketball support systems, fencing and lights.

FY24 GOALS

- Develop a comprehensive plan for the reuse of Overlook Park
- Develop additional pickleball courts in Burlington
- Continue to make improvements to the athletic fields
- Seek additional space for recreation programs

STAFFING

(1) Director of Parks & Recreation, (1) Assistant Director of Parks & Recreation, (1) Superintendent of Recreation Maintenance, (1) Program Coordinator, (1) Lead Working Foreman, (1) Assistant Program Coordinator, (1) Working Foremen, (1) Therapeutic Recreation Specialist, (6) Maintenance Craftsmen, (2) Administrative Assistant I, (1) Permanent Part-time Office Assistant (27.5 hours)

BUDGET ISSUES

As the department continues to grow we are finding it difficult to meet the budget guidelines. We are a service oriented department and the cost increases due to economic factors and the new contracts made it difficult to meet these guidelines.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Salaries							
	Full Time	1,071,973	1,139,490	1,273,129	1,330,216	1,330,216	1,330,216	
	Part Time	356,781	368,428	358,986	365,227	365,227	365,227	
	Elected/Appointed	1,500	1,300	2,100	2,100	2,100	2,100	
	Overtime	70,443	92,096	88,418	92,014	92,014	92,014	
81-	**TOTAL SALARIES**	**1,500,697**	**1,601,314**	**1,722,633**	**1,789,557**	**1,789,557**	**1,789,557**	
	Expenses							
	Occupancy	79,797	85,987	87,061	89,642	89,642	89,642	
	Contracted Services	39,935	39,373	28,625	24,175	24,175	24,175	
	Materials & Supplies	150,455	161,863	154,825	176,272	176,272	176,272	
	M.E.L.T.	14,272	12,495	16,549	17,965	17,965	17,965	
	Capital Outlay	6,000	5,851	8,000	8,000	8,000	8,000	
82-	**TOTAL EXPENSES**	**290,459**	**305,569**	**295,060**	**316,054**	**316,054**	**316,054**	
	Special							
	Transportation	13,950	14,907	5,000	0	0	0	
83-	**TOTAL SPECIAL**	**13,950**	**14,907**	**5,000**	**0**	**0**	**0**	
	GRAND TOTAL	**1,805,106**	**1,921,790**	**2,022,693**	**2,105,611**	**2,105,611**	**2,105,611**	**4.10%**

691 – HISTORICAL COMMISSION

DESCRIPTION OF SERVICES/MISSION

As per MGL Ch. 40 § 8D, Section 8D, responsibilities include the preservation, protection and development of the historical or archeological assets of the Town. Conducts research for places of historic or archeological value, cooperates with the state archeologist in conducting such research or other surveys, and seeks to coordinate the activities of unofficial bodies organized for similar purposes, and may advertise, prepare, print and distribute books, maps, charts, plans and pamphlets which it deems necessary for its work. Protects and preserves such historical places, makes such recommendations as it deems necessary to the Select Board and, subject to the approval of the Select Board, to the Massachusetts historical commission, that any such place be certified as an historical or archeological landmark.

STAFFING

(7) Members appointed by the Town Administrator to three year terms.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
	Expenses							
	Contracted Services	8,633	9,177	7,220	7,350	7,350	7,200	
	Materials & Supplies	0	448	2,400	2,650	2,650	2,800	
	M.E.L.T.	0	0	0	0	0	0	
84-	**TOTAL EXPENSES**	**8,633**	**9,625**	**9,620**	**10,000**	**10,000**	**10,000**	
	GRAND TOTAL	**8,633**	**9,625**	**9,620**	**10,000**	**10,000**	**10,000**	**3.95%**

710 – DEBT SERVICE

DESCRIPTION OF SERVICES/MISSION

This budget is used to account for principal and interest payments due on all of the Town's short term and long term tax supported debt issuances. The Town also has debt related payments which are paid for through dedicated revenue sources such as Sewer I/I funds. These non-tax supported payments are not reflected in this budget but are appropriated in separate warrant articles.

BUDGET ISSUES

The Town continues with its long stated goal to increase the investment in our infrastructure through the capital borrowing. Bonds are issued to invest in equipment, facilities, and infrastructure that will serve the needs of the Town for years to come. This schedule will require that the Town fund the following amounts for debt service for Fiscal Year 2024; Principal **$4,963,473** and Interest **$3,225,197** for a combined total of **$8,188,670 (7.66%)** Over the past several months we have worked closely with elected officials, department heads, and our financial advisors to develop a borrowing schedule that balances the needs of the departments as well as the impacts to the operating budget and the resident's tax burden. The Debt Plan contemplates that over the next several years, the Town will invest in some major projects, all of which are subject to Town Meeting Approval.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M* 2024	
85-	**Principal (A)**	3,511,772	3,720,495	4,833,144	4,963,473	4,963,473	4,963,473	**2.70%**
86-	**Interest (A)**	2,122,608	2,311,994	2,772,553	3,225,197	3,225,197	3,225,197	**16.33%**
	GRAND TOTAL	**5,634,380**	**6,032,489**	**7,605,697**	**8,188,670**	**8,188,670**	**8,188,670**	**7.66%**

*Not voted at time of printing.

OTHER ACCOUNTS

DESCRIPTION OF SERVICES/MISSION

The Reserve Fund is a budget appropriated to address unforeseen budget problems which may arise during course of an average fiscal year. A majority vote of the Ways and Means Committee is required for a Department to access these funds.

Middlesex Retirement accounts for the cost of the Town's assessment to the Middlesex Contributory Retirement System (MCRS). The system provides retirement benefits to the Town's retires as required by Massachusetts General Law and also accumulates assets to fund the future retirement benefits of the Town's current employees.

Negotiated Settlements is used to fund general government labor agreements as those agreements are approved by Town Meeting, and to assist departments with retirement-related liabilities. As agreements are approved, funds are transferred from the negotiated settlements budget into the individual departmental budgets as needed.

Local Transportation represents the operating budget appropriation to support the Town's rideshare subsidy program. This program replaces the fixed-route B-Line bus service with subsidized curb-to-curb, 24/7 ride share services. The Town contracted with a rideshare service provider as well as a "concierge" service for riders not comfortable using a mobile device. Those riders can call the concierge and have a ride scheduled for them, and accommodate any specialized needs of the rider. The program was rolled out just as the pandemic was beginning. In the years since we have seen steadily increasing ridership and are increasing the budget request accordingly.

Capital Improvements represents the yearly payments (4th year) of a five year network infrastructure improvement program and a five year enterprise security solution. The network infrastructure improvement program includes installation of new core and edge network switches, upgrades voice over IP Call management system, new wireless access points in town facilities and schools, phone replacement, support and warranty renewals for existing equipment. The enterprise security solution includes initiatives aimed at enhancing security and reliability such as: applied cloud-delivered security to all endpoints, installation of malware protection application, installing secure email software and cloud access security broker, implementing new next-general firewall at Town and School buildings.

		ACTUAL 2021	ACTUAL 2022	TOTAL 2023	DEPT 2024	SUPER-VISORY	W&M 2024	
87-	Reserve Fund	110,483	0	300,000	200,000	200,000	200,000	-33.33%
88-	Middlesex Retirement (A)	10,675,811	11,757,449	12,543,435	13,403,482	13,403,482	13,403,482	6.86%
89-	Negotiated Settlements	249,740	115,611	55,398	208,516	208,516	208,516	276.40%
90-	Local Transport (A)	120,000	50,000	50,000	100,000	100,000	100,000	100.00%
91-	Capital Budget (A)	399,021	399,021	400,000	400,000	400,000	400,000	0.00%

SECTION 3:
SUPPLEMENTAL INFORMATION

This Page Intentionally Left Blank

PERSONNEL CHART (FY 2022 - FY 2024)

NEW POSITION
PRIOR TO POSITION BEING CREATED
POSITION NO-LONGER STAFFED
* ADMINISTRATIVE & PROFESSIONAL

DEPARTMENT	JOB CLASS DESC	FISCAL 2022			FISCAL 2023			FISCAL 2024 PROPOSED		
		# OF EMP.	FTE	TOTAL DEPT FTE	# OF EMP.	FTE	TOTAL DEPT FTE	# OF EMP.	FTE	TOTAL DEPT FTE
122 Selectmen	TOWN ADMINISTRATOR	1	1.00	7.00	1	1.00	7.00	1	1.00	7.00
	ASSISTANT TOWN ADMINISTRATOR*	-	-		1	1.00		1	1.00	
	ECONOMIC DEVELOPMENT DIRECTOR	1	1.00		1	1.00		1	1.00	
	SELECTMEN'S OFFICE MANAGER*	1	1.00		1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT II				1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT I	4	4.00		2	2.00		2	2.00	
135 Accounting	TOWN ACCOUNTANT*	1	1.00	5.57	1	1.00	5.57	1	1.00	5.57
	BUDGET DIRECTOR*	1	1.00		1	1.00		1	1.00	
	PURCHASING/FINANCIAL ANALYST*	1	1.00		1	1.00		1	1.00	
	ASSISTANT TOWN ACCOUNTANT	1	1.00		1	1.00		1	1.00	
	ACCOUNTING SPECIALIST	1	1.00		1	1.00		1	1.00	
	ACCOUNTING TECHNICIAN	1	0.57		1	0.57		1	0.57	
141 Assessors	APPRAISER/ASSESSOR*	1	1.00	4.00	1	1.00	3.00	1	1.00	3.00
	ADMINISTRATIVE ASSISTANT II	1	1.00		1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT I	2	2.00		1	1.00		1	1.00	
145 Treasurer	TREASURER/COLLECTOR*	1	1.00	9.00	1	1.00	9.00	1	1.00	9.00
	ASSISTANT TAX COLLECTOR	1	1.00		1	1.00		1	1.00	
	ASSISTANT TREASURER	1	1.00		1	1.00		1	1.00	
	BENEFITS ADMINISTRATOR	1	1.00		-	-		-	-	
	PAYROLL ADMINISTRATOR	1	1.00		1	1.00		1	1.00	

	BENEFITS SPECIALIST	1	1.00		1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT I	3	3.00		2	2.00		2	2.00	
	ACCOUNTING SPECIALIST	0	0.00		2	2.00		2	2.00	
152 Human Resources	HUMAN RESOURCES DIRECTOR*	1	1.00	**2.00**	1	1.00	**2.00**	1	1.00	**2.00**
	HUMAN RESOURCES COORDINATOR*	1	1.00		1	1.00		1	1.00	
155 MIS	CRITICAL SYSTEMS ADMIN*	1	1.00	**4.00**	1	1.00	**4.00**	1	1.00	**4.00**
	APPLICATIONS SYSTEM ADMIN*	1	1.00		1	1.00		1	1.00	
	IT SUPPORT ADMINISTRATOR*	1	1.00		1	1.00		1	1.00	
	NETWORK REPAIR TECHNICIAN*	1	1.00		1	1.00		1	1.00	
161 Town Clerk	TOWN CLERK*	1	1.00	**5.00**	1	1.00	**5.00**	1	1.00	**5.00**
	ARCHIVIST/RECORDS MANAGER*	1	1.00		1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT II	1	1.00		1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT I	2	2.00		2	2.00		2	2.00	
171 Conservation	CONSERVATION ADMINISTRATOR*	1	1.00	**3.00**	1	1.00	**3.00**	1	1.00	**3.00**
	ASSISTANT CONSERVATION ADMIN.*	1	1.00		1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT I	1	1.00		1	1.00		1	1.00	
175 Planning	PLANNING DIRECTOR*	1	1.00	**4.00**	1	1.00	**5.00**	1	1.00	**5.00**
	SENIOR PLANNER*	1	1.00		1	1.00		1	1.00	
	ASSISTANT PLANNER*	1	1.00		1	1.00		1	1.00	
	ZONING COMPLIANCE OFFICER				1	1.00		1	1.00	
	ADMINISTRATIVE ASSISTANT I	1	1.00		1	1.00		1	1.00	
210 Police	POLICE CHIEF*	1	1.00	**78.14**	1	1.00	**78.14**	1	1.00	**78.14**
	DEPUTY POLICE CHIEF	1	1.00		1	1.00		1	1.00	
	POLICE CAPTAIN	2	2.00		2	2.00		2	2.00	
	POLICE LIEUTENANT	5	5.00		5	5.00		5	5.00	

		POLICE SERGEANT	9	9.00		9	9.00		9	9.00	
		POLICE PATROLMEN	50	50.00		50	50.00		50	50.00	
		CIVIL POLICE DISPATCHER	3	3.00		3	3.00		3	3.00	
		TRAFFIC SUPERVISOR	7	3.14		7	3.14		7	3.14	
		ANIMAL CONTROL OFFICER	1	1.00		1	1.00		1	1.00	
		AMN SECRETARY	1	1.00		1	1.00		1	1.00	
		ADMINISTRATIVE ASSISTANT I	2	2.00		2	2.00		2	2.00	
220 Fire		FIRE CHIEF*	1	1.00	**73.86**	1	1.00	**73.86**	1	1.00	**73.86**
		ASSISTANT FIRE CHIEF*	1	1.00		1	1.00		1	1.00	
		FIRE CAPTAIN	6	6.00		6	6.00		6	6.00	
		FIRE LIEUTENANT	10	10.00		15	15.00		14	14.00	
		FIREFIGHTER	48	48.00		43	43.00		44	44.00	
		CIVILIAN DISPATCHER	4	4.00		4	4.00		4	4.00	
		EMERGENCY VEHICLE TECHNICIAN-MECHANIC	1	1.00		1	1.00		1	1.00	
		AMNISTRATIVE SECRETARY	1	1.00		1	1.00		1	1.00	
		ADMINISTRATIVE ASSISTANT I	1	1.00		1	1.00		1	1.00	
		PART-TIME OFFICE ASSISTANT (30)	1	0.86		1	0.86		1	0.86	
241 Building Inspector		INSPECTOR OF BUILDINGS*	1	1.00	**7.00**	1	1.00	**7.00**	1	1.00	**7.00**
		LOCAL BUILDING INSPECTOR	1	1.00		1	1.00		1	1.00	
		SENIOR BUILDING INSPECTOR	1	1.00		1	1.00		1	1.00	
		INSPECTOR OF WIRES	1	1.00		1	1.00		1	1.00	
		INSPECTOR OF PLUMBING & GAS	1	1.00		1	1.00		1	1.00	
		ADMINISTRATIVE ASSISTANT I	2	2.00		2	2.00		2	2.00	
400 Public Works	411 Eng.	TOWN ENGINEER*	1	1.00	**65.85**	1	1.00	**65.85**	1	1.00	**65.85**
		ASSISTANT TOWN ENGINEER*	1	1.00		1	1.00		1	1.00	
		SENIOR CIVIL ENGINEER	2	2.00		2	2.00		2	2.00	
		CIVIL ENGINEER	1	1.00		1	1.00		1	1.00	
		ADMINISTRATIVE ASSISTANT I	1	1.00		1	1.00		1	1.00	

	420 Admin.	DPW SUPERINTENDENT*		1	1.00			1	1.00			1	1.00	
		OPERATIONS MANAGER*						1	1.00			1	1.00	
		BUSINESS MANAGER*						1	1.00			1	1.00	
		OPERATIONS ANALYST*		1	1.00									
		ADMINISTRATIVE ASSISTANT II		1	1.00			1	1.00			1	1.00	
		ACCOUNTING SPECIALIST		2	2.00			2	2.00			2	2.00	
		ADMINISTRATIVE ASSISTANT I		1	1.00			1	1.00			1	1.00	
	421 Highway	SUPERINTENDENT		1	1.00			1	1.00			1	1.00	
		LEAD FOREMAN		1	1.00			1	1.00			1	1.00	
		WORKING FOREMAN/LABORER		1	1.00			1	1.00			1	1.00	
		SPECIAL HEAVY EQUIP OPER/LABOR		10	10.00			10	10.00			10	10.00	
		TIME/RECORD KEEPER		1	1.00			1	1.00			1	1.00	
	451 Water & Sewer	TREATMENT PLANT MANAGER		1	1.00			1	1.00			1	1.00	
		CHIEF OPERATOR CHEMIST		1	1.00			1	1.00			1	1.00	
		TREATMENT PLANT OPERATOR		7	7.00			6	6.00			6	6.00	
		ASST SUPERINTENDENT		1	1.00			1	1.00			1	1.00	
		LEAD FOREMAN		1	1.00			1	1.00			1	1.00	
		WORKING FOREMAN/LABORER		1	1.00			1	1.00			1	1.00	
		PUMPING STATION OPERATOR		3	3.00			3	3.00			3	3.00	
		SPECIAL HEAVY EQUIP OPER/LABOR												
		WATER SYSTEM MAINTENANCE CRAFT		3	3.00			3	3.00			3	3.00	
		METER/BACKFLOW PREVENTION		1	1.00			1	1.00			1	1.00	
		LABORER		2	2.00			2	2.00			2	2.00	
	490 Central Maint.	SUPERINTENDENT		1	1.00			1	1.00			1	1.00	
		MASTER MECHANIC		1	1.00			1	1.00			1	1.00	
		MECHANIC		2	2.00			2	2.00			2	2.00	
	491 Buildings & Cem.	SUPERINTENDENT-BUILD/CEMETERY		1	1.00			1	1.00			1	1.00	
		PART-TIME OFFICE ASSISTANT		1	0.85			1	0.85			1	0.85	
		LEAD FOREMAN		1	1.00			1	1.00			1	1.00	
		WORKING FOREMAN/LABORER		1	1.00			1	1.00			1	1.00	
		SENIOR MAINTENANCE BUILDING CRAFTSMAN		1	1.00			1	1.00			1	1.00	

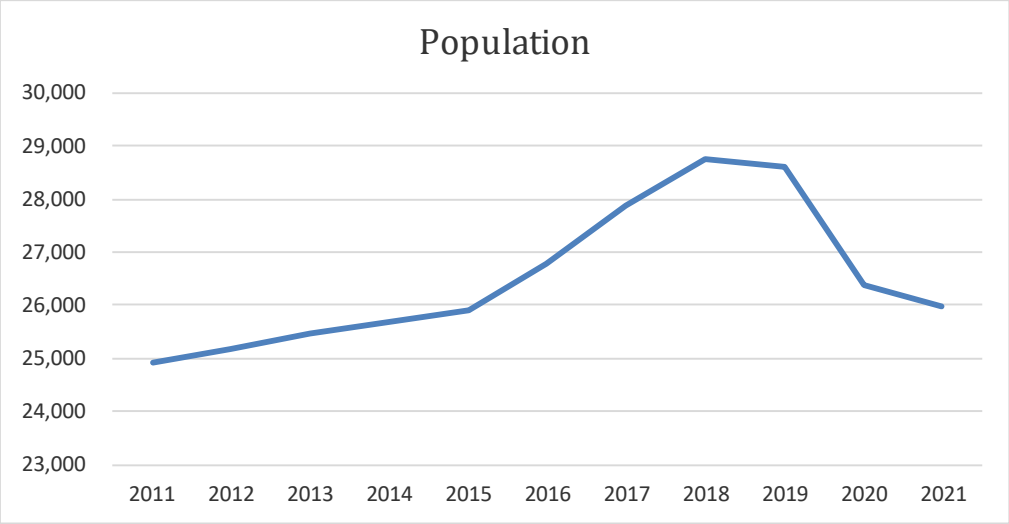
		MAINTENANCE BUILDING CRAFTSMEN	3	3.00		3	3.00		3	3.00	
		SPECIAL HEAVY EQUIP OPER/LABOR	1	1.00		1	1.00		1	1.00	
		HEAD CUSTODIAN	1	1.00		1	1.00		1	1.00	
		LEAD CUSTODIAN	2	2.00		2	2.00		2	2.00	
		BUILDING CUSTODIAN	3	3.00		3	3.00		3	3.00	
510 Board of Health		DIRECTOR OF PUBLIC HEALTH*	1	1.00	**7.86**	1	1.00	**7.86**	1	1.00	**7.86**
		ASSISTANT DIRECTOR OF PUBLIC HEALTH*	1	1.00		1	1.00		1	1.00	
		ENVIRONMENTAL ENGINEER*	1	1.00		1	1.00		1	1.00	
		HEALTH AGENT/SANITARIAN	1	1.00		1	1.00		1	1.00	
		SUPERVISING NURSE	1	1.00		1	1.00		1	1.00	
		ADMINISTRATIVE ASSISTANT I	2	1.86		1	0.86		1	0.86	
		ADMINISTRATIVE ASSISTANT II				1	1.00		1	1.00	
		ASSOC. HEALTH INSPECTOR	1	1.00		1	1.00		1	1.00	
541 Council On Aging		COUNCIL ON AGING DIRECTOR*	1	1.00	**6.08**	1	1.00	**7.05**	1	1.00	**7.05**
		OUTREACH WORKER	3	1.68		2	2.00		2	2.00	
		VAN DRIVER	2	1.43		2	1.43		2	1.43	
		ADMINISTRATIVE ASSISTANT II	1	1.00		1	1.00		1	1.00	
		ACTIVITY COORDINATOR				1	0.54		1	0.54	
		FRONT DESK CLERK	2	0.97		2	1.08		2	1.08	
543 Veterans		VETERANS' SERVICES DIRECTOR*	1	1.00	**2.00**	1	1.00	**2.00**	1	1.00	**2.00**
		ADMINISTRATIVE ASSISTANT I	1	1.00		1	1.00		1	1.00	
549 Youth & Family Services		EXECUTIVE DIRECTOR*	1	1.00	**6.59**	1	1.00	**6.59**	1	1.00	**6.59**
		GROUP WORK COORDINATOR*	0	0.00		0	0.00		0	0.00	
		SOCIAL WORKER*	4	3.59		4	3.59		4	3.59	
		ADMINISTRATIVE ASSISTANT	1	1.00		1	1.00		1	1.00	
		CLINICAL SUPERVISOR	1	1.00		1	1.00		1	1.00	

610 Library		LIBRARY DIRECTOR*	1	1.00	**15.00**	1	1.00	**15.00**	1	1.00	**15.00**
		ASSISTANT LIBRARY DIRECTOR	1	1.00		1	1.00		1	1.00	
		CHILDREN'S LIBRARIAN	1	1.00		1	1.00		1	1.00	
		CIRCULATION LIBRARIAN	1	1.00		1	1.00		1	1.00	
		HEAD REFERENCE LIBRARIAN	1	1.00		1	1.00		1	1.00	
		TECH SERVICE LIBRARIAN	1	1.00		1	1.00		1	1.00	
		REFERENCE LIBRARIAN	2	2.00		2	2.00		2	2.00	
		YOUNG-ADULT LIBRARIAN	1	1.00		1	1.00		1	1.00	
		CIRC & TECH SERVICES ASST	1	0.91		1	0.91		1	0.91	
		ASSISTANT TO CHILD LIBRARIAN	3	1.17		3	1.17		3	1.17	
		CIRCULATION ILL ASSISTANT	1	1.00		1	1.00		1	1.00	
		SENIOR LIBRARY TECH	2	1.49		2	1.49		2	1.49	
		IT ASSISTANT	1	0.43		1	0.43		1	0.43	
		ADMINISTRATIVE ASSISTANT I	1	1.00		1	1.00		1	1.00	
630/1 Recreation	630 Director	DIRECTOR OF PARKS & RECREATION*	1	1.00	**15.57**	1	1.00	**16.57**	1	1.00	**16.57**
		ASSISTANT DIRECTOR				1	1.00		1	1.00	
		PROGRAM COORDINATOR	1	1.00		1	1.00		1	1.00	
		ASSISTANT PROGRAM COORDINATOR	1	1.00		1	1.00		1	1.00	
		ADMINISTRATIVE ASSISTANT I	2	2.00		2	2.00		2	2.00	
		OFFICE ASSISTANT	1	0.57		1	0.57		1	0.57	
		THERAPEUTIC RECREATION SPECIALIST	1	1.00		1	1.00		1	1.00	
	631 Maint.	SUPERINTENDENT OF REC MAINT	1	1.00		1	1.00		1	1.00	
		LEAD WORKING FOREMAN	1	1.00		1	1.00		1	1.00	
		WORKING FOREMAN	1	1.00		1	1.00		1	1.00	
		MAINT CRAFTSMAN	6	6.00		6	6.00		6	6.00	
TOTAL ALL DEPARTMENTS			333.00		**321.52**	334.00		**323.49**	334.00		**323.49**

STATISCAL INFORMATION

POPULATION

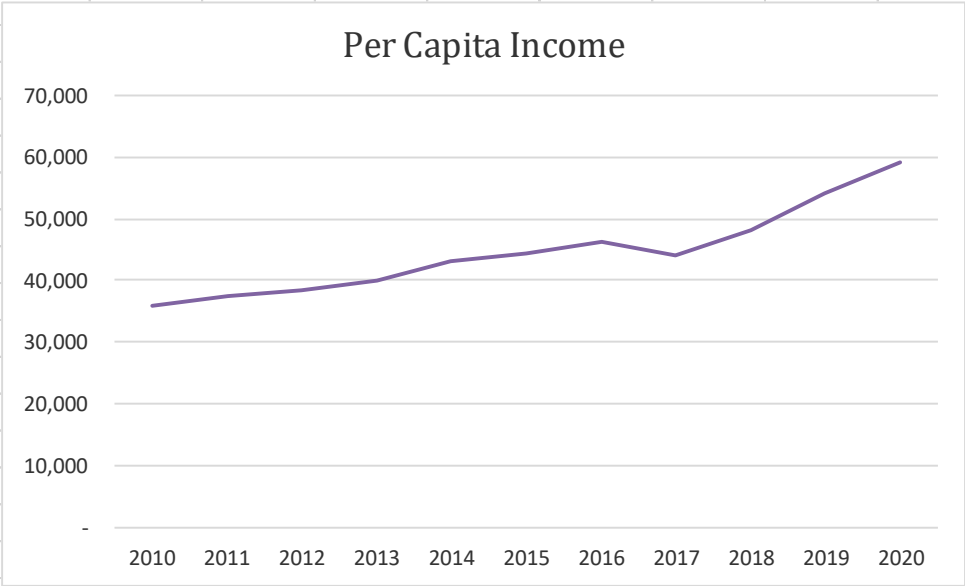
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
24,920	25,165	25,463	25,699	25,920	26,782	27,881	28,742	28,627	26,377	25,989



Souce: Massachusetts Department of Revenue

PER CAPITA INCOME

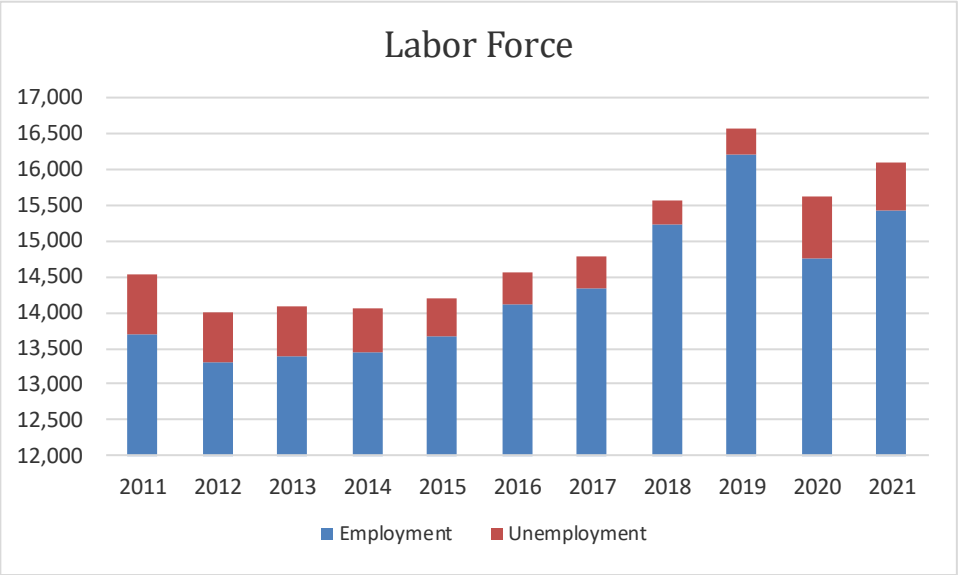
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
35,843	37,429	38,353	40,101	43,154	44,437	46,169	44,050	48,304	53,983	59,089



Source: Massachusetts Department of Revenue

LABOR FORCE

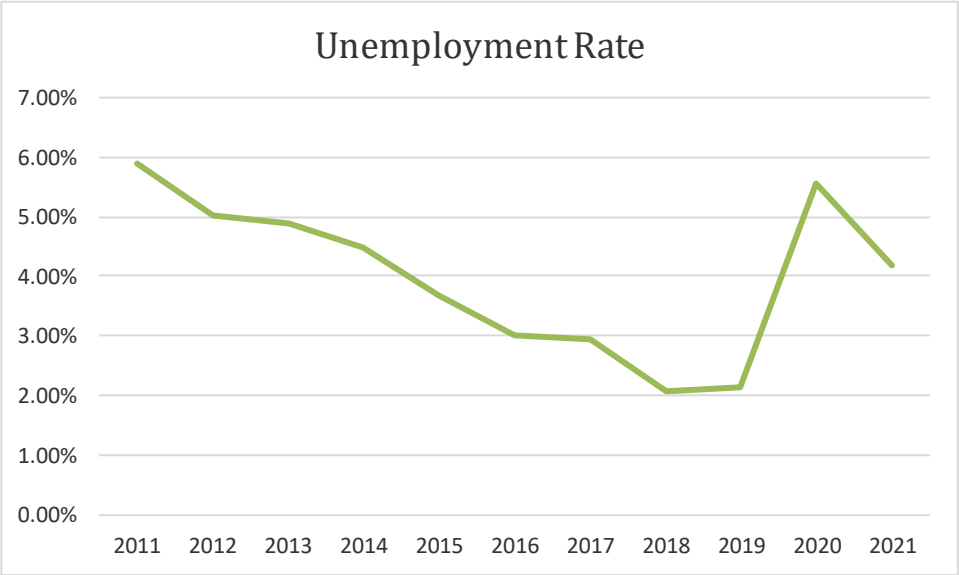
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
13,682	13,309	13,399	13,442	13,681	14,113	14,351	15,239	16,219	14,747	15,428
859	705	689	630	521	437	434	321	353	869	674



Source: Massachusetts Department of Revenue

UNEMPLOYMENT RATE

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
5.91%	5.03%	4.89%	4.48%	3.67%	3.00%	2.94%	2.06%	2.13%	5.56%	4.19%



Source: Massachusetts Department of Revenue

LOCAL ECONOMY

LOCAL ECONOMY

Top Ten Taxpayers (FY 2021)

No.	Name	Assessed Value	Total Tax Bill
1	Bellweather Prop of Mass	$250,192,700	$6,665,134
2	NEEP Investor Holdings LLC	$222,980,700	$5,940,206
3	Network Drive Owner LLC	$112,790,600	$3,004,742
4	Wayside Common Invest.	$79,922,300	$2,129,130
5	Oracle USA Inc.	$77,111,000	$2,054,237
6	Network Drive Owner LLC	$67,912,100	$1,809,178
7	EMD Millipore Corp	$64,242,400	$1,711,418
8	Burlington Mall FB-1 LLC	$60,775,900	$1,619,070
9	PIEDMONT 5 & 15 WAYSIDE LLC	$58,885,200	$1,568,702
10	Piedmont 25 Mall Road LLC	$58,205,500	$1,550,595

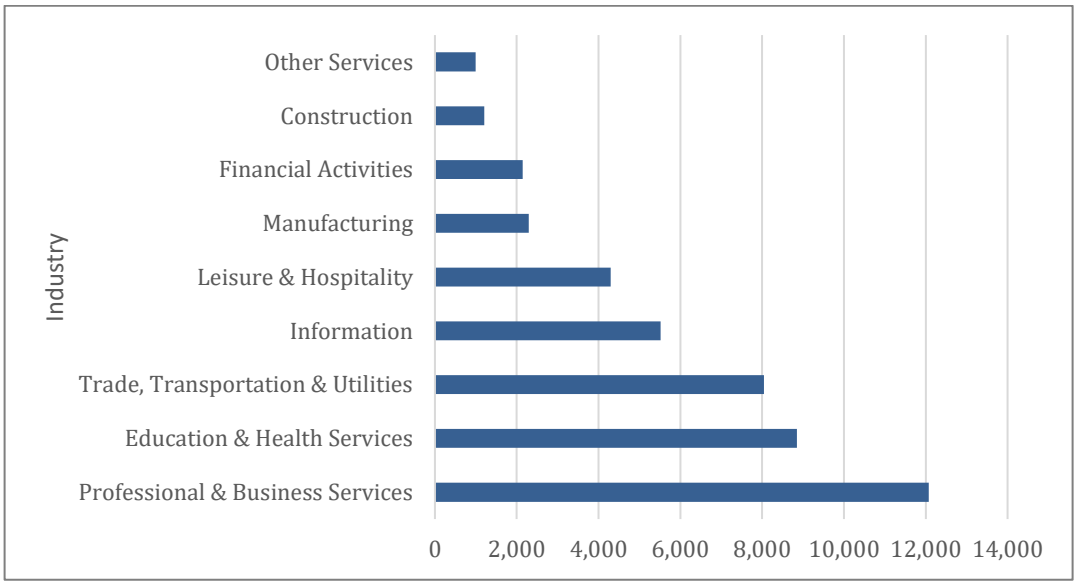
Principal Employers (FY 2021)

No.	Name	Type of Business	Employees
1	Lahey Hospital & Medical Center	General Medical And Surgical Hospitals	1,200
2	Oracle	Software Publishers	1,200
3	Salesforce Commerce Cloud	Custom Computer Programming Services	943
4	Cerence Inc.	Software Publishers	900
5	Avid Technology Inc.	Independent Artists, Writers, And Performers	850
6	Everbridge Inc.	Software Publishers	850
7	Dimensional Insight Inc.	Software Publishers	850
8	Endurance International Group	Data Processing, Hosting, And Related Services	762
9	Click Software Inc.	Software Publishers	701
10	Oasis Systems LLC	Engineering Services	700

Source: DataAxle 2021

Businesses in Burlington

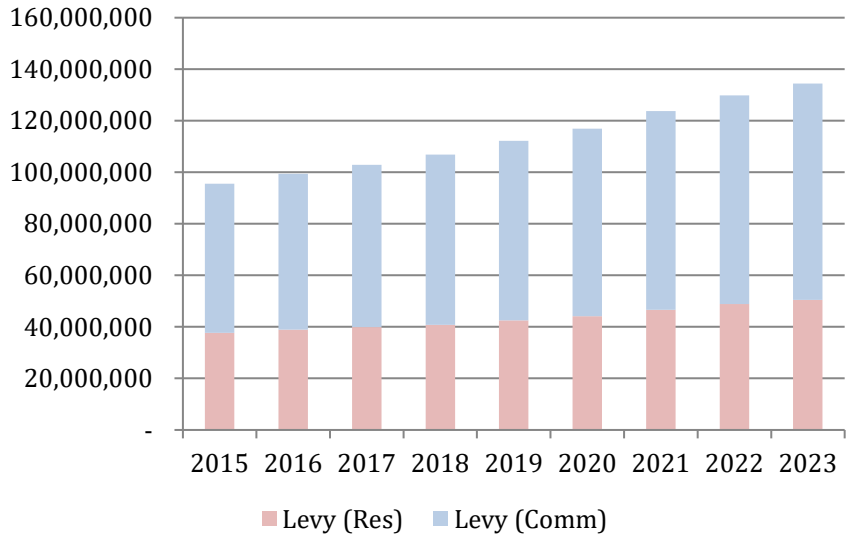
Business Type	Employees
Professional & Business Services	12,075
Education & Health Services	8,848
Trade, Transportation & Utilities	8,042
Information	5,520
Leisure & Hospitality	4,296
Manufacturing	2,292
Financial Activities	2,145
Construction	1,206
Other Services	991

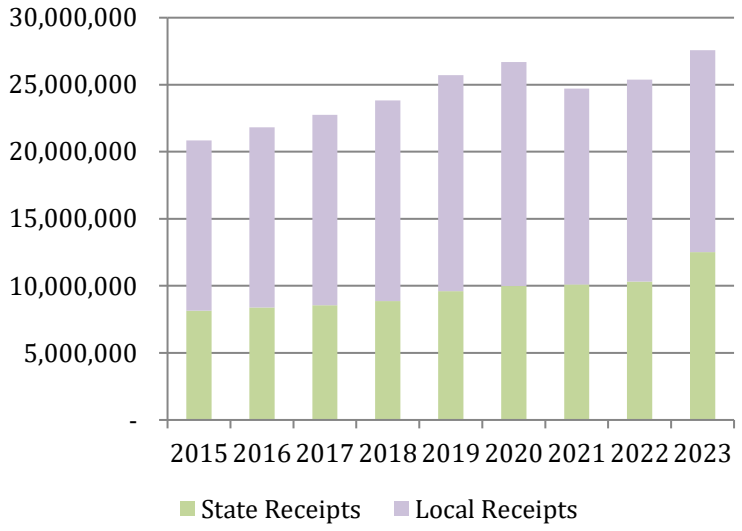


Source: Burlington Comprehensive Master Plan (Draft)

REVENUE TRENDS

SOURCE	2015	2016	2017	2018	2019	2020	2021	2022	2023
Levy (Res)	37,665,103	38,920,977	39,864,195	40,792,378	42,490,973	44,188,654	46,625,032	48,880,312	50,459,183
Levy (Comm)	57,953,205	60,478,310	62,999,352	66,128,891	69,663,310	72,764,980	77,166,778	80,920,832	84,031,983
Subtotal	**95,618,308**	**99,399,287**	**102,863,547**	**106,921,269**	**112,154,283**	**116,953,634**	**123,791,810**	**129,801,144**	**134,491,166**
State Receipts	8,151,960	8,395,166	8,560,593	8,853,759	9,609,507	9,991,068	10,105,123	10,315,584	12,511,792
Local Receipts	12,704,730	13,432,865	14,194,300	14,971,938	16,113,475	16,692,757	14,595,515	15,062,209	15,061,606
Subtotal	**20,856,690**	**21,828,031**	**22,754,893**	**23,825,697**	**25,722,982**	**26,683,825**	**24,700,638**	**25,377,793**	**27,573,398**
TOTAL	**116,474,998**	**121,227,318**	**125,618,440**	**130,746,966**	**137,877,265**	**143,637,459**	**148,492,448**	**155,178,937**	**162,064,564**

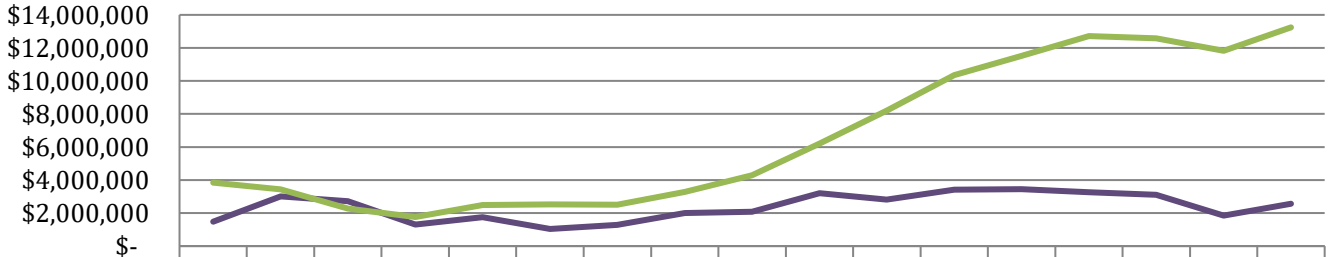




Source: Massachusetts Department of Revenue

NEW GROWTH AND EXCESS CAPACITY TRENDS

Fiscal Year	New Growth	Excess Capacity
2007	$ 1,484,969	$ 3,834,411
2008	$ 3,009,772	$ 3,441,330
2009	$ 2,714,298	$ 2,278,469
2010	$ 1,311,909	$ 1,761,889
2011	$ 1,752,240	$ 2,479,594
2012	$ 1,039,460	$ 2,526,883
2013	$ 1,285,957	$ 2,497,532
2014	$ 2,011,752	$ 3,281,767
2015	$ 2,086,124	$ 4,289,870
2016	$ 3,207,055	$ 6,213,650
2017	$ 2,814,173	$ 8,203,886
2018	$ 3,422,812	$ 10,345,662
2019	$ 3,447,269	$ 11,517,758
2020	$ 3,270,590	$ 12,715,534
2021	$ 3,108,274	$ 12,574,264
2022	$ 1,844,130	$ 11,818,212
2023	$ 2,573,178	$ 13,241,851

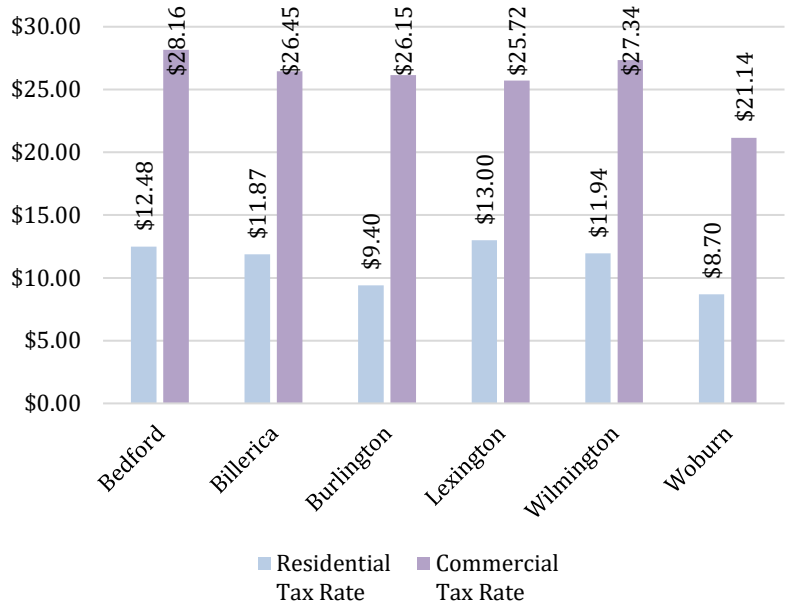


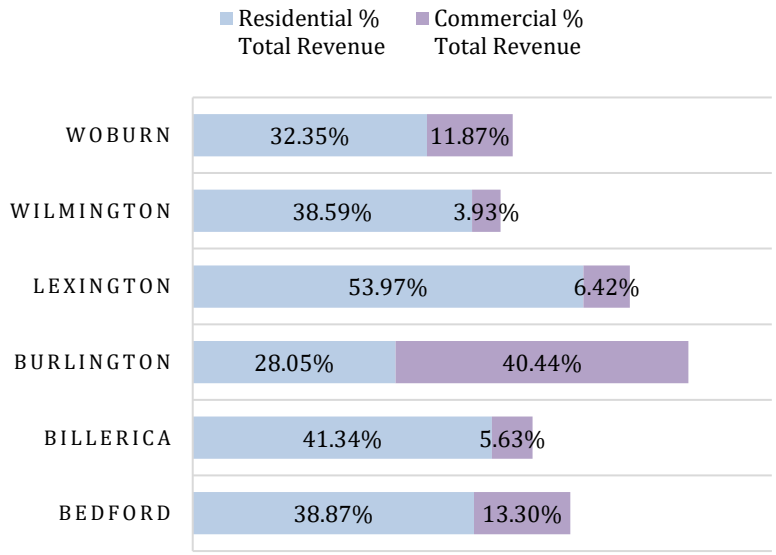
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
New Growth	$1,4	$3,0	$2,7	$1,3	$1,7	$1,0	$1,2	$2,0	$2,0	$3,2	$2,8	$3,4	$3,4	$3,2	$3,1	$1,8	$2,5
Excess Capacity	$3,8	$3,4	$2,2	$1,7	$2,4	$2,5	$2,4	$3,2	$4,2	$6,2	$8,2	$10,	$11,	$12,	$12,	$11,	$13,

Source: Massachusetts Department of Revenue

COMMUNITY COMPARISONS

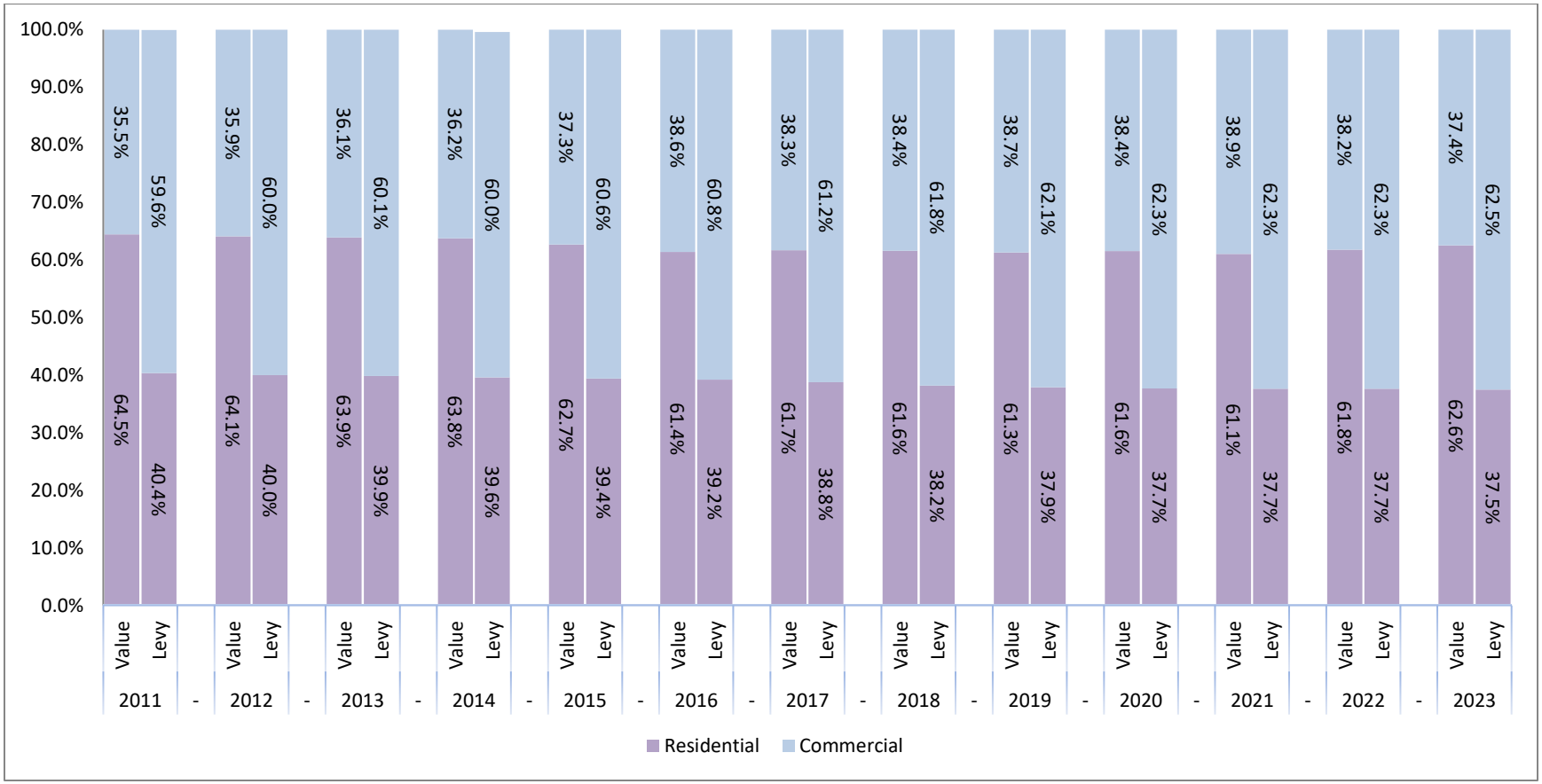
Community	Residential Tax Rate	Commercial Tax Rate	Average Single Family Tax Bill	Residential Levy	Commercial Levy	Total Levy	Total Revenue
Bedford	$12.48	$28.16	$10,454	$45,443,887	$15,547,216	$76,158,940	$116,926,238
Billerica	$11.87	$26.45	$6,520	$88,509,921	$12,052,295	$145,003,356	$214,120,587
Burlington	**$9.40**	**$26.15**	**$6,197**	**$50,459,183**	**$72,764,621**	**$134,491,167**	**$179,914,109**
Lexington	$13.00	$25.72	$17,514	$177,391,333	$21,115,128	$231,395,607	$328,676,117
Wilmington	$11.94	$27.34	$7,428	$57,120,537	$5,823,188	$98,247,551	$148,017,855
Woburn	$8.70	$21.14	$5,320	$66,173,969	$24,271,236	$126,230,243	$204,536,156





Source: Massachusetts Department of Revenue

SHARE OF VALUE V. SHARE OF LEVY
(Residential v. Commercial)



Source: Massachusetts Department of Revenue

SECTION 4:
CAPITAL IMPROVEMENT PLAN

OVERVIEW OF THE CAPITAL IMPROVEMENT PLAN

Local government officials are tasked with the preservation, maintenance, and improvement of the Town's capital assets. The Town defines a capital asset as property that has an initial useful life in excess of one year, and that is of significant value. Capital assets include land, infrastructure, new buildings and renovations to buildings, equipment, vehicles, and other tangible and intangible assets that have useful lives longer than one year. For the purposes of financial reporting, all purchases and construction costs in excess of $25,000 are capitalized. The Town of Burlington relies on its physical assets to adequately provide services to the residents and businesses, and to ensure employees are properly equipped to perform their jobs effectively. These assets include items such as roads and intersections, water and sewer systems, buildings, parks, vehicles, large equipment, and technology. These assets must be purchased, maintained, and replaced on a regular basis to ensure their efficacy in providing public services. The Town's ten-year Capital Improvement Program and Capital Budget are developed to ensure sufficient capital investments in these Town's assets.

A capital improvement program (CIP) is a blueprint for planning a community's capital expenditures. The capital improvement program is often a multi-year plan that identifies capital projects and equipment to be funded during the program period. The CIP is primarily a planning document; it is updated annually to match the needs of the community. Through proactive planning, the capital improvement program can provide advance project identification, scope definition, evaluation, public discussion, cost estimating, and financial planning.

A capital improvement program is composed of two parts, a capital program and a capital budget. The capital program is a plan for capital expenditures that extends out past the capital budget. The capital budget is the upcoming year's spending plan for capital items.

Development of a CIP that will ensure sound fiscal and capital planning requires effective leadership and the involvement of all Town departments. The proper development of a CIP allows the Town to maintain its strong credit rating, stabilize debt service payments, and identify the most economical means of financing capital projects. Furthermore, developing a finance plan for capital investments that fits within the overall framework of the community is important, as poor decisions regarding the use of debt can negatively impact a community's financial condition for many years.

Article #	Department & Item	FY23		FY 2024			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
		Prior Year		Requested	Supervisory Recommendation		Requested	Requested	Requested	Requested	Requested	Requested	Requested	Requested
		AMOUNT	SOURCE		AMOUNT	SOURCE								
	General Government													
	122 Select Board/Adminstrator													
	Town Center 3A Roadway Analysis	35,000	Free Cash											
	subtotal	35,000		0	0		0	0	0	0	0	0	0	0
	155 MIS													
	Equipment Van						45,000							
	Technology Infrastructure	300,000	Tax Levy	300,000	300,000	Tax Levy	300,000	300,000	300,000	300,000	300,000	300,000	300,000	
	Cyber Security	100,000	Tax Levy	100,000	100,000	Tax Levy	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
	subtotal	400,000		400,000	400,000		445,000	400,000	400,000	400,000	400,000	400,000	400,000	0
	161 Town Clerk													
	Electronic Document Management Software						30,000							
	subtotal	0		0	0		30,000	0	0	0	0	0	0	0
	171 Conservation													
	Open Space Recreation Plan (OSRP)									40,000				
	Vehicle							30,000						
	Land Acquisition						1,500,000							
	subtotal	0		0	0		1,500,000	30,000	0	40,000	0	0	0	0
	210 Police													
	Records Management and Dispatch System	439,500	Free Cash											
	Network Security Upgdates	63,219	Free Cash											
	Body Camera Data Storage	222,870	Free Cash											
	Replace Portable Radios (2-year cycle)						58,880							
	subtotal	725,589		0	0		58,880	0	0	0	0	0	0	0
	220 Fire													
	Vehicles:													
16	Ambulance (Replace 2009 Horton)			485,000	485,000	Receipts/Reserved								
	Command Car 2 2015 Ford Interceptor								65,000					
	Command Car 5 2009 Ford Escape						70,000							
	Command Car 1 2017 Ford Interceptor										65,000			
7-1	Utility Pickup (Replace 2012 Ford F350)			110,000	110,000	Free Cash								
	Fire Truck Pumpers:													
	2002 Pierce Quantum (2013) (Engine 3)											840,000		
	2002 Pierce Arrow XT (Engine 4)						950,000							
	Fire Truck Misc.:													
12	Aerial Tower (Replace 2008 Pierce)			2,000,000	2,000,000	Borrowing								
	Other:													
7-2	Bird Netting (Apparatus Bay & Mechanics Bay)			0	0	Withdrawn								
	Radio Communication System Upgrade	700,000	Free Cash					650,000						
	subtotal	700,000		2,595,000	2,595,000	0	1,020,000	650,000	65,000	0	65,000	840,000	0	0
	400 Public Works													
	Streets & Sidewalks:													
	Road & Parking Paving	3,500,000	Borrowing				3,500,000		3,500,000		3,500,000		3,500,000	
7-17	Winn St./Mountain Rd. Traffic Light			100,000	100,000	Free Cash	400,000							
	S. Bedford St/Blanchard Rd. Upgrades							500,000						
	Water Distribution & Production:													
13	Water Main Upgrades			1,500,000	1,500,000	Borrowing		1,500,000		1,500,000		1,500,000		1,500,000
	Water Meter Replacment						50,000	1,000,000	1,000,000	1,000,000	1,000,000			
	Replace Center Street Tank								1,000,000	2,000,000				
	Mill Pond TOC Treatment Construction									2,500,000				
	Mill Pond TOC Treatment Evaluation/Design								350,000					
	Shawsheen Raw Water Intake Lining								1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
	Sewer System Improvements:													

Article #	Department & Item	FY23		FY 2024			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
		Prior Year		Requested	Supervisory Recommendation		Requested	Requested	Requested	Requested	Requested	Requested	Requested	Requested
		AMOUNT	SOURCE		AMOUNT	SOURCE								
14	Inflow/Infiltration MWRA Phase 4			1,200,000	1,200,000	MWRA Grant/Loan								
7-7	Terrance Hall Station Grinder			60,000	60,000	Free Cash								
7-8	Terrace Hall VFD Replacement Phase 1			40,000	40,000	Free Cash	40,000	40,000						
7-9	Sewer Vactor Truck Fan Repairs			25,000	25,000	Free Cash								
7-6	Portable Sewer Bypass Grinder Pump			30,000	30,000	Free Cash								
7-4	Douglas Pump Station Design			125,000	125,000	Free Cash								
	Douglas PS Forcemain Replacement							1,300,000						
	Grandview Pump Station Design	130,000	Free Cash											
	Grandview Pump Station Rehabilitation						1,400,000							
	Patridge Lane Pump Station Rehabilitation	1,100,000	Free Cash											
7-5	Culvert/Stream Cleaning/ Drainage Repair	200,000	Free Cash	200,000	200,000	Free Cash	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
7-3	NPDES Stormwater Retrofit Project			100,000	100,000	Free Cash		100,000		100,000		100,000		100,000
	NPDES Stormwater sub-basin investigation								100,000					
	Cemetery:													
7-34	Pine Haven Columbarium			150,000	150,000	Receipts Reserved								
7-35	Pine Haven Roof			55,000	55,000	Receipts Reserved								
7-14	Cemetery Tractor (Kubota)			25,000	25,000	Free Cash								
	Chestnut Hill Fence	20,000	Free Cash											
	Expand Chestnut Hill Garage						150,000							
	Highway:													
8	Chapter 90 Roadwork	1,090,873	Chapter 90	1,071,425	1,071,425	Chapter 90								
7-10	DPW Vehicle Replacement Program:	593,000	Free Cash	607,000	607,000	Free Cash	596,000	843,000	521,000	544,000	690,000	522,000	421,000	291,000
	Facilities:													
7-15	Recreation Building Demolition			200,000	200,000	Free Cash								
7-12	Dog Pound Renovations			100,000	100,000	Free Cash								
	61 Center Street-Gym Façade										130,000			
	61 Center Street-Gym Roof									155,000				
	61 Center Street Murray Kelly Roof									92,000				
	61 Center Street-Elevator Piston											100,000		
	Library Elevator											100,000		
	Fire HQ Elevator											100,000		
	Fire HQ Roof									230,000				
	Fire HQ- Garage Doors									55,000				
	Town Hall/Annex HVAC						5,000,000							
	Town Hall Generator						390,000							
	Town Hall Annex Elevator Piston											100,000		
	Town Hall Elevator Piston											100,000		
7-13	Facilitiy Upgrades Including Energy Conservation			250,000	250,000	Free Cash		200,000	200,000					
	Town/School Building Construction						32,000,000							
	Meadowbrook School Roof						1,300,000							
	Meadowbrook School- Windows													
7-16	West School Foundation and Siding			100,000	100,000	Free Cash								
	Museum Painting & Siding													
7-11	Carpenter House Demolition			41,000	41,000	Free Cash								
	subtotal	6,633,873		5,979,425	5,979,425		45,026,000	5,683,000	7,871,000	9,376,000	6,520,000	3,822,000	5,121,000	1,891,000
	510 Board of Health													
	Administrative Vehicle						55,000							
	subtotal	0		0	0		55,000	0	0	0	0	0	0	0
	541 Council on Aging													
	Replace Van 1						55,000							
	Upgrade Furnitures and Fixtures							25,000						
	Digital Signage									30,000				

Article #	Department & Item	FY23		FY 2024			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
		Prior Year		Requested	Supervisory Recommendation		Requested	Requested	Requested	Requested	Requested	Requested	Requested	Requested
		AMOUNT	SOURCE		AMOUNT	SOURCE								
	subtotal	0		0	0		55,000	25,000	0	30,000	0	0	0	0
	630 &631 Recreation													
7-19	Outdoor Facilities Master Plan			62,000	62,000	Free Cash								
	Overlook													
	Renovate Overlook Park (pump track, hiking)						750,000							
	Rahanis													
	Renovations													500,000
	Renovate Basketball Court							125,000						
	Simonds													
	Accesibility Upgrades						750,000		75,000					
7-22	Pickleball Court/Hockey Renovation			50,000	50,000	Free Cash								
	Accesible Walkway Phase 2						30,000							
	Replace ball fied renovator, screen and mat						30,000							
	New Lighting & Renovate Basketball Courts	230,000	Free Cash											
	Basketball court bubble													200,000
	Renovate Wading Pool									225,000				
	Veterans													
	Renovations												225,000	
	Wildwood													
	Install bathroom facilities							125,000						
	Parking improvements									25,000				
	Misc. Locations													
	Vehicles & Equipment													
7-18	Replace R-2 (Dump Truck)			90,000	90,000	Free Cash								
	Replace 2 R-4 Pickup Truck										65,000			
	Replace R-5 Pickup Truck											60,000		
	Replace R-6 Rack Body									60,000				
	Replace R-10 Recreation SUV								50,000					
	Replace R-11 Pickup Truck							60,000						
	Replace R-12 (pickup w/ plow)	50,000	Free Cash											
	Replace R-14 Toro Mower										100,000			
	Replace R-15 Larger Mower/Tractor												100,000	
7-21	Dump Body and tailgate replacement			25,000	25,000	Free Cash								
	Compact Track Loader						66,000							
	Replace Slope Mower							50,000						
	Replace Wood Chipper						55,000							
	Accessible Terain Hopper										75,000			
7-20	Accesible Passenger Van			25,000	25,000	Free Cash								
	subtotal	280,000		252,000	252,000		1,681,000	360,000	150,000	335,000	240,000	60,000	325,000	700,000
	691 Historical Commission													
	Historic Style Shed (West School)	33,000	Free Cash											
	subtotal	33,000		0	0	0	0	0	0	0	0	0	0	0
	Schools													
	System-wide													
	CS4All Computer Science Curriculum & Furniture	150,000	Free Cash											
	Pavement Replacement Program								225,000				225,000	
	Master Plan Update								200,000					
	Vehicle Replacement									60,000	62,000			
	Auditroiam A/V Lighting and Upgrades								150,000				150,000	
	Security Camera Replacement and Upgrades								50,000					75,000
	Sports Field Master Plan	70,000	Free Cash											
	Activity Bus & Utility Vehicles	145,000	Free Cash											

Article #	Department & Item	FY23		FY 2024			FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
		Prior Year		Requested	Supervisory Recommendation		Requested	Requested	Requested	Requested	Requested	Requested	Requested	Requested
		AMOUNT	SOURCE		AMOUNT	SOURCE								
	Scoreboards for Sports Fields	110,000	Free Cash											
	HVAC Controller Upgrade	108,000	Free Cash											
	Visitor Access Controls	25,000	Free Cash											
	Teacher MacBook Replacment						500,000					500,000		
	Lightspeed Replacement							455,000						
	Boiler Replacement										800,000			
	Parking Lot Light Replacement							200,000		200,000		200,000		200,000
	Marshall Simonds Middle School													
	Track Resurfacing/Turf Replacement							1,000,000						
	AC Chiller Replacement						290,000							
	Bleachers	220,000	Free Cash											
7-23	Secuirty Cameras			45,111	45,111	Free Cash								
7-32	Athletic Field Improvements			0	0	Withdrawn								
	Memorial School													
7-30	Fire Systems Upgrades			41,190	41,190	Free Cash								
	HVAC									200,000	300,000	300,000		
	Bio Retention Area Reconstruction								150,000		150,000			
	Pine Glen													
	Playground Resurface													60,000
	Classroom Interior Renovations								300,000			300,000		
	Bathroom Repairs	65,000	Free Cash											
	HVAC Renovations (Mech. Exhaust/AC)	500,000	Free Cash						500,000					
7-24	Instructional Space Transformation			115,562	115,562	Free Cash								
7-28	Siding and Sofit			150,403	150,403	Free Cash								
	Construction (Town Share)													
	Burlington High School													
7-26	BECC Student Bathroom Renovations			82,770	82,770	Free Cash								
7-25	Lightspeed Amplification Systems			154,980	154,980	Free Cash								
7-33	Athletic Field Improvements			0	0	Withdrawn								
30	Feasibility Study			1,500,000	1,500,000	Borrowing								
	HVAC Construction								13,000,000					
	Renovation (Town Share)											40,000,000		
	Performing Arts Center / Auditorium Improvements						40,000							
	Track Resurfacing/ Turf Replacement													1,500,000
	Electrical Transformer Replacement						125,000							
	Pump Replacement						55,000			55,000			55,000	
	Music Room Floor Reconstruction	450,000	Free Cash											
	Fox Hill													
	Portable Roof Repairs	160,000	Free Cash											
	Feasibility Study	1,500,000	Free Cash											
	Construction (Town Share)						27,000,000							
	Francis Wyman													
7-27	Stairwell Resurfacing			42,049	42,049	Free Cash								
7-29	Cafeteria Grease Trap			39,393	39,393	Free Cash								
7-31	Grass Field Improvements			700,000	700,000	Free Cash								
	Playground Equipment	290,000	Free Cash											
	Playground Resurface										65,000			
	HVAC Installation/Replacement							500,000				500,000		
	Schools Subtotal	3,793,000		2,871,458	2,871,458		28,010,000	2,155,000	14,575,000	515,000	1,377,000	41,800,000	430,000	1,835,000
	Grand Total	12,600,462		12,097,883	12,097,883		77,914,840	9,310,500	23,068,500	10,703,500	8,609,500	46,929,500	6,283,500	4,426,000

SECTION 5:
GLOSSARY OF TERMS

Abatement	A reduction or elimination of a real or personal property tax, motor vehicle excise, a fee, charge, or special assessment imposed by a governmental unit. Administered by the local board of assessors.
Accommodated Accounts	A category utilized by the Town to classify expenses which; 1. are applicable to all departments (i.e. debt service, and employee benefits), 2. have historically been difficult to control due to atypical factors, and as a result would put the respective department at an unfair disadvantage in complying with annual budget operating guidelines (i.e. special education, trash removal), or 3. are mandated, with the Town having little control over the cost (i.e. retirement contributions). Accommodated accounts are denoted with an "(AA)" in the budget line item description.
Appropriation	Authority granted by town meeting, or other legislative body, to make expenditures, or to incur obligations to make expenditures, for a specific public purpose. In the operating budget, the authority concludes at the end of the fiscal year.
Capital Asset	Property that has an initial useful life in excess of one year, and that is of significant value. Capital assets include land, infrastructure, buildings, renovations to buildings, equipment, vehicles, and other tangible and intangible assets that have useful lives longer than one year.
Chapter 686 of The Acts of 1970	An act establishing a representative town meeting form of government, *as currently practiced in Burlington*, enacted by the Senate and House of Representatives in General Court on August 14, 1970, whereby one hundred twenty-six (126) members shall be elected to meet, deliberate, act and vote in the exercise of the corporate powers of the town.
Chapter 70 School Aid	Refers to the school funding formula created under the Education Reform Act of 1993 by which state aid is distributed through the Cherry Sheet to aid in establishing educational equity among municipal and regional school districts.
Chapter 90 Highway Funds	State funds derived from periodic transportation bond authorizations and apportioned to communities for highway projects based on the formula under the provisions of MGL Ch. 90 §34. Communities receive cost reimbursements to the limit of the grant upon submission of expenditure

reports to the Massachusetts Highway Department, for previously approved local highway projects.

Cherry Sheet The official notification to cities, towns and regional school districts of the next fiscal year's state aid and assessments. The aid is in the form of distributions, which provide funds based on formulas and reimbursements that provide funds for costs incurred during a prior period for certain programs of services. Links to the Cherry Sheets are located on the DLS website at www.mass.gov/dls

Contracted Services A subcategory within a department's total expenses budget line, which includes costs incurred from express or implied contracts, such as but not limited to printing, advertising, and the rental of equipment.

Deficit When expenditures exceed revenue in a given account.

Estimated Receipts Projections of anticipated local revenues, based on the previous year's receipts representing funding sources necessary to support a community's annual budget.

Excess Capacity Difference between the levy limit and the amount of real and personal property taxes actually levied in a given year. Each year, the Select Board must be informed of excess levy capacity and their acknowledgement must be submitted to the Department of Revenue when setting the Town's tax rate.

Fiscal Year The budget cycle which the Commonwealth and municipalities have operated on Since 1974 which begins July 1 and concludes June 30. (i.e. Fiscal year 2016 is from July 1, 2015 through June 30, 2016).

Free Cash Remaining, unrestricted funds from operations of the previous fiscal year, certified annually by the Department of Revenue.

General Fund Fund used to account for most financial resources and activities governed by the normal town meeting appropriation process.

Local Receipts	Locally generated revenues, other than real and personal property taxes. Examples include motor vehicle excise, investment earnings, and hotel tax.
Long-Term Debt	Community borrowing, or outstanding balance at any given time, of loans with an original maturity date of 12 months or more.
Massachusetts Water Resources Authority (MWRA)	A Massachusetts public authority established by an act of the Legislature in 1984 to provide wholesale water and sewer services to 2.5 million people and more than 5,500 large industrial users in 61 metropolitan Boston communities. Burlington is a member of MWRA for sewer.
MELT	*Municipal Expenses and Local Travel.* A subcategory of total budgeted expenses which includes department costs incurred for membership dues in professional organizations, in-service education and training, conferences, and automobile mileage reimbursements associated with travel on Town business.
New Growth	The additional tax revenue generated by new construction, renovations and other increases in the property tax base during a calendar year; excluding value increases caused by normal market forces or by revaluations. This is calculated by multiplying the assessed value associated with new construction, renovations and other increases by the prior year tax rate.
Operating Budget	A plan of proposed expenditure for personnel, supplies, and other expenses for the coming fiscal year.
Other Post-Employment Benefits (OPEB)	A form of deferred compensation which is *not* an integral part of a pension plan for an eligible retiree (i.e. healthcare).
Overlay	(Overlay Reserve or Allowance for Abatements and Exemptions)- An account established on an annual basis to fund anticipated property tax abatements, exemptions and uncollected taxes in that year.
Overlay Surplus	Any balance in the overlay account of a given year in excess of the amount remaining to be collected or abated can be transferred into this account; the amount of overlay available for transfer must be certified by the assessor.

At the end of each fiscal year, unused overlay surplus is "closed" to surplus revenue *(i.e. becomes part of free cash).*

Raise and Appropriate A phrase used to identify a funding source for an expenditure or expenditures, which refers to money generated by the tax levy or other local receipts.

Recurring Revenue A source of money used to support municipal expenditures, which can be relied upon at some level in future years.

Reserve Fund An amount set aside on an annual basis within the town budget, administered by the Ways & Means Committee, to provide a funding source in the event that extraordinary or unforeseen expenditures are incurred by the town. Per Mass General Law, the amount set aside is not to exceed 5% of the preceding year's tax levy.

Senior Property Tax Work-off Program A program under which participating taxpayers over 60 years old volunteer their services to the municipality in exchange for a reduction in their tax bills.

Sewer Enterprise Fund A separate accounting and financial reporting mechanism of municipal services, for which a fee is charged in exchange for goods and/or services. It allows for the Town to easily track total costs of a service recovered through user charges; Burlington uses this fund to account for our Massachusetts Water Resource Authority (MWRA) assessment for sewer services.

Special Revenue Funds Funds used to account for the proceeds of special revenue sources (other than capital) that are legally restricted to expenditures for a specific purpose.

Stabilization Funds Funds designated to accumulate amounts for capital and other future spending purposes. Communities can establish one or multiple funds for different purposes. The establishment of, an amendment of purpose, or the appropriation of money from stabilization all require a two-thirds vote of town meeting; however, appropriation in aggregate in any given year cannot exceed 10% of the prior year's tax levy.

Statutory Exemptions

Massachusetts Law provides for an exemption from local property taxes for certain qualifying organizations. Not all organizations qualify for this exemption, and not all properties of qualified organizations are eligible for exemption. By law, the burden of establishing entitlement to an exemption falls upon the person or organization seeking the exemption. Massachusetts General Law Chapter 59, § 5 defines several types of organizations that may be eligible for an exemption.

PROJECT DIRECTORY

Project Name: **Burlington Fox Hill Elementary School**
Project Number:

Owner's Name: **Fox Hill Elementary School**
Owner's Address: Fox Hill Rd
Burlington, MA, 01803

DESIGN TEAM:				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**
Donna DiNisco	DiNisco Design	99 Chauncy Street, Suite 901, Boston, MA	617.429.8806	d.dinisco@dinisco.com
Vivian Low	DiNisco Design	99 Chauncy Street, Suite 901, Boston, MA	617.780.9239	v.low@dinisco.com
Neil Harrigan	DiNisco Design	99 Chauncy Street, Suite 901, Boston, MA	978.257.3067	n.harrigan@dinisco.com

BUILDING COMMITTEE:				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**
Nichole Coscia	Town of Burlington	123 Cambridge Street, Burlington, MA	781-825-7452	ncoscia@bpsk12.org
John Danizio	Town of Burlington	29 Center Street, Burlington, MA	791-505-1197	jdanizio@burlington.org
Paul Sagarino	Town of Burlington	29 Center Street, Burlington, MA	781-270-1635	psagarino@burlington.org
Melissa Massardo	Town of Burlington	123 Cambridge Street, Burlington, MA	N**/A**	mmassardo@bpsk12.org
Katherine Bond	Town of Burlington	123 Cambridge Street, Burlington, MA	N**/A**	kbond@bpsk12.org
Jeremy Brooks	Town of Burlington	123 Cambridge Street, Burlington, MA	N**/A**	jbrooks@bpsk12.org
Christine Monaco	Town of Burlington	123 Cambridge Street, Burlington, MA	N**/A**	cmonaco@bpsk12.org
Martha Simon	Town of Burlington	123 Cambridge Street, Burlington, MA	N**/A**	msimon@bpsk12.org
Eric Conti	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1801**	conti@bpsk12.org
Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1814**	Bob.Cunha@bpsk12.org

PROJECT CONTACT LIST

David Rosenblatt	Town of Burlington	Fox Hill Rd, Burlington, MA 01803	781-270-1791	drosenblatt@bpsk12.org
Dennis Villano	Town of Burlington	123 Cambridge Street, Burlington, MA	781-367-7060	villano@bpsk12.org
Roger Riggs	Town of Burlington	4 Briarwood Ln, Burlington, MA 01803	781-229-2041	rriggs9000@comcast.net
Ed Parsons	Town of Burlington	30 Wheatland St, Burlington, MA 01803	339-234-6020	edward.parsons@gmail.com
Jennifer Priest	Town of Burlington	1**8 Prouty Road, Burlington, MA**	N**/A**	jennifernpriest@gmail.com
Tara Carroll	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N**/A**	tcarroll@bpsk12.org
Audrey Boeri	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N**/A**	boeri@bpsk12.org
George Papayannis	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N**/A**	doyouaskwhy@gmail.com
Kristen Downie	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N**/A**	KDownie@bpsk12.org
John Lyons	Town of Burlington	1 Pine Glen Way, Burlington, MA	N/A	jlyons@bpsk12.org
Margo Bunker	T**own of Burlington**	N/A	N/A	margo.bunker@bpsk12.org
Amanda Hanafin	Town of Burlington	N/A	N/A	ahanafin@bpsk12.org
Melissa Gilberg	Town of Burlington	N/A	N/A	mgilberg@bpsk12.org

DESIGN COMMITTEE:				
NAME	COMPANY	ADDRESS	PHONE:	EMAIL:

OWNER'S PROJECT MANAGER (OPM)				
NAME	COMPANY	ADDRESS	PHONE:	EMAIL:
Mike Burton	Dore & Whittier	260 Merrimac St, Newburyport, MA		mburton@DoreandWhittier.com
Steve Brown	Dore & Whittier	260 Merrimac St, Newburyport, MA		sbrown@doreandwhittier.com
Christina Dell Angelo	Dore & Whittier	260 Merrimac St, Newburyport, MA		cdellangelo@DoreandWhittier.com

PROJECT CONTACT LIST

Mike Cox	Dore & Whittier	260 Merrimac St, Newburyport, MA		mcox@DoreandWhittier.com
Rachel Rincon	Dore & Whittier	260 Merrimac St, Newburyport, MA		rrincon@DoreandWhittier.com
Aidan Place	Dore & Whittier	260 Merrimac St, Newburyport, MA		aplace@doreandwhittier.com

AUTHORITIES HAVING JURISDICTION (AHJ)				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**

OTHER OWNER'S CONTACTS				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**
Kevin Baker	**Fox Hill Senior Custodian**		**781-424-9505**	
Barbara Nunes	Pine Glen Senior Custodian		781-424-9504	

EXECUTIVE WORKING GROUP:				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**
Eric Conti	Town of Burlington	123 Cambridge Street, Burlington, MA	**781-270-1801**	conti@bpsk12.org
Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	**781-270-1814**	Bob.Cunha@bpsk12.org
Melissa Massardo	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	mmassardo@bpsk12.org
Nicole Coscia	Town of Burlington	123 Cambridge Street, Burlington, MA	781-825-7452	ncoscia@bpsk12.org

COMMUNICATION WORKING GROUP:				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**
Eric Conti	Town of Burlington	123 Cambridge Street, Burlington, MA	**781-270-1801**	conti@bpsk12.org

PROJECT CONTACT LIST

Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1814**	Bob.Cunha@bpsk12.org
Melissa Massardo	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	mmassardo@bpsk12.org
Martha Simon	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	msimon@bpsk12.org
Kristen Downie	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N/A	KDownie@bpsk12.org
Jennifer Priest	Town of Burlington	1**8 Prouty Road, Burlington, MA**	N/A	jennifernpriest@gmail.com

SUSTAINABILITY WORKING GROUP:				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**
Roger Riggs	Town of Burlington	4 Briarwood Ln, Burlington, MA 01803	N/A	rriggs9000@comcast.net
Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1814**	Bob.Cunha@bpsk12.org
Melissa Massardo	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	mmassardo@bpsk12.org
Martha Simon	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	msimon@bpsk12.org
George Papayannis	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N/A	doyouaskwhy@gmail.com

SITE LOGISTICS WORKING GROUP:				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**
Paul Sagarino	Town of Burlington	29 Center Street, Burlington, MA	781-270-1635	psagarino@burlington.org
Audrey Boeri	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N/A	boeri@bpsk12.org
Katherine Bond	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	kbond@bpsk12.org
Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1814**	Bob.Cunha@bpsk12.org

EXTERIOR DESIGN WORKING GROUP:				
NAME	**COMPANY**	**ADDRESS**	**PHONE:**	**EMAIL:**

PROJECT CONTACT LIST

Katherine Bond	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	kbond@bpsk12.org
Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1814**	Bob.Cunha@bpsk12.org
Dennis Villano	Town of Burlington	123 Cambridge Street, Burlington, MA	781-367-7060	villano@bpsk12.org
Kristen Downie	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N/A	KDownie@bpsk12.org
Melissa Massardo	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	mmassardo@bpsk12.org
Tara Carroll	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N**/A**	tcarroll@bpsk12.org
Jennifer Priest	Town of Burlington	1**8 Prouty Road, Burlington, MA**	N/A	jennifernpriest@gmail.com
Martha Simon	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	msimon@bpsk12.org
Eric Conti	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1801**	conti@bpsk12.org

INTERIOR DESIGN WORKING GROUP:

NAME	COMPANY	ADDRESS	PHONE:	EMAIL:
Katherine Bond	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	kbond@bpsk12.org
Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1814**	Bob.Cunha@bpsk12.org
Dennis Villano	Town of Burlington	123 Cambridge Street, Burlington, MA	781-367-7060	villano@bpsk12.org
Kristen Downie	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N/A	KDownie@bpsk12.org
Melissa Massardo	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	mmassardo@bpsk12.org
Tara Carroll	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N**/A**	tcarroll@bpsk12.org
Jennifer Priest	Town of Burlington	1**8 Prouty Road, Burlington, MA**	N/A	jennifernpriest@gmail.com
Martha Simon	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	msimon@bpsk12.org
Eric Conti	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1801**	conti@bpsk12.org
George Papayannis	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N/A	doyouaskwhy@gmail.com

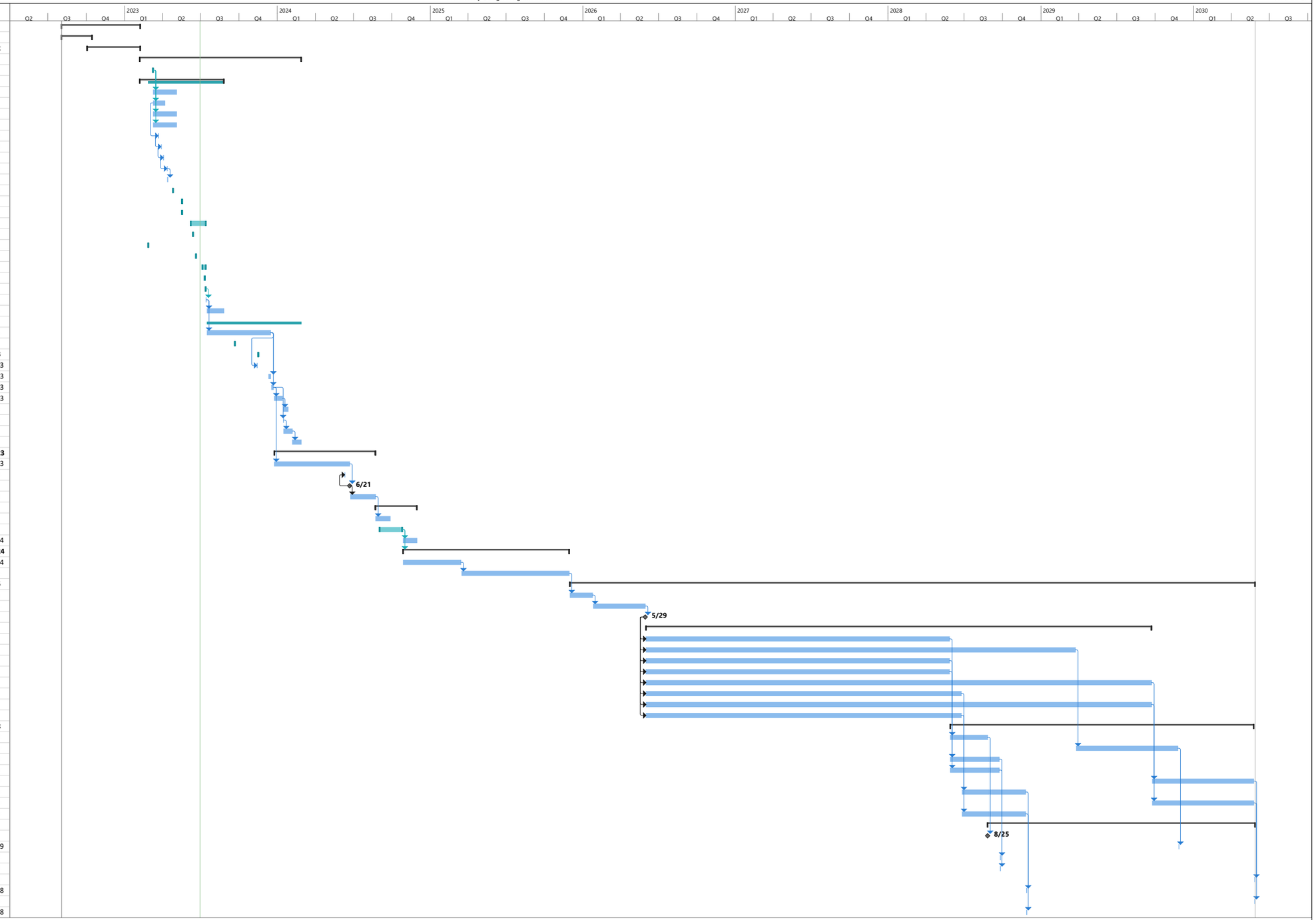
EDUCATIONAL PROGRAMMING WORKING GROUP:

PROJECT CONTACT LIST

NAME	COMPANY	ADDRESS	PHONE:	EMAIL:
Katherine Bond	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	kbond@bpsk12.org
Christine Monaco	Town of Burlington	123 Cambridge Street, Burlington, MA	N**/A**	cmonaco@bpsk12.org
Dennis Villano	Town of Burlington	123 Cambridge Street, Burlington, MA	781-367-7060	villano@bpsk12.org
Tara Carroll	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N**/A**	tcarroll@bpsk12.org
Eric Conti	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1801**	conti@bpsk12.org
George Papayannis	Town of Burlington	1 **Fox Hill Road, Burlington, MA**	N/A	doyouaskwhy@gmail.com
Martha Simon	Town of Burlington	123 Cambridge Street, Burlington, MA	N/A	msimon@bpsk12.org

FINANCIAL AND BONDING & FACILITIES ASSESSMENT WORKING GROUP:				
NAME	COMPANY	ADDRESS	PHONE:	EMAIL:
Paul Sagarino	Town of Burlington	29 Center Street, Burlington, MA	781-270-1635	psagarino@burlington.org
Bob Cunha	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1814**	Bob.Cunha@bpsk12.org
Nicole Coscia	Town of Burlington	123 Cambridge Street, Burlington, MA	781-825-7452	ncoscia@bpsk12.org
John Danizio	Town of Burlington	29 Center Street, Burlington, MA	791-505-1197	jdanizio@burlington.org
Paul Sagarino	Town of Burlington	29 Center Street, Burlington, MA	781-270-1635	psagarino@burlington.org
Eric Conti	Town of Burlington	123 Cambridge Street, Burlington, MA	7**81-270-1801**	conti@bpsk12.org
Roger Riggs	Town of Burlington	4 Briarwood Ln, Burlington, MA 01803	N/A	rriggs9000@comcast.net

ID	Task Name	Duration	Start
1	**Module 2: FORMING THE TEAM**	**134 days?**	**Wed 8/3/22**
2	**OPM Selection**	**53 days**	**Wed 8/3/22**
10	**Designer Selection**	**91 days?**	**Mon 10/3/22**
25	**Module 3: FEASIBILITY STUDY**	**276 days?**	**Mon 2/6/23**
26	MSBA & Team Kick off Meeting	1 day	Thu 3/9/23
27	**Preliminary Design Program (PDP)**	**145 days?**	**Mon 2/6/23**
28	Educational Program Standards, and Policies	40 days	Fri 3/10/23
29	Initial Space Summary	20 days	Fri 3/10/23
30	Evaluation of Existing Conditions	40 days	Fri 3/10/23
31	Site Development Requirements	40 days	Fri 3/10/23
32	Educational Visioning Session No. 1	1 day	Wed 3/22/23
33	Educational Visioning Session No. 2	1 day	Wed 3/29/23
34	Community Visioning Session No. 1	1 day	Mon 4/3/23
35	Educational Visioning Session No. 3	1 day	Wed 4/12/23
36	Community Visioning Session No. 2	1 day	Thu 4/13/23
37	Lincoln Elementary School Building Tour	1 day	Wed 4/26/23
38	Maria Hastings Elementary School Building Tour	1 day	Thu 5/18/23
39	Community Forum No. 1	1 day	Thu 5/18/23
40	Preliminary Evaluation of Options	26 days	Thu 6/8/23
41	SC Review of Ed. Program and Space Summary	1 day	Tue 6/13/23
42	SC support of Ed. Program and Space Summary	1 day	Sun 2/26/23
43	SBC Review of criteria and options	1 day	Tue 6/20/23
44	PDP Draft Available to SBC and the Public	6 days	Thu 7/6/23
45	Community Forum No. 2	1 day	Tue 7/11/23
46	SBC PDP Approval	1 day	Thu 7/13/23
47	Submit PDP to MSBA	1 day	Fri 7/14/23
48	MSBA Review	6 wks	Mon 7/17/23
49	**Preferred Schematic Report (PSR)**		
50	PSR Submittal Development	110 days	Mon 7/17/23
51	Community Forum No. 3	1 day	Thu 9/21/23
52	Community Forum No. 4	1 day	Thu 11/16/23
53	Final SC Approval of Educational Plan and Space Summa	1 day	Mon 11/13/23
54	SBC Submittal Approval Date	5 days	Mon 12/11/23
55	Submit PSR to MSBA	5 days	Mon 12/18/23
56	MSBA Staff Review	15 days	Mon 12/25/23
57	Respond to MSBA PSR Comments	10 days	Mon 1/15/24
58	FAS Presentation	1 day?	Mon 1/15/24
59	Address FAS Comments	15 days	Tue 1/16/24
60	MSBA PS Board Approval	3 wks	Tue 2/6/24
61	**MODULE 4: SCHEMATIC DESIGN**	**174 days?**	**Mon 12/25/23**
62	Schematic Design Binder Development	26 wks	Mon 12/25/23
63	SD Notification Email Sent	1 day?	Mon 6/10/24
64	Submit to MSBA	0 days	Fri 6/21/24
65	MSBA Board Meeting TBD	44 days	Mon 6/24/24
66	**MODULE 5: PROJECT FUNDING APPROPRIATION**	**71 days**	**Fri 8/23/24**
67	Project Scope and Budget Agreement	25 days	Fri 8/23/24
68	Local Vote	8 wks	Mon 9/2/24
69	Execute Project Funding Agreement	25 days	Mon 10/28/24
70	**MODULE 6: DETAILED DESIGN**	**285 days**	**Mon 10/28/24**
71	DD	20 wks	Mon 10/28/24
72	CD	37 wks	Mon 3/17/25
73	**MODULE 7: CONSTRUCTION**	**1171 days**	**Mon 12/1/25**
74	Bidding/GMP	40 days	Mon 12/1/25
75	Submittals/Shops	90 days	Mon 1/26/26
76	Mobilize	0 days	Fri 5/29/26
77	**Phase 1 Building**	**865 days**	**Mon 6/1/26**
78	Option 1 Base Repair	104 wks	Mon 6/1/26
79	Option 2 Add Reno 325	147 wks	Mon 6/1/26
80	Option 3A & 3B 325 (3 story)	104 wks	Mon 6/1/26
81	Option 3C & 3D 325 (2 story)	104 wks	Mon 6/1/26
82	Option 5 Add Reno 640 (@Fox Hill)	173 wks	Mon 6/1/26
83	Option 6A & 6B 640 (@Fox Hill)	108 wks	Mon 6/1/26
84	Option 7 Add Reno 640 (@Pine Glen)	173 wks	Mon 6/1/26
85	Option 8 New 640 (@Pine Glen)	108 wks	Mon 6/1/26
86	**Phase 2 - site/demo**	**520 days**	**Mon 5/29/28**
87	Option 1 Base Repair	13 wks	Mon 5/29/28
88	Option 2 Add Reno 325	35 wks	Mon 3/26/29
89	Option 3A & 3B 325 (3 story)	17 wks	Mon 5/29/28
90	Option 3C & 3D 325 (2 story)	17 wks	Mon 5/29/28
91	Option 5 Add Reno 640 (@Fox Hill)	35 wks	Mon 9/24/29
92	Option 6A & 6B 640 (@Fox Hill)	22 wks	Mon 6/26/28
93	Option 7 Add Reno 640 (@Pine Glen)	35 wks	Mon 9/24/29
94	Option 8 New 640 (@Pine Glen)	22 wks	Mon 6/26/28
95	**Final Completion**	**456 days**	**Fri 8/25/28**
96	Option 1 Base Repair	0 days	Fri 8/25/28
97	Option 2 Add Reno 325	1 day	Mon 11/26/29
98	Option 3A & 3B 325 (3 story)	1 day	Mon 9/25/28
99	Option 3C & 3D 325 (2 story)	1 day	Mon 9/25/28
100	Option 5 Add Reno 640 (@Fox Hill)	1 day	Mon 5/27/30
101	Option 6A & 6B 640 (@Fox Hill)	1 day	Mon 11/27/28
102	Option 7 Add Reno 640 (@Pine Glen)	1 day	Mon 5/27/30
103	Option 8 New 640 (@Pine Glen)	1 day	Mon 11/27/28



RECEIVED
By Town Clerk's Office at 2:42 pm, Jun 26, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: June 28, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m0a04b54709dc67d4a8161463766f3f91

Join by meeting number
Meeting number (access code): 2334 214 7922
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Approval of June 20th, 2023, Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
11. Public Comment
12. Next Meetings
13. Adjourn

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

https://www.foxhillbuildingproject.com/committee

RECEIVED
By Town Clerk's Office at 12:31 pm, Jun 15, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: June 20, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=ma3965f7adf6263414751bf23868a7ead

Join by meeting number
Meeting number (access code): 2348 439 7572
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Approval of May 30th, 2023, Meeting Minutes
3. Working Group Update
4. Review Educational Program & Space Summary
5. Criteria Matrix Review
6. Design Concepts Review
7. Upcoming Milestones/Dates
8. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
9. Public Comment
10. Next Meetings
11. Adjourn

RECEIVED
By Town Clerk's Office at 12:37 pm, May 25, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: May 30, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m8461e7311b9e5705019a397ff0120802

Join by meeting number
Meeting number (access code): 2337 422 2425
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of May 16th, 2023, Meeting Minutes
3. SBC Member Update
4. Recap Community Forum Meeting
5. Criteria Matrix Review
6. Design Concepts Review
7. Upcoming Milestones/Dates
8. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
9. Public Comment
10. Next Meetings
11. Adjourn

RECEIVED
By Town Clerk's Office at 3:04 pm, May 11, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: May 16, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m0dccfb771e2713dd23ce692bb761d803

Join by meeting number
Meeting number (access code): 2330 643 1122
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of May 2nd, 2023, Meeting Minutes
3. Public Comment
4. Design Update
5. Pine Glen SBC Representation
6. Upcoming Milestones/Dates
7. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
8. Next Meetings
9. Adjourn

RECEIVED
By Town Clerk's Office at 9:46 am, Apr 28, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee

DATE: May 2, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m0fcc110fa87fcd58c7a35e3f5e26cfbc

Join by meeting number
Meeting number (access code): 2330 460 5181
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of April 13th, 2023, Meeting Minutes
3. Public Comment
4. Financial Update
5. Design Update
6. Upcoming Milestones/Dates
7. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
8. Next Meetings
9. Adjourn

RECEIVED
By Town Clerk's Office at 1:12 pm, Apr 10, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee

DATE: April 13, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=mc005c3128158b5a0e26c9f18ffd4529b

Join by meeting number
Meeting number (access code): 2336 642 9431
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of March 7th, 2023, Meeting Minutes
3. Public Comment
4. Financial Update
5. Existing Conditions Update
6. Educational Program Update
7. Upcoming Dates
8. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
9. Next Meetings
10. Adjourn

RECEIVED
By Town Clerk's Office at 9:36 am, Mar 02, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee

DATE: March 7, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=mf057a8babfb3c46d7cf28a63e5d8513f

Join by meeting number
Meeting number (access code): 2349 065 7830
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of February 7th, 2023, Meeting Minutes
3. Public Comment
4. Financial Update
5. Existing Conditions Update
6. Educational Program Update
7. Working Group Update
8. Project Website Update
9. Upcoming Dates
10. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
11. Next Meetings
12. Adjourn

RECEIVED
By Town Clerk's Office at 10:39 am, Feb 02, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee

DATE: February 7, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m2850adf7ec2fbb4a0007ef77738b6aad

Join by meeting number
Meeting number (access code): 2331 566 4339
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2022, Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Group Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
12. Public Comment
13. Next Meetings
14. Adjourn

RECEIVED
By Town Clerk's Office at 12:55 pm, Jan 09, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee

DATE: January 11, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m7c9c17a59a0435ab2e723e3dfe1f159d

Join by meeting number
Meeting number (access code): 2345 882 8318
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022, Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
11. Public Comment
12. Next Meetings
13. Adjourn

RECEIVED
By Town Clerk's Office at 3:31 pm, Nov 17, 2022

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee

DATE: November 22, 2022

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

The public can also access this meeting via WebEx Technology (see below). This meeting/hearing of the Fox Hill School Building Committee will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m21a8efea0033c215a26f07fec69afd61

Join by meeting number
Meeting number (access code): 2344 484 8328
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Previous Topics & Approval of November 1st, 2022, Meeting Minutes
3. Invoices and Commitments for Approval
4. SBC Voting Member Review and Approval
5. Designer Procurement Update
6. Designer RFS Update
7. SBC Goals Update
8. Working Groups
9. Project Website Update
10. Early Consultants Update
11. Educational Program
12. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
13. Public Comment
14. Next Meetings
15. Adjourn

RECEIVED
By Town Clerk's Office at 12:12 pm, Oct 27, 2022

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30 A, c. §18-25)

DEPT./BOARD: Fox Hill School Building Committee

DATE: November 1, 2022

TIME: 7:00 PM

PLACE: Webex (Virtual)

This meeting/hearing of The Fox Hill School Building Committee will be held virtually via the WebEx information provided. Members of the Public are welcome to attend this meeting virtually.

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=mfdded19ca6adda0c6b87afeb9139b672

Join by meeting number
Meeting number (access code): 2330 299 5365
Meeting password: Burlington

Agenda

1. Call to Order & Intro
2. Dore + Whittier Introductions
3. Previous Topics & Approval of August 15th, 29th, 30th, 31st, 2022 Meeting Minutes
4. Invoices and Commitments for Approval
5. SBC Voting Member Review and Approval
6. Designer Procurement Timeline
7. Designer RFS Review and Approval to Submit to MSBA
8. SBC Goals
9. Working Groups
10. Project Website
11. Early Consultants (Hazmat/Geotech)
12. Ed Program
13. Other Topics not Reasonably Anticipated 48 hours prior to the Meeting
14. Public Comment
15. Next Meetings
16. Adjourn

RECEIVED
By Town Clerk's Office at 2:20 pm, Aug 29, 2022

TOWN OF BURLINGTON

Meeting Posting Notice of Public Meeting – (As required by G.L. c. 30A, c §18-25)

DEPT./BOARD:	Fox Hill School Building Committee Special Session – Joint OPM (Owner's Project Manager) Selection Committee
DATE:	August 31, 2022
TIME:	4:00 pm
PLACE:	School Committee Room, 123 Cambridge Street, Burlington, MA

The public can also access this meeting via WebEx Technology (see below). The Fox Hill School Building Committee will hear public comments in person and virtually.

AGENDA*

1. Welcome and Pledge of Allegiance
2. Public Participation – Remote attendees can access through WebEx. The WebEx information is below.
3. News & Updates
4. OPM (Owner's Project Manager) Interview(s) & Discussion
5. Adjourn

*Agenda subject to change

WEBEX MEETING ACCESS INFORMATION

Wednesday, August 31, 2022

4:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 2 hrs

Join meeting

More ways to join:

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m173582a59c300fe1d0863bba79da2dd4

Join by meeting number

Meeting number (access code): 2330 943 2303

Meeting password: Burlington

Tap to join from a mobile device (attendees only)

+1-408-418-9388,,23309432303## United States Toll

Join by phone

+1-408-418-9388 United States Toll

Global call-in numbers

Join from a video system or application

Dial 23309432303@townofburlington.webex.com

You can also dial 173.243.2.68 and enter your meeting number.

Need help? Go to https://help.webex.com

RECEIVED
By Town Clerk's Office at 2:13 pm, Aug 25, 2022

TOWN OF BURLINGTON

Meeting Posting Notice of Public Meeting – (As required by G.L. c. 30A, c §18-25)

DEPT./BOARD:	Fox Hill School Building Committee Special Session – Joint OPM (Owner's Project Manager) Selection Committee
DATE:	August 30, 2022
TIME:	6:00 pm
PLACE:	School Committee Room, 123 Cambridge Street, Burlington, MA

The public can also access this meeting via WebEx Technology (see below). The Fox Hill School Building Committee will hear public comments in person and virtually.

AGENDA*

1. Welcome and Pledge of Allegiance
2. Public Participation – Remote attendees can access through WebEx. The WebEx information is below.
3. News & Updates
4. OPM (Owner's Project Manager) Interview(s) & Discussion
5. Adjourn

*Agenda subject to change

WEBEX MEETING ACCESS INFORMATION

Tuesday, August 30, 2022

6:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 2 hrs

Join meeting

More ways to join:

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m6dc0eea3a4a2e95a9b2af660b8d87287

Join by meeting number

Meeting number (access code): 2347 239 2973

Meeting password: Burlington

Tap to join from a mobile device (attendees only)

+1-408-418-9388,,23472392973## United States Toll

Join by phone

+1-408-418-9388 United States Toll

Global call-in numbers

Join from a video system or application

Dial 23472392973@townofburlington.webex.com

You can also dial 173.243.2.68 and enter your meeting number.

Need help? Go to https://help.webex.com

RECEIVED
By Town Clerk's Office at 2:14 pm, Aug 25, 2022

TOWN OF BURLINGTON

Meeting Posting Notice of Public Meeting – (As required by G.L. c. 30A, c §18-25)

DEPT./BOARD:	Fox Hill School Building Committee Special Session – Joint OPM (Owner's Project Manager) Selection Committee
DATE:	August 29, 2022
TIME:	4:00 pm
PLACE:	School Committee Room, 123 Cambridge Street, Burlington, MA

The public can also access this meeting via WebEx Technology (see below). The Fox Hill School Building Committee will hear public comments in person and virtually.

AGENDA*

1. Welcome and Pledge of Allegiance
2. Public Participation – Remote attendees can access through WebEx. The WebEx information is below.
3. News & Updates
4. OPM (Owner's Project Manager) Interview(s) & Discussion
5. Adjourn

*Agenda subject to change

WEBEX MEETING ACCESS INFORMATION

Monday, August 29, 2022

4:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 2 hrs

Join meeting

More ways to join:

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m090ea7e88d870f1b168da2769bee1b78

Join by meeting number

Meeting number (access code): 2341 497 3762

Meeting password: Burlington

Tap to join from a mobile device (attendees only)

+1-408-418-9388,,23414973762## United States Toll

Join by phone

+1-408-418-9388 United States Toll

Global call-in numbers

Join from a video system or application

Dial 23414973762@townofburlington.webex.com

You can also dial 173.243.2.68 and enter your meeting number.

Need help? Go to https://help.webex.com

RECEIVED
By Town Clerk's Office at 1:44 pm, Aug 09, 2022

TOWN OF BURLINGTON

Meeting Posting Notice of Public Meeting – (As required by G.L. c. 30A, c §18-25)

DEPT./BOARD:	Fox Hill School Building Committee
DATE:	August 15, 2022
TIME:	7:00 p.m.
PLACE:	BHS Small Conference Room, 123 Cambridge Street, Burlington, MA

The public can also access this meeting via WebEx Technology (see below). The Fox Hill School Building Committee will hear public comments in person and virtually.

AGENDA*

1. Welcome and Pledge of Allegiance
2. Approval of Minutes – 6/23/22
3. Public Participation - Remote attendees can access through Webex. The Webex information is below.
4. News & Updates
   a. OPM Selection Process
5. Adjourn

*Agenda subject to change

WEBEX MEETING ACCESS INFORMATION

Monday, August 15, 2022

7:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 2 hrs

Join meeting

More ways to join:

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=md4c239cbc0afdcd09c56e83d34465b5a

Join by meeting number

Meeting number (access code): 2342 448 4800

Meeting password: Burlington

Tap to join from a mobile device (attendees only)

+1-408-418-9388,,23424484800## United States Toll

Join by phone

+1-408-418-9388 United States Toll

Global call-in numbers

Join from a video system or application

Dial 23424484800@townofburlington.webex.com

You can also dial 173.243.2.68 and enter your meeting number.

Need help? Go to https://help.webex.com

RECEIVED
By Town Clerk's Office at 11:56 am, Jun 29, 2023

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: June 20, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	6/20/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
	David Rosenblatt*	Fox Hill Principal	✓	Donna DiNisco	DiNisco Design
	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member	✓	Jae Rodgers	
✓	Tara Carroll	SBC Member	✓	John Tucci	
	Audrey Boeri	SBC Member	✓	Cathy Beyer	
✓	George Papayannis	SBC Member	✓	Rachel Small	
✓	Katherine Bond*	Vice Chair of SBC	✓	John Iler	
✓	Jeremy Brooks*	SBC Member	✓	Liz Trelegan	
✓	Christine Monaco*	SBC Member	✓	Karin Keyser	
✓	Martha Simon*	SBC Member	✓	Marie Torres	
✓	Kristen Downie	Secretary	✓	Chris Campbell	
✓	John Lyons*	Pine Glen Principal	✓	Jess Goodstone	
✓	Margo Bunker*	SBC Member			
✓	Amanda Hanafin	SBC Member			
✓	Melissa Gilberg	SBC Member			
✓	Lauren Anderson				
✓	Lindsey Woodward				
✓	Melissa Ulliani				
✓	Alison Varrell				
✓	Amanda Pierce				

* SBC Voting Member

Item No.	Description	Action
10.1	**Call to Order & Intro**: 6:08 pm meeting was called to order by SBC Chair M. Massardo with 13 of 15 voting members in attendance.	Record
10.2	**Previous Topics & Approval of May 30th, 2023, Meeting Minutes:** ➢ A motion to approve the 05/30/2023 meeting minutes[1] as submitted made by K. Bond and seconded by M. Simon. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – Yes - N. Coscia – Yes – J. Lyons – Yes – P. Sagarino – Yes – E. Conti – Yes – C. Monaco – Yes – M. Bunker - Yes. Abstention: None. Motion passes, minutes approved.	Record
10.3	**Working Group Update:** ➢ C. Dell Angelo says they had an executive working group meeting where they reviewed the upcoming SBC meetings. They also met with the communications working group and discussed the distribution of the community meeting flyer and information about the upcoming community meeting. Then we also met with the sustainability working group where they talked about goals.	Record
10.4	**Review of Educational Program & Space Summary:** ➢ D. DiNisco had asked the community to rank the priorities that were important to them as they start looking at and thinking about the vision for the new school. What they have received is that the community feels that the most important priority is the educational benefits for the new school site. Considerations and impacts are second with equity to the other elementary schools in the district ranked third. And then rounding off at four is the building design considerations and impacts. Then there were construction impacts, followed by sustainability, cost and schedule and then operating costs. ➢ D. DiNisco recaps the sustainability working group meeting on the slideshow[2]. ➢ D. DiNisco says they met with the school committee last week and presented the educational program for both enrollment options. So, there are two documents to support the educational program, as it would impact 365 students and 640 students. Says the goal is to be before the school committee next Monday night, on the 26th, with the goal of receiving their approval for the educational program as well as	Record

[1] May 30, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

the spaces and the space summary required to support those educational programs.

- D. DiNisco talks about the space summary. Goes through the different categories on the slide[2]. Says the core academic spaces are the general classrooms, science and tech, engineering classrooms, ELL programs, literacy, and math specialists, as well as all the tutors to support the students. The special education program includes the lab program that currently exists at Fox Hill. What it will also do is bring one of the classrooms that is currently at Memorial because of space constraints to Fox Hill. Then as they started looking to a new school, whether it be for enrollment one or enrollment two, the district is finding that the DSC program at Pine Glen is growing and it's creating space issues at Pine Glen. The thought and opportunity with the new Fox Hill School is to bring one part of the DSC program into Fox Hill and to keep the other half of the DSC program at Pine Glen. The health and PE category is for a full-sized gym that will fit a full-size basketball court for high school students. The school department feels that having a little larger gym for more runoff space so that you can rent out and use the gym will be beneficial to the entire community. The media center is designed based on MSBA guidelines. The dining category includes the cafeteria and the stage. It will include the kitchen, the teacher's dining, and a stage.
- D. DiNisco says the Fox Hill Only option will need 91,000 GSF and for the Combined School they will need 155,000 GSF.
- J. Priest asks about the gym size coverage by MSBA for 325 students. D. DiNisco says they will reimburse up to 6300SF for both sizes of the school.
- M. Massardo asks about the size of the current cafeteria versus the proposed one for Fox Hill only option which is smaller. D. DiNisco responds saying some of it comes from the kitchen and cafeteria itself. Says it is based on having two seatings for lunch.
- A. Hanafin asks about splitting the size of the cafeteria into sections. D. DiNisco responds saying yes, they will have options for this once design begins for a portioned wall that can be closed off.
- C. Monaco asks about the dining area and confirming the different sizes. Also asks about the full-size gym and what they would reimburse for and the cafeteria as well. D. DiNisco responds saying for the gym the MSBA will participate in reimbursing 6,300 SF for both options. E. Conti says they added 1000 SF of run off so the gym can be for the high school practices and games. D. DiNisco says the gym is the only space where they are asking for additional space for the Fox Hill Only school.
- J. Priest asks the admin/medical being larger have the MSBA reimbursed for this. D. DiNisco says anything above the MSBA guidelines the Town of Burlington will be responsible for.
- D. DiNisco discusses more of the space requirements in the slide shown[2].

[1] May 30, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

- C. Monaco asks if the reimbursement is apt to be higher on the smaller school than the bigger school. D. DiNisco says yes, it is.
- A. Hanafin asks about nurses' office being shared in the combined space. D. DiNisco says no, there would be separate nurses and administration offices. The spaces shared are Kitchen, Cafetorium, Media Center, and Gym.
- M. Bunker about the different options being considered with the combined school. D. DiNisco responds saying they are identifying higher square footages to submit to MSBA. Once they get through PDP then they can refine those options.
- D. DiNisco explains the grossing factor. The MSBA focuses on program spaces and does not account for things such as mechanical spaces, corridors, bathrooms etc. The grossing factor accounts for these spaces.
- D. DiNisco explains the square footage and the grossing factor.
- J. Danizio asks where they will really take a hit for reimbursement is the site costs and FF&E. D. DiNisco responds yes, and they will have all the costs breakdown.
- C. Monaco asks about the different reimbursement categories. D. DiNisco responds saying the reimbursement cap is $430 per square foot. She acknowledged this doesn't cover the whole cost. Says it used to be 8% of the cost of the building construction. Says they cover $10 a square foot for site costs. S. Brown responds saying the MSBA willingly acknowledges they don't have the funds to fund more on each project. They just can't keep pace with construction costs.
- C. Monaco asks clarifying question about the site reimbursement. D. DiNisco responds saying before it used to be 8% overall cost of building construction for site. Now it is $10 per square foot. S. Brown responds they can provide a line-by-line estimate on what the reimbursement will come in at. They won't have MSBA formal numbers until later on in the project.
- M. Gilberg asks about special ed space and what it included. D. DiNisco responds saying it goes from quiet rooms or reflection spaces to occupational therapy, physical therapy, speech, and language pathologists. As well as small breakout spaces, adjustment councilors.
- M. Simon asks about special education teacher spaces and offices and if they're included. D. DiNisco says yes, it is.
- C. Monaco asks about the options we have and are submitting. D. DiNisco responds by showing the PDP options slide[2] and going over each of them.
- C. Monaco asks about the two different educational plans and why they have two. D. DiNisco responds saying the plans are mostly the same besides some small nuances. The introduction of the larger enrollment option articulates that MSBA is asking them to look at this enrollment. The teaching methodology will stay the same in both programs.

[1] May 30, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ D. DiNisco goes over the traffic study findings in the slideshow[2]. Says the Data collection included vehicles, bicycles, and pedestrians. Intersections are highly graded for level of service. The average traffic speed is 30-32 mph. The longest traffic queue was two cars. Vehicle crash data review: 6 total over the last 5 years (3 of them single car incidents). Safety improvements recommendations: Update school zone and crosswalk signage and striping, add crosswalks and signage to Fox Hill / Vincent, and Westwood / Richard. Widen existing sidewalks to 8 feet to accommodate bikes and walkers. Add traffic calming measures. D. DiNisco talks about the town planned improvements in the slide[2]. M. Massardo follows saying the flashing lights at crosswalks is grant pending. They are creating a safe route to school task force over the summer. ➢ D. DiNisco goes over the Net Zero slides[2]. Says EUI stands for Energy Use Intensity and with a building that is 25 EUI or less they can provide a building that is net zero ready. ➢ D. DiNisco goes over the PDP cost estimate slide[2].	
10.5	**Criteria Matrix Review**: ➢ D. DiNisco talks about the criteria matrix shown in the slideshow[2]. ➢ G. Papayannis asks about the criteria matrix and option 4 not being included. C. Dell Angelo says they will resend with all the options. ➢ M. Simon asks how they can evaluate the matrix if they haven't received all the info. C. Dell Angelo says the first step was agreeing with all the different categories in the matrix. She will get out the revised matrix with feedback from everyone tonight. S. Brown says this is a tool to help narrow down the options. Says this isn't a requirement for PDP submission. They are just trying to get a jumpstart on the options. ➢ R. Riggs asks to treat empty cells as neutral in the excel sheet. ➢ A. Hanafin asks if any of the options will be eliminated before the July community meeting. D. DiNisco says they will have all the options at the community meeting. ➢ R. Riggs says to fill out the things that are important to you so that way they can see what's important.	Record
10.6	**Design Concepts Review:** ➢ D. DiNisco goes over the different options in the slideshow[2]. Option 1 & 4 are Fox Hill repairs/code upgrades (325/640 Students). Existing single-story building to remain. Phased occupied construction for repairs/code upgrades. Option 2 is Fox Hill Addition/Renovation (325 Students). Proposed 3 story addition. Existing building to be partially demolished. Requires building to be vacated for addition/renovation. Option 3 is Fox Hill New Construction (325 Students). Existing school remains	Record

[1] May 30, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	operational during construction. Existing building to be demolished after the new building is complete. Option 5 is Fox Hill Addition/Renovation (640 Students). Existing building to be partially demolished. Requires building to be vacated for addition/renovation. 25,000 GSF of existing building to be renovated, 131,000 GSF 3-story building addition. Option 6 is Fox Hill New Construction (640 Students) 3-story building 155,000 GSF. Existing school remains operational during construction. Existing building to be demolished after the new building is complete. Option 7 Pine Glen Addition/Renovation (640 Students) Proposed building 164,000 GSF. Existing building to be partially demolished. Does not require building to be vacated for addition/renovation. 48,000 GSF of existing building to be renovated, 112,000 GSF 3-story addition. Site is extremely limited, cannot accommodate queuing and play fields. Option 8 Pine Glen New Construction (640 Students). Proposed 3-story 155,000 GSF, existing school remains operational during construction. Existing building to be demolished after the new building is complete. Future Pine Glen New Construction (325 students) – Non MSBA. 3-story 83,000 GSF 3 classrooms per grade, K-5. ➢ K. Bond asks about making sure to include the costs of knocking down the building as well. D. DiNisco says they will include that. ➢ G. Papayannis asks about the difference between 2 stories versus 3 stories. D. DiNisco says it is a local preference for 2 stories. Says it's what the priorities of the community are. ➢ A. Hanafin advocates for two story school. Says as a teacher she would like to see the sense of community and two stories allow for that. ➢ M. Simon asks if all these options allow for expansion in the future. D. DiNisco says they do. Says there is an expansion category on the criteria matrix.	
10.7	**Upcoming Milestones/Dates:** ➢ Talked about in the Next Meetings section.	Record
10.8	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ A motion to approve the Dore + Whittier Invoice No. 08 in the amount of $30,062.50, DiNisco Invoice No. 9817 in the amount of $29,545.00, DiNisco Invoice No. 9818 for the Existing Conditions Survey in the amount of $39,934.08, DiNisco Invoice No. 9819 for the Wetlands/ANRAD in the amount of $445.50 made by M. Simon and seconded by C. Monaco. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – Yes - N. Coscia – Yes – J. Lyons – Yes – P.	Record

[1] May 30, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	Sagarino – Yes – E. Conti – Yes – C. Monaco – Yes – M. Bunker - Yes. Abstention: None. Motion passes, Invoices approved.	
10.9	**Public Comment**: ➢ Dennis Dolorey makes a public comment. Says the traffic pattern is very bad. At times he has trouble getting out of his driveway due to this. Wants more attention to be paid to the traffic study. Asks if there is an emergency at Fox Hill, how can they handle the emergency vehicles getting into Fox Hill School. Says as the plan stands, they don't seem to be able handle a situation like this. ➢ John Iler makes a public comment. Says he asked the town clerk for the minutes of the working groups. Says in the opinion of the town clerk and town legal the open meeting law was violated. Says these are subcommittees of a public body. He states the SBC Chair stated there is another legal opinion where these working groups are not subcommittees. Says this doesn't make sense as these multi-member sub-bodies of a public body that are holding formal meetings created to advise and inform the larger public body. He says the term working group doesn't appear in the open meeting law so its not an exception to the open meeting law. He says it's good to hear these will be posted meetings going forward. Says one issue that he would like addressed is to show all the working groups on the website. Asks for meetings that were not posted to be posted so the public can catch up on those minutes. He says received some of the minutes but none from the sustainability working group. He didn't file a formal complaint, just wants open meetings and open process. Says the unconscious bias is to control information and limit public access. Wants the working groups to be posted with members and minutes. ➢ David Woodilla makes a public comment. Says there has been a steady stream of people not wanting the combined school. Says there is considerable amount of scientific peer reviewed research on total school size and what's best for younger learners. D.T. Williams concluded that somewhere between 300-400 students is optimal for elementary schools. In general, smaller schools promote better student's attitudes, social behavior, better extra circular participation, and interpersonal relationships. Teachers have better attitudes and a stronger efficacy in smaller schools. The general view of a school within a school is a marketing gimmick. It doesn't work and is just to grasp something more efficient. Says a 640 school doesn't align with educational science or community values or provide the best education for younger students. Time to vote the proposal down and move forward with smaller school planning. Says Ms. Danizio has reminded them that this is Burlington's decision. Says to vote yes on the 350-student plan and vote down the 640-student plan.	

[1] May 30, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ Don Doherty makes a public comment. He agrees and is in favor of the smaller school. He is also concerned about the traffic with the combined school. He says he is also concerned with people spraying trees and cutting them down for the new parking lot. He is concerned with the damage being done to the woods/trees. ➢ Wendy Berkeley makes a public comment. Was curious about when the decision is being made about the new school, does the architect meet with the people that will be using the spaces. Is confused with who gets access to make decisions with the criteria matrix is it just the board or open to the public. Says she is also in favor of keeping the small schools/community.	
10.10	**Next Meetings**: ➢ Monday, June 26th, 2023 – School Committee Meeting at 7:00PM ➢ Wednesday, June 28th, 2023 – School Building Meeting at 6:00PM ➢ Tuesday July 11th, 2023 – Community Presentation at 7:00PM ➢ Thursday July 13th, 2023 – School Building Committee at 6:00PM	Record
10.11	**Adjourn**: 8:31 pm A motion was made by E. Conti and seconded by K. Bond to adjourn the meeting, Discussion: None. Meeting adjourned.	Record

Submitted: 6/28/23

Approved: 6/28/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] May 30, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

June 28, 2023

DORE + WHITTIER

DINISCO DESIGN
architects + planners

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #11

June 28, 2023, 6:00 PM

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Previous Meeting Minutes

1. June 20th, 2023, Minutes

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Response to Previous SBC Comments

- **Emergency vehicle concerns due to Fox Hill current traffic pattern**
  - New school options will provide for emergency vehicle access and improved traffic queuing onsite and alleviate traffic queuing on Fox Hill Rd and Westwood St
  - Safe routes to school work ongoing this summer to alleviate current traffic
- **Working groups not listed on website** Agendas & Minutes | Fox Hill ES (foxhillbuildingproject.com)
  - Working groups are listed on the website
- **Meeting notes from working groups not listed on website** Agendas & Minutes | Fox Hill ES (foxhillbuildingproject.com)
  - Notes after 6/1 are posted on website
- **Spray painted trees and markings to remove trees**
  - Not part of this project
- **Decision about the preferred school option has been made**
  - No decision has been made. Decision is required in November to select a preferred solution to submit to MSBA
- **Traffic report and educational programs not on website** Official Documents | Fox Hill ES (foxhillbuildingproject.com)
  - Traffic report and educational programs posted on website
- **Have not presented 2 story building options** Agendas & Minutes | Fox Hill ES (foxhillbuildingproject.com)
  - Presented 2 story options at SBC meeting on 6/20 and 6/28

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

6/26/23 School Committee Update

- Second discussion on the educational programs and space summaries for enrollments of 325 and 640 students
- Reiterated studying two enrollment options is an MSBA requirement
- Final educational program and space summary will be submitted with the Preferred Solution to MSBA
- School Committee voted to submit both enrollments in the PDP submission pursuant to the MSBA process per the agreement

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

School Building Committee Meeting

BURLINGTON ELEMENTARY SCHOOL

Burlington, MA

June 28, 2023

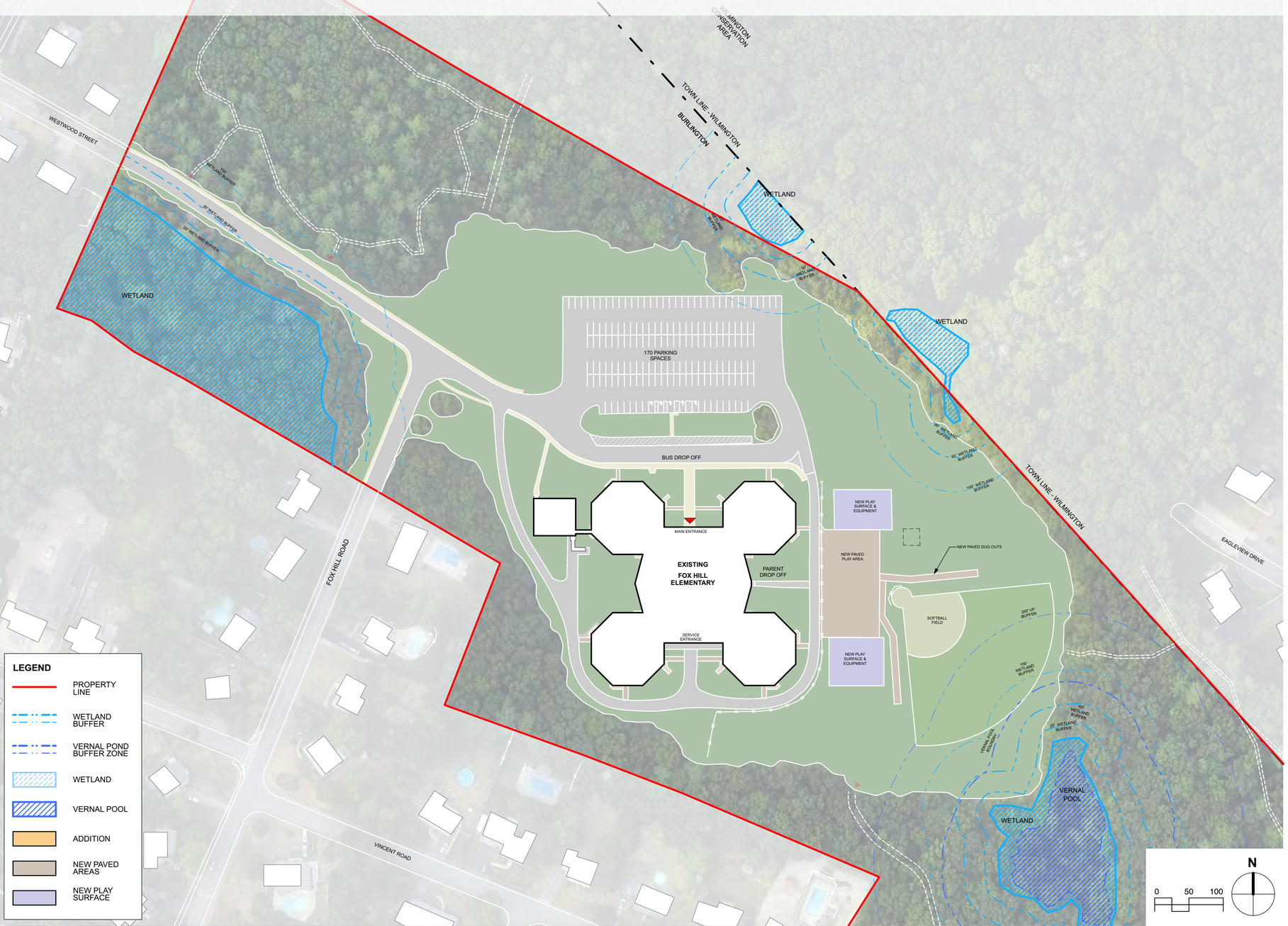
© 2023 DiNisco Design, Inc.

DINISCO DESIGN

PDP Options | Required to be evaluated

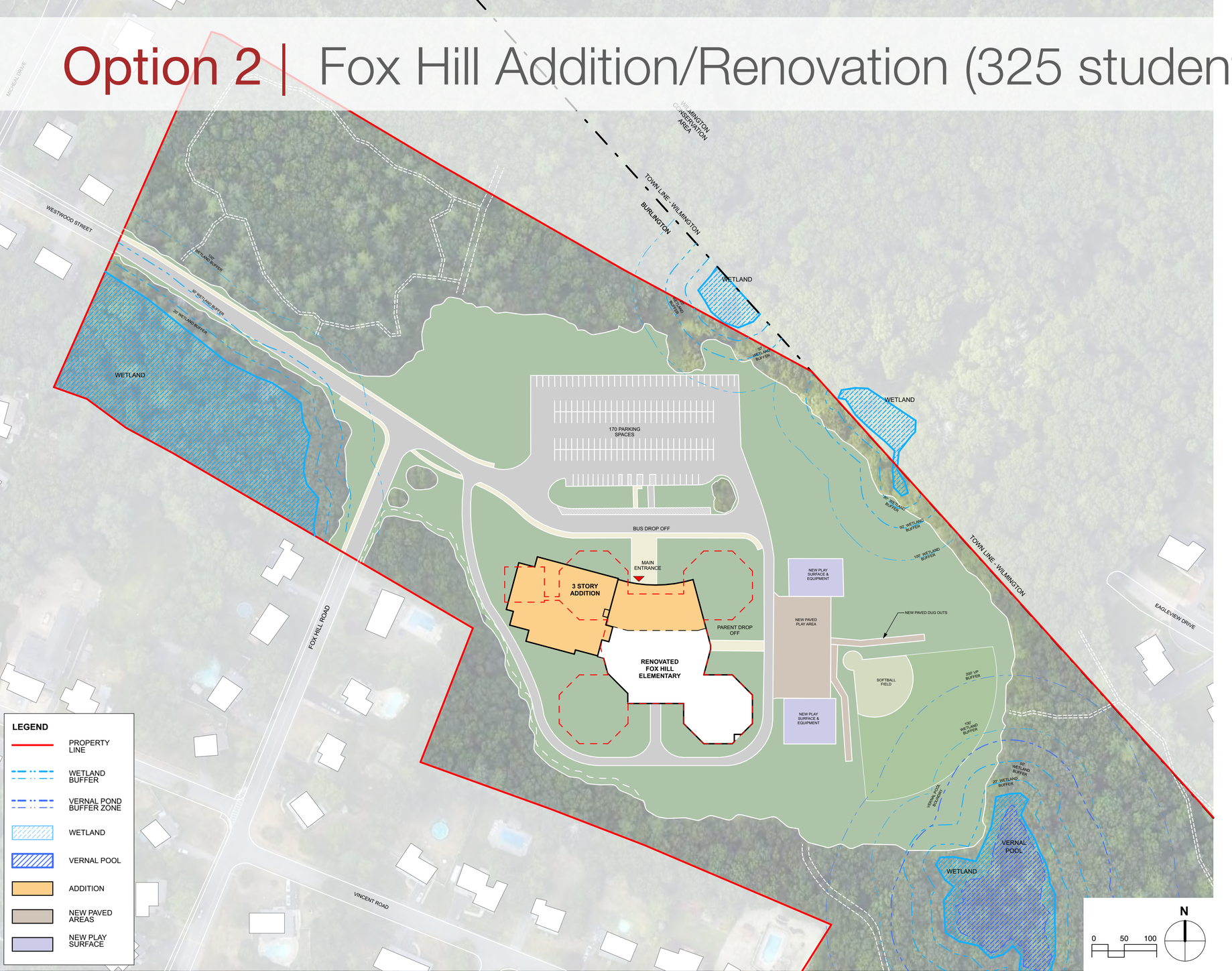
Alternative	Description	Location	# of students	# of classrooms	Solution
Option No. 1	Code Upgrade / Repair Only	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 2	Addition / Renovation	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 3	New Construction	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 4	Code Upgrade / Repair Only	Fox Hill School	640 Students	2 x 3 classrooms /grade	Combined Fox Hill & Pine Glen
Option No. 5	Addition / Renovation	Fox Hill School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools
Option No. 6	New Construction	Fox Hill School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools
Option No. 7	Addition / Renovation	Pine Glen School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools
Option No. 8	New Construction	Pine Glen School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools

Option 1 & 4 | Fox Hill Repairs/Code Upgrades (325/640 students)



- Existing single story building 64,400 GSF to remain
- Requires building to be vacated
- Upgrades include improvements for:
  - life-safety
  - building code compliance
  - accessibility compliance
  - mechanical, electrical, plumbing and fire protection systems replacement/installation
  - envelope replacement
- Does not meet educational program
- Traffic does not improve
- Pine Glen remains as is

Option 2 | Fox Hill Addition/Renovation (325 students) | Conceptual

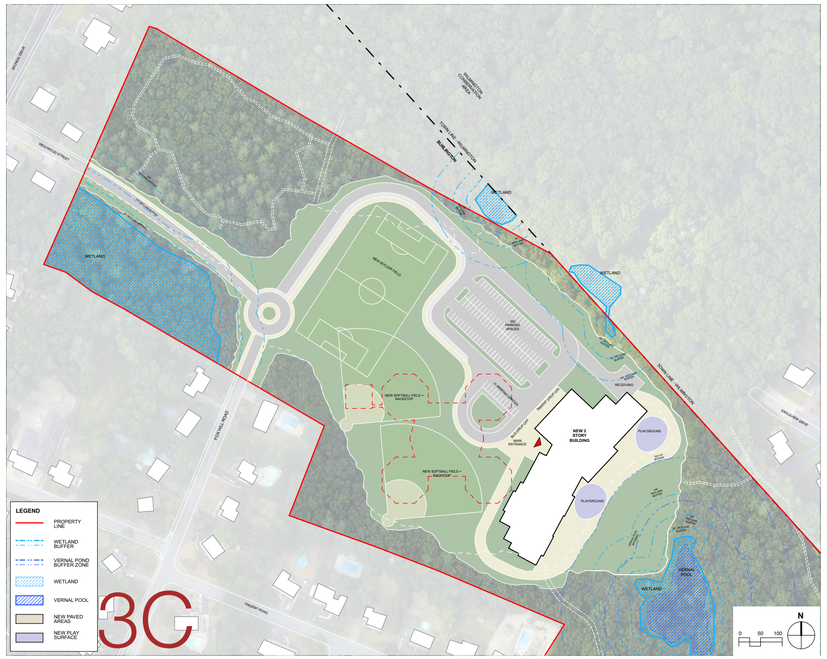


- Proposed building 101,000 GSF
- Existing building to be partially demolished
- Requires building to be vacated
- 25,000 GSF of existing building to be renovated, 76,000 GSF 3-story building addition
- Meets educational program
- Traffic does not improve
- Pine Glen remains as is

Option 3 | Fox Hill New Construction (325 students) | Conceptual

Three-story building on eastern part of the Fox Hill site

Three-story building on northern part of the Fox Hill site



Two-story building on eastern part of the Fox Hill site

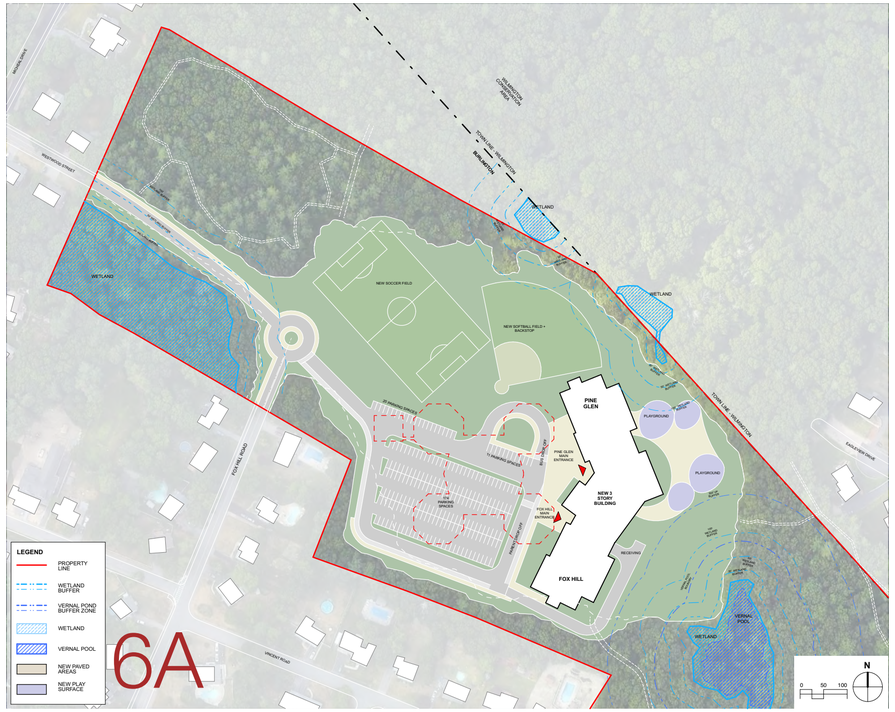
Two-story building on northern part of the Fox Hill site

- Proposed building 91,000 GSF
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Meets educational program
- Options provide for 2 story or 3 story school
- All options provide improved traffic with full on-site queuing
- Pine Glen remains as is

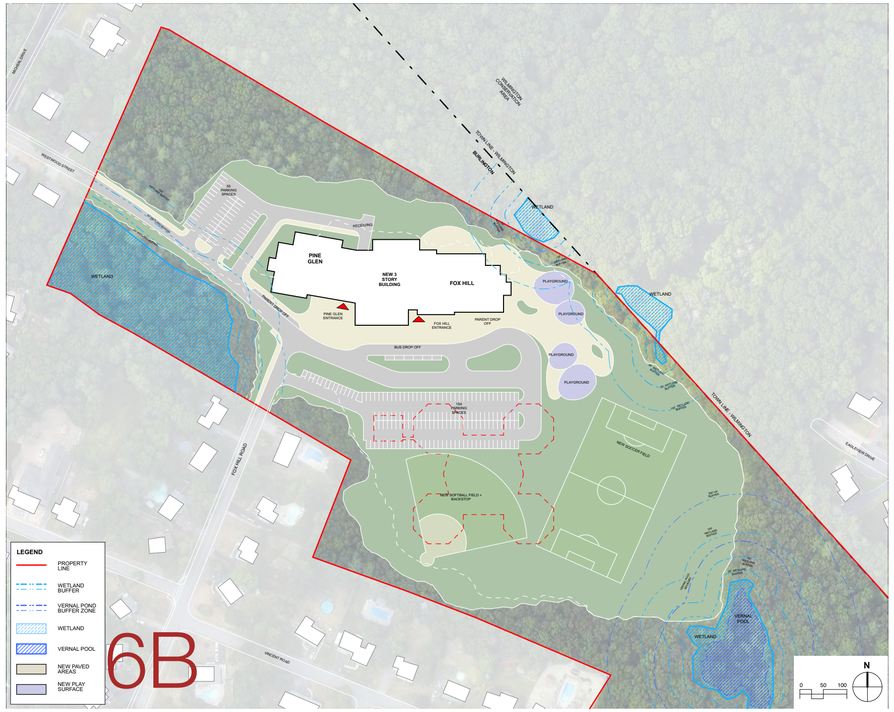
Option 5 | Fox Hill Addition/Renovation (640 students) | Conceptual

- Proposed building 156,000 GSF
- Existing building to be partially demolished
- Requires building to be vacated
- 25,000 GSF of existing building to be renovated, 131,000 GSF 3-story building addition
- Meets educational program
- Traffic is worsened due to existing site circulation
- Pine Glen becomes available for alternative use such temporary student space during HS construction project, BECC, other

Option 6 | Fox Hill New Construction (640 students) | Conceptual



Three-story building on eastern part of the Fox Hill site



Three-story building on norther part of the Fox Hill site

- Proposed 3-story building 155,000 GSF
- 2-story building option challenging
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Meets educational program
- Both options provide improved traffic with full on-site queuing
- Pine Glen becomes available for alternative use such temporary student space during HS construction project, BECC, other

Option 7 | Pine Glen Addition/Renovation (640 students) | Conceptual

- Proposed building 164,400 GSF
- Existing building to be partially demolished
- Does not require building to be vacated
- 48,000 GSF of existing building to be renovated, 112,000 GSF 3-story building addition
- Meets educational program
- Site extremely limited, cannot accommodate queuing and play fields
- Fox Hill becomes available for alternative use such temporary student space during HS construction project, BECC, other

Option 8 | Pine Glen New Construction (640 students) | Conceptual

- Proposed 3-story building 155,000 GSF
- 2-story building option not possible
- Existing school remains operational during construction
- Meets educational program
- Existing building to be demolished after new building is complete
- Site extremely limited, cannot accommodate queuing and site amenities
- Fox Hill becomes available for alternative use such temporary student space during HS construction project, BECC, other

Option 9 | Pine Glen New Construction (325 students) - Non MSBA | Conceptual

- Proposed 3-story building 83,000 GSF3 classroom per grade, K-5
- 2-story building option challenging
- Meets educational program
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Cost of project solely borne by Town of Burlington

School Building Committee Meeting

BURLINGTON ELEMENTARY SCHOOL

Burlington, MA

June 28, 2023

© 2023 DiNisco Design, Inc.

DINISCO DESIGN

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Cost Estimate

- Developed the options to provide enough information for the cost estimator
- Met with estimating team last week
- These **rough order magnitude costs** will change and evolve as we continue the design process and ultimately select a preferred option
- Future estimates:
  - Preferred Schematic Report
  - Schematic Design
  - Design Development
  - 60% Construction Documents
  - 90% Construction Documents

Total Project Budget Template

Insert District and School

DRAFT

Enter Budget Values for Ineligible Costs in light yellow highlighted cells.

NOTE that ineligible costs can not exceed Estimated Budget Cost for any individual line item, distribute across multiple lines if needed.

Template Revised: March 2023
Incorporates revisions to MSBA's project funding limits policy, which was approved at the December 21, 2022 MSBA Board of Directors Meeting.

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Estimated Basis of Maximum Facilities Cost	Estimated Basis of Maximum Total Facilities	Estimated Maximum Total Facilities Grant[1]
		Enter Budget Values for all light yellow highlighted cells.	Enter Budget Values for Ineligible Costs in light yellow highlighted cells.	
Feasibility Study Agreement				
OPM Feasibility Study	$0	$0	$0	
A&E Feasibility Study	$0	$0	$0	
Environmental & Site	$0	$0	$0	
Other	$0	$0	$0	
Feasibility Study Agreement Subtotal	**$0**	**$0**	**$0**	**$0**
Administration				
Legal Fees	$0	$0	$0	**$0**
Owner's Project Manager				
Design Development	$0	$0		
Construction Contract Documents	$0	$0		
Bidding	$0	$0		
Construction Contract Administration	$0	$0		
Closeout	$0	$0		
Extra Services	$0	$0	$0	
Reimbursable & Other Services	$0	$0	$0	
Cost Estimates	$0	$0	$0	
Advertising	$0	$0	$0	
Permitting	$0	$0	$0	
Owner's Insurance	$0	$0	$0	
Other Administrative Costs	$0	$0	$0	
Administration Subtotal	**$0**	**$0**	**$0**	**$0**
Architecture and Engineering				
Basic Services				
Design Development	$0	$0		
Construction Contract Documents	$0	$0		
Bidding	$0	$0		
Construction Contract Administration	$0	$0		
Closeout	$0	$0		
Other Basic Services	$0	$0		
Basic Services Subtotal	**$0**	**$0**	**$0**	
Reimbursable Services				
Construction Testing	$0	$0	$0	
Printing (over minimum)	$0	$0	$0	
Other Reimbursable Costs	$0	$0	$0	
Hazardous Materials	$0	$0	$0	
Geotechnical & Geo-Environmental	$0	$0	$0	
Site Survey	$0	$0	$0	
Wetlands	$0	$0	$0	
Traffic Studies	$0	$0	$0	
Architectural / Engineering Subtotal	**$0**	**$0**	**$0**	**$0**
CM at Risk Pre-Construction Services				
Pre-Construction Services	$0	$0	$0	**$0**
Site Acquisition				
Land / Building Purchase	$0	$0	$0	
Appraisal Fees	$0	$0	$0	
Recording fees	$0	$0	$0	
Site Acquisition Subtotal	**$0**	**$0**	**$0**	**$0**
Construction Costs				
SUBSTRUCTURE				
Foundations	$0			
Basement Construction	$0			
SHELL				
Super Structure	$0			
Exterior Closure	$0			
Exterior Walls	$0			
Exterior Windows	$0			
Exterior Doors	$0			
Roofing	$0			
INTERIORS				
Interior Construction	$0			
Staircases	$0			
Interior Finishes	$0			
SERVICES				
Conveying Systems	$0			
Plumbing	$0			
HVAC	$0			
Fire Protection	$0			
Electrical	$0			
EQUIPMENT & FURNISHINGS				
Equipment	$0			
Furnishings	$0			
SPECIAL CONSTRUCTION & DEMOLITION				
Special Construction	$0			
Existing Building Demolition	$0	$0		
In-Building Hazardous Material Abatement	$0	$0		

Cell C13 - Scope Excluded OPM Fees (Cell I40)

Cell C15 - Costs beyond MSBA funding cap for OPM Basic Services (Cell K48)

Cell C28 - Scope excluded Designer Fees (Cell I41)

Cell C30 - Costs beyond MSBA funding cap for Designer Basic Services (Cell K52)

Soft Cost Reimbursement

Category	Estimated Budget	Excluded Costs	Eligible Soft Costs
Administration:	$0	$0	$0
A/E Services:	$0	$0	$0
Site Acquisition:	Ineligible, therefore not included in calculation		
Miscellaneous Project Costs:	$0	$0	$0
FFE:	$0	$0	$0
Owners Contingency:	Not included in this calculation		
		Total Eligible Soft Costs =	$0

Construction Costs associated with Soft Cost Cap Calculation

Category	Estimated Budget	
CM Pre-Construction Services:	$0	
Construction Cost:	$0	
Construction Contingency:	Not included in this calculation	
Total Construction Cost:	$0	
Soft Cost Allowance:	20%	
Reimbursable Soft Cost:	$0	
Eligible minus Reimbursable =	$0	If >0 enter into Cell C116

-If Eligible minus Reimbursable is negative; OK.
-If Eligible minus Reimbursable is positive enter value into "Soft Costs that exceed 20% of Construction Cost" below in the Ineligible column.

Scope Excluded OPM & Designer Costs associated with Scope Excluded Building Costs

Scope Excluded Aud/PE (GSF):		0	#DIV/0!
Total (GSF):		0	
	Estimated Budget	Excluded (%)	Scope Excluded Costs
OPM Basic Services:	$0	#DIV/0!	#DIV/0!
Designer Basic Services:	$0	#DIV/0!	#DIV/0!

Scope Excluded OPM & Designer Costs associated with Scope Excluded Site Work

Scope Excluded Direct Construction Cost ($):		$0	#DIV/0!
Total Direct Construction Costs ($):		$0	
	Estimated Budget	Excluded (%)	Scope Excluded Costs
OPM Basic Services:	$0	#DIV/0!	#DIV/0!
Designer Basic Services:	$0	#DIV/0!	#DIV/0!
Total Scope Excluded OPM Fees ($):			#DIV/0! Enter in Cell C13
Total Scope Excluded Designer Fees ($):			#DIV/0! Enter in Cell C28

Ineligible Fees associated with OPM (3.5%) & Designer (10%) Fee Caps

Upper Limit:		$0	0	$550 /sf	
Construction Budget:		$0			
Basis of OPM & Designer Fee Caps:		$0			
OPM Services Estimated Budget		Ineligible Costs	Eligible Costs	OPM Value @ 3.50%	Value > 3.5%
Basic Services:	$0	$0	$0	$0	$0
Extra Services:	$0	$0	$0		If >0 enter into Cell C15
Designer Services Estimated Budget		Ineligible Costs	Eligible Costs	Designer Value @ 10.00%	Value > 10%
Basic Services:	$0	$0	$0	$0	$0
Extra Services:	$0	$0	$0		If >0 enter into Cell C30

Ineligible Building Area	Ineligible NSF	Ineligible Aud/PE GSF	Other Ineligible GSF	Estimated District Cost
Core Academic:			-	#DIV/0!
Special Education:			-	#DIV/0!
Art & Music:			-	#DIV/0!
Vocations & Technology:			-	#DIV/0!
Chapter 74 CTE:			-	#DIV/0!
Health & Physical Education:		-		#DIV/0!
Media Center:			-	#DIV/0!
Auditorium / Drama:		-		#DIV/0!
Dining & Food Service:			-	#DIV/0!
Medical:			-	#DIV/0!
Administration & Guidance:			-	#DIV/0!
Custodial & Maintenance			-	#DIV/0!
Other:			-	#DIV/0!
	Total:	-	-	**#DIV/0!**
Grossing Factor:	1.50			

Mark Up Ratio

Construction Budget	$0	#DIV/0!	= Mark Up Ratio
Construction Trades Subtotal	$0		

Demolition and Abatement Costs

Total Demolition and Abatement Costs:	$0

Total Project Budget Template

Asbestos Containing Floor Material / Ceiling Tile Abatement	$0	$0		
Other Hazardous Material Abatement	$0	$0		
BUILDING SITE WORK				
Site Preparation	$0	$0		
Site Improvements	$0	$0		
Site Civil / Mechanical Utilities	$0	$0		
Site Electrical Utilities	$0	$0		
Scope Excluded Site Work	$0	$0		
Construction Trades Subtotal	$0	$0		
Contingencies (Design and Pricing)	$0	#DIV/0!		
Sub-Contractor Bonds	$0	#DIV/0!		
D/B/B Insurance	$0	#DIV/0!		
General Conditions	$0	#DIV/0!		
D/B/B Overhead & Profit	$0	#DIV/0!		
GMP Insurance	$0	#DIV/0!		
GMP Fee	$0	#DIV/0!		
GMP Contingency	$0	#DIV/0!		
Escalation to Mid-Point of Construction	$0	#DIV/0!		
Construction Cost over Funding Cap		$0		
Construction Budget	$0	#DIV/0!		#DIV/0!
Alternates				
Ineligible Work Included in the Base Project	$0	$0	$0	
Alternates Included in the Total Project Budget	$0	$0	$0	
Alternates Excluded from the Total Project Budget	$0		$0	
Subtotal to be Included in Total Project Budget	$0	$0	$0	$0
Miscellaneous Project Costs				
Utility Company Fees	$0	$0	$0	
Testing Services	$0	$0		
Swing Space / Modulars	$0	$0		
Other Project Costs (Mailing & Moving)	$0	$0		
Miscellaneous Project Costs Subtotal	$0	$0		$0
Furnishings and Equipment				
Furniture, Fixtures, and Equipment	$0	$0		
Technology	$0	$0		
FF&E Subtotal	$0	$0		$0
Soft Costs that exceed 20% of Construction Cost		$0		
Project Budget	$0	#DIV/0!		#DIV/0!

Update: Item was "Other Site Construction".

"Site Cost over Allowance" line below has been removed.

Cell C86 - Scope Excluded Sitework Costs such as a stadium, out buildings, concession stand etc. (Enter Direct Construction Costs)

Cell C98 - Represents construction costs over MSBA funding limits (Cell H103)

Cell C112 - Represents the amount exceeding the $1,200 per student allowance for FF&E (Cell J109)

Cell C113 - Represents the amount exceeding the $1,200 per student allowance for Technology (Cell J110)

Cell C116 - Soft costs that exceed 20% of the construction cost (Cell G21)

Ineligible Demolition and Abatement Costs:	$0
Eligible Demolition and Abatement Costs:	$0
Marked Up Eligible Costs:	#DIV/0!

Eligible Site Work Cost

Total Direct Site Work Costs:	$0	
Ineligible Site Work Costs:	$0	0 Eligible Building GSF
Potentially Eligible Direct Site Work Costs:	$0	**$39 Site Work Cost Limit ($/sf) includes Mark Up**
Potentially Eligible Marked Up Site Work Costs:	#DIV/0!	$0 Site Work Cost Allowance includes Mark Up
Marked Up Eligible Site Work Costs:	#DIV/0!	

Construction Costs and Funding Cap

Total Building Area (GSF):	0
Ineligible Excess Auditorium/PE Areas (GSF):	0
Other Ineligible Building Areas (GSF):	0
Eligible Building GSF:	0
Building Cost Funding Limit ($/sf):	**$393**
Eligible Building Costs:	$0
Eligible Site Work Costs:	#DIV/0!
Eligible Demolition & Abatement Costs:	#DIV/0!
Basis of Construction Costs:	**#DIV/0!**
Construction Budget:	$0
Basis of Construction Costs:	#DIV/0!
Ineligible Construction Costs:	#DIV/0!
Construction Cost over Funding Cap:	#DIV/0!
If > 0 enter value into Cell C98	

Ineligible Cost Breakdown

Scope Excluded Site Work:	$0
Site Work Cost beyond Funding Limit:	#DIV/0!
Ineligible Demo & Abatement:	#DIV/0!
Scope Excluded Aud/PE Areas:	#DIV/0!
Other Ineligible Building Areas:	#DIV/0!
Construction Cost over Funding Cap:	#DIV/0!

Construction Cost Breakdown

Total Construction Cost ($/sf):	#DIV/0!
Reimbursable Construction Cost ($/sf):	#DIV/0!
Marked Up Building Costs ($/sf):	#DIV/0!
Marked Up Site, Building Takedown & Haz Mat ($/sf):	#DIV/0!
Direct Building Cost ($/sf):	#DIV/0!

FF&E Reimbursement

Eligible Enrollment: Enter Eligible Enrollment

	Funding Limit	Estimated Budget	Eligible Costs	Ineligible Costs
Furniture, Fixtures & Equipment:	$1,200/student	$0	$0	$0 If >0 enter in Cell C112
Technology:	$1,200/student	$0	$0	$0 If >0 enter in Cell C113

Incentive Points

0.00	(0-2) Maintenance		
0.00	(0-6) Newly Formed Regional School District		
0.00	(0-5) Major Reconstruction or Reno/Reuse type in rounded to 2 decimal places		
	#DIV/0!	0 gsf Renovated or Existing to Remain	If Cell G117 > 0 enter value into Cell F116
		0 gsf Total at Conclusion of Project	
0.00	(0-1) Overly Zoning 40R and 40S		
0.00	(0-0.5) Overlay Zoning 100 units or 50% of units 1,2, or 3 family structures		
0.00	(0-2) Energy Efficiency - "Green Schools"		
			Owner's Contingency Cap: 0.50%
0.00	**Total Incentive Points**		Construction Contingency Cap: 1.00%

0.00	Reimbursement Rate Before Incentive Points
0.00	Total Incentive Points
0.00%	MSBA Reimbursement Rate

Board Authorization

Design Enrollment	0
Total Building Gross Floor Area (GSF)	0
Total Project Budget (excluding Contingencies)	$0
Scope Items Excluded or Otherwise Ineligible	#DIV/0!
Third Party Funding (Ineligible)	- $0
Estimated Basis of Maximum Total Facilities Grant[1]	#DIV/0!
Reimbursement Rate[1]	0.00%
Est. Max. Total Facilities Grant (before recovery)[1]	#DIV/0!
Cx Costs associated with Ineligible Building Area[2]	#N/A
Cost Recovery associated with Prior Projects[2]	- $0
Estimated Maximum Total Facilities Grant[1]	#DIV/0!

Construction Contingency[3]	$0
Ineligible Construction Contingency[3]	$0
"Potentially Eligible" Construction Contingency[3]	$0
Owner's Contingency[3]	$0
Ineligible Owner's Contingency[3]	$0
"Potentially Eligible" Owner's Contingency[3]	$0
Total Potentially Eligible Contingency[3]	$0
Reimbursement Rate	0.00%
Potential Additional Contingency Grant Funds[3]	$0
Maximum Total Facilities Grant	#DIV/0!
Total Project Budget	$0

NOTES

This template was prepared by the MSBA as a tool to assist Districts and consultants in understanding MSBA policies and practices regarding potential impact on the MSBA's calculation of a potential Basis of Total Facilities Grant and potential Total Maximum Facilities Grant. This template does not contain a final, exhaustive list of all evaluations which the MSBA may use in determining whether items are eligible for reimbursement by the MSBA. The MSBA will perform an independent analysis based on a review of information and estimates provided by the District for the proposed school project that may or may not agree with the estimates generated by the District using this template.

1 - The Estimated Basis of Total Facilities Grant and Estimated Maximum Facilities Grant amounts do not include any potentially eligible contingency funds and are subject to review and audit by the MSBA.

2 - Costs associated with the commissioning of ineligible building area is estimated to result in the recovery of a portion of the overall commissioning cost. The OPM has estimated this recovery of funds to be $_____. The proposed demolition of the _____ School is expected to result in the MSBA recovering a portion of state funds previously paid to the District for the _____ project at the existing facilities completed in ____. The MSBA will perform an independent analysis based on a review of its records and information and estimates provided by the District for the proposed school project that may or may not agree with the estimated cost recovery generated by the District and its consultants using this template.

3 - Pursuant to Section 3.21 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

Commissioning (Cx) Costs associated with Ineligible Building Area

Building GSF:	0
Cx Fee per GSF:	#N/A
Ineligible GSF:	0
Ineligible Cx Costs:	#N/A If >0 enter in Cell B128

Commissioning Fee Schedule

Cost Recovery associated with Prior Projects

Prior Project ID Number:	
Prior Project Total Grant:	
Propose School Opens:	
Prior Project Substantial Completion:	
Beneficial use (years):	0.00
Unused Years:	20.00
Unused Years as % of 20:	100.00%
Prior Project Cost Recovery:	$0 If >0 enter in Cell B128

Enter Date. Assume 15th of August if new school opens in September. For example if turnover is June, new school will not be used until September by students.

Enter Date. If only month is known, assume 15th of the month.

Total Project Budget Template

Draft - 3011 overview analysis - Burlington PDP

Potential Total Project Budget

	ID	Description	Base Repair	Renovation Addition - 325	New 3 Story - 325	New 3 Story - 325	New 2 Story - 325	New 2 Story -325	Repair only 640	Renovation Addition - 640	New 3 Story - 640 at Fox Hill	New 3 Story - 640 at Fox Hill	Renovation Addition - 640 at Pine Glen	New 3 Story - 640 at Pine Glen	Pine Glen only New 3 Story 325
			1	2	3A	3B	3C	3D	4	5	6A	6B	7	8	9
CO		Total Construction	40,038,566	85,503,802	81,736,871	82,292,495	85,823,548	86,202,370	40,038,566	121,612,971	122,667,012	122,448,619	122,041,074	119,234,464	74,535,080
		Construction Cost per SF	$ 621.72	$ 843.23	$ 898.21	$ 904.31	$ 943.12	$ 947.28	$ 621.72	$ 779.57	$ 791.40	$ 789.99	$ 744.15	$ 777.28	$ 898.01
Sof		Total Soft Costs	21,650,206	27,788,013	15,679,478	15,754,487	16,231,179	16,282,320	23,084,206	34,096,751	22,339,047	22,309,564	34,154,545	21,875,653	14,588,236
		Soft Cost % (Less contingencies) compared to Total Construction	54%	32%	19%	19%	19%	19%	58%	28%	18%	18%	28%	18%	20%
		Total Construction and Soft Cost	**61,688,772**	**113,291,815**	**97,416,349**	**98,046,982**	**102,054,727**	**102,484,690**	**63,122,772**	**155,709,722**	**145,006,059**	**144,758,183**	**156,195,619**	**141,110,117**	**89,123,316**
		Feasibility & Schematic design appropriation	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**1,500,000**	**675,000**
		Remaining funding required	**60,188,772**	**111,791,815**	**95,916,349**	**96,546,982**	**100,554,727**	**100,984,690**	**61,622,772**	**154,209,722**	**143,506,059**	**143,258,183**	**154,695,619**	**139,610,117**	**88,448,316**
		Project Cost (Less contingencies)	$ 958	$ 1,117	$ 1,071	$ 1,077	$ 1,121	$ 1,126	$ 980	$ 998	$ 936	$ 934	$ 952	$ 920	$ 1,074
REI		Assumed Reimbursement Rate	53.2%	50.7%	48.2%	48.2%	48.2%	48.2%	53.2%	50.7%	48.2%	48.2%	50.7%	48.2%	0.0%
		Ineligible Total	$ 15,717,264	$ 49,426,686	$ 50,553,102	$ 51,183,532	$ 52,177,147	$ 55,620,186	$ 16,245,264	$ 64,863,190	$ 66,553,027	$ 66,305,187	$ 61,299,044	$ 63,467,943	$ 45,586,609
		Construction Contingency (5%)	$ 2,001,928	$ 4,275,190	$ 4,086,844	$ 4,114,625	$ 4,291,177	$ 4,310,119	$ 2,001,928	$ 6,080,649	$ 6,133,351	$ 6,122,431	$ 6,102,054	$ 5,961,723	$ 3,726,754
		Owner's Contingency (Soft Costs @ 3%)	$ 649,506	$ 833,640	$ 470,384	$ 472,635	$ 486,935	$ 488,470	$ 692,526	$ 1,022,903	$ 670,171	$ 669,287	$ 1,024,636	$ 656,270	$ 437,647
		Total Project Cost	**$ 64,340,207**	**$ 118,400,646**	**$ 101,973,576**	**$ 102,634,241**	**$ 106,832,840**	**$ 107,283,278**	**$ 65,817,227**	**$ 162,813,273**	**$ 151,809,581**	**$ 151,549,900**	**$ 163,322,309**	**$ 147,728,109**	**$ 93,287,717**
		MSBA Estimated Max Reimbursement	$ 24,998,750	$ 33,040,478	$ 23,186,232	$ 23,190,349	$ 24,669,303	$ 23,219,138	$ 25,480,923	$ 46,995,645	$ 38,710,355	$ 38,708,757	$ 49,053,084	$ 38,294,531	
		Total District share ($1.5 already appropriated for F&S Study)	**39,341,457**	**85,360,167**	**78,787,344**	**79,443,892**	**82,163,537**	**84,064,141**	**40,336,304**	**115,817,628**	**113,099,226**	**112,841,143**	**114,269,225**	**109,433,578**	**93,287,717**
		Effective Reimbursement	**39%**	**28%**	**23%**	**23%**	**23%**	**22%**	**39%**	**29%**	**25%**	**26%**	**30%**	**26%**	**0%**
		Total Project $psf	**$ 999**	**$ 1,168**	**$ 1,121**	**$ 1,128**	**$ 1,174**	**$ 1,179**	**$ 1,022**	**$ 1,044**	**$ 979**	**$ 978**	**$ 996**	**$ 963**	**$ 1,124**

Cost Summary

Burlington Elementary School Project

Summary of PDP options

#	Description	Total Project Cost	District Share
		Medium	Medium
1	Base Repair	$ 64,000,000	$ 39,000,000
2	Renovation Addition - 325	$ 118,000,000	$ 85,000,000
3A	New 3 Story - 325	$ 102,000,000	$ 79,000,000
3B	New 3 Story - 325	$ 103,000,000	$ 79,000,000
3C	New 2 Story - 325	$ 107,000,000	$ 82,000,000
3D	New 2 Story -325	$ 107,000,000	$ 84,000,000
4	Repair only 640	$ 66,000,000	$ 40,000,000
5	Renovation Addition - 640	$ 163,000,000	$ 116,000,000
6A	New 3 Story - 640 at Fox Hill	$ 152,000,000	$ 113,000,000
6B	New 3 Story - 640 at Fox Hill	$ 152,000,000	$ 113,000,000
7	Renovation Addition - 640 at Pine Glen	$ 163,000,000	$ 114,000,000
8	New 3 Story - 640 at Pine Glen	$ 148,000,000	$ 109,000,000
9	Pine Glen only New 3 Story 325	$ 93,000,000	$ 93,000,000

Overall summary	Total Project cost	District share
Fox Hill Only 325	$ 107,000,000	$ 84,000,000
Combined school 640	$ 152,000,000	$ 113,000,000
New Fox Hill 325 (MSBA) + Pine Glen 325 (non-msba)	$ 200,000,000	$ 177,000,000

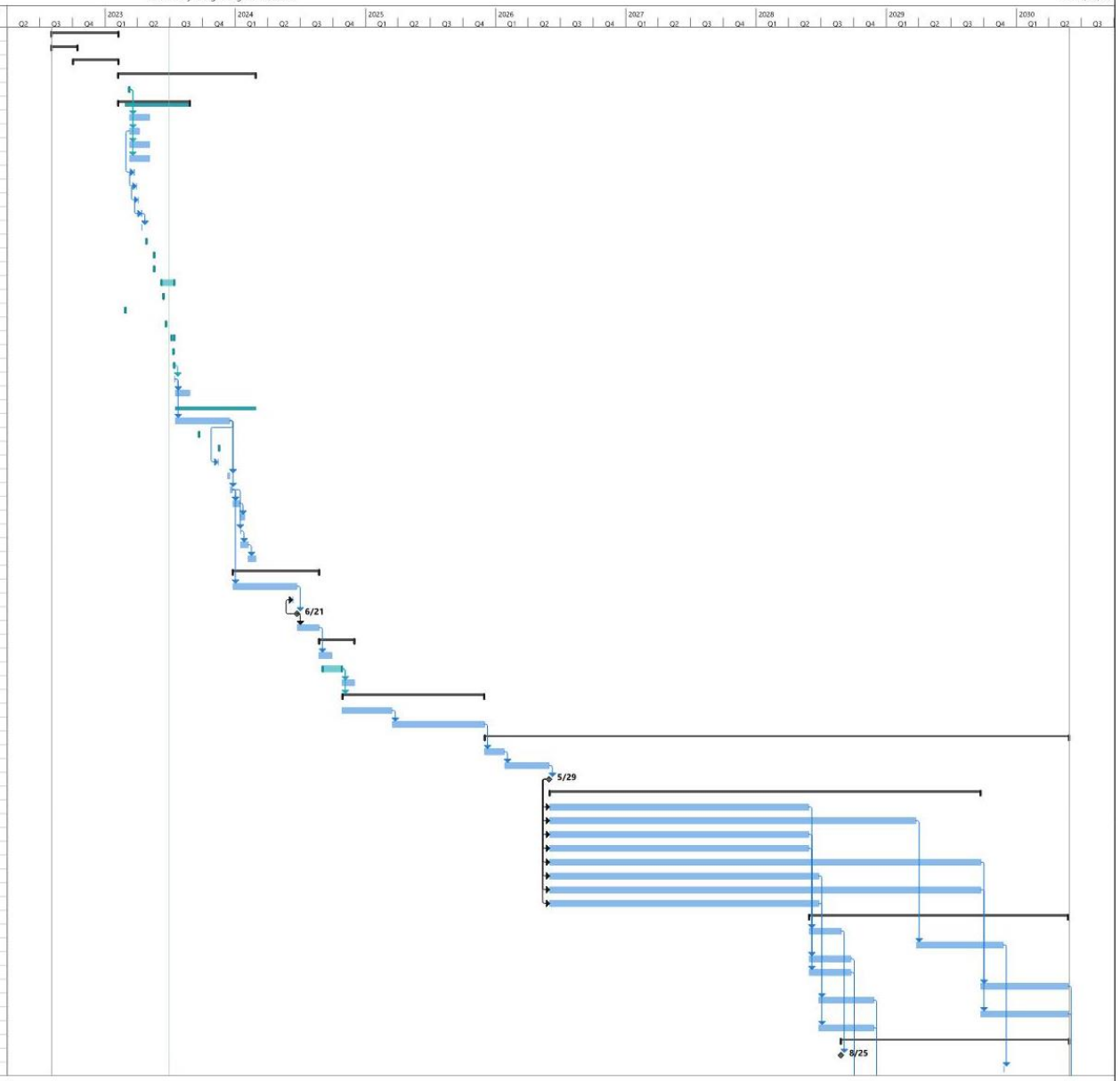
Next Steps

- Financial Working Group
  - Schedule a time to go through total project budget and assumptions
  - Establish local actions and approvals process
  - Town Administrators, Finance, Ways and Means, etc.
  - Establish bonding strategy and identify taxpayer impact
    - Nichole Coscia
    - Paul Sagarino
    - John Danizio
    - Eric Conti
    - Roger Riggs

Schedule Review

Town of Burlington — Preliminary Design Program Schedule — Wed 6/28/23

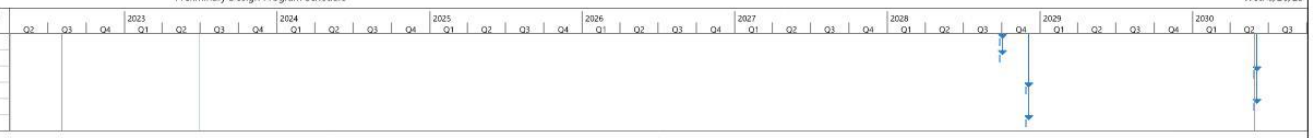
ID	Task Name	Duration	Start	Finish	Predecessors	Notes	Resource Names
1	**Module 2: FORMING THE TEAM**	**134 days?**	**Wed 8/3/22**	**Mon 2/6/23**			
2	**OPM Selection**	**53 days**	**Wed 8/3/22**	**Fri 10/14/22**			
10	**Designer Selection**	**91 days?**	**Mon 10/3/22**	**Mon 2/6/23**			
25	**Module 3: FEASIBILITY STUDY**	**276 days?**	**Mon 2/6/23**	**Mon 2/26/24**			
26	MSBA & Team Kick off Meeting	1 day	Thu 3/9/23	Thu 3/9/23			
27	**Preliminary Design Program (PDP)**	**145 days?**	**Mon 2/6/23**	**Fri 8/25/23**			
28	Educational Program Standards, and Policies	40 days	Fri 3/10/23	Thu 5/4/23	26		
29	Initial Space Summary	20 days	Fri 3/10/23	Thu 4/6/23	26		
30	Evaluation of Existing Conditions	40 days	Fri 3/10/23	Thu 5/4/23	26		
31	Site Development Requirements	40 days	Fri 3/10/23	Thu 5/4/23	26		
32	Educational Visioning Session No. 1	1 day	Wed 3/22/23	Wed 3/22/23	29SS+8 days		
33	Educational Visioning Session No. 2	1 day	Wed 3/29/23	Wed 3/29/23	32SS+5 days		
34	Community Visioning Session No. 1	1 day	Mon 4/3/23	Mon 4/3/23	33SS+2 days		
35	Educational Visioning Session No. 3	1 day	Wed 4/12/23	Wed 4/12/23	34SS+7 days		
36	Community Visioning Session No. 2	1 day	Thu 4/13/23	Thu 4/13/23	35		
37	Lincoln Elementary School Building Tour	1 day	Wed 4/26/23	Wed 4/26/23			
38	Maria Hastings Elementary School Building Tour	1 day	Thu 5/18/23	Thu 5/18/23			
39	Community Forum No. 1	1 day	Thu 5/18/23	Thu 5/18/23			
40	Preliminary Evaluation of Options	26 days	Thu 6/8/23	Thu 7/13/23			
41	SC Review of Ed. Program and Space Summary	1 day	Tue 6/13/23	Tue 6/13/23			
42	SC support of Ed. Program and Space Summary	1 day	Sun 2/26/23	Sun 2/26/23			
43	SBC Review of criteria and options	1 day	Tue 6/20/23	Tue 6/20/23			
44	PDP Draft Available to SBC and the Public	6 days	Thu 7/6/23	Thu 7/13/23			
45	Community Forum No. 2	1 day	Tue 7/11/23	Tue 7/11/23			
46	SBC PDP Approval	1 day	Thu 7/13/23	Thu 7/13/23			
47	Submit PDP to MSBA	1 day	Fri 7/14/23	Fri 7/14/23	46		
48	MSBA Review	6 wks	Mon 7/17/23	Fri 8/25/23	47		
49	**Preferred Schematic Report (PSR)**						
50	PSR Submittal Development	110 days	Mon 7/17/23	Fri 12/15/23	47		
51	Community Forum No. 3	1 day	Thu 9/21/23	Thu 9/21/23			
52	Community Forum No. 4	1 day	Thu 11/16/23	Thu 11/16/23			
53	Final SC Approval of Educational Plan and Space Summa	1 day	Mon 11/13/23	Mon 11/13/23	50FS-25 days		
54	SBC Submittal Approval Date	5 days	Mon 12/11/23	Fri 12/15/23	50FS-5 days		
55	Submit PSR to MSBA	5 days	Mon 12/18/23	Fri 12/22/23	50		
56	MSBA Staff Review	15 days	Mon 12/25/23	Fri 1/12/24	55		
57	Respond to MSBA PSR Comments	10 days	Mon 1/15/24	Fri 1/26/24	56		
58	FAS Presentation	1 day?	Mon 1/15/24	Mon 1/15/24	55FS+3 wks		
59	Address FAS Comments	15 days	Tue 1/16/24	Mon 2/5/24	58		
60	MSBA PS Board Approval	3 wks	Tue 2/6/24	Mon 2/26/24	59		
61	**MODULE 4: SCHEMATIC DESIGN**	**174 days?**	**Mon 12/25/23**	**Thu 8/22/24**			
62	Schematic Design Binder Development	26 wks	Mon 12/25/23	Fri 6/21/24	55		
63	SD Notification Email Sent	1 day?	Mon 6/10/24	Mon 6/10/24	64SS-10 days		
64	Submit to MSBA	0 days	Fri 6/21/24	Fri 6/21/24	62		
65	MSBA Board Meeting TBD	44 days	Mon 6/24/24	Thu 8/22/24	64		
66	**MODULE 5: PROJECT FUNDING APPROPRIATION**	**71 days**	**Fri 8/23/24**	**Fri 11/29/24**			
67	Project Scope and Budget Agreement	25 days	Fri 8/23/24	Thu 9/26/24	65		
68	Local Vote	8 wks	Mon 9/2/24	Fri 10/25/24			
69	Execute Project Funding Agreement	25 days	Mon 10/28/24	Fri 11/29/24	68		
70	**MODULE 6: DETAILED DESIGN**	**285 days**	**Mon 10/28/24**	**Fri 11/28/25**	**68**		
71	DD	20 wks	Mon 10/28/24	Fri 3/14/25			
72	CD	37 wks	Mon 3/17/25	Fri 11/28/25	71		
73	**MODULE 7: CONSTRUCTION**	**1171 days**	**Mon 12/1/25**	**Mon 5/27/30**			
74	Bidding/GMP	40 days	Mon 12/1/25	Fri 1/23/26	72		
75	Submittals/Shops	90 days	Mon 1/26/26	Fri 5/29/26	74		
76	Mobilize	0 days	Fri 5/29/26	Fri 5/29/26	75		
77	**Phase 1 Building**	**865 days**	**Mon 6/1/26**	**Fri 9/21/29**			
78	Option 1 Base Repair	104 wks	Mon 6/1/26	Fri 5/26/28	76SS		
79	Option 2 Add Reno 325	147 wks	Mon 6/1/26	Fri 3/23/29	76SS		
80	Option 3A & 3B 325 (3 story)	104 wks	Mon 6/1/26	Fri 5/26/28	76SS		
81	Option 3C & 3D 325 (2 story)	104 wks	Mon 6/1/26	Fri 5/26/28	76SS		
82	Option 5 Add Reno 640 (@Fox Hill)	173 wks	Mon 6/1/26	Fri 9/21/29	76SS		
83	Option 6A & 6B 640 (@Fox Hill)	108 wks	Mon 6/1/26	Fri 6/23/28	76SS		
84	Option 7 Add Reno 640 (@Pine Glen)	173 wks	Mon 6/1/26	Fri 9/21/29	76SS		
85	Option 8 New 640 (@Pine Glen)	108 wks	Mon 6/1/26	Fri 6/23/28	76SS		
86	**Phase 2 - site/demo**	**520 days**	**Mon 5/29/28**	**Fri 5/24/30**			
87	Option 1 Base Repair	13 wks	Mon 5/29/28	Fri 8/25/28	78		
88	Option 2 Add Reno 325	35 wks	Mon 3/26/29	Fri 11/23/29	79		
89	Option 3A & 3B 325 (3 story)	17 wks	Mon 5/29/28	Fri 9/22/28	80		
90	Option 3C & 3D 325 (2 story)	17 wks	Mon 5/29/28	Fri 9/22/28	81		
91	Option 5 Add Reno 640 (@Fox Hill)	35 wks	Mon 9/24/29	Fri 5/24/30	82		
92	Option 6A & 6B 640 (@Fox Hill)	22 wks	Mon 6/26/28	Fri 11/24/28	83		
93	Option 7 Add Reno 640 (@Pine Glen)	35 wks	Mon 9/24/29	Fri 5/24/30	84		
94	Option 8 New 640 (@Pine Glen)	22 wks	Mon 6/26/28	Fri 11/24/28	85		
95	**Final Completion**	**456 days**	**Fri 8/25/28**	**Mon 5/27/30**			
96	Option 1 Base Repair	0 days	Fri 8/25/28	Fri 8/25/28	87		
97	Option 2 Add Reno 325	1 day	Mon 11/26/29	Mon 11/26/29	88		



Schedule Review

Town of Burlington — Preliminary Design Program Schedule — Wed 6/28/23

ID	Task Name	Duration	Start	Finish	Predecessors	Notes	Resource Names
98	Option 3A & 3B 325 (3 story)	1 day	Mon 9/25/28	Mon 9/25/28	89		
99	Option 3C & 3D 325 (2 story)	1 day	Mon 9/25/28	Mon 9/25/28	90		
100	Option 5 Add Reno 640 (@Fox Hill)	1 day	Mon 5/27/30	Mon 5/27/30	91		
101	Option 6A & 6B 640 (@Fox Hill)	1 day	Mon 11/27/28	Mon 11/27/28	92		
102	Option 7 Add Reno 640 (@Pine Glen)	1 day	Mon 5/27/30	Mon 5/27/30	93		
103	Option 8 New 640 (@Pine Glen)	1 day	Mon 11/27/28	Mon 11/27/28	94		



Schedule Review

- Submit PDP to MSBA 7/13/23
- Submit PSR to MSBA 12/20/23
- Submit Schematic Design to MSBA 6/19/24
- Local Vote September 2024
- Execute Project Funding Agreement November 2024
- Detailed Design October 2024 – February 2025
- Construction Documents March 2025 – November 2025
- Bidding / GMP – November 2025 – January 2026
- Begin Construction – Spring 2026
- Complete construction varies by options with ranges from 24 months to 48 months

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Criteria Matrix Review

- Tool used to define goals and priorities of the SBC
- Evolving document that we will use throughout Preferred Schematic Report phase
- Tool that will help identify the preferred solution
- Will continue to reference and modify matrix as we study, refine, and chose a preferred solution in November 2023

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Next Meetings

- July 11th, 2023 Community Meeting No. 2 @ 7:00pm (update on concepts, criteria and options)
- July 13th, 2023 School Building Committee Meeting @6:00pm (Approve PDP and submit to MSBA)
- August 1, 2023 School Building Committee Meeting @6:00pm (further refinement and evaluation of the options)
- August 21, 2023 School Building Committee Meeting @6:00pm

- Executive Working Group
  - 6/28-Reviewed upcoming SBC meetings

- Communications/Executive Working Group
  - 7/10-review community forum presentation

- Sustainability Working Group
  - Late July early August

SBC Meeting Agenda – June 28, 2023, 6:00PM

1. Call to Order & Intro
2. Approval of June 20th, 2023 Meeting Minutes
3. Responding to Previous SBC Comments
4. Future Public Comment Format
5. Building Project Name
6. 6/26 School Committee Update
7. Preliminary Design Program Options to be Evaluated
8. Preliminary Design Program Cost Estimate/Project Cost/Schedule
9. Criteria Matrix Review and Discussion
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

RECEIVED
By Town Clerk's Office at 2:58 pm, Jun 22, 2023

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: May 30, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

RECEIVED
By Town Clerk's Office at 2:58 pm, Jun 22, 2023

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	5/30/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
	Paul Sagarino*	SBC Member		Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
✓	David Rosenblatt*	Fox Hill Principal	✓	Donna DiNisco	DiNisco Design
	Dennis Villano*	SBC Member		Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member		Krystal Anderson	
✓	Tara Carroll	SBC Member	✓	Melissa Ulliani	
	Audrey Boeri	SBC Member	✓	Nicci Kadilak	
✓	George Papayannis	SBC Member	✓	Melissa Gilberg	
✓	Katherine Bond*	Vice Chair of SBC		Kristen DeMarco	
✓	Jeremy Brooks*	SBC Member		Sasha Stevens	
	Christine Monaco*	SBC Member		Alison Varrell	
✓	Martha Simon*	SBC Member		Amy Barrows	
✓	Kristen Downie	Secretary		Melissa Parnell	
✓	John Lyons*	Pine Glen Principal		Anna Lisa Finn	
✓	Jennifer Agati		✓	Doug Davison	
✓	Elizabeth Orfanos		✓	Kim Shubrooks	
✓	Bill Boivin			Rachel Small	
✓	Erica Zola			Diane Fitzpatrick	
✓	Amanda Hanafin		✓	Diana Segool	
✓	Will Ikier		✓	John Iler	
✓	Alexandra Laverty		✓	Helena Rayne	
✓	Brian Spignese		✓	Jamie Beane	

✓	Kathleen Fazio		✓	Jill Huntress	
✓	Liz DiTucci		✓	Johanna Mailloux	
✓	Nick Barrett		✓	Robert Bunker	
✓	Nick Priest		✓	Chris Campbell	
✓	Erin Ellis		✓	Jennifer Onorato	
✓	Michael Mccarthy		✓	Christopher Craft	
✓	Adam Heisler				

* SBC Voting Member

Item No.	Description	Action
9.1	**Call to Order & Intro**: 6:02 pm meeting was called to order by SBC Chair M. Massardo with 11 of 14 voting members in attendance.	Record
9.2	**Previous Topics & Approval of May 16th, 2023, Meeting Minutes:** ➢ A motion to approve the 05/16/2023 meeting minutes[1] as submitted made by M. Simon and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – N. Coscia – Yes – D. Rosenblatt – Yes – J. Lyons - Yes. Abstention: None. Motion passes, minutes approved.	Record
9.3	**SBC Member Update:** ➢ A motion to add Margo Bunker as a Pine Glen Parent as a voting SBC member made by M. Simon and seconded J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – N. Coscia – Yes – D. Rosenblatt – Yes. Abstention: J. Lyons. Motion passes, voting member approved. ➢ A motion to add Amanda Hanafin and Melissa Gilberg as Pine Glen Teachers to the SBC committee as members made by M. Simon and seconded K. Bond. Discussion: None. Roll Call Vote: B. Cunha – Yes – M. Massardo – Yes – J. Danizio – Yes – J. Priest – Yes – J. Brooks – Yes – M. Simon – Yes – K. Bond – N. Coscia – Yes – D. Rosenblatt – Yes – J. Lyons – Yes – E. Conti - Yes. Abstention: None. Motion passes, members approved.	Record

[1] May 16, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

9.4	**Recap Community Forum Meeting:** ➢ D. DiNisco starts by going over the community forum that was held on 5/18. Says the community ranked their top priorities for the new school. The top priority was educational benefits. Says there is a link in the slideshow[2] for the community to have more input on the ranking. Asks if anyone is aware of any sites that could be available to study for the new school, please let them know. Says they need to follow the MSBA process that is outlined. Says no decisions have been made so far in the process. They must look at all options, from renovation to a combined 640-student school. Goes over the Educational Program and that it identifies programs to be offered district wide. It also identifies programs to be offered within the "new" Fox Hill Elementary School. It also identifies programmatic spatial relationships and adjacencies. The program defines the space needs and total square footage for the project. Says they must develop two education programs, one for 325 students and one for 640 students. Shows a list on the slideshow[2] of what they are looking at. ➢ E. Conti says the MSBA wants to invest tens of millions of dollars into the community with this school but must follow their process. The program piece he says is very critical. Notes that in the beginning of the process the MSBA said all elementary classrooms must have a ratio of 23:1. The district pushed back, and the state listened and allowed a smaller classroom ratio. Said they would support a 325-student new school at a ratio of 18:1. Says they cannot put all of the children with a certain disability under one roof in a school as this is frowned upon. Fox Hill has a collaborative program that already exists there. They want to look at dividing their developmental classrooms. They would like to ask MSBA to accept adding three of those classrooms at Fox Hill. Says there is no more room at Pine Glen and wouldn't want to have the whole program there anyways. Says the program part of this is critical as it drives the building design. Wants the space to be reflective of the program they are currently working on. ➢ D. DiNisco says the goal is to have a draft of the PDP done by June 13th to present to the school committee. ➢ K. Bond asks if the cost includes the demolition of the existing building. D. DiNisco says yes it will be. ➢ D. DiNisco talks about the PDP enrollment agreement. Shows the two enrollment options of 325 and 640 students. She goes over the breakdown for each enrollment in the slideshow[2]. Then goes into the preliminary space summary comparison and talks about the different spaces in the presented slide[2]. Says all the staff currently exists just all don't have a space to be in. The Café will be sufficient to have half the school eating lunch at one time, will also support full school assembly.	Record

[1] May 16, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	Says they need 90,000 GSF for the Fox Hill Only Option and 150,000 GSF for a combined school. ➢ E. Zola asks about special education space and if the square footage reflects the four-school model with some of DSC in Fox Hill. D. DiNisco says DSC 2 to move to Fox Hill and DSC 1 to stay at Pine Glen. E. Conti says it hasn't been finalized yet, hoping the MSBA agrees as there is no current program at the Fox Hill school. ➢ D. DiNisco goes into the Spatial Relationships slides[2]. Goes over for 325 and 640 students. This outlines how each space will relate and integrate. E. Conti says it's the program document that will drive the design decisions. D. DiNisco says they must look at both spaces and if they don't MSBA will make them go back and study them. ➢ G. Papayannis asks about the Developmental Skills Program for each side of the combined school. D. DiNisco says the slide will be updated to reflect this. E. Conti responds saying the slide reflects the space requirements. Says the goal is to make sure the Department of Education supports the program and the MSBA supports it for funding. Then asks about DSC being reflected in the 325 spatial relationships. D. DiNisco says the slide will be updated to reflect it. ➢ M. Gilberg asks about DSC being split into different schools, how would it be split up. E. Conti responds saying they will look to reallocate space elsewhere. ➢ D. DiNisco goes over the eight different options in the slideshow[2]. ➢ E. Conti says the MSBA has a process that is structured due to having to serve all the communities in Massachusetts. If you want to participate in the MSBA process, you have to accept their enrollment projections which have a good track record of being accurate. Asks S. Brown if it's rare for the MSBA to back off their 23:1 ratio for class sizes. ➢ S. Brown agrees with E. Conti that the MSBA rarely changes their 23:1 student classroom size. S. Brown says the MSBA says they are trying to find the most educationally and financially responsible solution. But stress the educational part first. ➢ D. DiNisco comments on the enrollment projections. Saying that no one can predict 20-30 years into the future for enrollment. MSBA will ask the district where they would put an addition, and to think about future expansion in the design. ➢ A. Hanafin asks about with the 325 or 640 student options will it be a 2 or 3 story building. D. DiNisco responds saying they will look at both options. With wetlands and a vernal pool, and the opportunity for outdoor learning, fewer floors' results in a larger footprint. Says all these conversations and decisions will occur once they get through PDP. E. Conti follows saying the parking needs are going to be significant as well.	

[1] May 16, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ M. Simon speaks to the educational program and acknowledges the work that went into it and thanks the district, Dore + Whitter, and DiNisco Design. ➢ E. Conti goes over the Educational Program Draft. There is an introduction to discuss vision and values. Talks about grade and configuration policies. Shows a table with current class sizes per grade. Shows the school scheduling program with number of minutes per week by subject. Making sure there are both indoor and outdoor areas for student activity. They also have a significant ELL population so looking to make sure classrooms can support that. Also making sure there is literacy and math support. Talks about the initiative for computer science for all. Goes over some positions that aren't currently at Fox Hill such as Physical Therapy and Counseling Services. E. Conti stresses the importance of this document. ➢ S. Brown goes over timeline for the educational program. The PDP will go until mid-July when the MSBA will review it internally and give feedback. The first board meeting will be in December. From July to December the district/town will narrow down the eight options to one option. ➢ D. DiNisco says the MSBA will give comments back and then the district/town responds, after this they will proceed, and it isn't a dialogue. ➢ M. Simon asks is there a process to eliminate some of the options before submitting. S. Brown says they must study all eight options in this phase. Says the evaluation criteria matrix will help narrow options down. C. Dell Angelo confirms that the criteria matrix will help with the decision process as well.	
9.5	**Criteria Matrix Review**: ➢ C. Dell Angelo talks about the criteria matrix. Says she sent out a survey to the committee to see if they wanted to add/change anything on the matrix. D+W received responses and made the appropriate changes. ➢ D. DiNisco talks about the building location and size are still being considered in the matrix. ➢ A. Hanafin asks to make some of the feedback for in person meetings. M. Massardo says the plan for the July Community Forum will be virtual but they are planning on September for a in person meeting in the auditorium at the high school.	Record
9.6	**Design Concepts Review:** ➢ Will review at a later date.	Record

[1] May 16, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

9.7	**Upcoming Milestones/Dates:** ➢ C. Dell Angelo goes over the next meetings slide[2]. o June 13th School Committee Meeting at 7:00PM o June 20th School Building Committee Meeting at 6:00PM o June 26th School Committee Meeting at 7:00PM o Week of June 26th School Building Committee at 6:00PM o July 11th Community Forum Meeting No. 2 at 7:00PM o July 13th School Building Committee Meeting at 6:00PM ➢ M. Simon says the June 26th School Committee meeting is a Monday.	Record
9.8	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ None.	Record
9.9	**Public Comment**: ➢ M. Mccarthy makes a comment. Says he hasn't heard anything at all about the impact on the surrounding community. The idea that they are talking about a 3-story building in a residential community is concerning to him. Says there are cars coming down Westwood at 40-50mph. His concern is that the combination of two schools is going to bring more traffic. Is also concerned with using the school to do other community events. ➢ C. Craft makes a comment. Says his concern is the increase in congestion by increasing the student population. Says Westwood is somewhat of a dangerous street. Says there have been numerous speed traps and they haven't been effective. His belief is that the site is not made to hold that many students and staff. His concern is that with the increase in the student population there will be a greater increase in accidents. He hopes Burlington will do what's best for Burlington and not just accept the money and follow the states guidelines. ➢ A. Heisler makes a comment. Says there is currently a nice mature forest and one of the designs would have the parking come all the way down to the residents. They are concerned with cutting those trees down, asks to push the parking lot to the northern side of the property. Asks to consider the neighborhood when deciding on parking lot location. ➢ K. Shubrooks makes a comment. Has a child with special needs and her son started at Fox Hill. Wants to make sure that there is adequate space for special needs. Does not think that 3,000SF is enough. Says that with the combined school there will be more sensory issues than before. Wants more support for special needs and wants that to be a focus when designing the building. She also thinks the small school option is the better option.	

[1] May 16, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

- K. Boschetti makes a comment. References the metropolitan area planning council which is predicting 400,000 new housing units will be needed by 2040. She is confused as to why they are hearing different things when it comes to the population numbers. Says that safety is important and that with a multiple story building it is a bad idea due to less exits and having to travel down flights of stairs in a crisis situation. She doesn't want three levels to be considered at all. Says it seems that most of the planning isn't focusing on the student's safety and only the design of the building. Wants the focus to be on student safety.
- E. Orfanos makes a comment. Thanks Dr. Conti for going over the educational program. Asks the question at the school committee meeting in 2019 there was a quote that said "The need is for more elementary classrooms, increasing student numbers, enrollment concerns at Francis Wyman with construction on Corporate Drive. The intention is not to downsize staff." Wants this to be a family focused community and shrinking to a three-school model wouldn't be family focused. Wants continued conversations around school size and educational benefits. She says it is clear small school size is more educationally beneficial than larger schools. How are they addressing the special needs population. Does the Pine Glen program need to be split up across the district. What are the entrance criteria of that program and how are they addressing their needs that don't qualify for that program. Says that equity is important as well. How can they balance their elementary schools equally.
- K. Callahan makes a comment. Is in favor of the four-school plan. Says there is already so much congestion and traffic. Wants to consider that years from now there will be more kids.
- S. Shaw makes a comment. Asks if they go with a combined school what happens with Pine Glen. What is the plan for that building if schools combine. How would the combined school work and function with two different schools in one building. Feels the Pine Glen community would be lost in the combined model. Asks how those community aspects will be continued on in a combined school.
- E. Zola makes a comment. Says the traffic concern is real, feels that 325 students would be the best model for the neighborhood. She doesn't think the neighborhood can support a school with 640 students. Says it should be safe for students to walk to school. Wants them to consider the traffic concerns for after school activities as well due to having more kids and programs.
- E. Sheehan makes a comment. Says she moved out of Fox Hill neighborhood and feared for her kid's life because of how fast the cars were going on the road. Says the families of the neighborhood don't need the risk of having to worry about their kids walking home for school. She is concerned about the lack of voices from the Pine Glen community. Asks how they can make the community more aware of this

[1] May 16, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	project. Pine Glen community is shocked they could be impacted by this. They understand a vote was taken years ago and the school committee was in favor of four schools. She is unaware of if that vote was rescinded and is confused how the vote can be overridden. Asks how they can push back on the MSBA and do what is right for the community. Asks for a broader effort for more community wide engagement so all voices are heard. ➢ E. Torres makes a comment. Says that the traffic and speed at which people go are way too fast. Says he puts his five grandchildren in the backyard for arrival and dismissal due to the danger of the roads at that time. Thinks that doubling the students and administrators is a huge mistake.	
9.10	**Next Meetings**: ➢ Tuesday June 20th, 2023, at 6:00PM.	Record
9.11	**Adjourn**: 8:31 pm A motion was made by M. Simon and seconded by J. Priest to adjourn the meeting, Discussion: None. Meeting adjourned.	Record

Submitted: 6/20/23

Approved: 6/20/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] May 16, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

May 30, 2023

DORE + WHITTIER

DINISCO DESIGN
architects + planners

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #9

May 30, 2023, 6:00 PM

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

Previous Meeting Minutes

1. *May 16th, 2023, Minutes*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

SBC Member Update

Motion to add

- *Margo Bunker (Pine Glen Parent) to the SBC Committee as a voting member*

Motion to add

- *Amanda Hanafin (Pine Glen Teacher)*
- *Melissa Gilberg (Pine Glen Teacher)*

to the SBC Committee

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

School Building Committee Meeting

BURLINGTON ELEMENTARY SCHOOL

Burlington, MA

May 30, 2023

© 2023 DiNisco Design, Inc.

DINISCO DESIGN

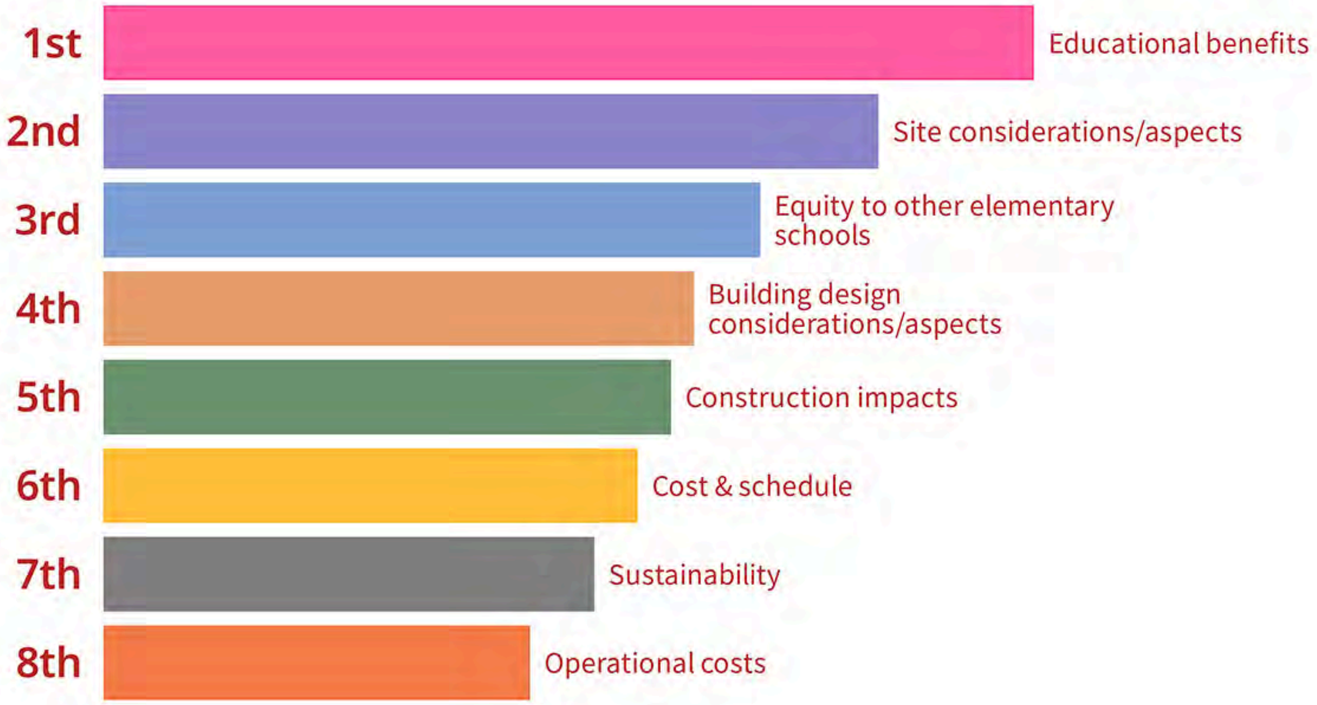
Community Input

- Enrollment fluctuation
- 4 elementary schools a priority
- Small schools
- Traffic
- Wetlands
- Safety concerns
- Cost / Tax implications
- Consider other town sites

Community Input | Priorities and Criteria

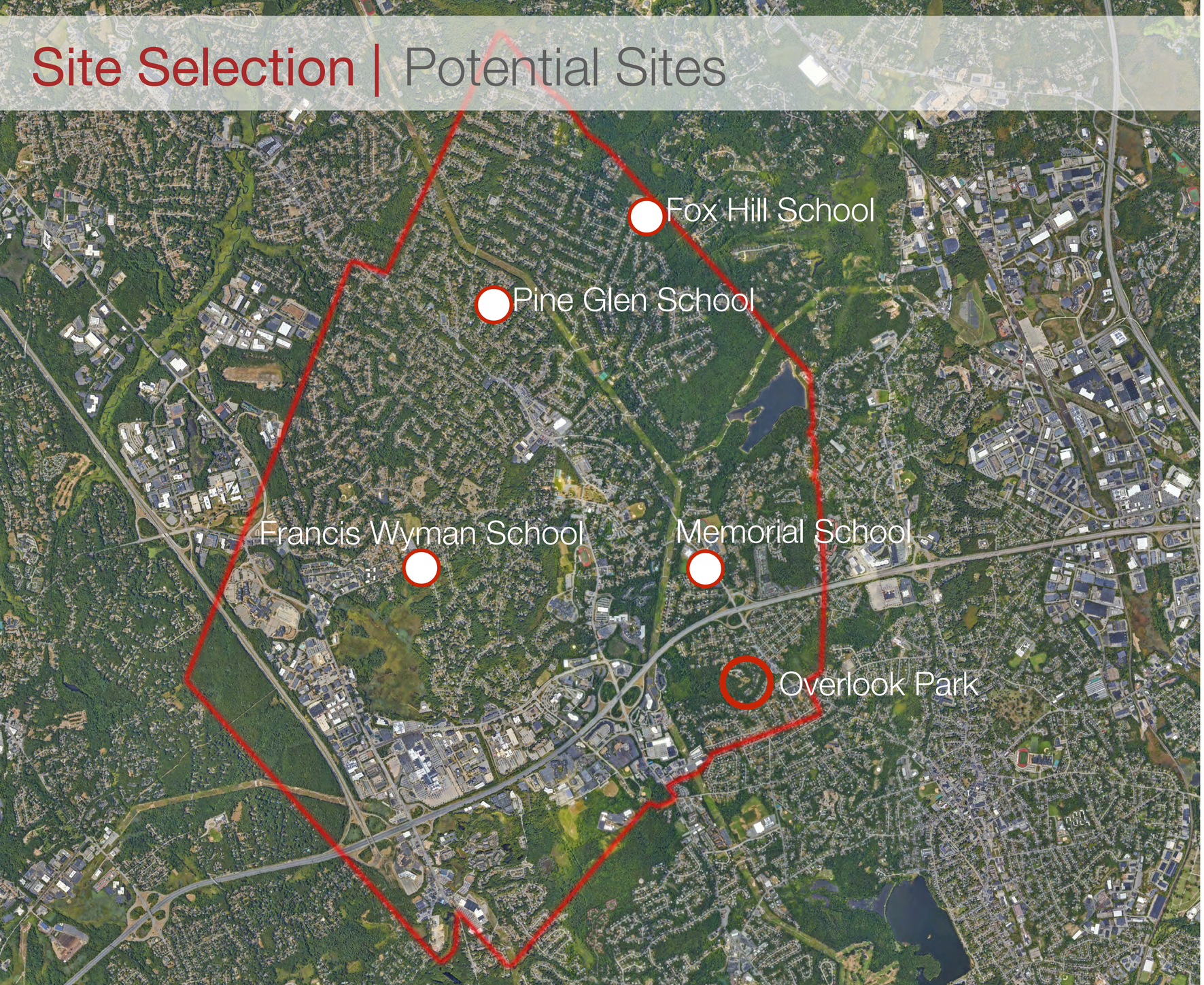
Rank These Priorities for the New School

1st	Equity to other elementary schools
2nd	Cost & schedule
3rd	Educational benefits
4th	Building design considerations/aspects
5th	Site considerations/ aspects
6th	Construction impacts
7th	Operational costs
8th	Sustainability



https://www.foxhillbuildingproject.com/community-outreach

Site Selection | Potential Sites

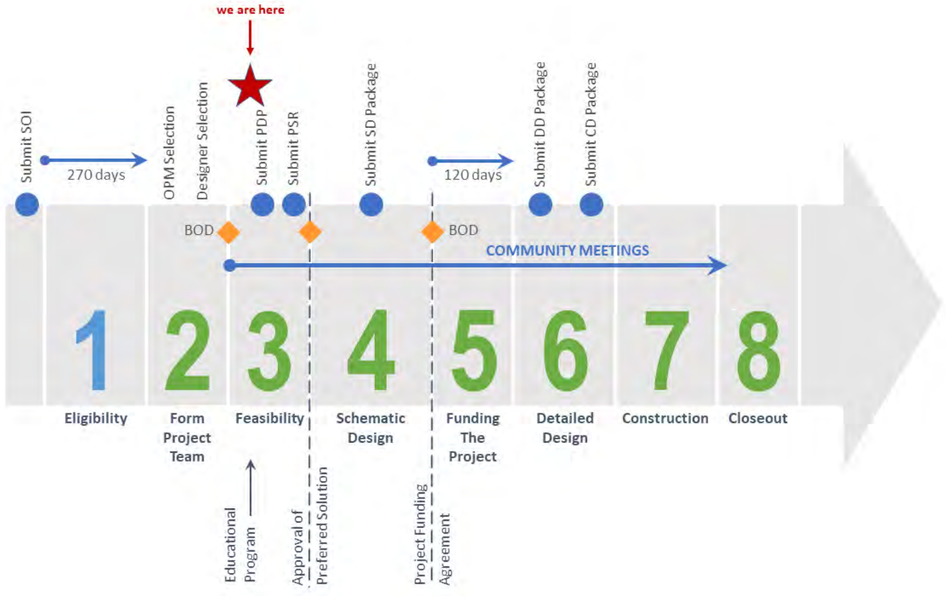


- Elementary School District
- Size of site
- Site restrictions

MSBA Process

The MSBA delivers a project through a clearly defined and prescribed process utilizing “modules”

- Module 1 – Eligibility Period
- Module 2 – Forming the Team
- **Module 3 – Feasibility Study**
- Module 4 – Schematic Design
- Module 5 – Funding the Project
- Module 6 – Detailed Design
- Module 7 – Construction
- Module 8 – Completing the Project



MSBA Process

Module 3 Activities - Feasibility Study:

Preliminary Design Program (PDP) ~ July 2023

- Educational program and Space Summary
- Existing conditions report
- Establish design parameters
- Develop and evaluate alternatives

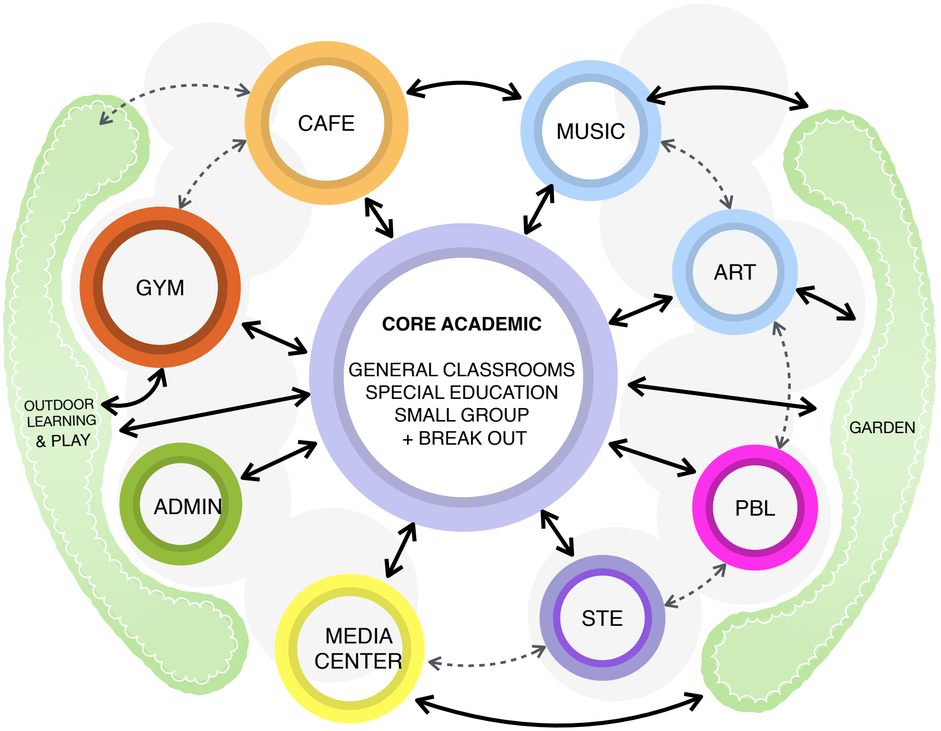
Preferred Schematic Report ~ December 2023

- Summarize the process and conclusions of the Preliminary and Final Evaluation of Alternatives
- Cost comparison table
- Document District's selection and recommendation of the most cost effective and educationally appropriate preferred solution to the MSBA
- Submit Preferred Schematic Report (PSR)

MSBA Board Approval of PSR ~ February 2024

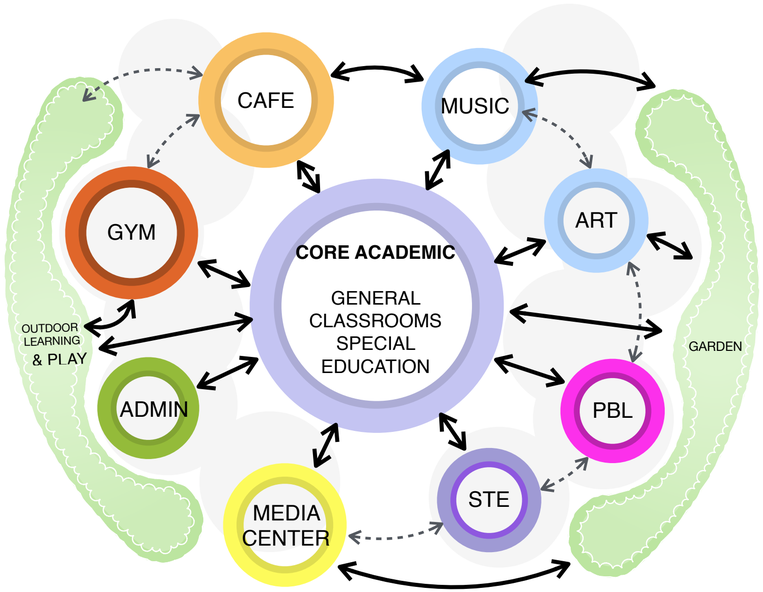
MSBA Process | Educational Program

- Identifies programs offered district-wide
- Identifies programs to be offered within the “new” Fox Hill Elementary School
- Identifies programmatic spatial relationships and adjacencies
- The program defines the space needs and total square footage for the project



MSBA Process | Educational Program

- Grade & School Configuration Policies
- Class Size Policies
- School Scheduling Method
- Teaching Methodology and Structure
- Teacher Planning
- Pre-Kindergarten Program
- Kindergarten Program
- Lunch Programs
- Technology Instruction Policies & Program Requirements
- Visual Art Programs
- Music/Performing Arts Programs
- Physical Education Programs
- Special Education Programs
- Vocations and Technology Programs
- Core Academic Space Narrative
- Transportation Policies
- Functional & Spatial Relationships and Key Programmatic Adjacencies
- Security & Visual Access Requirements



Preliminary Design Program | Enrollment Agreement

MSBA District Enrollment Forecast — Average 2023-2032

Year	K	1	2	3	4	5	Total
Avg. thru 2032	262	265	268	261	268	268	1,592

Massachusetts School Building Authority

Option 1 | 325 Student Enrollment

School	# of Clrms	18 Stu/Clrm	Total Capacity
Memorial ES	23	18	414
Pine Glen ES	17	18	306
Francis Wyman	30	18	540
Total Capacity	70		1,260
Projected Enrollment			1,590
Fox Hill ES	18	18	325

General Classrooms	K	1	2	3	4	5	Total
# Students (Average)	54	54	54	54	54	55	325
Average # students/class	18	18	18	18	18	18	
# of classrooms	3	3	3	3	3	3	18
Total Classrooms / Grade	3	3	3	3	3	3	18

Option 2 | 640 Student Enrollment

School	# of Clrms	18 Stu/Clrm	Total Capacity
Memorial ES	23	18	414
Francis Wyman	30	18	540
Total Capacity	53		954
Projected Enrollment			1,590
Fox Hill /Pine Glen ES	36	18	648

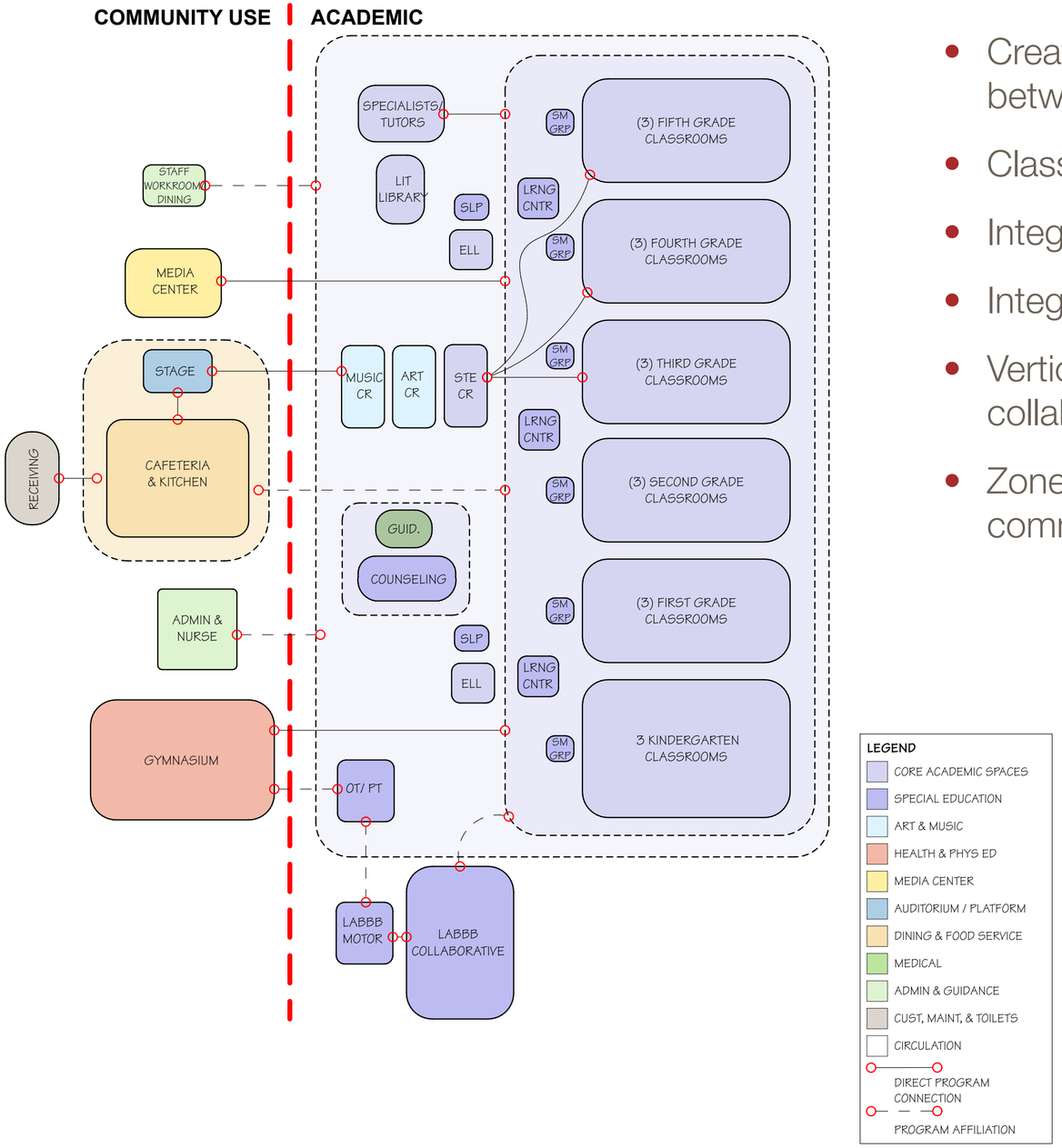
General Classrooms	K	1	2	3	4	5	Total
# Students (Average)	106	106	107	107	107	107	640
Average # students/class	18	18	18	18	18	18	
# of classrooms	5.89	5.89	5.94	5.94	5.94	5.94	35.56
Total Classrooms / Grade	6	6	6	6	6	6	36

Preliminary Space Summary | Enrollment Comparison

Program	Fox Hill Existing Conditions	Fox Hill Only @ MSBA Standards (325 Students)	Combined Fox Hill + Pine Glen School @ MSBA Standards (640 Students)	Comments
Core Academic	24,815 NFA	23,270 NFA	46,540 NFA	Includes general classrooms, STE classroom, ELL, literacy + math specialists, tutors
Special Ed.	4,485 NFA	15,225 NFA	21,775 NFA	Includes LABBB program, DSC II, support spaces (SLP, BCBA, Learning Centers, Small Group / Reading, OT/PT, Team Chair, Psychologist, Adjustment Counselor, etc.)
Art/Music	2,160 NFA	2,500 NFA	5,000 NFA	
Health & PE	4,170 NFA	7,300 NFA	7,300 NFA	Full size gym supports MIAA HS basketball court
Media Center	1,365 NFA	2,130 NFA	3,550 NFA	
Dining (Cafe, Kitchen, Stage, Teacher Dining)	6,610 NFA	5,567 NFA	8,413 NFA	
Medical / Admin	1,790 NFA	2,855 NFA	6,150 NFA	
Custodial / Main	860 NFA	1,925 NFA	2,240 NFA	
Other	0 NFA	0 NFA	0 NFA	
Sub Total Program	46,255 NFA	60,772 NFA	100,968 NFA	
Total Gross Sq. Ft. (GSF) (Gross SF / NFA = 1.5)	64,400 GSF	91,158 GSF	151,452 GSF	

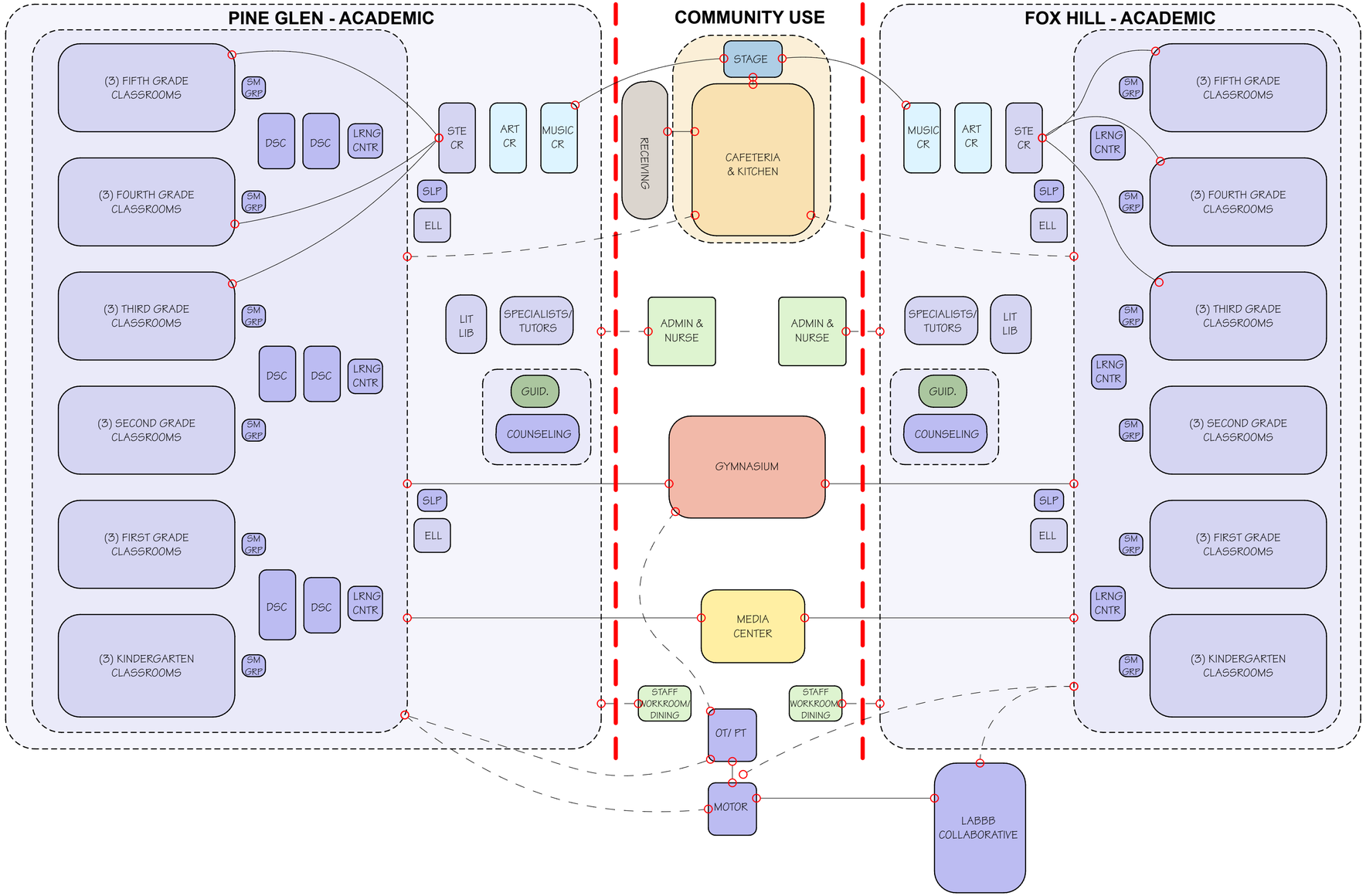
NFA = Net Floor Area

Spatial Relationships | Fox Hill School Only - 325 Students

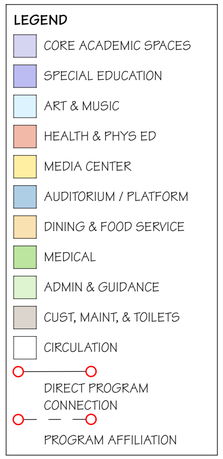


- Create optimum adjacencies between programs
- Classrooms clustered by grade
- Integrated student support
- Integrated Special Education
- Vertical and horizontal collaboration
- Zoned for after school / community use

Spatial Relationships | Fox Hill and Pine Glen School - 640 Students



- Create optimum adjacencies between programs
- Two separate schools sharing cafeteria, gymnasium and media center in one facility
- Classrooms clustered by grade
- Integrated student support
- Integrated Special Education
- Vertical and horizontal collaboration
- Zoned for after school / community use



MSBA Process

Module 3 Activities - Feasibility Study:

Preliminary Design Program (PDP) ~ July 2023

- Educational program and Space Summary
- Existing conditions report
- Establish design parameters
- Develop and evaluate alternatives

Massachusetts School Building Authority

Alternative	Description	Location	# of students	# of classrooms	Solution
Option No. 1	Code Upgrade / Repair Only	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 2	Addition / Renovation	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 3	New Construction	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 4	Code Upgrade / Repair Only	Fox Hill School	640 Students	2 x 3 classrooms /grade	Combined Fox Hill & Pine Glen
Option No. 5	Addition / Renovation	Fox Hill School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools
Option No. 6	New Construction	Fox Hill School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools
Option No. 7	Addition / Renovation	Pine Glen School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools
Option No. 8	New Construction	Pine Glen School	640 Students	2 x 3 classrooms /grade	Combined FHES + PGES building with independent schools

School Building Committee | Priorities and Criteria

Fox Hill Elementary School - Burlington, MA — **Options and Evaluation Matrix**

	Evaluation criteria based upon priorities	Proposed Concepts						
		Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Site (640 Students)	Fox Hill School Site (640 Students)	Pine Glen School Site (640 Students)	Pine Glen School Site (640 Students)
		Code Upgrades + Repairs no addition	Renovation + Addition	Full demo + new construction	Renovation + addition	Full demo + new construction	Renovation + addition	Full demo + new construction
Concept Facts								
1	Size of site (acres)	37.90 ac	37.90 ac	37.90 ac	37.90 ac	37.90 ac	11.80 ac.	11.80 ac.
2	Usable size of site (acres)	17.90 ac	17.90 ac	17.90 ac	17.90 ac	17.90 ac	9.6 ac.	9.6 ac.
3	Site environmental (wetlands, etc)	20.00 ac	20.00 ac	20.00 ac	20.00 ac	20.00 ac	2.20 ac	2.20 ac
4	Classroom count	18	18	18	36	36	36	36
5	Building gross square feet (GSF)	64,400 SF	100,000 SF	92,000 SF	160,000 SF	152,000 SF	160,000 SF	152,000 SF
6	Net Zero Capability							
Equity to Other Elementary Schools								
1	Equity between Fox Hill and Pine Glen							
2	Equity among all elementary schools							
Cost and Schedule								
1	Project Cost, $million							
2	Cost to the Town							
3	District's annual operating expenses							
4	Allows students to move in to new school 2028							
5	Requires swing space							
Educational								
1	Meets educational program for all students + design enrollment							
1	Size of spaces							
2	Optimizes configuration and adjacency of teaching spaces							
3	Educational program flexibility							
4	Provides outdoor learning opportunities							
5	Provides flexibility for future growth							
6	Provides flexibility for fluctuation of grade cohort sizes							
7	Allows for efficient program design layout							
8	Minimizes school disruption							
Building								
1	Allows for a contextually sensitive design							
2	Allows efficient attainment of Green School/Stretch Code requirements							
3	Optimizes use of natural light and daylighting							
4	Optimizes connection of outdoor/indoor space, integration with site							
5	Meets ADA requirements efficiently							
6	Addresses all outdated elementary schools							

DRAFT

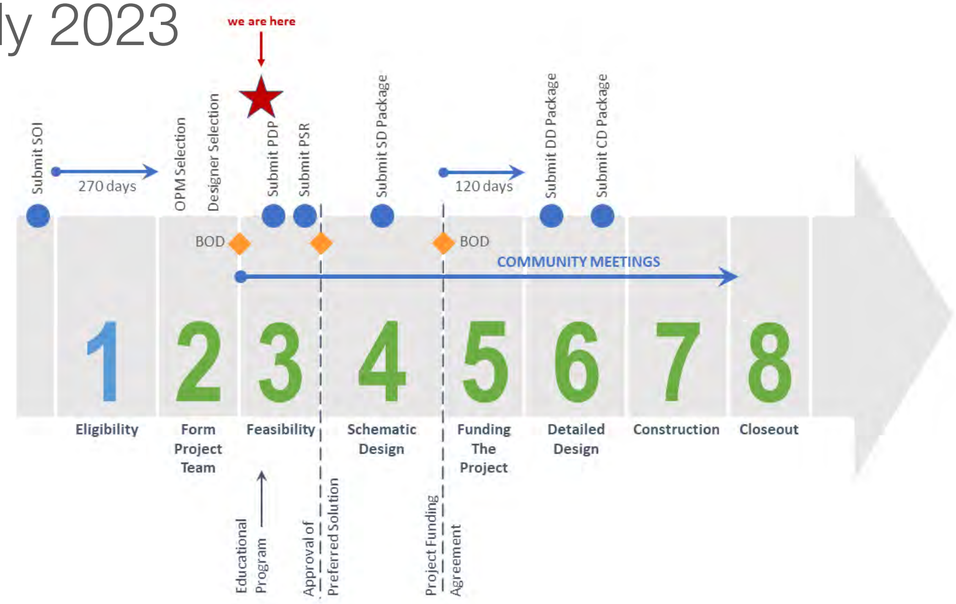
Fox Hill Elementary School - Burlington, MA — **Options and Evaluation Matrix**

	Evaluation criteria based upon priorities	Proposed Concepts						
		Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Site (640 Students)	Fox Hill School Site (640 Students)	Pine Glen School Site (640 Students)	Pine Glen School Site (640 Students)
		Code Upgrades + Repairs no addition	Renovation + Addition	Full demo + new construction	Renovation + addition	Full demo + new construction	Renovation + addition	Full demo + new construction
Concept Facts								
1	Size of site (acres)	37.90 ac	37.90 ac	37.90 ac	37.90 ac	37.90 ac	11.80 ac.	11.80 ac.
2	Usable size of site (acres)	17.90 ac	17.90 ac	17.90 ac	17.90 ac	17.90 ac	9.6 ac.	9.6 ac.
3	Site environmental (wetlands, etc)	20.00 ac	20.00 ac	20.00 ac	20.00 ac	20.00 ac	2.20 ac	2.20 ac
4	Classroom count	18	18	18	36	36	36	36
5	Building gross square feet (GSF)	64,400 SF	100,000 SF	92,000 SF	160,000 SF	152,000 SF	160,000 SF	152,000 SF
6	Net Zero Capability							
Site								
1	Maximizes efficient utilization of site							
2	Provides additional space for Town recreation							
3	Optimizes outdoor program space and green space							
4	Optimizes safety and efficiency of on site drop off							
5	Separates safe circulation of bus, vehicle, pedestrian and bike access							
6	Provides sufficient parking for teachers, staff + visitors							
7	Improves off site traffic impact							
8	Improves pedestrian safety and access							
9	Allows for future expansion							
Sustainability								
1	Ease of maintenance / maintenance costs							
2	Site requirements							
3	Cost							
4	Optimizes solar (PV) opportunities							
5	Minimizes embodied carbon footprint with building reuse							
6	Achieves Town goal for fossil free building HVAC systems							
7	Optimizes building orientation							
8	Allows efficient attainment of Green School/Stretch Code requirements							
9	Optimizes building envelope thermal performance							
Construction impacts / cost								
1	Building construction cost							
2	Site construction cost							
3	Construction Duration impact							
4	School disruption impacts							
5	Construction impacts on abutters							
Operational costs								
1	Life Cycle Cost Analysis (LCCA)							
2	Annual Operating Cost							
3	Cost for solar as it relates to operating cost (annual)							
Community								
1	Provides additional community/school asset							

DRAFT

Next Steps | Preliminary Design Program (PDP)

- Review and approval of educational program and space requirements
- Finalize traffic analysis study
- Establish design parameters
- Explore design options
- Community Forum #2
- Submit Preliminary Design Program (PDP) to MSBA ~ July 2023

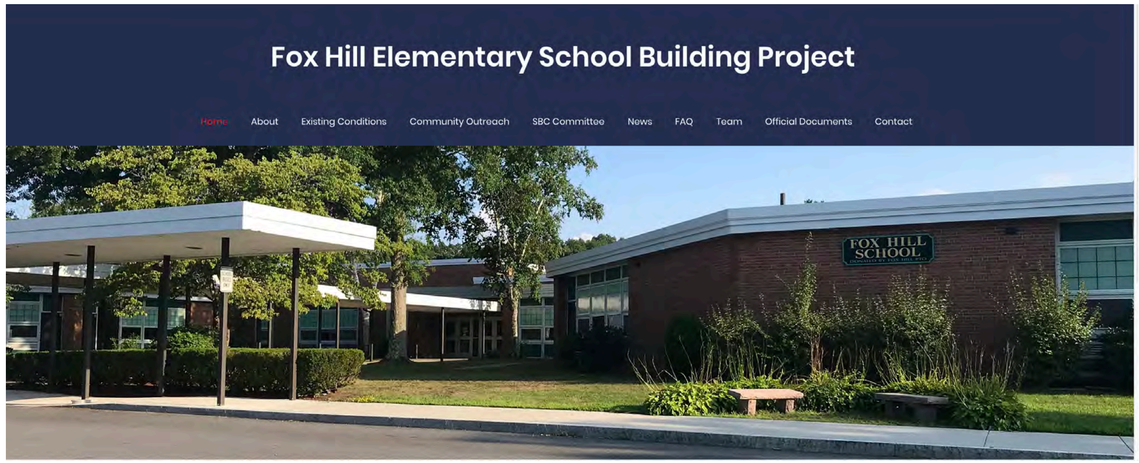


Key Dates

- PDP Submission July 13, 2023
- PSR Phase July through December 2023
- PSR Submission December 13, 2023
- MSBA Board Meeting to proceed into Schematic Design February 2024
- Schematic Design December 2023 through June 2024
- SD Submission July 2024
- MSBA Board Meeting to proceed with local funding August 2024
- Local Town Vote for Project Approval September 23, 2024

Stay Connected

https://www.foxhillbuildingproject.com/



School Building Committee Meeting

BURLINGTON ELEMENTARY SCHOOL

Burlington, MA

May 30, 2023

© 2023 DiNisco Design, Inc.

DINISCO DESIGN

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Review*
   - *Educational Program Review*
   - *Space Summary Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

Next Meetings

- *June 13th, 2023 School Committee Meeting@ 7:00PM (further review of educational program and space summary)*
- *June 20th, 2023 School Building Committee Meeting @ 6:00PM (further review of educational program, space summary, and building concepts)*
- *June 26th, 2023 School Committee Meeting @ 7:00pm (approve educational program and space summary)*
- *Week of June 26th 2023 School Building Committee @6:00pm (Review Cost Estimates)*
- *July 11th, 2023 Community Meeting No. 2 @ 7:00pm (update on concepts, criteria and options)*
- *July 13th, 2023 School Building Committee Meeting @6:00pm (Approve PDP and submit to MSBA)*

SBC Meeting Agenda – May 30, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 16th, 2023 Meeting Minutes*
3. *SBC Member Update*
4. *Recap Community Forum Meeting*
5. *Criteria Matrix Review*
6. *Design Concepts Review*
7. *Upcoming Milestones/Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Public Comment*
10. *Next meetings*
11. *Adjourn*

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

RECEIVED
By Town Clerk's Office at 1:13 pm, May 31, 2023

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee & School Committee

DATE: May 16, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	5/16/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair		Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
	David Rosenblatt*	Principal	✓	Donna DiNisco	DiNisco Design
	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member	✓	Krystal Anderson	
	Tara Carroll	SBC Member	✓	Melissa Ulliani	
	Audrey Boeri	SBC Member	✓	Nicci Kadilak	
✓	George Papayannis	SBC Member	✓	Melissa Gilberg	
✓	Katherine Bond*	Vice Chair of SBC	✓	Kristen DeMarco	
✓	Jeremy Brooks*	SBC Member	✓	Sasha Stevens	
✓	Christine Monaco*	SBC Member	✓	Alison Varrell	
✓	Martha Simon*	SBC Member	✓	Amy Barrows	
✓	Kristen Downie	Secretary	✓	Melissa Parnell	
✓	Heather Brady		✓	Anna Lisa Finn	
✓	Jennifer Agati		✓	John Lyons	
✓	Elizabeth Orfanos		✓	Kim Shubrooks	
✓	Bill Boivin		✓	Rachel Small	
✓	Erica Zola		✓	Diane Fitzpatrick	
✓	Amanda Hanafin		✓	Diana Segool	

* SBC Voting Member

Item No.	Description	Action
8.1	**Call to Order & Intro**: 6:02 pm meeting was called to order by SBC Chair M. Massardo with 9 of 13 voting members in attendance.	Record
8.2	**Previous Topics & Approval of May 2nd, 2023, Meeting Minutes:** ➢ A motion to approve the 05/2/2023 meeting minutes[1] as submitted made by M. Simon and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes M. Massardo – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – C. Monaco – Yes – J. Brooks – Yes – M. Simon - Yes. Abstention: None. Motion passes, minutes approved.	Record
8.3	**Public Comment:** ➢ A. Hanafin wants to add a parent from Pine Glen as a voting member. M. Massardo says Mr. Lyons will come back to the next SBC with a parent to be voted in as a voting member. ➢ B. Boivin makes a statement about the presence of a vernal pool on the Fox Hill site. Describes what a vernal pool is and the rules that a 200-foot buffer from the water line is needed around the vernal pool, as it is the most sensitive resource in Burlington. ➢ M. Simon says that D+W and DiNisco are already aware of this and are already making plans to accommodate the vernal pool. ➢ E. Zola makes a statement that she is for keeping the district at a four-school model and not building a combined school. Shares her concerns with the added traffic of the new school option and the lack of sidewalks and signs in the area. Wants traffic studies to be expanded to a wider area. ➢ E. Orfanos makes a statement saying she is deeply invested in the community, children, and the school system. She states she is in support of the four-school model and not a combined school. Says the research shows that smaller schools are what's best for their children. Notes she would like parent representation on the SBC, with no dual roles. ➢ K. Bond asks to add a Pine Glen parent to the SBC as a voting member.	Record

[1] May 2, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ J. Priest says J. Lyons should bring a parent with a non-dual role as a voting member. ➢ C. Monaco says she would like more non-voting members on the SBC. ➢ A. Hanafin suggests adding titles/roles on the website for everyone to know who serves on the committee.	
8.4	**Design Update:** ➢ M. Simon asks to change the name of the committee to the Burlington Elementary School Building Committee, as there is now Pine Glen representation. ➢ C. Monaco says that its important to recognize that whatever the plan for the school is it will affect every school in the town. ➢ D. DiNisco says the MSBA will continue to refer to the committee as the Fox Hill School Building Committee but won't take exception to changing the name. ➢ D. DiNisco starts going over the presentation[2]. Introduces D+W as well as DiNisco and the people on each team. Goes over the considerations that have been discussed: Elementary school equity, Enrollment considerations, Future Flexibility, Community support. They are looking at both options as it relates to the Fox Hill and Pine Glen School. Says they are currently in the Feasibility Study which is Module 3 of 8 of the process. D. DiNisco clarifies E. Conti asked the MSBA to consider the four-school model as the MSBA just wanted to study the combined school option. Shows a slide explaining the Preliminary Design Program (PDP), this details options 1-8 to be studied. During the PDP they will develop the Educational Program and Space Summary, Existing Conditions Report, Establish Design Parameters, and develop and evaluate alternatives. Notes that they have to study all 8 options and no decisions have been made. ➢ M. Simon asks a clarifying question about options 4-8, saying that some options are for a combined school with an enrollment of 640, while other options are for two separate schools with each enrollment of 325, with shared common spaces such as gym and cafe. D. DiNisco agrees and says that is correct and notes they will edit the slideshow to accurately reflect that. ➢ B. Boivin asks if there is an option that includes having two new schools at each respective site. D. DiNisco says that the site is up to the town, but the MSBA will only support one site and not two different sites. ➢ E. Orfanos asks if Pine Glen doesn't get involved in the project does that negate them from submitting for the Pine Glen site later. D. DiNisco says they can submit for the Pine Glen site later, the MSBA just may not select it. ➢ C. Monaco comments if they were to go with any combination of the combined school it would be 640 students. Asks to focus on all the	Record

[1] May 2, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

options equally and to not focus on one option as she feels the focus is on the combined school. What the community wants is Fox Hill and Pine Glen on their respective sites.

- J. Priest talks about needing to look at all the schools for the most equitable solution. As they should look at how these small classrooms/schools would look for the entire community.
- E. Conti says that the presentation is based on the view of the MSBA process and that's what dictates the options to look at.
- C. Monaco agrees that they need to work with the MSBA on the Fox Hill School. She wants to acknowledge that Pine Glen School needs to move up in the process and whether the community needs to pay for it or not is irrelevant at this moment.
- D. DiNisco responds saying there are more options than what is shown, and they are happy at a high level with the support of the community to help them understand the other options outside of the MSBA process in terms of impacts on costs and timeline, they can't get into designing it however.
- E. Parsons says that the idea the Burlington is growing and facing enrollment issues is false. Says the MSBA has been largely correct on their assumptions and that the enrollment has been flat and has lost some students over the recent years.
- D. DiNisco goes over the MSBA process. Talks about the preferred schematic report, which will be submitted in December 2023. Shows a slide[2] that details the process. The PSR will go to MSBA for board approval in February 2024. Schematic Design Submission will be in June 2024 and the MSBA will vote on the Schematic Design in August 2024.
- B. Boivin asks about what MSBA contribution is. D. DiNisco responds saying the reimbursement percentage is 45% of eligible costs. Says the effective rate will be less than the 45%.
- M. Burton says the effective reimbursement rate is closer to 25%.
- D. DiNisco talks about the educational program and enrollment. She goes over the enrollment agreement slide[2]. Then shows the Preliminary space summary slide[2]. This slide details what each space would look like at the fox hill only and the combined school. In total for Fox Hill only it would be around 95,433 GSF and for the combined school it would be 151,452 GSF. She shows the SBC goals that were decided on earlier this year. She talks about the Visioning sessions that were held and shows the educational priorities that were mentioned, then shows the architectural priorities for the new school. Starts talking about the spatial relationships and shows a slide for Fox Hill only,
- M. Simon asks about spatial relationships and that the diagram isn't a building floor plan. D. DiNisco confirms that these are not floor plans but to give information about the relationships between spaces.
- N. Harrigan talks about the existing conditions and traffic study. Says that the site is 37.9 acres, but only 17.9 are useable due to wetlands and

[1] May 2, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	vernal pool. There is also relatively high ground water in select areas of the site. Discusses the traffic study that was conducted from 7:00am until just after dismissal. D. DiNisco says there are several phases of the traffic study. This first one was just to understand the existing conditions. The second part was to do traffic counts and are waiting to get those results back. The third part of the study will be working to develop the best solution to mitigate the traffic issues on the site and neighborhood. N. Harrigan talks about the Pine Glen site which has 11.8 acres although 9.6 are useable. There is a presumed high-water table, and poorly draining soils. ➢ N. Harrigan talks about the different options that are being considered in the slideshow[2]. D. DiNisco talks to the Criteria Matrix and says they have polled the building committee and asked for input on it. They will be asking the community as well at the community forum to give their input on the matrix. ➢ D. DiNisco goes over the Menti poll that will be had at the community meeting. They will ask the community to rank 8 different categories in terms of priority to solicit feedback to better understand the community needs/wants. This poll will also be on the website after the fact for people who miss the forum. ➢ C. Monaco asks of the community meeting will be in person. D. DiNisco says that it is up to the committee, but they have found virtual is more effective due to getting more people to attend. C. Dell Angelo says they can discuss this at the next communication working group meeting. ➢ M. Simon talks about how the master plan the town made identified BHS as priority number one, with the Fox Hill School as number two on the list of the most in need of repair/renovation/addition/or new school. ➢ A community member notes that traffic is congested right now and adding a school would add to that traffic density. ➢ M. Ulliani says the traffic study is insufficient, needs to incorporate a larger radius to include more connecting roads. N. Harrigan responds saying they did studies at two intersections at Westwood and Fox Hill and Westwood and Wilmington. M. Ulliani recommends doing a study at the intersection of Fox Hill and Hart Street. ➢ D. DiNisco says they factor in who is a walker at Pine Glen now but would be driving if the combined school is approved. ➢ M. Massardo says she is working with Kristen Downie and David Rosenblatt to work on educating the students about traffic and safety. They are also working on telling parents not to line up so early for pickup.	
8.5	**Pine Glen SBC Representation**: ➢ A motion to add John Lyons as a voting SBC member made by E. Conti and seconded M. Simon. Discussion: None. Roll Call Vote: B. Cunha –	Record

[1] May 2, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	Yes E. Conti – Yes M. Massardo – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – C. Monaco – Yes – J. Brooks – Yes – M. Simon - Yes. Abstention: None. Motion passes, voting member approved.	
8.6	**Upcoming Dates:** ➢ C. Dell Angelo goes over the next steps. Which are to review and approve the educational program and space summary requirements, finalize the traffic study, establish design parameters, explore design options, hold community forum #2, and submit the PDP to MSBA in July 2023.	Record
8.7	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ None.	Record
8.8	**Next Meetings**: ➢ Tuesday May 30th, 2023, at 6:00PM.	Record
8.9	**Adjourn**: 8:24 pm A motion was made by M. Simon and seconded by J. Priest to adjourn the meeting, Discussion: None. Meeting adjourned.	Record

Submitted: 5/30/23

Approved: 5/30/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] May 2, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

May 16, 2023

DORE + WHITTIER

DINISCO DESIGN
architects + planners

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #8

May 16, 2023, 6:00 PM

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Previous Meeting Minutes

1. *May 2nd, 2023, Minutes*

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Community Forum

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

May 18, 2023

© 2023 DiNisco Design, Inc.

DINISCO DESIGN

Project Team

Dore & Whittier Team

Michael Burton MCPPO
Principal-In-Charge

Steve Brown MCPPO
Project Director

Christina Dell Angelo MCPPO
Project Manager

Michael Cox MCCPO
Project Manager

DiNisco Team

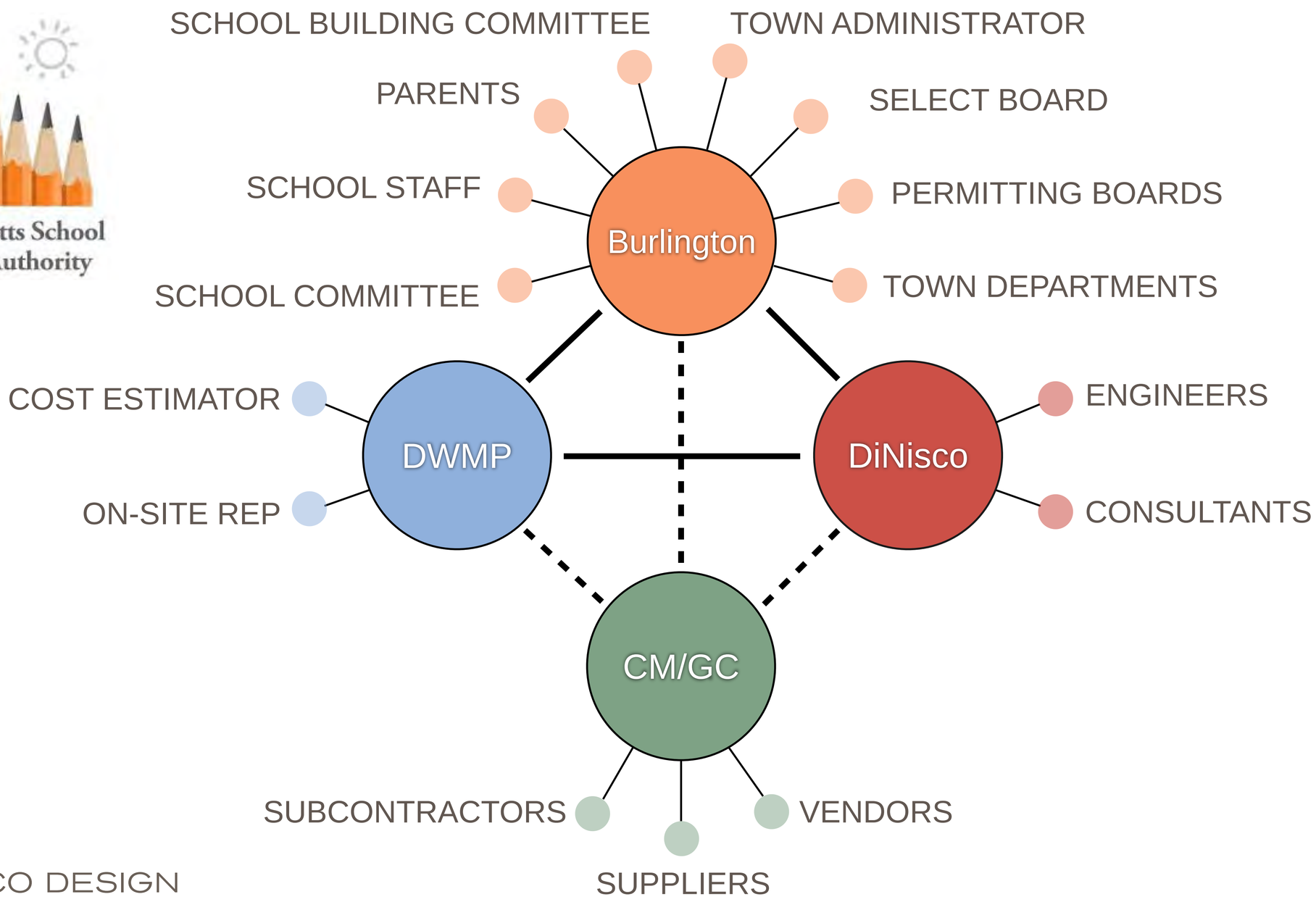
Vivian Low AIA, MCPPO
Vice President/Principal
Principal-In-Charge

Donna DiNisco MCPPO
President/Principal
Educational Programmer

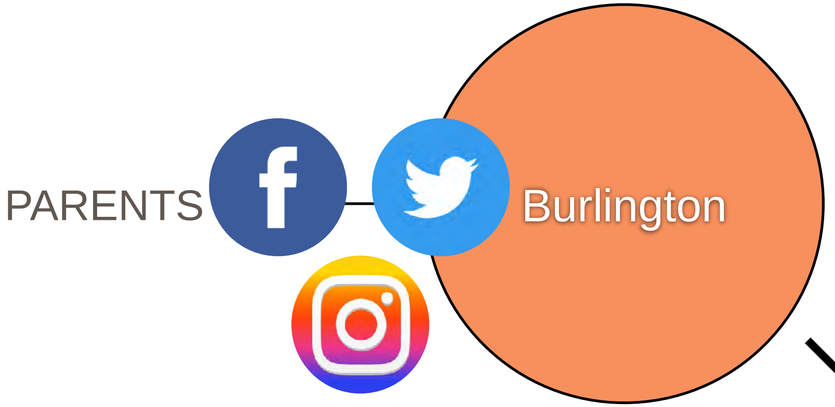
Neil Harrigan AIA, MCCPO
Associate
Project Manager

Massachusetts School Building Authority

The Project Team | Collaboration



Collaboration | Burlington Community



Seek Community Input

Define the Problem

Identify Goals

DiNisco

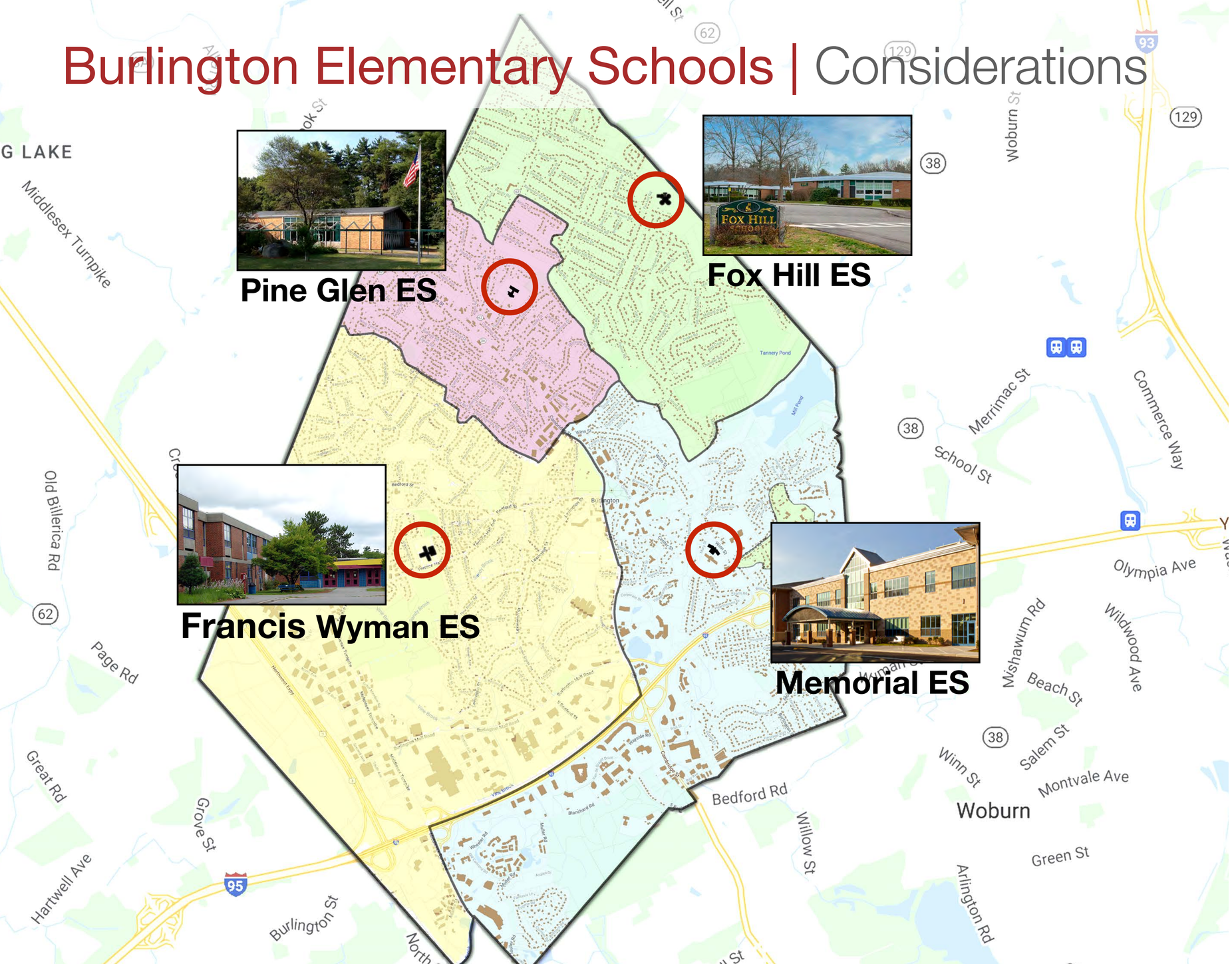
Welcoming and Transparent

Communication and Outreach

Consensus

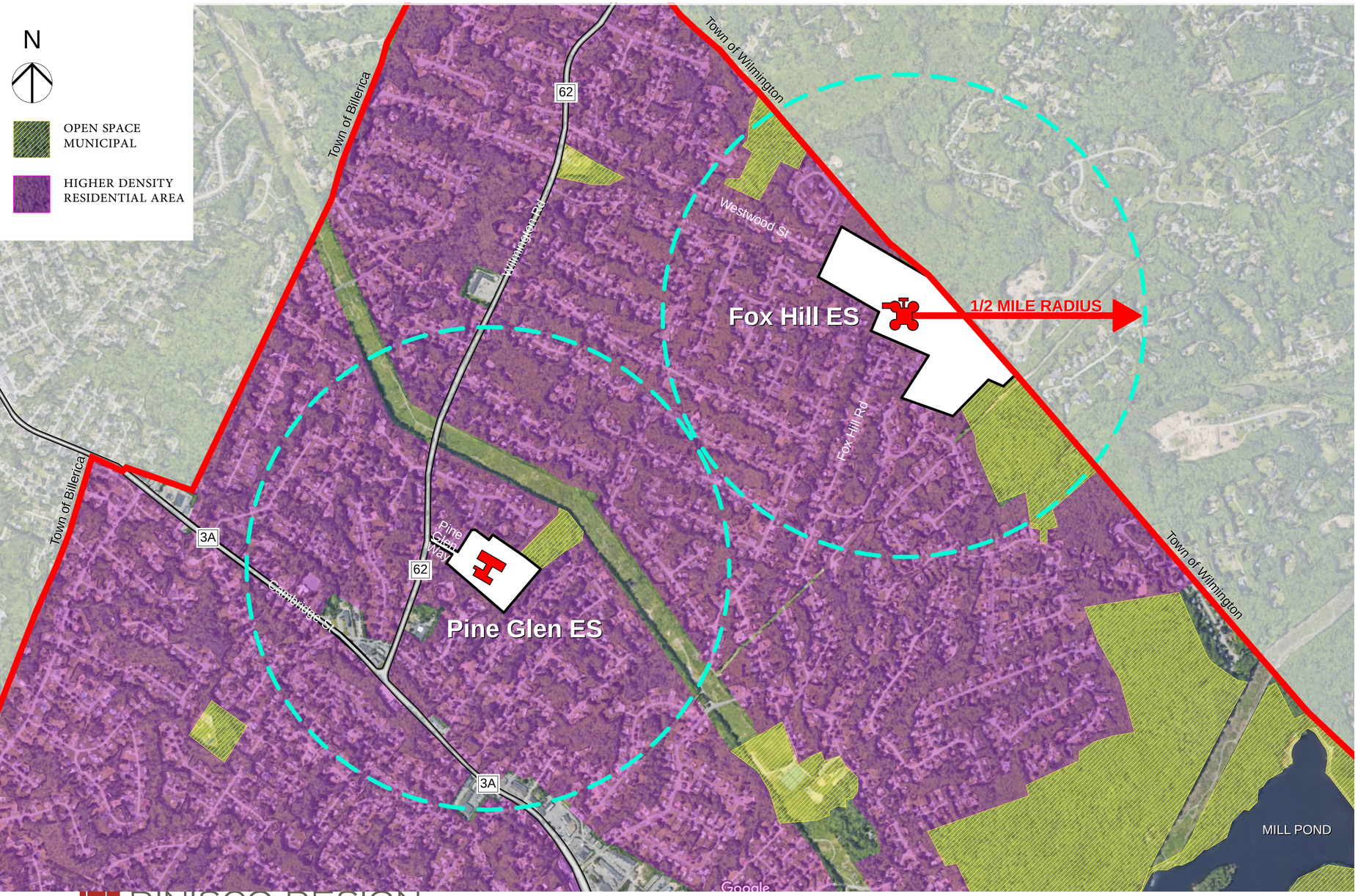
Enriched Design

Burlington Elementary Schools | Considerations



- Elementary school equity
- Enrollment considerations
- Future flexibility
- Community support

Burlington Elementary Schools | Considerations

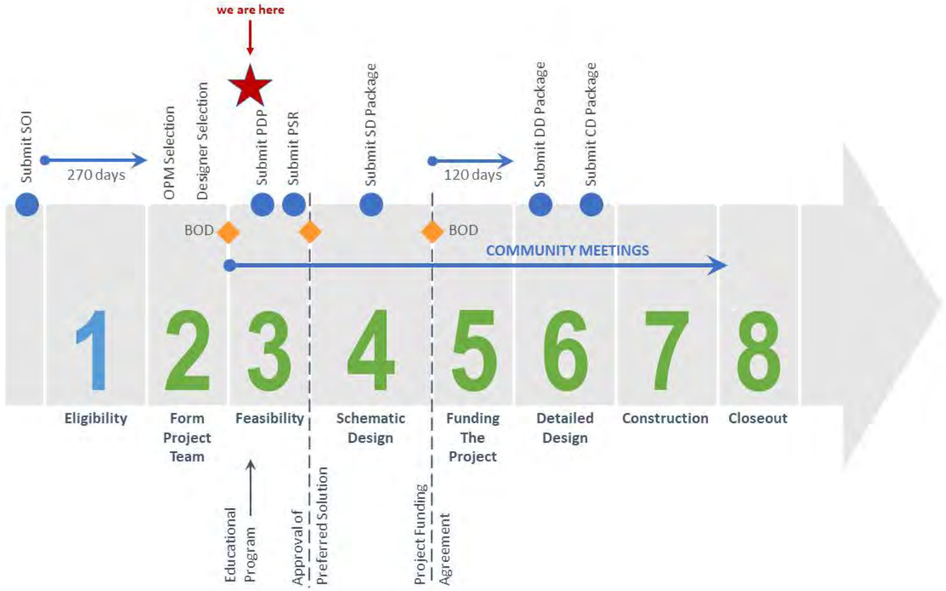


- Elementary school equity
- Enrollment considerations
- Future flexibility
- Community support

MSBA Process

The MSBA delivers a project through a clearly defined and prescribed process utilizing “modules”

- Module 1 – Eligibility Period
- Module 2 – Forming the Team
- **Module 3 – Feasibility Study**
- Module 4 – Schematic Design
- Module 5 – Funding the Project
- Module 6 – Detailed Design
- Module 7 – Construction
- Module 8 – Completing the Project



MSBA Process

Module 3 Activities - Feasibility Study:

Preliminary Design Program (PDP) ~ July 2023

- Educational program and Space Summary
- Existing conditions report
- Establish design parameters
- Develop and evaluate alternatives

Massachusetts School Building Authority

Alternative	Description	Location	# of students	# of classrooms	Solution
Option No. 1	Code Upgrade / Repair Only	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 2	Addition / Renovation	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 3	New Construction	Fox Hill School	325 Students	3 classrooms / grade	Fox Hill Only
Option No. 4	Code Upgrade / Repair Only	Fox Hill School	640 Students	2 x 3 classrooms /grade	Fox Hill & Pine Glen Two School Option
Option No. 5	Addition / Renovation	Fox Hill School	640 Students	2 x 3 classrooms /grade	Fox Hill & Pine Glen Two School Option
Option No. 6	New Construction	Fox Hill School	640 Students	2 x 3 classrooms /grade	Fox Hill & Pine Glen Two School Option
Option No. 7	Addition / Renovation	Pine Glen School	640 Students	2 x 3 classrooms /grade	Fox Hill & Pine Glen Two School Option
Option No. 8	New Construction	Pine Glen School	640 Students	2 x 3 classrooms /grade	Fox Hill & Pine Glen Two School Option

MSBA Process

Module 3 Activities - Feasibility Study:

Preferred Schematic Report (PSR) ~ December 2023

- Summarize the process and conclusions of the Preliminary and Final Evaluation of Alternatives
- Cost comparison table
- Document District's selection and recommendation of the most cost effective and educationally appropriate preferred solution to the MSBA
- Submit Preferred Schematic Report (PSR)

MSBA Board Approval of PSR ~ February 2024

Module 4 Activities — Schematic Design:

Schematic Design Submission ~ June 2024

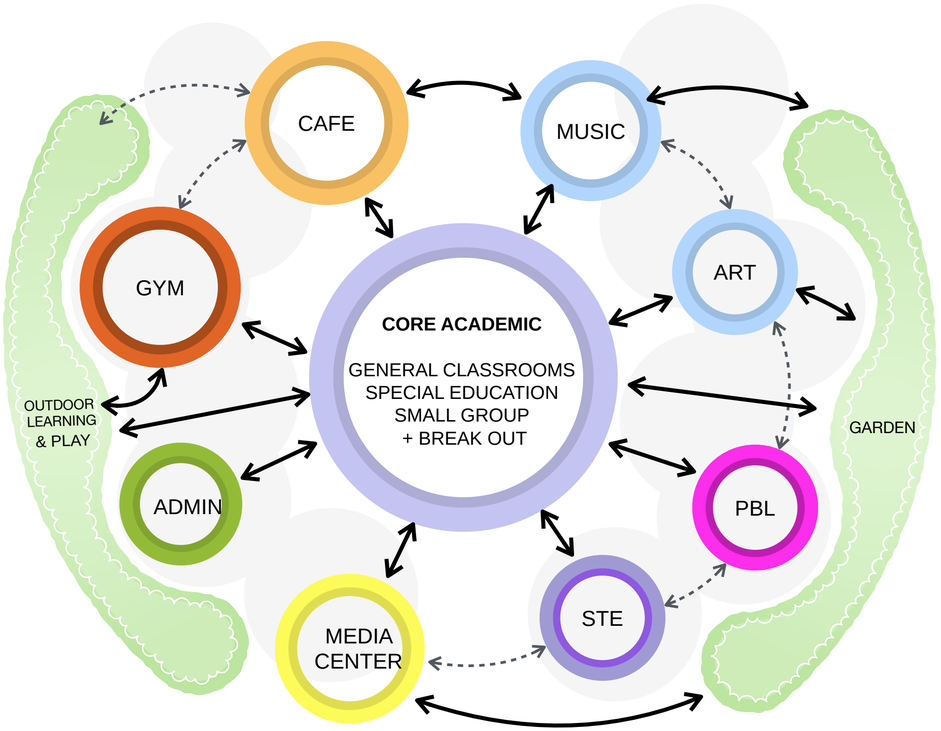
- Final design program
- More detailed estimates
- Preliminary Plans / Specs

MSBA Board Approval of Schematic Design ~ August 2024

Massachusetts School Building Authority

Educational Program

- Identifies programs offered district-wide
- Identifies programs to be offered within the “new” Fox Hill Elementary School
- Identifies programmatic spatial relationships and adjacencies
- The program defines the space needs and total square footage for the project



Preliminary Design Program | Enrollment Agreement

MSBA District Enrollment Forecast — Average 2023-2032

Year	K	1	2	3	4	5	Total
Avg. thru 2032	262	265	268	261	268	268	1,592

Massachusetts School Building Authority

Option 1 | 325 Student Enrollment

School	# of Clrms	18 Stu/Clrm	Total Capacity
Memorial ES	23	18	414
Pine Glen ES	17	18	306
Francis Wyman	30	18	540
Total Capacity	70		1,260
Projected Enrollment			1,590
Fox Hill ES	18	18	325

	K	1	2	3	4	5	Total
# Students (Average)	54	54	54	54	54	55	325
Average # students/class	18	18	18	18	18	18	
# of classrooms	3	3	3	3	3	3	18
Total Classrooms / Grade	3	3	3	3	3	3	18

Option 2 | 640 Student Enrollment

School	# of Clrms	18 Stu/Clrm	Total Capacity
Memorial ES	23	18	414
Francis Wyman	30	18	540
Total Capacity	53		954
Projected Enrollment			1,590
Fox Hill /Pine Glen ES	36	18	648

	K	1	2	3	4	5	Total
# Students (Average)	106	106	107	107	107	107	640
Average # students/class	18	18	18	18	18	18	
# of classrooms	5.89	5.89	5.94	5.94	5.94	5.94	35.56
Total Classrooms / Grade	6	6	6	6	6	6	36

Preliminary Space Summary | Enrollment Comparison

Program	Fox Hill Only @ MSBA Standards (325 Students)	Combined Fox Hill + Pine Glen School @ MSBA Standards (640 Students)	Comments
Core Academic	23,270 NFA	46,540 NFA	Includes general classrooms, STE classroom, ELL, literacy + math specialists, tutors
Special Ed.	18,075 NFA	21,775 NFA	Includes LABBB program, DSC program, SPED support spaces (SLP, BCBA, Learning Centers, Small Group / Reading, OT/PT, Team Chair, Psychologist, Adjustment Counselor, etc.
Art/Music	2,500 NFA	5,000 NFA	
Health & PE	7,300 NFA	7,300 NFA	Full size gym supports MIAA HS basketball court
Media Center	2,130 NFA	3,550 NFA	
Dining (Cafe, Kitchen, Stage, Teacher Dining)	5,567 NFA	8,413 NFA	
Medical / Admin	2,855 NFA	6,150 NFA	
Custodial / Main	1,925 NFA	2,240 NFA	
Other	0 NFA	0 NFA	
Sub Total Program	63,622 NFA	100,968 NFA	
Total Gross Sq. Ft. (GSF) (Gross SF / NFA = 1.5)	95,433 GSF	151,452 GSF	

NFA = Net Floor Area

School Building Committee | Project Goals

- Cost efficiency
- Building efficiency
- Sustainability
- Quality of materials
- Security and technology
- 21st Century learning
- Building that meets enrollment
- Building meets needs of students and staff for effective learning
- Flexible and adaptable learning space that meets educational program
- Collaborative student-centered education
- Design to accommodate future technological advances in teaching tools
- Outdoor spaces
- Community involvement and input
- Healthy learning environment

Visioning Sessions | Educational Priorities

Fox Hill

- Safe and Welcoming
- Student-Centered Learning
- Collaborative Learning
- STEAM and Project Based Learning
- Inclusive and Differentiated Learning
- Community Connections
- Outdoor Learning

Pine Glen

- Inclusive and Differentiated Learning
- Student Centered Learning
- Collaborative Learning
- Social Emotional Learning
- School Community and Culture
- Enrichment Opportunities
- Community Partnerships
- Outdoor Learning

Visioning Sessions | Architectural Priorities

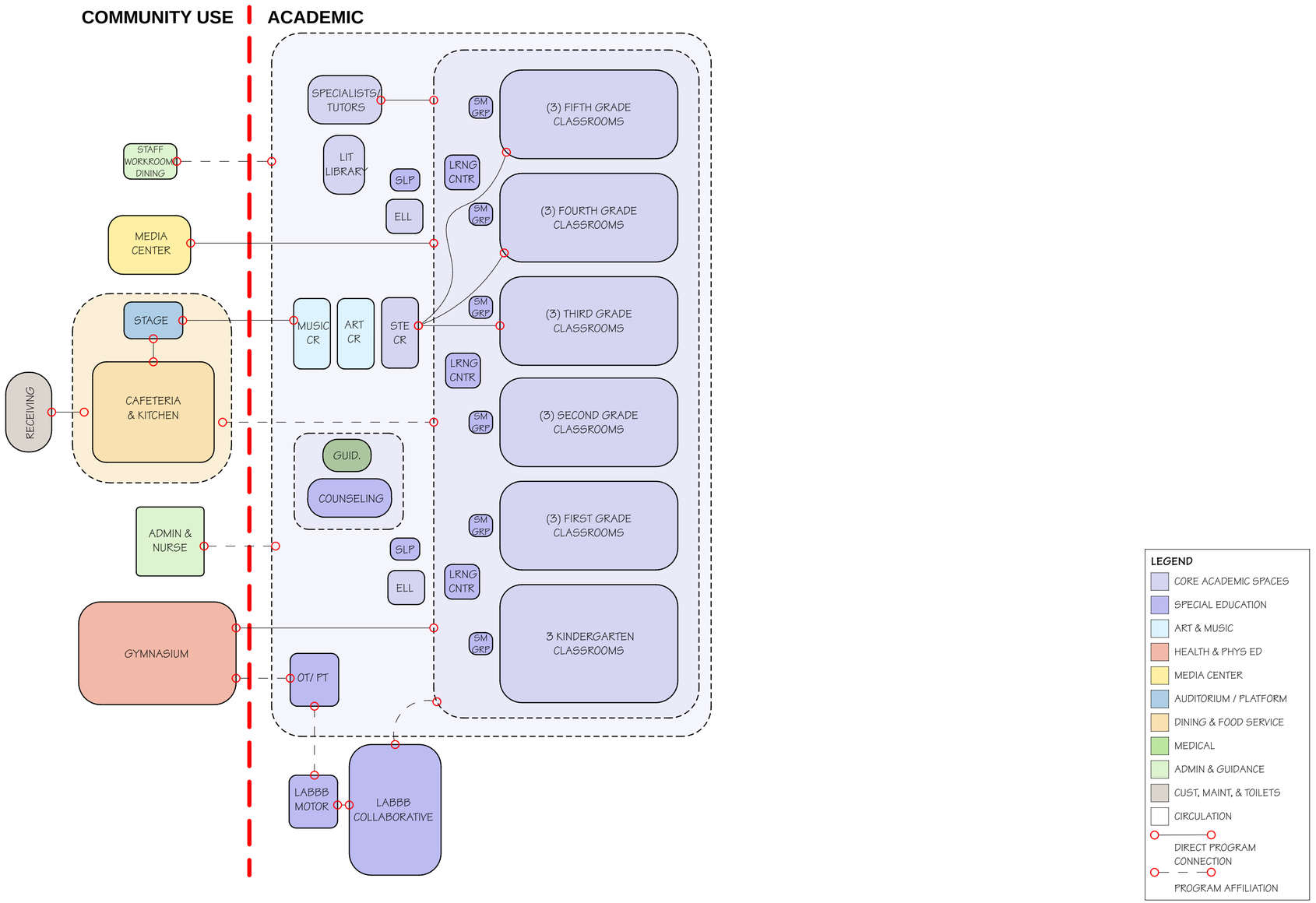
Fox Hill

- Safe and Welcome
- Innovative and Flexible Learning Spaces
- Support for Differentiated Learning
- Robust Technology
- Sustainability
- Good Acoustics
- More Space
- Teacher Workspaces and Support
- Good Storage
- Bathrooms

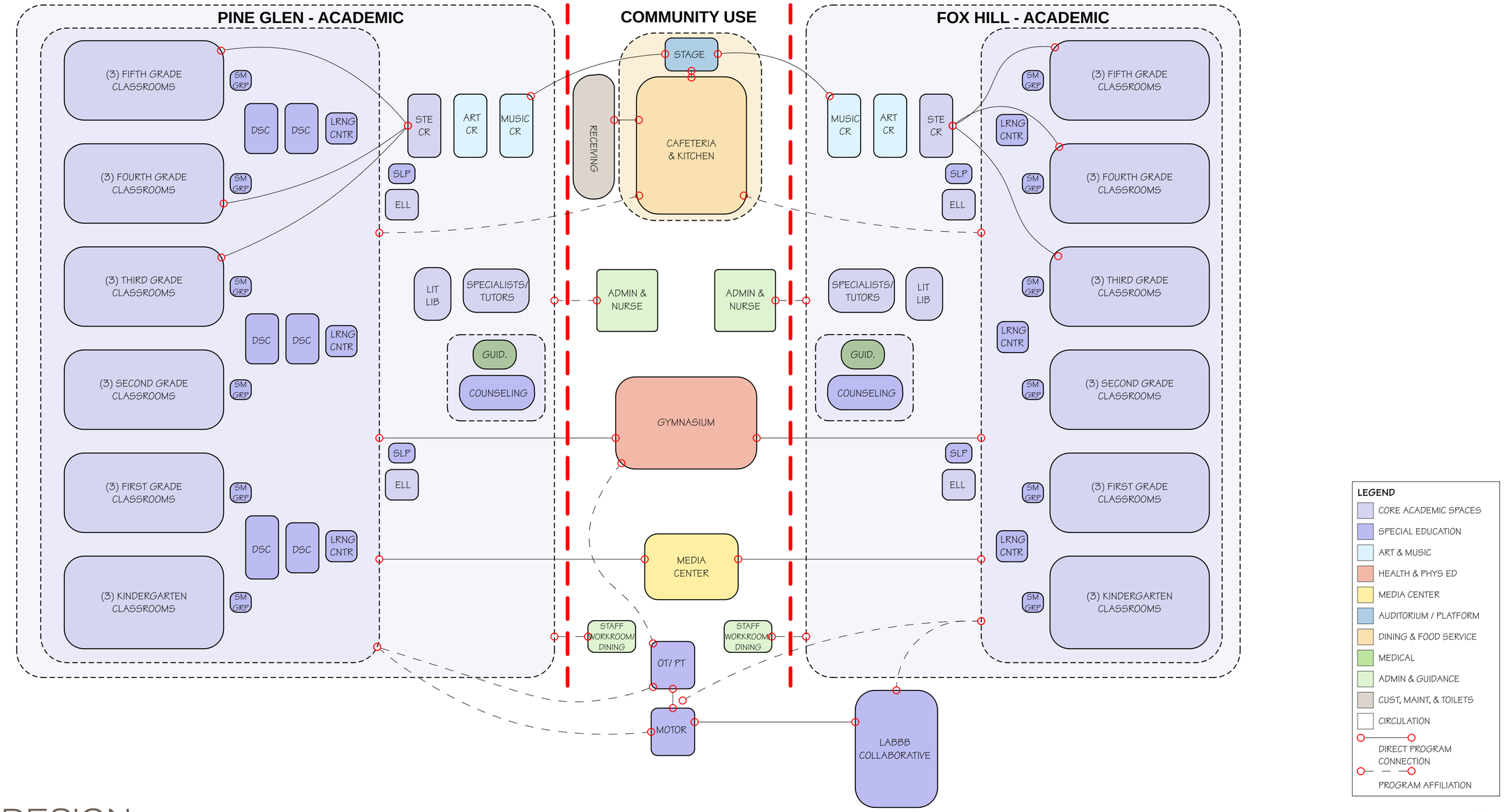
Pine Glen

- Inclusion and Access
- Flexible Classrooms and Spaces
- Classroom Neighborhoods
- Small Group and Meeting Spaces
- Collaborative Learning and Gathering Spaces
- Healthy Building
- Outdoor Learning Spaces
- Robust Technology
- Thermal Comfort, Natural Light

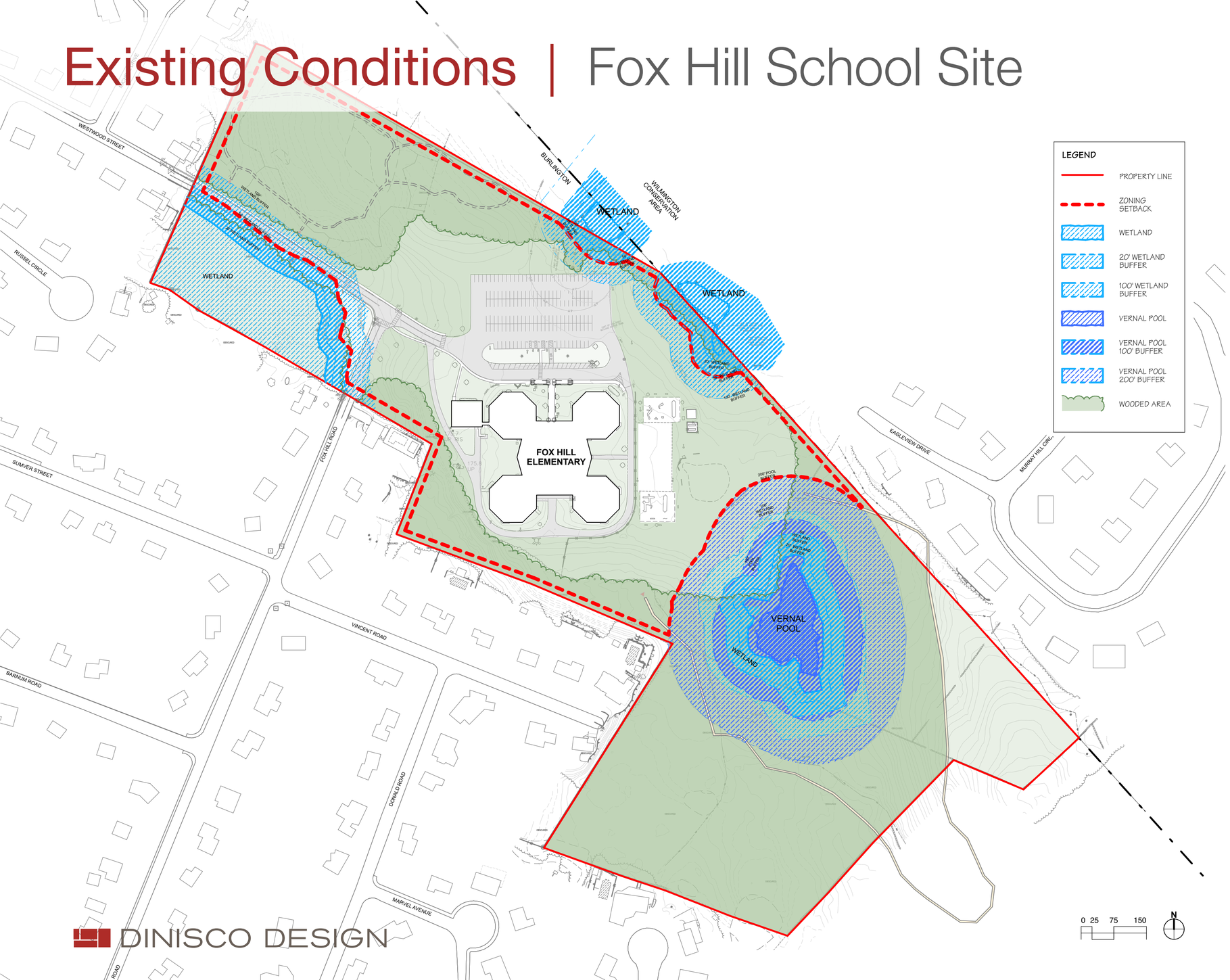
Spatial Relationships | Fox Hill School Only - 325 Students



Spatial Relationships | Fox Hill and Pine Glen School - 640 Students



Existing Conditions | Fox Hill School Site



- 37.9 Acre site — 17.9 acres usable area, limited by wetlands and vernal pool. Some rock outcroppings are located at the southeast corner of the site (south of existing school)
- 64,400 GSF existing building
- Relatively high ground water in select areas of the site
- Rock removal may be required
- ANRAD filings and conservation commission approvals will be required in both Burlington and Wilmington

DINISCO DESIGN

Existing Conditions | Fox Hill Traffic Study - Arrival

- Parents drop off at loop road surrounding the school on the south side - there were no cars observed to be queuing beyond the loop at arrival times
- Parent drop off positions the driver side adjacent to the building entrance. It is preferable to have the passenger side of the vehicle adjacent to the building entrance
- There are no accessible sidewalk ramps on north side of crosswalk between Westwood Street and Fox Hill Road
- Accessible sidewalk ramps at intersections do not have detectable warning plates
- Signing and striping at multiple locations are faded and difficult to read/illegible
- Signage requires updating

Existing Conditions | Fox Hill Traffic Study - Dismissal

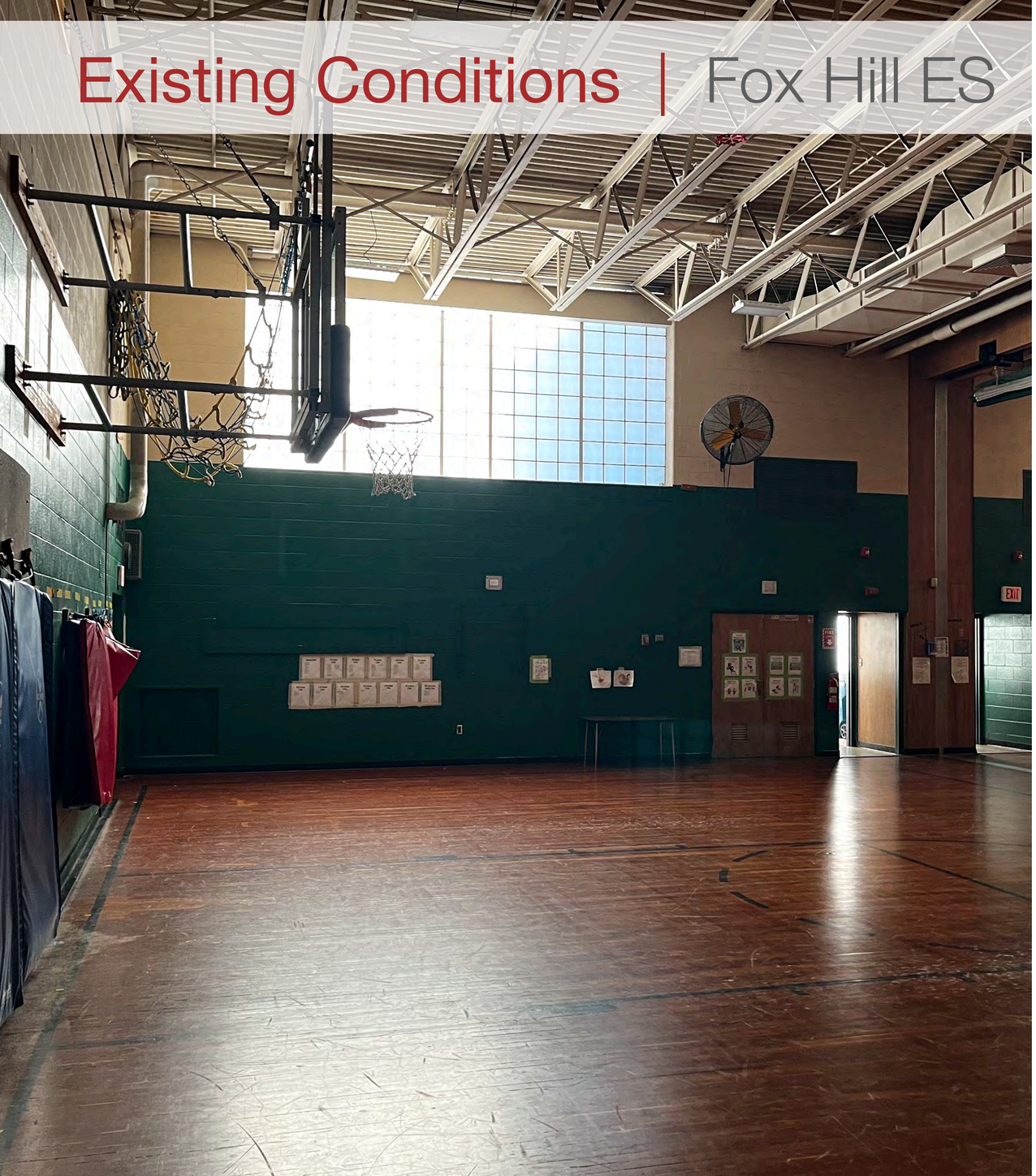
- Vehicle queues were observed along Westwood Street and Fox Hill Road prior to opening of gate to the drop off /pick up loop. Neither road has shoulders to allow vehicles to pull off the travel lane
- Parents were observed arriving at the school at least 30 minutes before dismissal
- The gate (chain) is typically not opened until 5 minutes prior to dismissal so that children using the playground can safely cross the driveway to head back to the school
- Once the gate was opened, parent queuing did not extend beyond the drop off/pick up loop

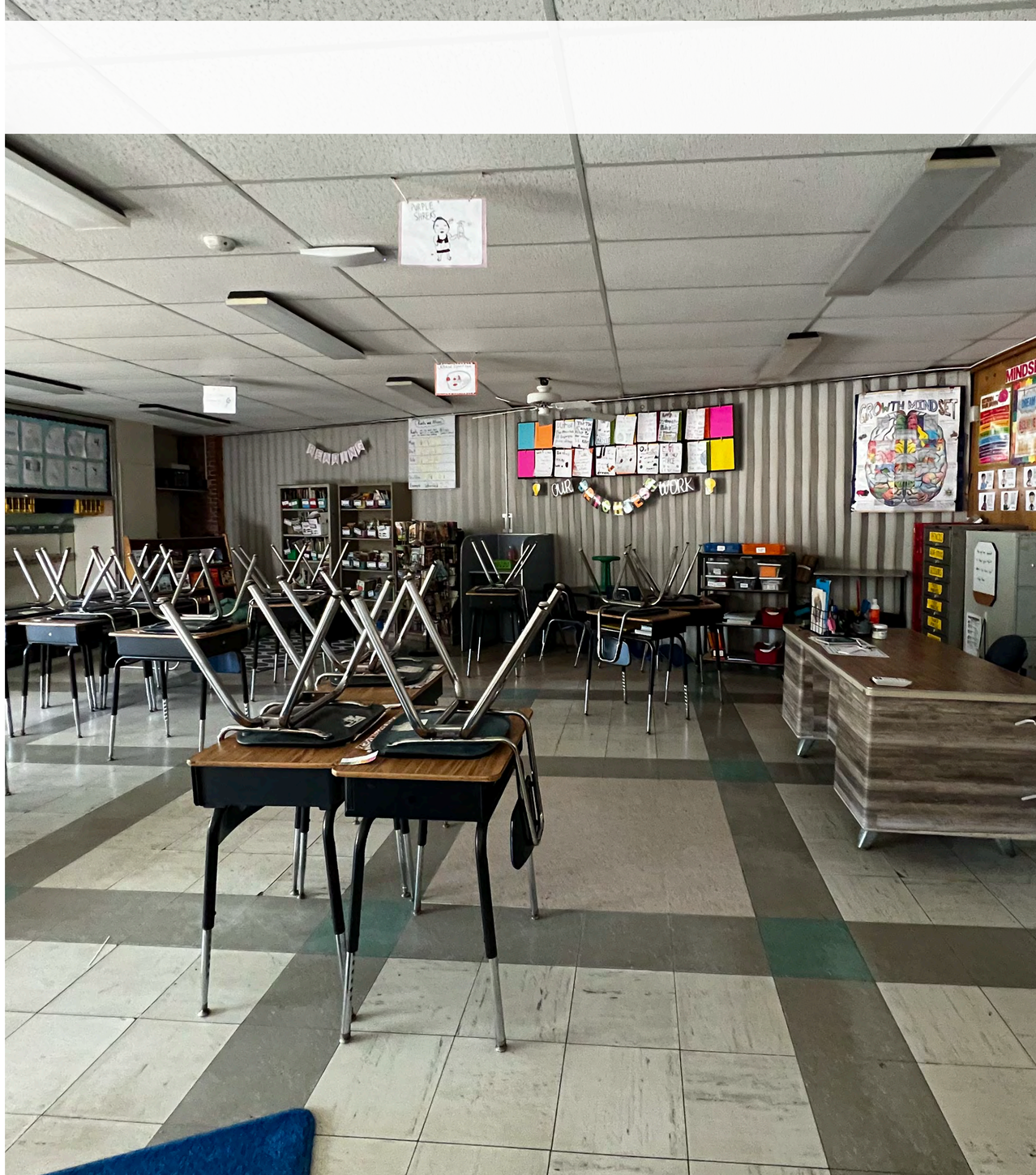
Existing Conditions | Fox Hill ES

DINISCO DESIGN

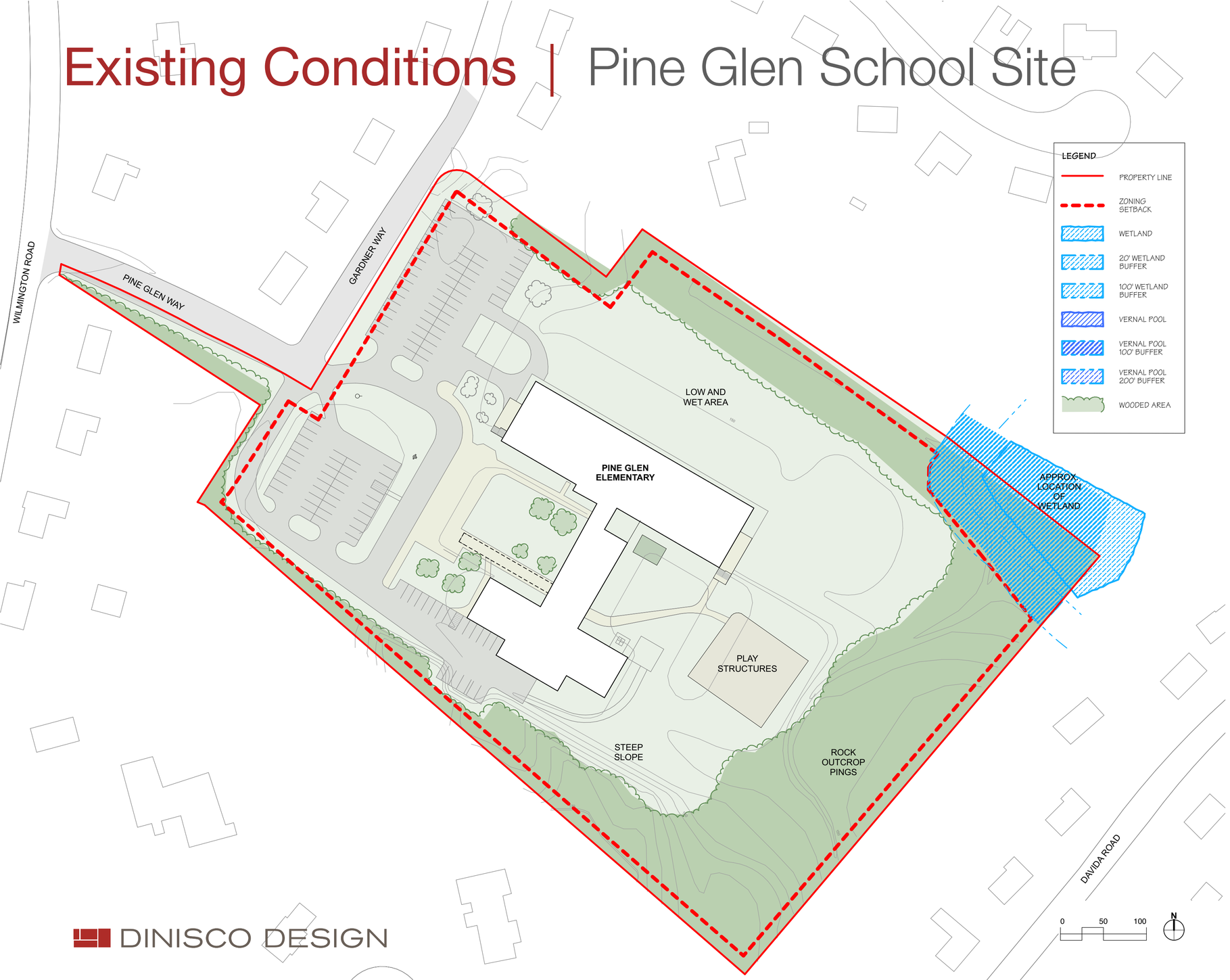
Existing Conditions | Fox Hill ES

Existing Conditions | Fox Hill ES





Existing Conditions | Pine Glen School Site



- 11.8 Acre site — 9.6 acres usable area, limited by wetlands and rock outcroppings
- 58,000 GSF existing building
- Presumed high water table
- Poorly draining soils
- Rock removal will be required
- ANRAD filing and conservation commission approval may be required

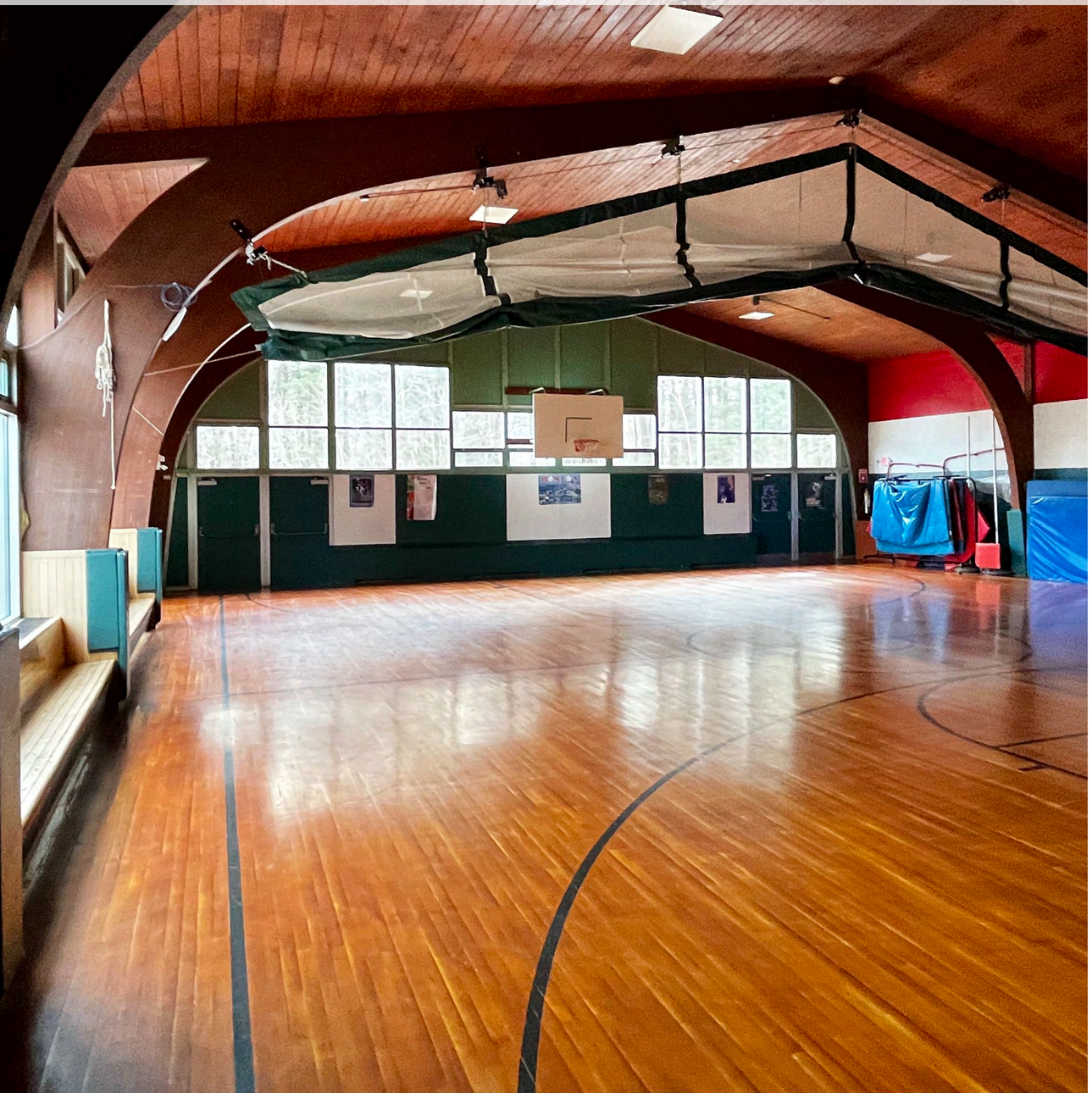
* No formal investigations performed. Based upon visual observations only

DINISCO DESIGN

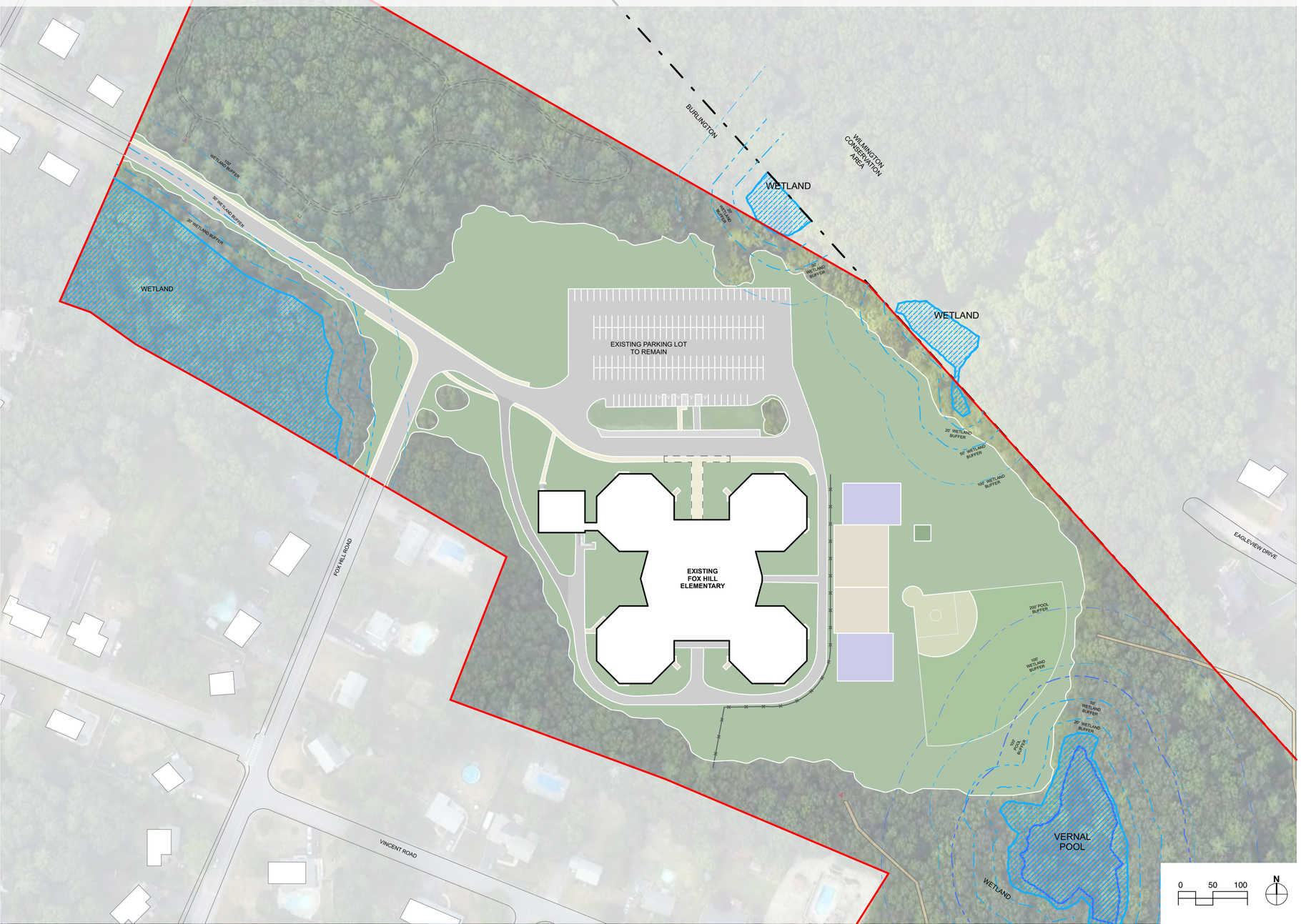
Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES

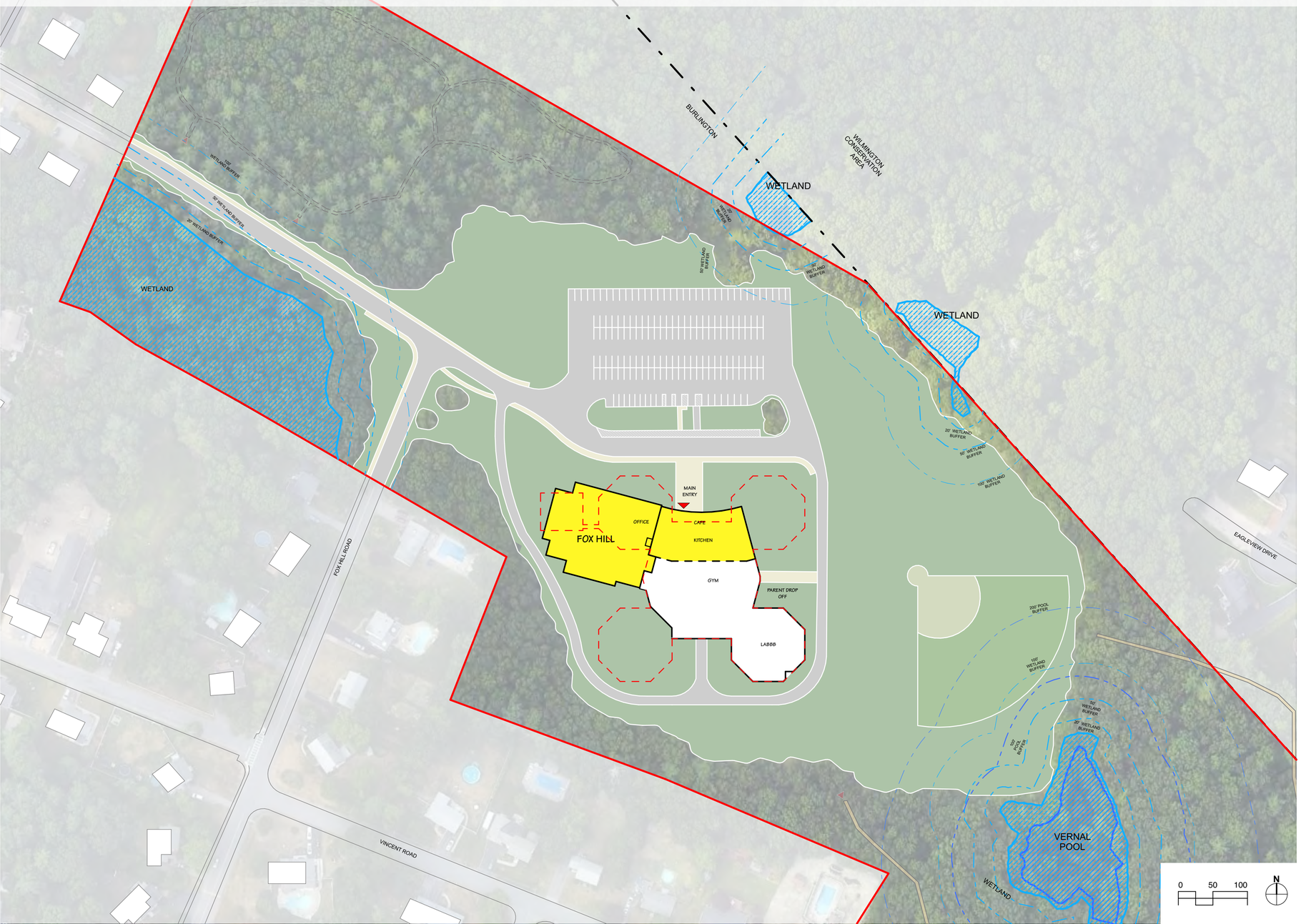


Option 1 | Fox Hill Repairs/Code Upgrades (325 students)



- Existing single story building 64,400 GSF
- Existing building to remain
- Requires building to be vacated for repairs/code upgrades
- Does not meet MSBA space guidelines
- Upgrades include improvements for:
  - life-safety
  - building code compliance
  - accessibility compliance
  - mechanical, electrical, plumbing and fire protection systems replacement/installation
  - envelope replacement
- Pine Glen remains as is

Option 2 | Fox Hill Addition/Renovation (325 students)



- Proposed building 100,000 GSF
- Existing building to be partially demolished
- Requires building to be vacated for addition/renovation
- 25,000 GSF of existing building to be renovated, 75,000 GSF 3-story building addition
- Pine Glen remains as is

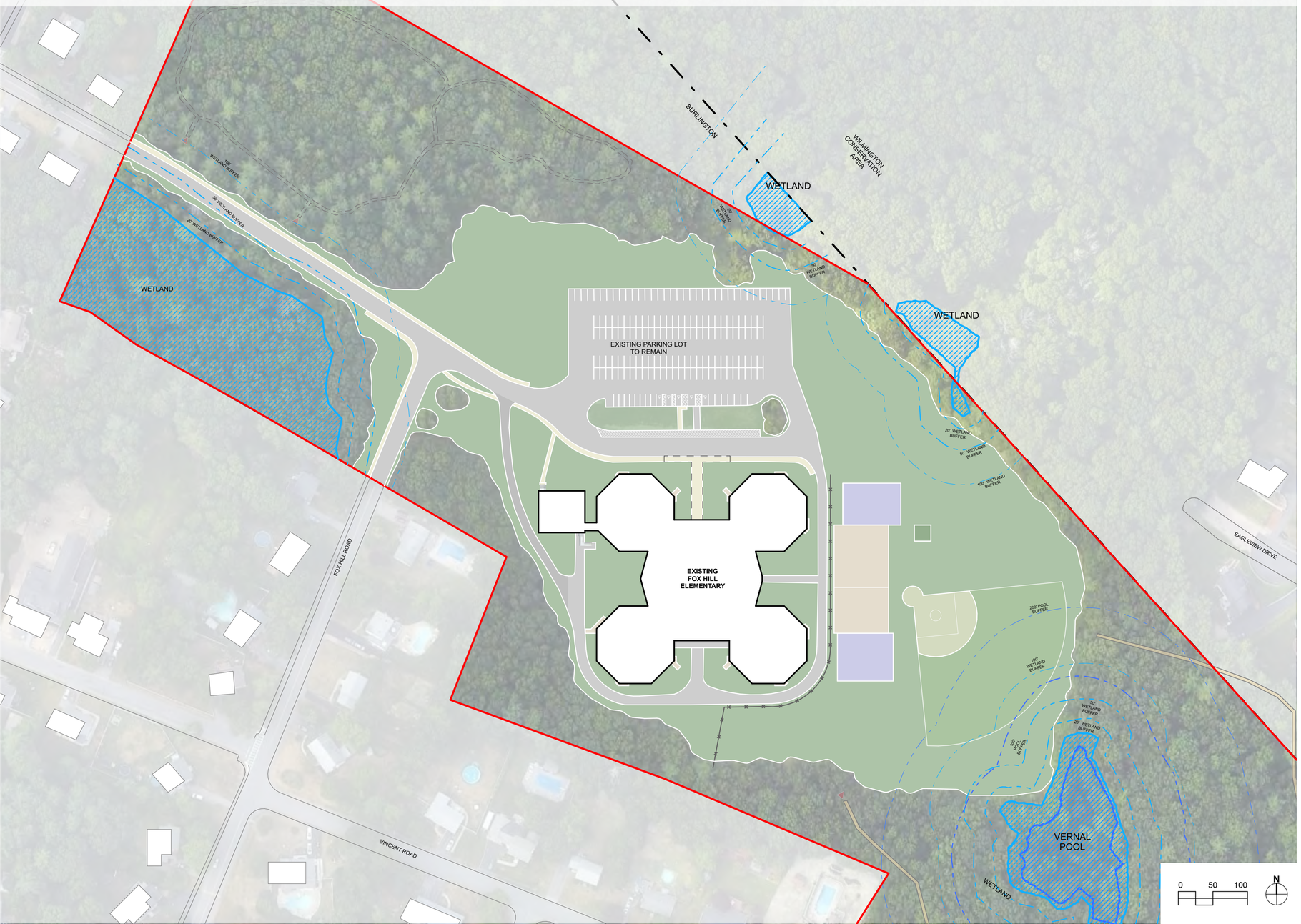
Option 3A | Fox Hill New Construction (325 students)

- Proposed 3-story building 95,500 GSF
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Pine Glen remains as is

Option 3B | Fox Hill New Construction (325 students)

- Proposed 3-story building 95,500 GSF
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Pine Glen remains as is

Option 4 | Fox Hill Repairs/Code Upgrades (640 students)

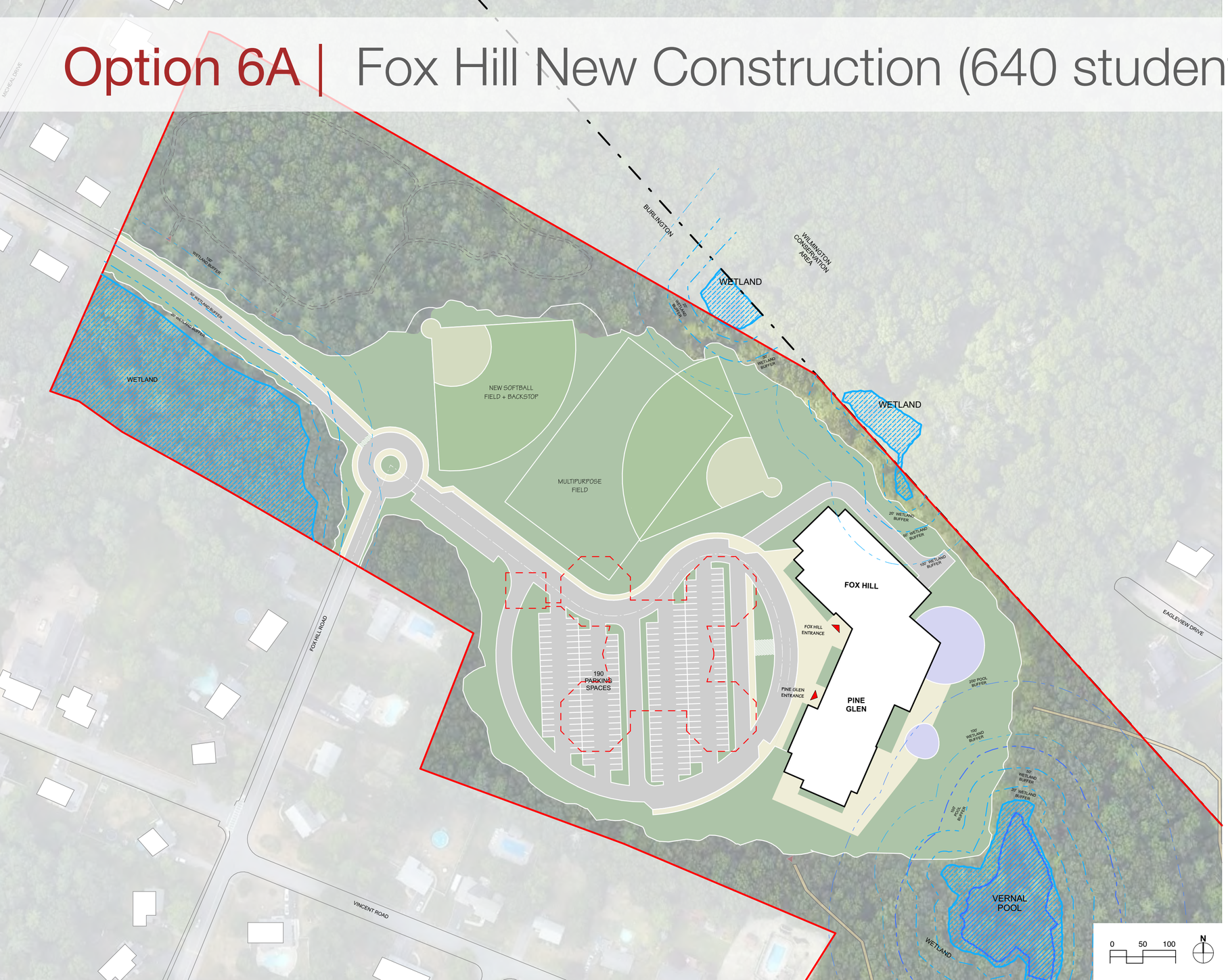


- Existing single story building 64,400 GSF
- Existing building to remain
- Requires building to be vacated for repairs/code upgrades
- Does <u>not</u> meet MSBA space guidelines
- Upgrades include improvements for:
  - life-safety
  - building code compliance
  - accessibility compliance
  - mechanical, electrical, plumbing and fire protection systems replacement/installation
  - envelope replacement

Option 5 | Fox Hill Addition/Renovation (640 students)

- Proposed building 160,000 GSF
- Existing building to be partially demolished
- Requires building to be vacated for addition/renovation
- 25,000 GSF of existing building to be renovated, 135,000 GSF 3-story building addition
- Pine Glen becomes available for swing space, BECC, other

Option 6A | Fox Hill New Construction (640 students)

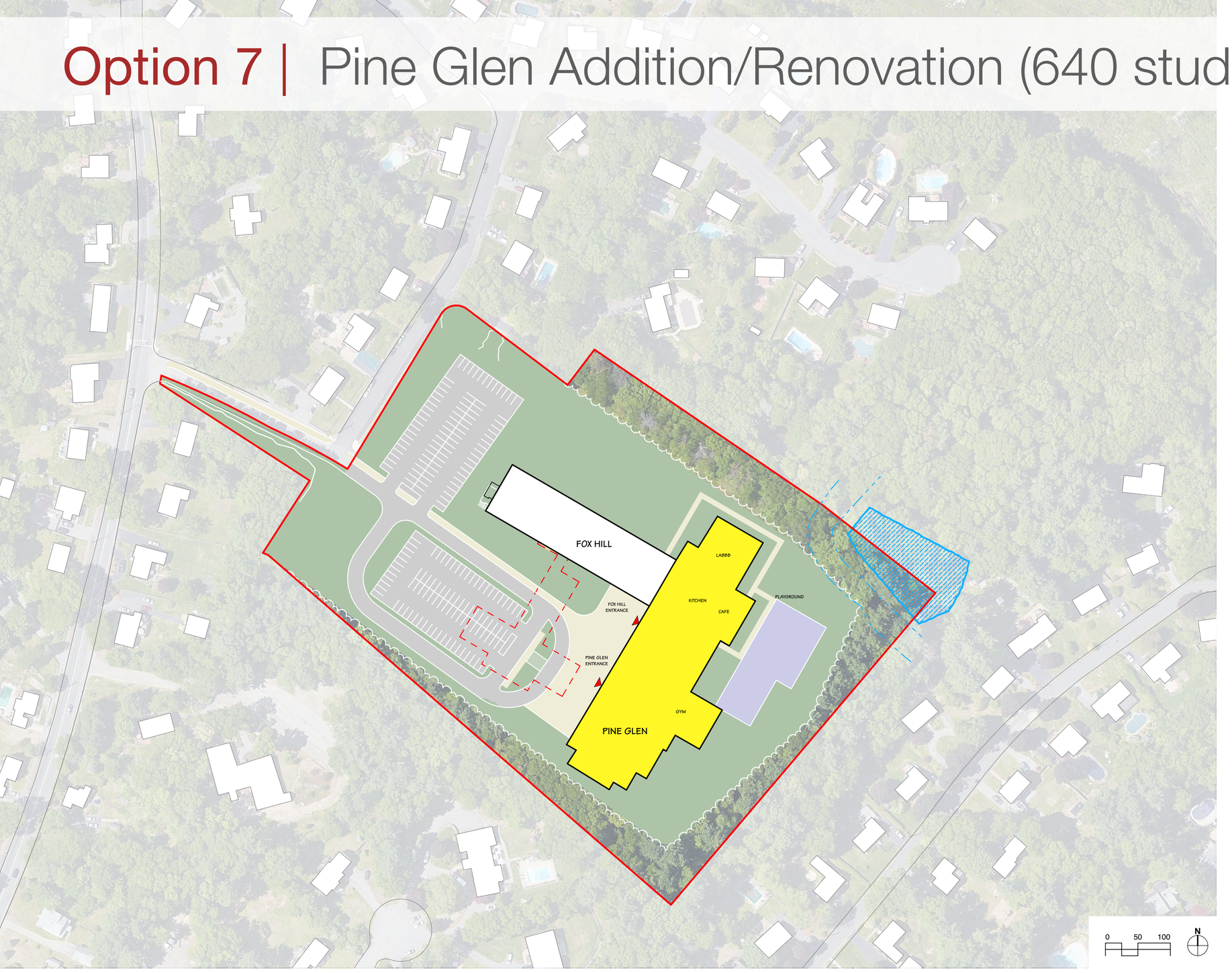


- Proposed 3-story building 150,000 GSF
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Pine Glen becomes available for swing space, BECC, other

Option 6B | Fox Hill New Construction (640 students)

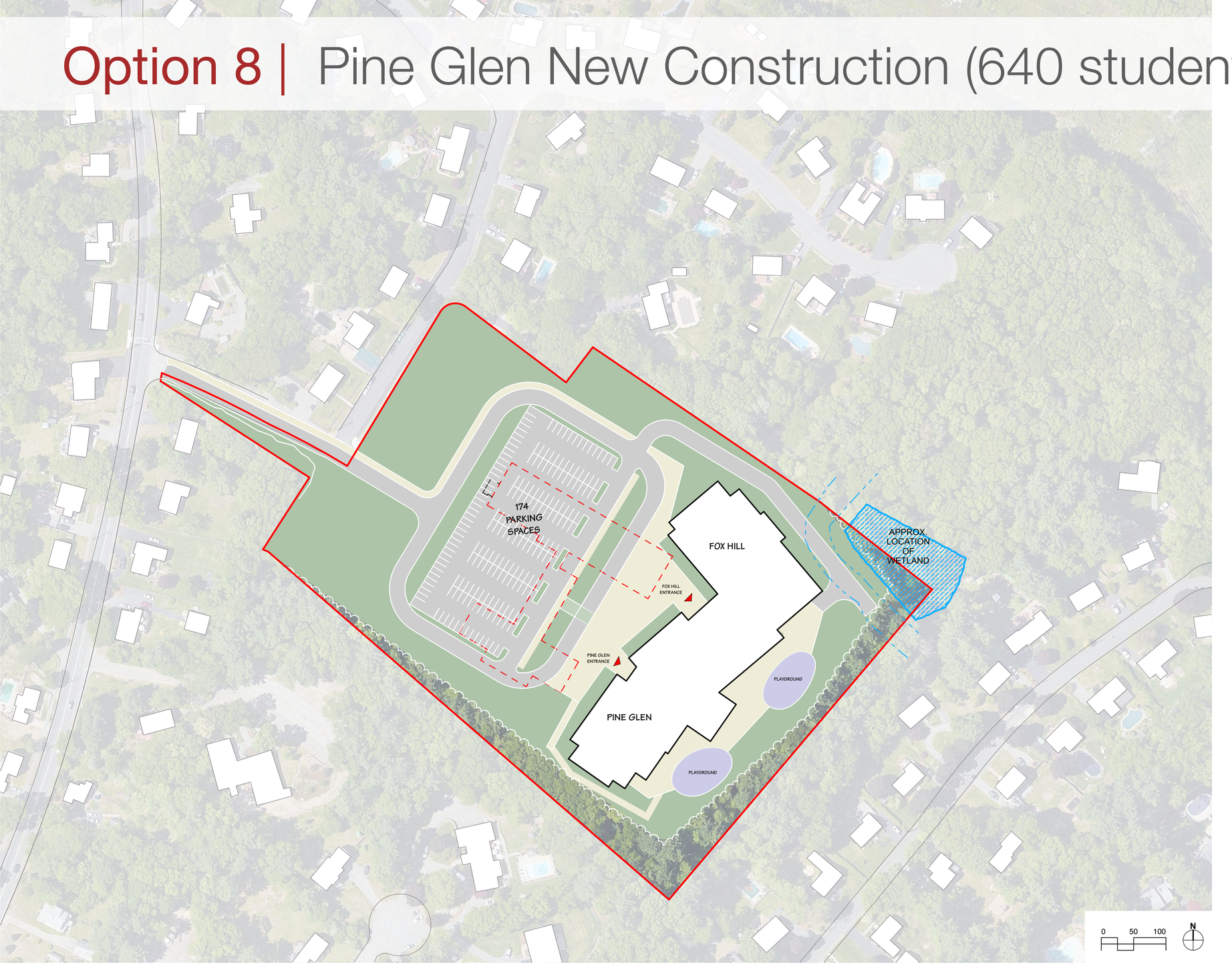
- Proposed 3-story building 150,000 GSF
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Pine Glen becomes available for swing space, BECC, other

Option 7 | Pine Glen Addition/Renovation (640 students)



- Proposed building 160,000 GSF
- Existing building to be partially demolished
- Does not require building to be vacated for addition/renovation
- 48,000 GSF of existing building to be renovated, 112,000 GSF 3-story building addition
- Site extremely limited, cannot accommodate queuing and play fields
- Fox Hill becomes available for swing space, BECC, other

Option 8 | Pine Glen New Construction (640 students)



- Proposed 3-story building 150,000 GSF
- Existing school remains operational during construction
- Existing building to be demolished after new building is complete
- Site extremely limited, cannot accommodate queuing and site amenities
- Fox Hill becomes available for swing space, BECC, other

School Building Committee | Priorities and Criteria

Fox Hill Elementary School - Burlington, MA — **Options and Evaluation Matrix**

	Evaluation criteria based upon priorities	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Site (640 Students)	Fox Hill School Site (640 Students)	Pine Glen School Site (640 Students)	Pine Glen School Site (640 Students)
		Code Upgrades + Repairs no addition	Renovation + Addition	Full demo + new construction	Renovation + addition	Full demo + new construction	Renovation + addition	Full demo + new construction
Concepts Facts								
1	Size of site (acres)	37.90 ac	37.90 ac	37.90 ac	37.90 ac	37.90 ac	11.80 ac.	11.80 ac.
2	Usable size of site (acres)	17.90 ac	17.90 ac	17.90 ac	17.90 ac	17.90 ac		
3	Site environmental (wetlands, etc)	20.00 ac	20.00 ac	20.00 ac	20.00 ac	20.00 ac		
4	Classroom count	18	18	18	36	36	36	36
5	Building gross square feet (GSF)	64,400	85,500	85,500	142,700	142,700	151,500	151,500
6	Net Zero Capability							
Equity to Other Recently Updated Elementary Schools								
Cost and Schedule								
1	Project Cost, $million							
2	LCCA /annual expenses							
3	Allows students to move in to new school 2028							
4	Requires swing space							
5	Requires CM@Risk (i.e. due to scheduling for early release packages)							
6	Operating Cost							
Educational								
1	Meets educational program for all students + design enrollment							
1	Size of spaces							
2	Optimizes configuration and adjacency of teaching spaces							
3	Pedagogical flexibility							
4	Outdoor learning							
5	Provides flexibility for future growth							
6	Provides outdoor learning opportunities							
7	Allows for efficient program design layout							
8	Minimizes school disruption							
Building								
1	Allows for a contextually sensitive design							
2	Allows efficient attainment of Green School/Stretch Code requirements							
3	Optimizes use of natural light and daylighting							
4	Optimizes connection of outdoor/indoor space, integration with site							
5	Meets ADA requirements efficiently							

DRAFT

Fox Hill Elementary School - Burlington, MA — **Options and Evaluation Matrix**

	Evaluation criteria based upon priorities	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Site (640 Students)	Fox Hill School Site (640 Students)	Pine Glen School Site (640 Students)	Pine Glen School Site (640 Students)
		Code Upgrades + Repairs no addition	Renovation + Addition	Full demo + new construction	Renovation + addition	Full demo + new construction	Renovation + addition	Full demo + new construction
Concepts Facts								
1	Size of site (acres)	37.90 ac	37.90 ac	37.90 ac	37.90 ac	37.90 ac	11.80 ac.	11.80 ac.
2	Usable size of site (acres)	17.90 ac	17.90 ac	17.90 ac	17.90 ac	17.90 ac		
3	Site environmental (wetlands, etc)	20.00 ac	20.00 ac	20.00 ac	20.00 ac	20.00 ac		
4	Classroom count	18	18	18	36	36	36	36
5	Building gross square feet (GSF)	64,400	85,500	85,500	142,700	142,700	151,500	151,500
6	Net Zero Capability							
Site								
1	Maximizes efficient utilization of site							
2	Optimizes outdoor program space and green space							
3	Optimizes safety and efficiency of on site drop off							
4	Separates safe circulation of bus, vehicle, pedestrian and bike access							
5	Provides sufficient parking for teachers, staff + visitors							
6	Improves off site traffic impact							
7	Improves pedestrian safety and access							
8	Allows for future expansion							
Sustainability								
1	Ease of maintenance / maintenance costs							
2	Site requirements							
3	Cost							
4	Optimizes solar (PV) opportunities							
5	Minimizes embodied carbon footprint with building reuse							
6	Achieves Town goal for fossil free building HVAC systems							
7	Optimizes building orientation							
8	Allows efficient attainment of Green School/Stretch Code requirements							
9	Optimizes building envelope thermal performance							
Construction impacts / cost								
1	Building construction cost							
2	Site construction cost							
3	Construction Duration impact							
4	School disruption impacts							
5	Construction impacts on abutters							
Operational costs								
1	Life Cycle Cost Analysis (LCCA)							
2	Annual Operating Cost							
3	Cost for solar as it relates to operating cost (annual)							
Community								

DRAFT

Instructions

Go to

www.menti.com

Enter the code

5648 5338

Or use QR code

Go to **www.menti.com** and use the code **7738 4072**

Rank These Priorities for the New School

Least Important

- Equity to other elementary schools
- Cost & schedule
- Educational benefits
- Building design considerations/aspects
- Site considerations/aspects
- Construction impacts
- Operational costs
- Sustainability

Most Important

Next Steps

- Review and approval of educational program and space requirements
- Finalize traffic analysis study
- Establish design parameters
- Explore design options
- Community Forum #2
- Submit Preliminary Design Program (PDP) to MSBA ~ July 2023

Key Dates

- PDP Submission July 13, 2023
- PSR Phase July through December 2023
- PSR Submission December 13, 2023
- MSBA Board Meeting to proceed into Schematic Design February 2024
- Schematic Design December 2023 through June 2024
- SD Submission July 2024
- MSBA Board Meeting to proceed with local funding August 2024
- Local Town Vote for Project Approval September 23, 2024

Stay Connected

https://www.foxhillbuildingproject.com/

Community Forum

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

May 18, 2023

© 2023 DiNisco Design, Inc.

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

SBC Member Approval

- *Motion to add John Lyons as a voting member.*

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Upcoming Dates - Meetings

- *Community Meeting - May 18th*
- *SBC Meeting - May 30th*
  - *Input from community meeting & criteria matrix*
- *Executive Working Group – May 31st*

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Next Meetings

- *May 30th, 2023 @ 6:00PM*

SBC Meeting Agenda – May 16, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of May 2nd, 2023 Meeting Minutes*
3. *Public Comment*
4. *Design Update*
5. *Pine Glen SBC Representation*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee

DATE: May 2, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	5/2/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager		Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
✓	David Rosenblatt*	Principal	✓	Donna DiNisco	DiNisco Design
✓	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member	✓	Jeremy Brooks	
✓	Tara Carroll	SBC Member	✓	Barbara L'heureux	
	Audrey Boeri	SBC Member	✓	David Woodilla	
	George Papayannis	SBC Member	✓	Nicole Neitameyer	
✓	Katherine Bond*	Vice Chair of SBC			
	Carl Foss*	Vice Chair School Committee			
✓	Christine Monaco*	SBC Member			
✓	Martha Simon*	SBC Member			
✓	Kristen Downie	Secretary			

* SBC Voting Member

Item No.	Description	Action
7.1	**Call to Order & Intro**: 6:04 pm meeting was called to order by SBC Chair M. Massardo with 12 of 13 voting members in attendance.	Record
7.2	**Previous Topics & Approval of April 13th, 2023, Meeting Minutes:** ➢ A motion to approve the 04/13/2023 meeting minutes[1] as submitted made by J. Priest and seconded by E. Conti. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes - N. Coscia – Yes M. Massardo – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – D. Rosenblatt – Yes – K. Bond – Yes – C. Monaco - Yes. Abstention: M. Simon, D. Villano. Motion passes, minutes approved.	Record
7.3	**Public Comment:** ➢ D. Woodilla makes the public comment that he is thankful for Burlington Schools. Says one of the greatest features of the school system is its neighborhood elementary schools. The thought of changing this neighborhood school concept and busing young students across town to a mega school complex is disconcerting to him. He urges the discounting of the mega school option and focus on the four-school neighborhood option.	Record
7.4	**Financial Update:** ➢ A motion to approve the DiNisco Invoice No. 03 in the amount of $29,545.00, DiNisco Invoice for the Environmental Assessment in the amount of $2,860.00, DiNisco Invoice for the Wetlands Environmental Services in the amount of $4,496.25, DiNisco Invoice for the Traffic Study in the amount of $8,005.25 made by E. Conti and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes - N. Coscia – Yes M. Massardo – Yes – C. Monaco – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – D. Rosenblatt – Yes – D. Villano – Yes – K. Bond – Yes – M. Simon – Yes. Abstention: None. Motion passes, Invoices approved. ➢ A motion to approve the Dore + Whittier Invoice No. 07 in the amount of $13,972.50 made by E. Conti and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes - N. Coscia – Yes M. Massardo – Yes – C. Monaco – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – D. Rosenblatt – Yes – D. Villano – Yes – K. Bond – Yes – M. Simon – Yes. Abstention: None. Motion passes, Invoice approved. ➢ C. Dell Angelo goes over the budget breakdown in the slideshow[2].	Record

[1] April 13, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

7.5	**Design Update**: ➢ D. DiNisco starts talking and goes over the PDP process and the enrollment. Shows the historic enrollment charts and the MSBA enrollment forecast through 2032 in the slideshow[2] for both Fox Hill only and for combined Fox Hill and Pine Glen. ➢ E. Conti notes that the combined school with Pine Glen was the original plan for MSBA and they petitioned the MSBA for an added four school option and was granted it. Also says it is not a range and that the enrollment is either 325 or 640 students. ➢ J. Priest asks about COVID and skewing the historical view of the enrollment projections. E. Conti responds saying that the projects are done from a historical perspective and overbuilding is a concern for the MSBA and their enrollment projections have been accurate. ➢ D. DiNisco comments saying they take the average enrollment over ten years which provides a buffer. She says in the past districts have not seen an over capacity when they open. DiNisco feels comfortable with the enrollment projections. ➢ M. Simon clarifies that the overcapacity they had heard about was from 10 years ago. Since then, the MSBA has reorganized and now uses different processes. Since then, they have been on target with enrollment projections. ➢ D. DiNisco says that the program used to be called SBA (School Building Assistance) and they asked the districts for enrollment. They didn't perform their own projections. Now they do their own projections and go in depth and look at historical statistics. ➢ M. Simon says she feels more comfortable in the numbers now knowing the history. ➢ D. DiNisco goes over Space Summary comparison in the slideshow[2]. ➢ C. Monaco does not agree with the MSBA numbers for enrollment projections. It is her opinion that the enrollment numbers are wrong, and that the enrollment will not go down as the MSBA projects. She asks about the extra classrooms. D. DiNisco responds saying the MSBA is not looking to overbuild schools and that they will mandate that they keep either three or six classrooms per grade. ➢ M. Simon asks about the MSBA standards vs guidelines. D. DiNisco responds saying that the MSBA uses a generic formula for calculating space summary which they consider their guidelines but then after calculating the need for the Fox Hill School they came to a different number proving the space needed is more. M. Simon asks if core academic includes certain programs. D. DiNisco responds saying the core academic includes any program that supports general education with the exception of guidance and SEL which fall under the admin section.	Record

[1] April 13, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

- K. Bond comments that she is uncomfortable with the enrollment number the MSBA has provided. Asks if later down the road they can add classrooms if enrollment were to increase. D. DiNisco responds saying the MSBA will ask how an expansion could occur and they will show that, however she is unsure if that has ever happened before.
- M. Massardo says that Pine Glen would still be available if enrollment were to change as they aren't required to close the school.
- S. Brown states the MSBA's funds are very regimented in how they allocate funds to different projects. Says that once they agree to maximum facilities grant, which is after local funding approval, they already allocated the maximum funding to the project and to renegotiate with them would be very unlikely. Says if the feeling is that the MSBA projections are wrong the only option would be to withdraw from the program and have the town pay for the entirety of the project.
- K. Bond asks if the town could pay for additional classrooms if needed. S. Brown responds saying he thinks the MSBA wouldn't withdraw because of that if there is a proven need to expand beyond the initial plan.
- D. DiNisco comments they have seen enrollment spikes in other districts and have been thoughtful about where they put the additional expansion space.
- P. Sagarino says he received an email about apartment buildings and kids' enrollment. He will forward to the SBC community.
- D. DiNisco discusses the square footage for each of the options. Fox Hill would be 85,458 GSF, Combined Fox Hill and Pine Glen would be 142,677 GSF, and Separate Fox Hill and Pine Glen would be 151,452 GSF. She then discusses the educational program in the slideshow[2]. The educational program identifies programs offered district wide, identifies programs to be offered within the new Fox Hill Elementary School. It also identifies programmatic spatial relationships and adjacencies. The program also defines the space needs and total square footage for the project. Says they had great working sessions with the Fox Hill and Pine Glen staff.
- V. Low speaks to the spacial relationships shown in the slideshow[2]. Had the staff participate in the exercise of putting together how they viewed the new school spaces coming together for the different options. She shows the different diagrams for the different options.
- D. DiNisco goes over the Draft Criteria Matrix shown in the slideshow[2]. Says the intent of this is to develop criteria that are important for the project. She says they are required to look at renovation and repair, addition/renovation, and the new options for both 325 & 640 students. She goes over the different categories in the matrix and says they have created this based on what the committee and staff have expressed so far.

[1] April 13, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ S. Brown comments saying it is helpful to develop this criteria matrix so that they can be objective about the different options. It has worked successfully in the past and the key to making it work is that the right categories are on the page. They will solicit feedback from the committee and make the changes as necessary. ➢ N. Harrigan talks about the traffic study. He talks about the arrival procedures, says there seems to be seven buses for arrival but only 2 unload at a time. Goes over the slide showing the logistics plan for the arrival. Then talks about dismissal procedures and goes over the slide outlining it. Some notes are that signage does not meet MUTCD (Manual Uniform Traffic Control Devices), signing and striping at multiple locations are faded and difficult to read/illegible. ➢ C. Monaco asks about clarification about buses and vans for the school arrival and dismissal. N. Harrigan responds there are four vans that come in the morning, and they use the ring road. ➢ N. Harrigan goes over a few more observations. Says there were 42 walkers after school and three kids on their bikes. ➢ K. Bond asks about studying Pine Glen traffic as well. D. DiNisco says they can obtain that information. The traffic engineers will have to look at how the Pine Glen students will be coming to the new combined school. ➢ N. Neitameyer asks to look at the intersections with Vincent and Fox Hill and Sumner and Fox Hill. She says that multiple times she has had to run in the street to help kids not to be hit by cars. Asks to study these intersections as well. ➢ N. Harrigan goes over existing conditions shown in the slideshow[2]. He says there is vernal pool buffer and work may not be allowed in the 200-foot buffer.	
7.6	**Upcoming Dates:** ➢ C. Dell Angelo goes over the upcoming meetings scheduled. Executive working group meetings on 5/3 and 5/17, also a communication working group on 5/4. There will be a community meeting on 5/18 via Webex, will also be mailing out flyers to abutters. There will be an SBC/SC meeting on May 16th which is still TBD based on the executive working group meeting tomorrow, this meeting would be to vote on the Educational Plan and Space Summary. On May 30th there will be another SBC Meeting to vote on the submission for the PDP. ➢ M. Massardo says the community meeting will be recorded and there will be more community meetings after this. ➢ D. DiNisco says the PDP may go into June and may need another meeting. It is not driven by MSBA board votes and is just a staff review.	Record

[1] April 13, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

7.7	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ A motion to remove Carl Foss from the SBC Committee and replace with Jeremy Brooks as a member made by M. Simon and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes - N. Coscia – Yes M. Massardo – Yes – C. Monaco – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – D. Rosenblatt – Yes – D. Villano – Yes – K. Bond – Yes – M. Simon – Yes. Abstention: None. Motion passes, new member approved. ➢ M. Simon asks if they will need to post a School Committee notice if they will be having the meeting on 5/16. M. Massardo says yes, they will have to but still to be determined on the date.	Record
7.8	**Next Meetings**: ➢ Tuesday May 16th, 2023, TBD ➢ Tuesday May 30th, 2023, at 6:00PM.	Record
7.9	**Adjourn**: 7:45 pm A motion was made by J. Priest and seconded by M. Simon to adjourn the meeting, Discussion: None. Meeting adjourned.	Record

Submitted: 5/16/23

Approved: 5/16/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] April 13, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

May 2, 2023

DORE + WHITTIER

DINISCO DESIGN
architects + planners

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #7

May 2, 2023, 6:00 PM

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Previous Meeting Minutes

1. *April 13th, 2023, Minutes*

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Invoices and Commitments for Approval

- *DiNisco Invoice No. 03 in the amount of $29,545.00 (Vote)*
- *DiNisco Invoice for Environmental Assessment in the amount of $2,860.00 (Vote)*
- *DiNisco Invoice for Wetlands Environmental Services in the amount of $4,496.25 (Vote)*
- *DiNisco Invoice for Traffic Study in the amount of $8,005.25 (Vote)*
- *Dore + Whittier Invoice No. 07 in the amount of $13,972.50 (Vote)*

Budget Breakdown

Project Details

DWMP Project No.	22-0128	**Project Type**	Elementary School
Project Name	Burlington Fox Hill Elementary School	**Scope Type**	TBD
Project Address	Fox Hill Rd. Burlington, MA 01803	**MSBA Project?**	Yes
		MSBA Proj. No.	202000480007
Project Phase	Feasibility Study	**Enrollment**	0
Phase End-Date	12/19/2023	**Reimb. Rate**	45.52%
Phase % Complete	26%		

Edit Project Details

Budgets | Budget Transfers | Contracts | Invoices | Vendors | Meetings | Monthly Reporting

Project Budget Summary

Budget Category	Orig. Budget	Transfers	Upd. Budget	Contract Amt.	% Committed	Expended	% Expended	Contract Remain'g	Bud. Balance
0000-0000 Feasibility Study Agreement									
0001-0000: OPM - Feasibility Study	$750,000.00	-$332,071.00	$417,929.00	$400,079.00	95%	$76,864.00	19%	$323,215.00	$17,850.00
0002-0000: A&E - Feasibility Study	$500,000.00	$175,000.00	$675,000.00	$675,000.00	100%	$59,090.00	8%	$615,910.00	$0.00
0003-0000: Environmental & Site	$100,000.00	$188,000.00	$288,000.00	$129,874.50	45%		0%	$129,874.50	$158,125.50
0004-0000: Other	$150,000.00	-$30,929.00	$119,071.00		0%		0%	$0.00	$119,071.00
Total - 0000-0000 Feasibility Study Agreement	**$1,500,000.00**	**$0.00**	**$1,500,000.00**	**$1,204,953.50**		**$135,954.00**		**$1,068,999.50**	**$295,046.50**

**Does not reflect invoices, commitments, or budget revision requests submitted for approval at this SBC Meeting.*

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

School Building Committee Meeting

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

May 02, 2023

DINISCO DESIGN

© 2023 DiNisco Design, Inc.

Agenda

- MSBA Process
- Enrollment
- Educational Program
  - Spatial Relationships
  - Preliminary Space Summary
- Criteria Matrix
- Existing Conditions Update
  - Traffic
  - Wetlands

MSBA Process

Massachusetts School Building Authority

Module 3 Activities - Feasibility Study:

Submit Preliminary Design Program (PDP)

- Educational program and Space Summary
- Existing conditions report
- Establish design parameters
- Develop and evaluate alternates

Submit Preferred Schematic Report (PSR)

- Summarize the process and conclusions of the Preliminary and Final Evaluation of Alternatives
- Document District's selection and recommendation of the most cost effective and educationally appropriate preferred solution to the MSBA
- Submit Preferred Schematic Report (PSR)

Preliminary Design Program | Enrollment Agreement

Massachusetts School Building Authority

Enrollment History through Current

Year	K	1	2	3	4	5	Total
2019-20	265	296	298	297	284	259	1,699
2020-21	260	269	282	286	297	277	1,671
2021-22	277	268	279	277	290	290	1,681
2022-23	281	278	269	270	281	287	1,666

MSBA Enrollment Forecast - Average 2023-2032

Year	K	1	2	3	4	5	Total
Ave. thru 2032	262	265	268	261	268	268	1,592

Capacity Need at Fox Hill Only

School	# of Clrms	18 Stu/Clrm	Total Capacity
Memorial ES	23	18	414
Pine Glen ES	17	18	306
Wyman	30	18	540
Total Capacity	70		1260
Projected Enrollment			1,590
Fox Hill ES	18	18	330
Fox Hill ES	18.06	18	325

General Classroom Requirement at Fox Hill Only

Goal Class Size	K	1	2	3	4	5	Total
# Students (Average)	54	54	54	54	54	54	325
Average # Stu / class	18	18	18	18	18	18	
# of classrooms	3.01	3.01	3.01	3.01	3.01	3.01	
Round for Total Classrooms / Grade	3	3	3	3	3	3	18

Preliminary Design Program | Enrollment Agreement

Massachusetts School Building Authority

Enrollment History through Current

Year	K	1	2	3	4	5	Total
2019-20	265	296	298	297	284	259	1,699
2020-21	260	269	282	286	297	277	1,671
2021-22	277	268	279	277	290	290	1,681
2022-23	281	278	269	270	281	287	1,666

MSBA Enrollment Forecast - Average 2023-2032

Year	K	1	2	3	4	5	Total
Ave. thru 2032	262	265	268	261	268	268	1,592

Capacity Need Combined Fox Hill + Pine Glen

School	# of Clrms	18 Stu/Clrm	Total Capacity
Memorial ES	23	18	414
Wyman	30	18	540
Total Capacity	53		954
Projected Enrollment			1,590
Fox Hill /Pine Glen ES	35.33	18	636
Fox Hill /Pine Glen ES	36	18	648

General Classroom Combined Fox Hill + Pine Glen

Goal Class Size	K	1	2	3	4	5	Total
# Students (Average)	107	107	107	107	107	107	642
Average # Stu / class	18	18	18	18	18	18	
# of classrooms	5.94	5.94	5.94	5.94	5.94	5.94	
Round for Total Classrooms / Grade	6	6	6	6	6	6	36

Preliminary Design Program | Enrollment Alternatives

Massachusetts School Building Authority

Class Size Policies	
Kindergarten through Fifth Grade	1 to 18 students

Option 1 - 325 Student Enrollment

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	54	54	54	54	54	55	325
Average # students/class	18	18	18	18	18	18	
# of classrooms	3	3	3	3	3	3	18
Total Classrooms / Grade	3	3	3	3	3	3	18

Option 2 - 640 Student Enrollment

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	106	106	107	107	107	107	640
Average # students/class	18	18	18	18	18	18	
# of classrooms	5.89	5.89	5.94	5.94	5.94	5.94	35.56
Total Classrooms / Grade	6	6	6	6	6	6	36

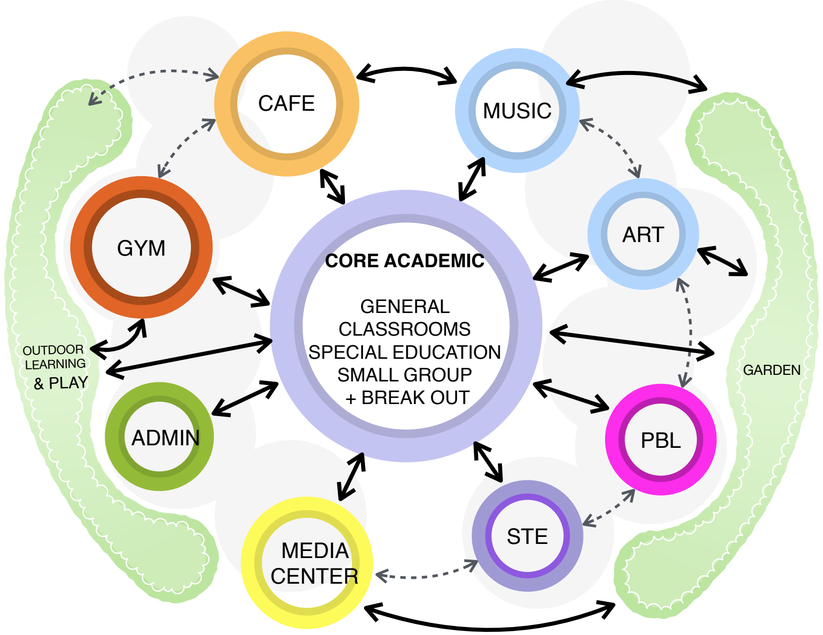
Preliminary Space Summary | Enrollment Comparison

Program	Fox Hill Only @ MSBA Standards (325 Students)	MSBA Guidelines (325 Students)	Combined Fox Hill + Pine Glen School (640 Students)	Separate Fox Hill + Pine Glen School (640 Students)	MSBA Guidelines (640 Students)	c
Core Academic	23,270 NFA	15,000 NFA	45,340 NFA	46,540 NFA	29,050 NFA	MSBA does not automatically include ELL, Lit / Math Specialists
Special Ed.	11,425 NFA	4,530 NFA	19,950 NFA	21,775 NFA	7,550 NFA	DESE reviews / approves Special Ed spaces
Art/Music	2,500 NFA	2,500 NFA	5,000 NFA	5,000 NFA	5,000 NFA	
Health & PE	7,300 NFA	6,300 NFA	7,300 NFA	7,300 NFA	6,300 NFA	District considering additional gym NFA
Media Center	2,130 NFA	2,130 NFA	3,550 NFA	3,550 NFA	3,550 NFA	
Dining (Cafe, Kitchen, Stage, Teacher	5,567 NFA	5,567 NFA	8,413 NFA	8,413 NFA	8,413 NFA	
Medical / Admin	2,855 NFA	2,550 NFA	3,325 NFA	6,150 NFA	2,735 NFA	
Custodial / Main	1,925 NFA	1,925 NFA	2,240 NFA	2,240 NFA	2,240 NFA	
Other	0 NFA	0 NFA	0 NFA	0 NFA	0 NFA	
Sub Total Program	56,972 NFA	40,502 NFA	95,118 NFA	100,968 NFA	64,838 NFA	
Total Gross Sq. Ft. (GSF) (Gross SF / NFA = 1.5)	85,458 GSF	57,482 GSF	142,677 GSF	151,452 GSF	92,800 GSF	

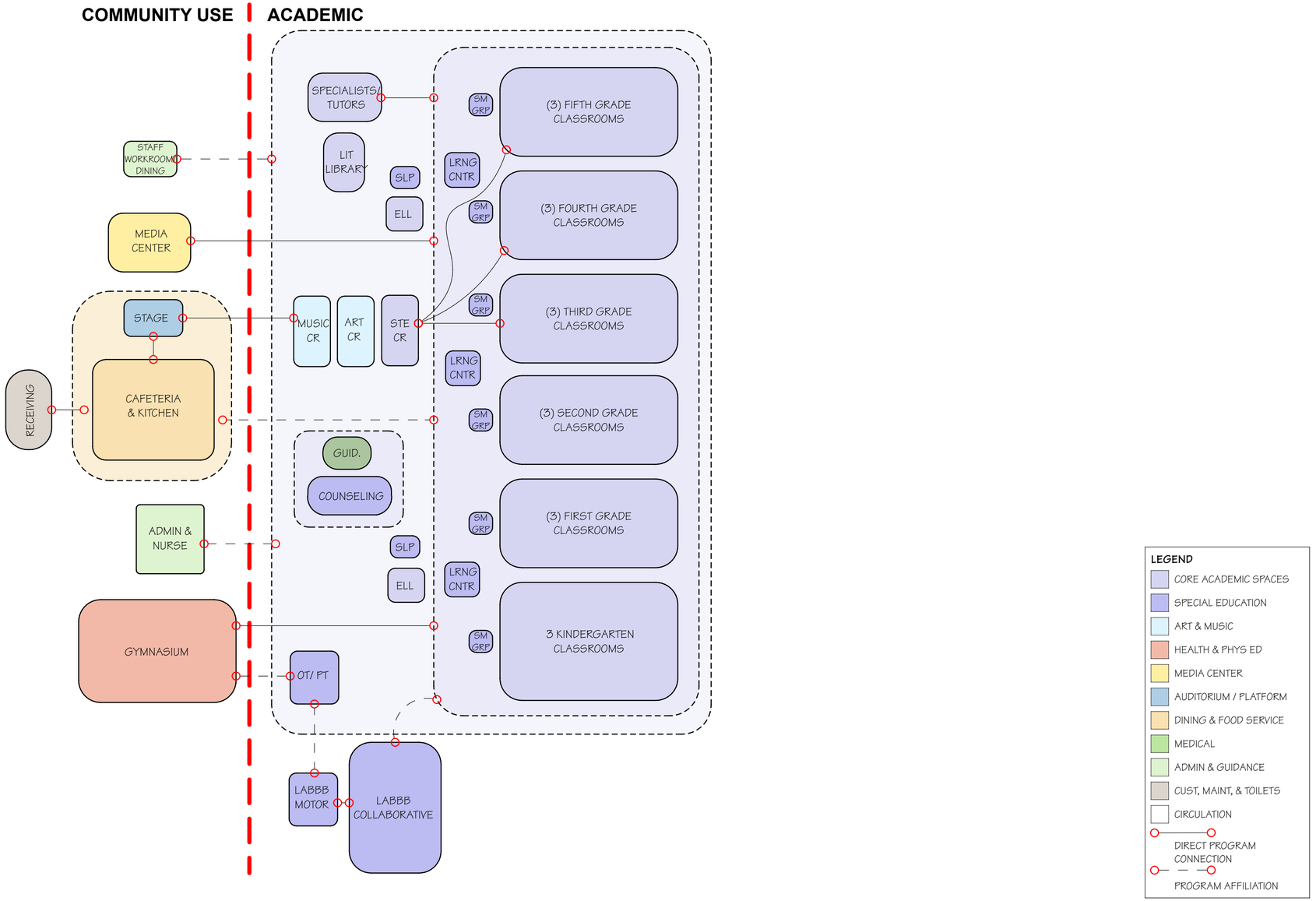
NFA = Net Floor Area

Educational Program

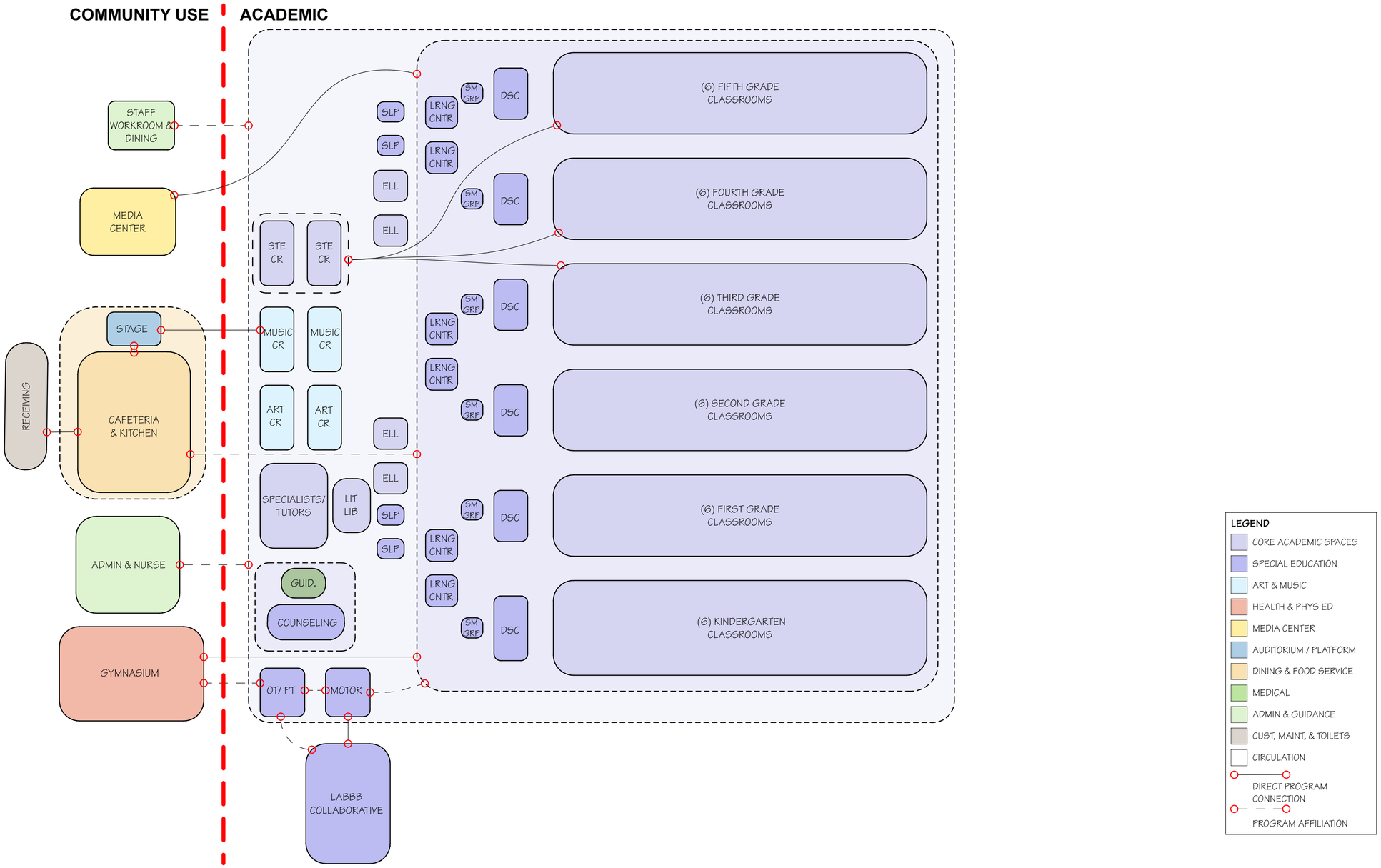
- Identifies programs offered district-wide
- Identifies programs to be offered within the “new” Fox Hill Elementary School
- Identifies programmatic spatial relationships and adjacencies
- The program defines the space needs and total square footage for the project



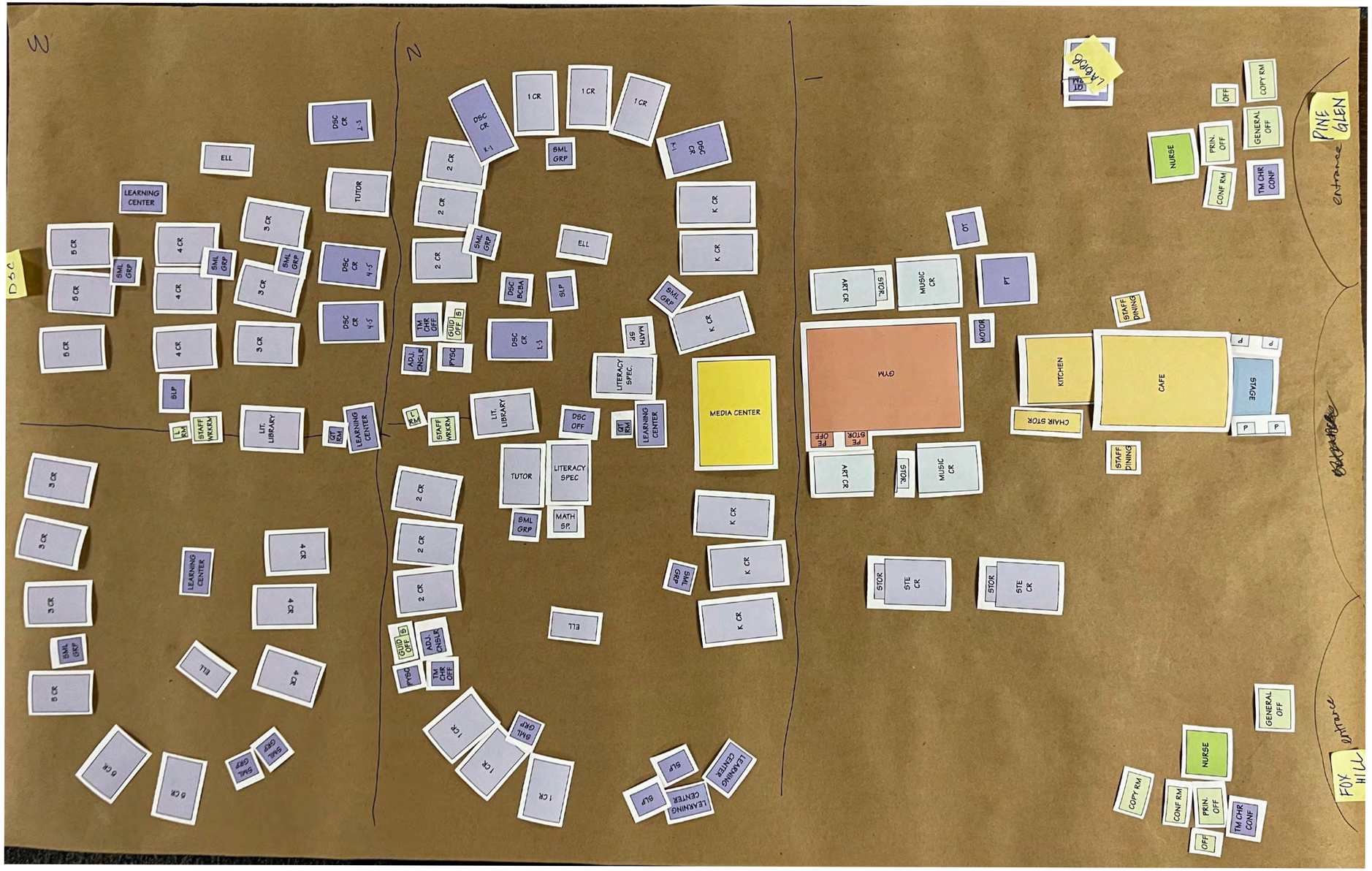
Spatial Relationships | Fox Hill School Only - 325 Students



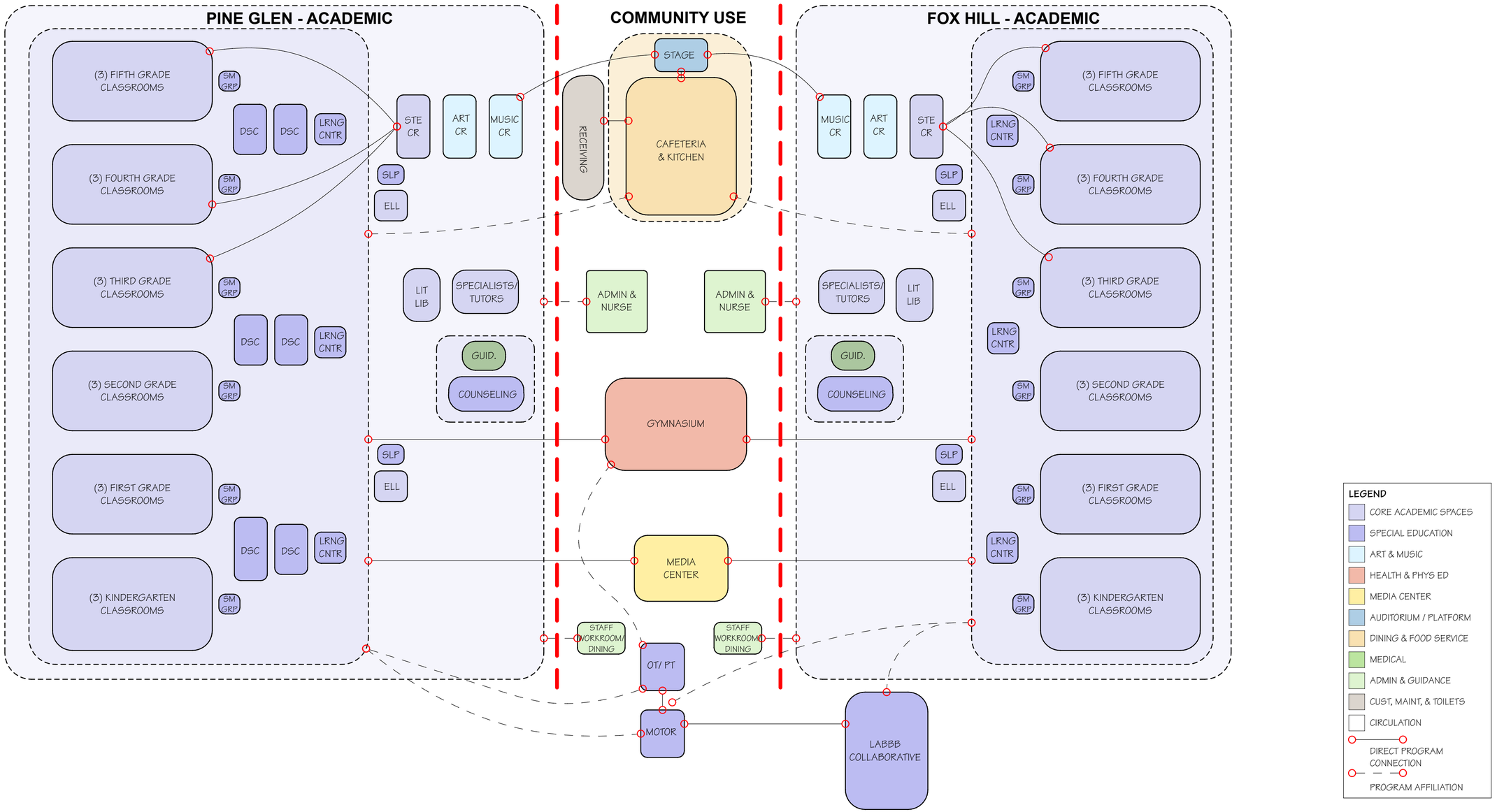
Spatial Relationships | Fox Hill and Pine Glen Combined - 640 Students



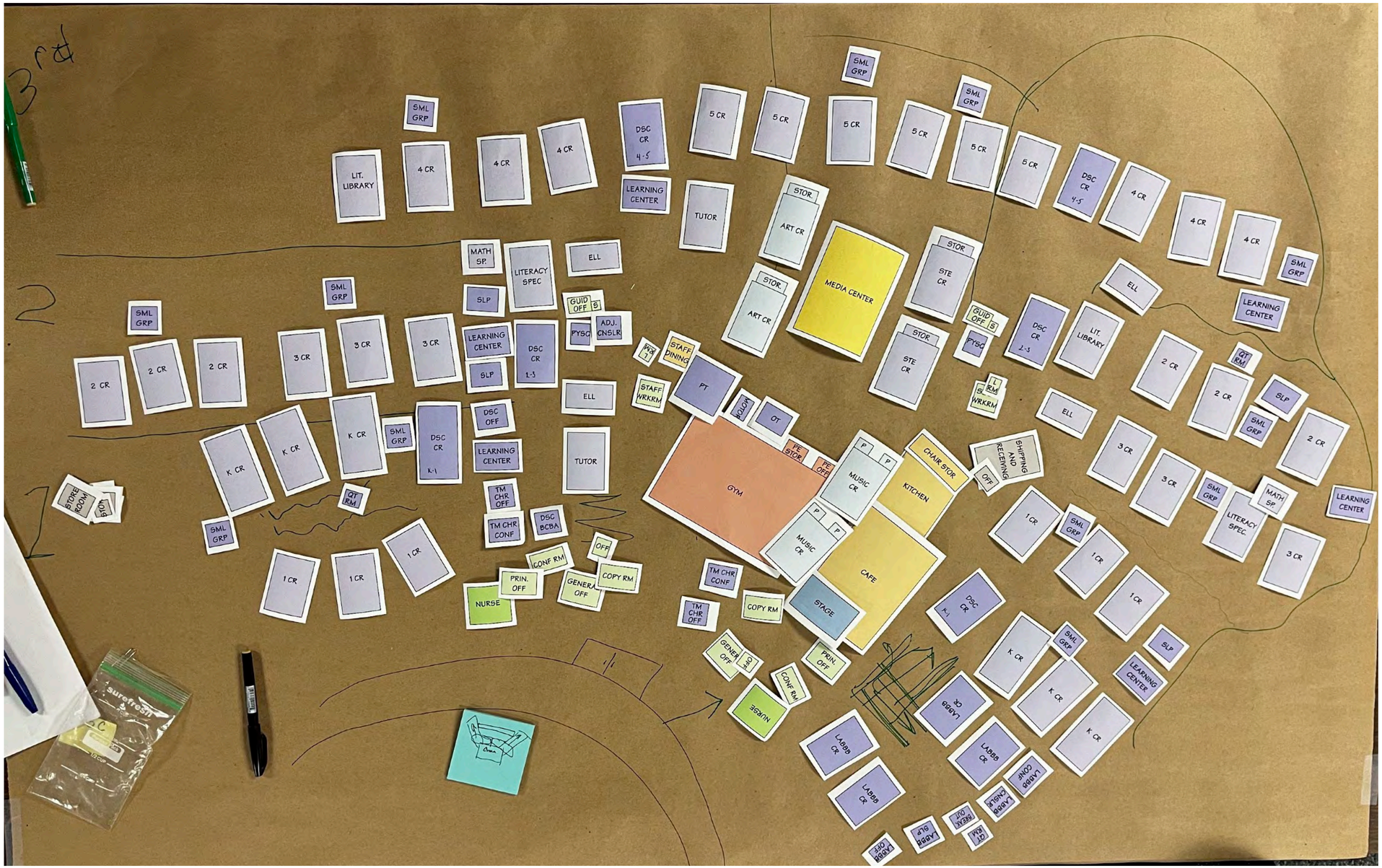
Spatial Relationships | Fox Hill and Pine Glen Visioning - Separate



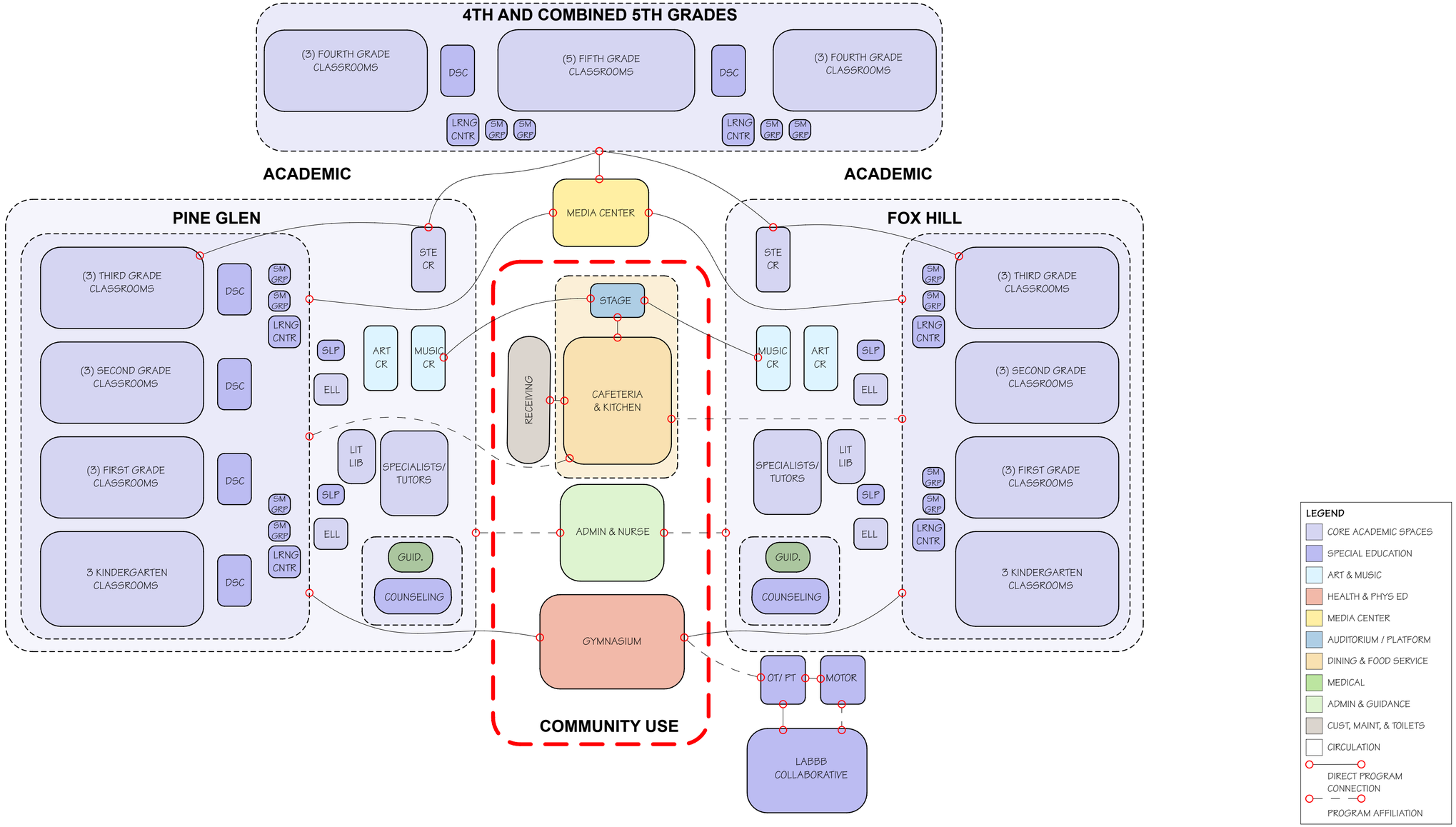
Spatial Relationships | Fox Hill and Pine Glen Separate - 640 Students



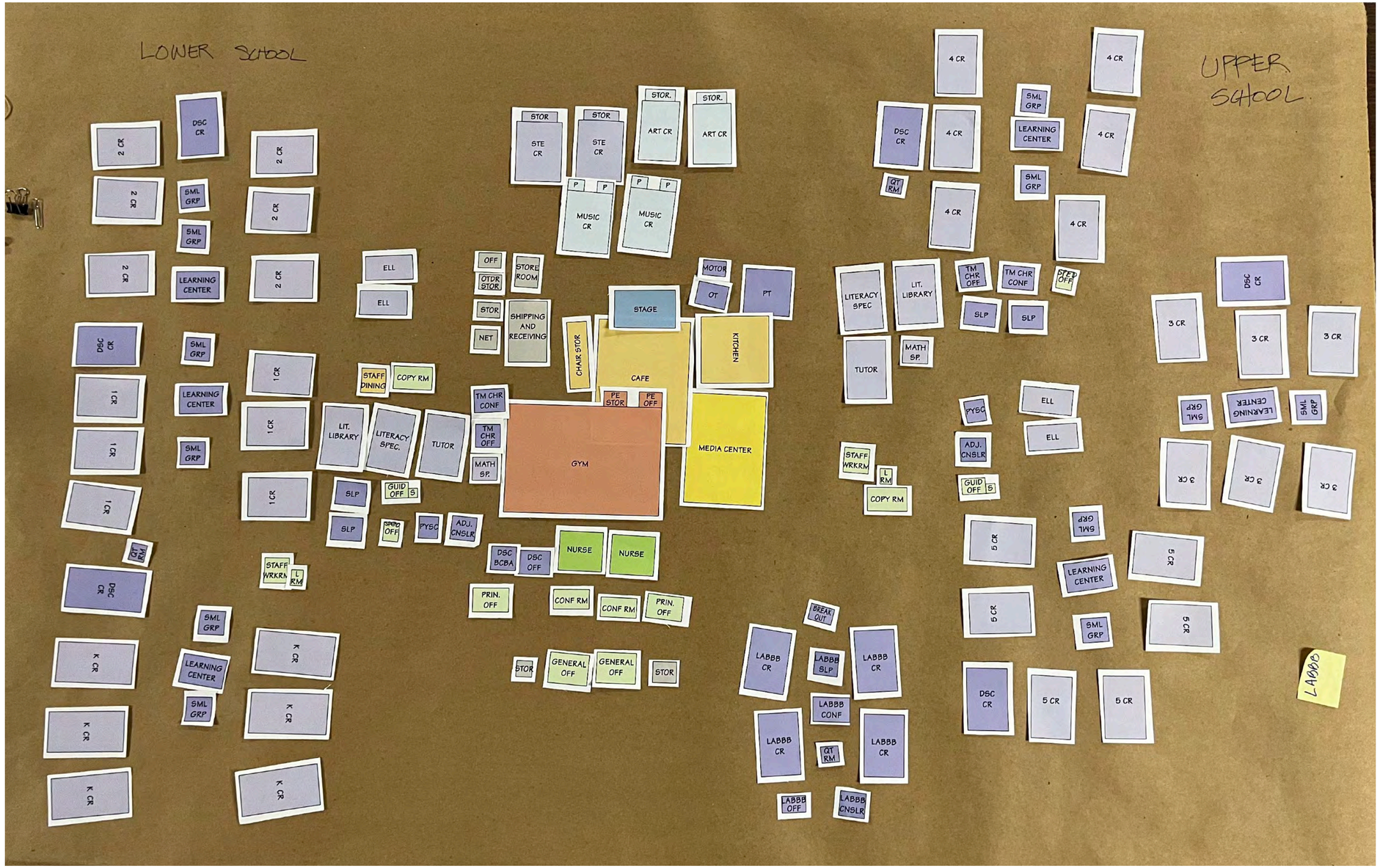
Spatial Relationships | Fox Hill and Pine Glen Visioning - Hybrid



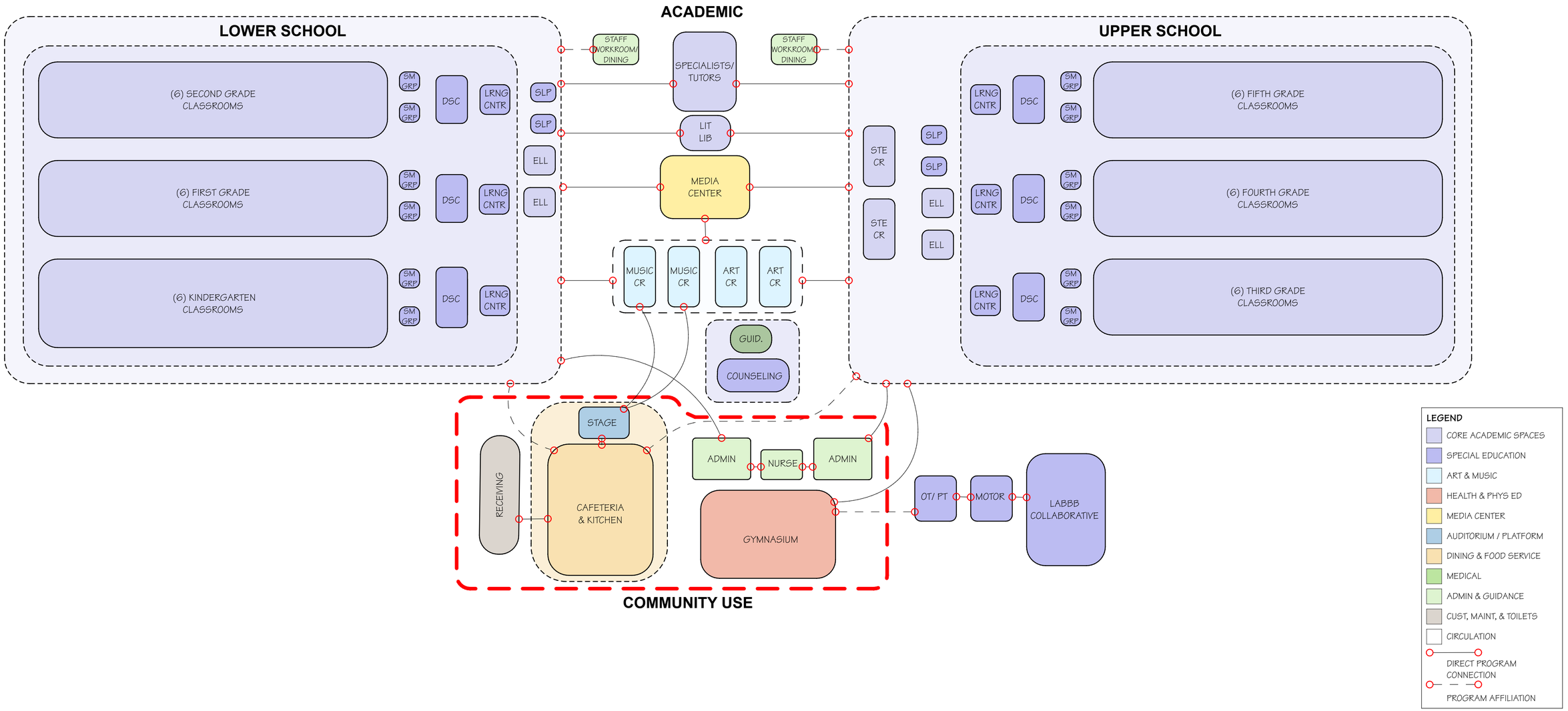
Spatial Relationships | Fox Hill and Pine Glen Hybrid - 640 Students



Spatial Relationships | Fox Hill and Pine Glen Visioning - Lower/Upper



Spatial Relationships | Fox Hill and Pine Glen Lower/Upper - 640 Students



Visioning Sessions | Criteria Matrix

Fox Hill Elementary School - Burlington, MA — **Options and Evaluation Matrix**

	Evaluation criteria based upon priorities	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Site (640 Students)	Fox Hill School Site (640 Students)	Pine Glen School Site (640 Students)	Pine Glen School Site (640 Students)
		Code Upgrades + Repairs no addition	Renovation + Addition	Full demo + new construction	Renovation + addition	Full demo + new construction	Renovation + addition	Full demo + new construction
Concepts Facts								
1	Size of site (acres)	37.90 ac	37.90 ac	37.90 ac	37.90 ac	37.90 ac	11.80 ac.	11.80 ac.
2	Usable size of site (acres)	17.90 ac	17.90 ac	17.90 ac	17.90 ac	17.90 ac		
3	Site environmental (wetlands, etc)	20.00 ac	20.00 ac	20.00 ac	20.00 ac	20.00 ac		
4	Classroom count	18	18	18	36	36	36	36
5	Building gross square feet (GSF)	64,400	85,500	85,500	142,700	142,700	151,500	151,500
6	Net Zero Capability							
Equity to Other Recently Updated Elementary Schools								
Cost and Schedule								
1	Project Cost, $million							
2	LCCA /annual expenses							
3	Allows students to move in to new school 2028							
4	Requires swing space							
5	Requires CM@Risk (i.e. due to scheduling for early release packages)							
6	Operating Cost							
Educational								
1	Meets educational program for all students + design enrollment							
1	Size of spaces							
2	Optimizes configuration and adjacency of teaching spaces							
3	Pedagogical flexibility							
4	Outdoor learning							
5	Provides flexibility for future growth							
6	Provides outdoor learning opportunities							
7	Allows for efficient program design layout							
8	Minimizes school disruption							
Building								
1	Allows for a contextually sensitive design							
2	Allows efficient attainment of Green School/Stretch Code requirements							
3	Optimizes use of natural light and daylighting							
4	Optimizes connection of outdoor/indoor space, integration with site							
5	Meets ADA requirements efficiently							

DRAFT

Fox Hill Elementary School - Burlington, MA — **Options and Evaluation Matrix**

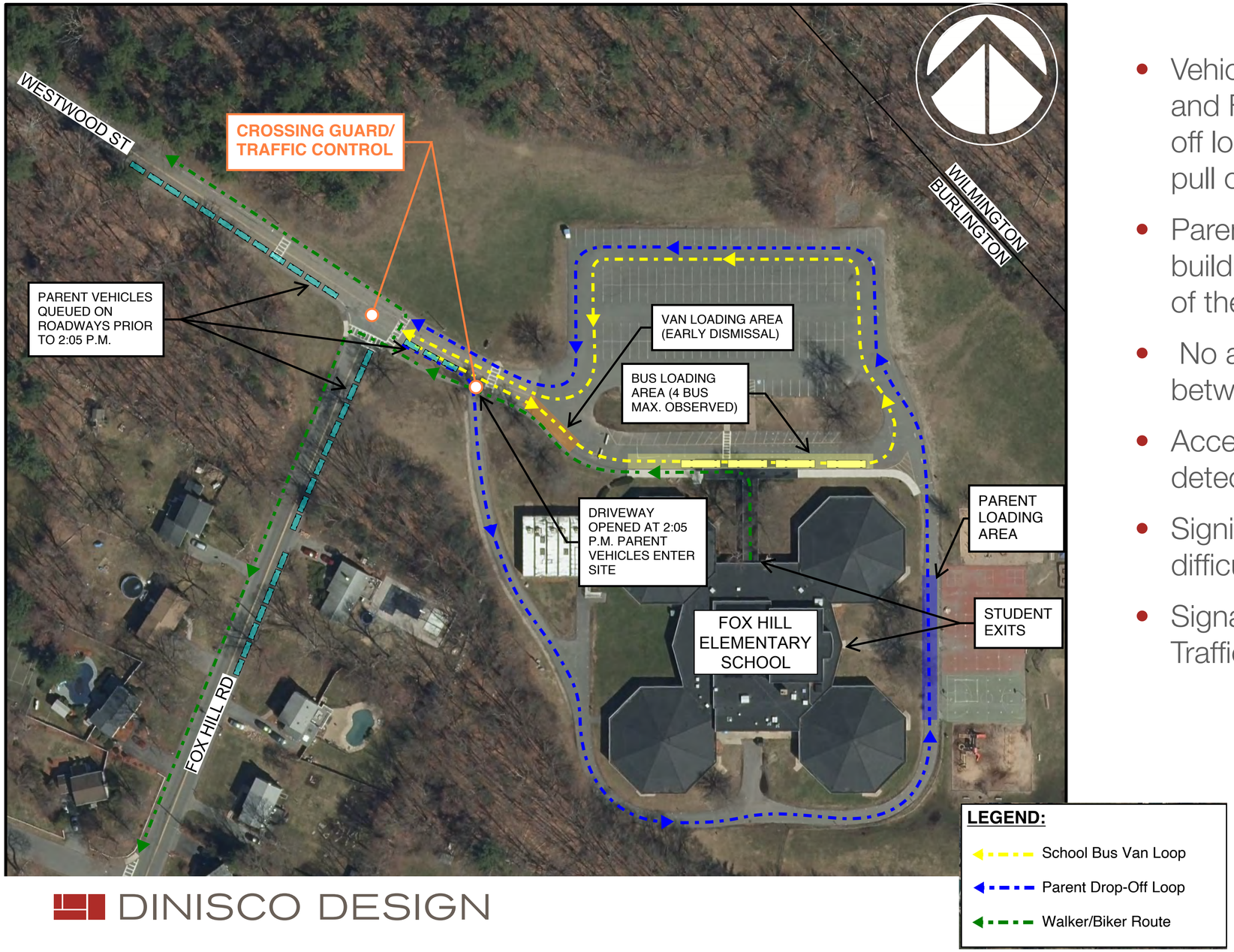
	Evaluation criteria based upon priorities	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Only (325 Students)	Fox Hill School Site (640 Students)	Fox Hill School Site (640 Students)	Pine Glen School Site (640 Students)	Pine Glen School Site (640 Students)
		Code Upgrades + Repairs no addition	Renovation + Addition	Full demo + new construction	Renovation + addition	Full demo + new construction	Renovation + addition	Full demo + new construction
Concepts Facts								
1	Size of site (acres)	37.90 ac	37.90 ac	37.90 ac	37.90 ac	37.90 ac	11.80 ac.	11.80 ac.
2	Usable size of site (acres)	17.90 ac	17.90 ac	17.90 ac	17.90 ac	17.90 ac		
3	Site environmental (wetlands, etc)	20.00 ac	20.00 ac	20.00 ac	20.00 ac	20.00 ac		
4	Classroom count	18	18	18	36	36	36	36
5	Building gross square feet (GSF)	64,400	85,500	85,500	142,700	142,700	151,500	151,500
6	Net Zero Capability							
Site								
1	Maximizes efficient utilization of site							
2	Optimizes outdoor program space and green space							
3	Optimizes safety and efficiency of on site drop off							
4	Separates safe circulation of bus, vehicle, pedestrian and bike access							
5	Provides sufficient parking for teachers, staff + visitors							
6	Improves off site traffic impact							
7	Improves pedestrian safety and access							
8	Allows for future expansion							
Sustainability								
1	Ease of maintenance / maintenance costs							
2	Site requirements							
3	Cost							
4	Optimizes solar (PV) opportunities							
5	Minimizes embodied carbon footprint with building reuse							
6	Achieves Town goal for fossil free building HVAC systems							
7	Optimizes building orientation							
8	Allows efficient attainment of Green School/Stretch Code requirements							
9	Optimizes building envelope thermal performance							
Construction impacts / cost								
1	Building construction cost							
2	Site construction cost							
3	Construction Duration impact							
4	School disruption impacts							
5	Construction impacts on abutters							
Operational costs								
1	Life Cycle Cost Analysis (LCCA)							
2	Annual Operating Cost							
3	Cost for solar as it relates to operating cost (annual)							
Community								

DRAFT

Existing Conditions Update | Fox Hill Traffic Study - Arrival

- Vehicle queues were observed along Westwood Street and Fox Hill Road prior to opening of gate to the drop off loop. Neither road has shoulders to allow vehicles to pull off the travel lane
- Parent drop off positions the driver side adjacent to the building entrance. Preferred to have the passenger side of the vehicle adjacent to the building entrance
- No accessible ramps on the north side of crosswalk between Westwood Street and Fox Hill Road
- Accessible sidewalk ramps at intersections do not have detectable warning plates
- Signing and striping at multiple locations are faded and difficult to read/illegible
- Signage does not meet MUTCD (Manual on Uniform Traffic Control Devices) standards

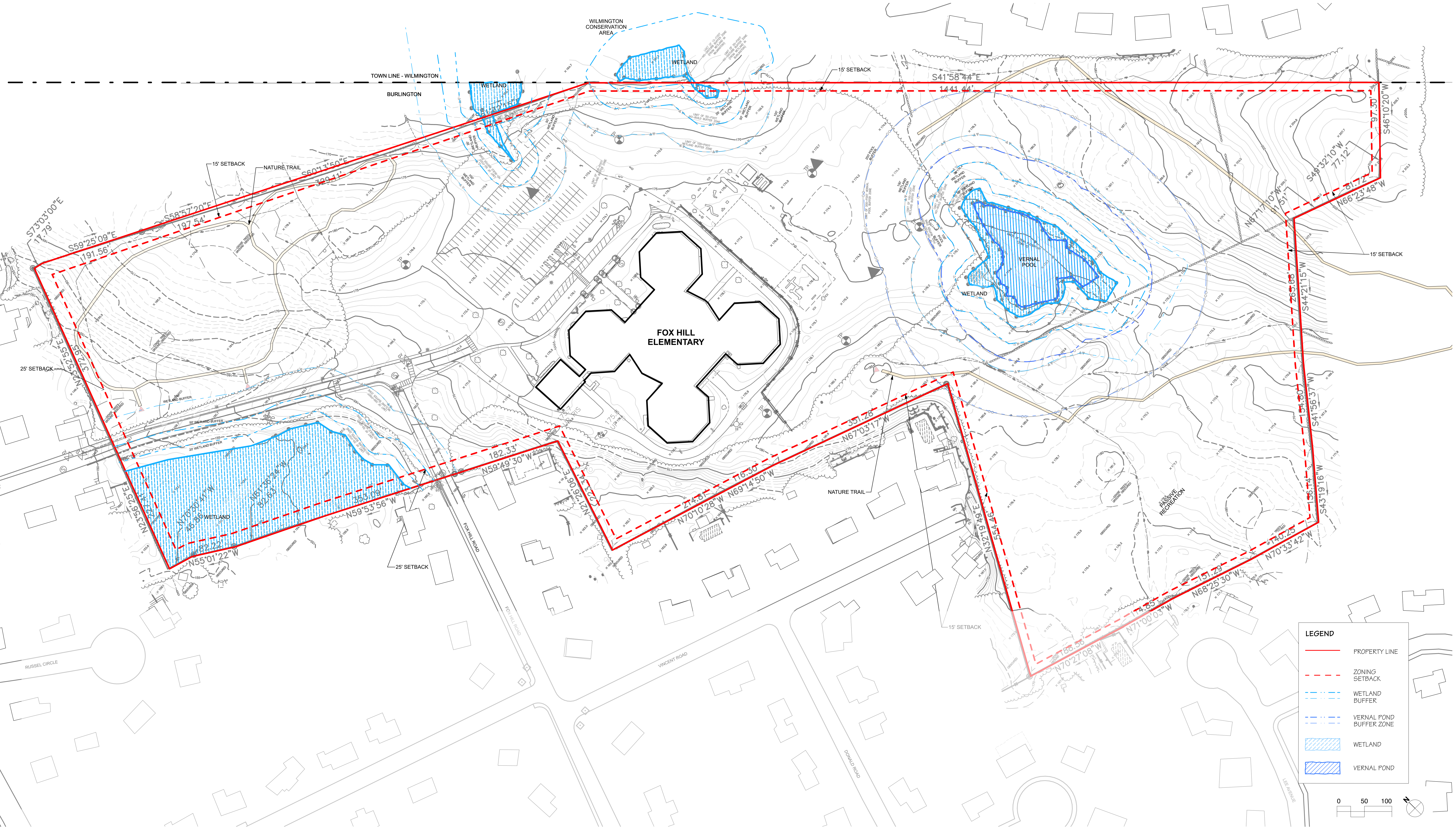
Existing Conditions Update | Fox Hill Traffic Study - Dismissal



- Vehicle queues were observed along Westwood Street and Fox Hill Road prior to opening of gate to the drop off loop. Neither road has shoulders to allow vehicles to pull off the travel lane
- Parent drop off positions the driver side adjacent to the building entrance. Preferred to have the passenger side of the vehicle adjacent to the building entrance
- No accessible ramps on the north side of crosswalk between Westwood Street and Fox Hill Road
- Accessible sidewalk ramps at intersections do not have detectable warning plates
- Signing and striping at multiple locations are faded and difficult to read/illegible
- Signage does not meet MUTCD (Manual on Uniform Traffic Control Devices) standards

DINISCO DESIGN

Existing Conditions Update | Fox Hill ES Site Survey



- Vernal Pool Buffer - Work may not be allowed in the 200 ft buffer
- ANRAD Filings- Will be required in both Burlington and Wilmington

School Building Committee Meeting

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

May 02, 2023

DINISCO DESIGN

© 2023 DiNisco Design, Inc.

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Upcoming Dates - Meetings

- *Executive Working Group - 5/3/2023 & 5/17/2023*
- *Communications Working Group - 5/4/2023*
  - *Community Meeting (May 18th)*
- *SBC/SC Meeting on May 16th TBD*
  - *Vote to approve Educational Program & Space Summary*
- *SBC Meeting on May 30th*
  - *Vote to approve PDP for submission*

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

SBC Member Approval

- *Motion to remove Carl Foss from the SBC Committee and replace with Jeremy Brooks as a member.*

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Next Meetings

- *May 16th, 2023, TBD*
- *May 30th, 2023 @ 6:00PM*

SBC Meeting Agenda – May 2, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of April 13th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Design Update*
6. *Upcoming Milestones/Dates*
7. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
8. *Next meetings*
9. *Adjourn*

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee

DATE: April 13, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

RECEIVED
By Town Clerk's Office at 8:55 am, May 05, 2023

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	4/13/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
	David Rosenblatt*	Principal	✓	Donna DiNisco	DiNisco Design
	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member	✓	Jeremy Brooks	
✓	Tara Carroll	SBC Member			
	Audrey Boeri	SBC Member			
	George Papayannis	SBC Member			
✓	Katherine Bond*	Vice Chair of SBC			
	Carl Foss*	Vice Chair School Committee			
✓	Christine Monaco*	SBC Member			
	Martha Simon*	SBC Member			
✓	Kristen Downie	Secretary			

* SBC Voting Member

Item No.	Description	Action
6.1	**Call to Order & Intro**: 6:04 pm meeting was called to order by SBC Chair M. Massardo with 8 of 13 voting members in attendance.	Record
6.2	**Previous Topics & Approval of March 7th, 2023, Meeting Minutes:** ➢ A motion to approve the 03/07/2023 meeting minutes[1] as submitted made by E. Conti and seconded by B. Cunha. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes - N. Coscia – Yes M. Massardo – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes. Abstention: C. Monaco. Motion passes, minutes approved.	Record
6.3	**Public Comment:** ➢ None.	Record
6.4	**Financial Update:** ➢ A motion to approve the DiNisco Invoice No. 02 in the amount of $29,545.00, Dore + Whittier Invoice No. 05 in the amount of $15,989.00, Dore + Whittier Invoice No. 06 in the amount of $16,232.50, made by B. Cunha and seconded by E. Conti. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes - N. Coscia – Yes M. Massardo – Yes – C. Monaco – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes. Abstention: None. Motion passes, contracts approved. ➢ M. Cox goes over the budget breakdown in the slideshow[2].	Record
6.5	**Existing Conditions Update**: ➢ D. DiNisco starts talking about the PDP and the progress that has been made. This includes the educational program and space summary; they also document the existing conditions to better understand the site.	Record
6.6	**Educational Program Update**: ➢ D. DiNisco talks about the educational program and what it entails. They identify special education programs offered district wide. They identify programs to be offered within the "new" Fox Hill/Pine Glen School. Identify programmatic spatial relationships and adjacencies. The program defines the space needs and total square footage for the project. ➢ D. DiNisco talks about the different visioning sessions that have taken place with Fox Hill and Pine Glen. Then talks about the enrollment alternatives and how they are looking at two different enrolments, one for 325 and one for 640. Goes over the slide[2] that breaks down each	Record

[1] March 7, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	enrollment. Then shows the breakdown for space summary for the 325-student enrollment. ➢ K. Bond asks about the future enrollment and how the design will reflect that. D. DiNisco responds saying that they can design flexibility onto the school so it can support additional classrooms. They will also look at where the building can be expanded, to allow for future expansion. D. DiNisco says that the MSBA's enrollment projections have a proven track record of being correct. ➢ J. Brooks asks if there is time down the road to add more classrooms and have MSBA reimburse them. D. DiNisco says no that the MSBA won't reimburse and if they want to increase classroom size now would be the time to have that conversation. ➢ E. Conti says that a couple years back they had a discussion with the MSBA about having two options with the MSBA which was 325 and 640 students and the community signed off on the MSBA enrollment projections. ➢ K. Bond asks about the MSBA allowing space additions for increasing populations. D. DiNisco responds saying they take the student population and give a cafeteria that will accommodate two sections of dining for half of the school. The MSBA will give a buffer on spaces like that. The gym wouldn't be modified because it can hold two sections at once. ➢ K. Bond asks about space for mental health services. D. DiNisco says the MSBA allows a certain amount of space and lets the district decide how to use it. ➢ S. Brown speaks about asking for more space and classrooms and advises that the best thing to do is to continue the process and going back to ask for more classrooms/space isn't worth the risk of being taken out of the program. D+W will ultimately help the town in whatever decision it decides to make. ➢ D. DiNisco will ask MSBA to see if it's possible to add 1 more classroom per grade paid for by the town because it would be outside the MSBA reimbursement. ➢ Discussion is had about the two-school concept of 640 enrollment. Also discussed are the traffic implications of combining the two schools. A traffic study will be performed to gauge the new traffic impact. The study will make sure to include the new traffic that will be had by combining both schools. ➢ C. Monaco comments the idea of combining Pine Glen and Fox Hill in any manner, one big school or two smaller ones on the same campus. She thinks it's a very bad idea to have so much congestion deep in a residential area.	
6.7	**Upcoming Dates:**	Record

[1] March 7, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ Building tour on 4/26 at 10:00 AM. ➢ Community Meeting on May 18th.	
6.8	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ None.	Record
6.9	**Next Meetings**: ➢ Tuesday May 2nd, 2023, at 6:00PM. ➢ Tuesday May 16th, 2023, at 6:00PM.	Record
6.10	**Adjourn**: 7:05 pm A motion was made by M. Massardo and seconded by J. Priest to adjourn the meeting, Discussion: None. Meeting adjourned.	Record

Submitted: 5/2/23

Approved: 5/2/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] March 7, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

April 13, 2023

DORE + WHITTIER

DINISCO DESIGN
architects + planners

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #6

April 13, 2023, 6:00 PM

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

Previous Meeting Minutes

1. *March 7th, 2023, Minutes*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

Invoices and Commitments for Approval

- *Dore + Whittier Invoice No. 05 in the amount of $15,989.00 (Vote)*
- *Dore + Whittier Invoice No. 06 in the amount of $16,232.50 (Vote)*
- *DiNisco Invoice No. 02 in the amount of $29,545.00 (Vote)*

Budget Breakdown

Project Details

DWMP Project No.	22-0128	**Project Type**	Elementary School
Project Name	Burlington Fox Hill Elementary School	**Scope Type**	TBD
Project Address	Fox Hill Rd. Burlington, MA 01803	**MSBA Project?**	Yes
		MSBA Proj. No.	202000480007
Project Phase	Feasibility Study	**Enrollment**	0
Phase End-Date	12/19/2023	**Reimb. Rate**	45.52%
Phase % Complete	11%		

Edit Project Details

Budgets | Budget Transfers | Contracts | Invoices | Vendors | Meetings | Monthly Reporting

Project Budget Summary

Budget Category	Orig. Budget	Transfers	Upd. Budget	Contract Amt.	% Committed	Expended	% Expended	Contract Remain'g	Bud. Balance
0000-0000 Feasibility Study Agreement									
0001-0000: OPM - Feasibility Study	$750,000.00	-$332,071.00	$417,929.00	$400,079.00	95%	$44,642.50	11%	$355,436.50	$17,850.00
0002-0000: A&E - Feasibility Study	$500,000.00	$175,000.00	$675,000.00	$675,000.00	100%	$29,545.00	4%	$645,455.00	$0.00
0003-0000: Environmental & Site	$100,000.00	$188,000.00	$288,000.00	$129,874.50	45%		0%	$129,874.50	$158,125.50
0004-0000: Other	$150,000.00	-$30,929.00	$119,071.00		0%		0%	$0.00	$119,071.00
Total - 0000-0000 Feasibility Study Agreement	**$1,500,000.00**	**$0.00**	**$1,500,000.00**	**$1,204,953.50**		**$74,187.50**		**$1,130,766.00**	**$295,046.50**
Total	**$1,500,000.00**	**$0.00**	**$1,500,000.00**	**$1,204,953.50**		**$74,187.50**		**$1,130,766.00**	**$295,046.50**

**Does not reflect invoices, commitments, or budget revision requests submitted for approval at this SBC Meeting.*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

School Building
Committee Meeting

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

DINISCO DESIGN

APRIL 13, 2023

© 2023 DiNisco Design, Inc.

Preliminary Design Program | Project Update

- MSBA Process
- Visioning
- Educational Program
- Space Summary
- Existing Conditions

MSBA Process

Module 3 Activities - Feasibility Study:

Preliminary Design Program (PDP)

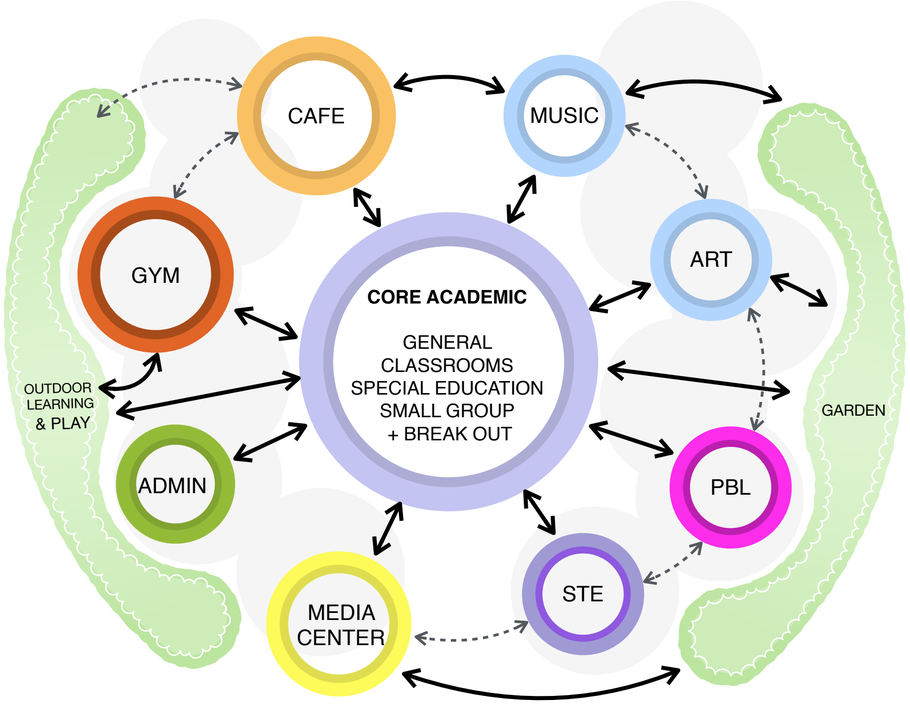
- Educational program and Space Summary
- Existing conditions report
- Establish design parameters
- Develop and evaluate alternatives

Preferred Schematic Report:

- Summarize the process and conclusions of the Preliminary and Final Evaluation of Alternatives
- Cost comparison table
- Document District's selection and recommendation of the most cost effective and educationally appropriate preferred solution to the MSBA
- Submit Preferred Schematic Report (PSR)

MSBA Process | Educational Program

- Identifies special education programs offered district-wide
- Identifies programs to be offered within the “new” Fox Hill/Pine Glen School
- Identifies programmatic spatial relationships and adjacencies
- The program defines the space needs and total square footage for the project



Visioning Sessions | Educational Priorities

Fox Hill

- Safe and Welcoming
- Student-Centered Learning
- Collaborative Learning
- STEAM and Project Based Learning
- Inclusive and Differentiated Learning
- Community Connections
- Outdoor Learning

Pine Glen

- Inclusive and Differentiated Learning
- Student Centered Learning
- Collaborative Learning
- Social Emotional Learning
- School Community and Culture
- Enrichment Opportunities
- Community Partnerships
- Outdoor Learning

Visioning Sessions | Architectural Priorities

Fox Hill

- Safe and Welcome
- Innovative and Flexible Learning Spaces
- Support for Differentiated Learning
- Robust Technology
- Sustainability
- Good Acoustics
- More Space
- Teacher Workspaces
- Good Storage
- Bathrooms

Pine Glen

- Inclusion and Access
- Flexible Classrooms and Spaces
- Classroom Neighborhoods
- Small Group and Meeting Spaces
- Collaborative Learning and Gathering Spaces
- Healthy Building
- Outdoor Learning Spaces
- Robust Technology
- Thermal Comfort, Natural Light

Preliminary Design Program | Enrollment Alternatives

Massachusetts School Building Authority

Class Size Policies	
Kindergarten through Fifth Grade	1 to 18 students

Option 1 - 325 Student Enrollment

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	54	54	54	54	54	55	325
Average # students/class	18	18	18	18	18	18	
# of classrooms	3	3	3	3	3	3	18
Total Classrooms / Grade	3	3	3	3	3	3	18

Option 2 - 640 Student Enrollment

GOAL Class Size	K	1	2	3	4	5	Total
# Students (Average)	106	106	107	107	107	107	640
Average # students/class	18	18	18	18	18	18	
# of classrooms	5.89	5.89	5.94	5.94	5.94	5.94	35.56
Total Classrooms / Grade	6	6	6	6	6	6	36

Preliminary Space Summary | 325 Student Enrollment

Program	Fox Hill Existing Conditions	Fox Hill Space Requirements	MSBA Guidelines	Differences	Comments
Core Academic	24,815 NFA	23,000 NFA	15,000 NFA	8,000 NFA	MSBA does not automatically include ELL, Lit / Math Specialists
Special Ed.	4,485 NFA	11,000 NFA	4,530 NFA	6,470 NFA	DESE reviews / approves Special Ed spaces
Art/Music	2,160 NFA	2,500 NFA	2,500 NFA	0 NFA	
Health & PE	4,170 NFA	7,300 NFA	6,300 NFA	1,000 NFA	Possibly increase size of gym for bleachers / more run-off space
Media Center	1,365 NFA	2,130 NFA	2,130 NFA	0 NFA	
Dining (Cafe, Kitchen, Stage, Staff Dining)	6,610 NFA	5,567 NFA	5,567 NFA	0 NFA	Maximize size of cafetorium to accommodate any future expansion
Medical / Admin	1,790 NFA	2,885 NFA	2,550 NFA	335 NFA	May be able to reduce area depending on layout
Custodial / Main	860 NFA	1,925 NFA	1,925 NFA	0 NFA	May require slightly more space depending on final layout
Other	0 NFA	0 NFA	0 NFA	0 NFA	MSBA does not reimburse for “other” spaces
Sub Total Program	46,255 NFA	56,307 NFA	40,502 NFA	15,805 NFA	
Total Gross Sq. Ft. (GSF) (Gross SF / NFA = 1.5)	64,400 GSF	**84,461 GSF**	60,753 GSF	23,708 GSF	

NFA = Net Floor Area

Preliminary Space Summary | 640 Student Enrollment | Two School Concept

Program	Fox Hill/Pine Glen Existing Conditions	Fox Hill/Pine Glen Space Requirements	MSBA Guidelines	Differences	Comments
Core Academic	42,615 NFA	46,540 NFA	29,050 NFA	17,490 NFA	MSBA does not automatically include ELL, Lit / Math Specialists
Special Ed.	8,675 NFA	20,025 NFA	7,550 NFA	12,475 NFA	DESE reviews / approves Special Ed spaces
Art/Music	4,085 NFA	5,000 NFA	5,000 NFA	0 NFA	
Health & PE	7,645 NFA	7,300 NFA	6,300 NFA	1,000 NFA	Possibly increase size of gym for bleachers / more run-off space
Media Center	2,635 NFA	3,550 NFA	3,550 NFA	0 NFA	
Dining (Cafe, Kitchen, Stage, Staff Dining)	12,870 NFA	8,413 NFA	8,413 NFA	0 NFA	
Medical / Admin	3,735 NFA	6,150 NFA	3,235 NFA	2,915 NFA	Assumes two Admin + nurse suites
Custodial / Main	2,995 NFA	2,240 NFA	2,240 NFA	0 NFA	
Other	0 NFA	0 NFA	0 NFA	0 NFA	
Sub Total Program	85,255 NFA	99,218 NFA	65,338 NFA	33,880 NFA	
Total Gross Sq. Ft. (GSF) (Gross SF / NFA = 1.5)	122,400 GSF	148,827 GSF	98,007 GSF	50,820 GSF	

DINISCO DESIGN

NFA = Net Floor Area

Preliminary Space Summary | Enrollment Comparison

Program	**325 Students** @ MSBA Standards	**325 Students** MSBA Guidelines	**640 Students** @ MSBA Standards	**640 Students** MSBA Guidelines	Comments
Core Academic	23,000 NFA	15,000 NFA	46,540 NFA	29,050 NFA	MSBA does not automatically include ELL, Lit / Math Specialists
Special Ed.	11,000 NFA	4,530 NFA	20,025 NFA	7,550 NFA	DESE reviews / approves Special Ed spaces
Art/Music	2,500 NFA	2,500 NFA	5,000 NFA	5,000 NFA	
Health & PE	7,300 NFA	6,300 NFA	7,300 NFA	6,300 NFA	
Media Center	2,130 NFA	2,130 NFA	3,550 NFA	3,550 NFA	
Dining (Cafe, Kitchen, Stage, Teacher Dining)	5,567 NFA	5,567 NFA	8,413 NFA	8,413 NFA	465 Enrollment: • 3 vs 2 seatings; Smaller kitchen (Angier)
Medical / Admin	2,885 NFA	2,550 NFA	6,150 NFA	3,235 NFA	May require slightly more space depending on final layout
Custodial / Main	1,925 NFA	1,925 NFA	2,240 NFA	2,240 NFA	May require slightly more space depending on final layout
Other (Extended Day)	0 NFA	0 NFA	0 NFA	0 NFA	MSBA does not reimburse for “other” spaces
Sub Total Program	56,307 NFA	40,502 NFA	99,218 NFA	65,338 NFA	
Total Gross Sq. Ft. (GSF) (Gross SF / NFA = 1.5)	**84,461 GSF**	60,753 GSF	**148,827 GSF**	98,007 GSF	

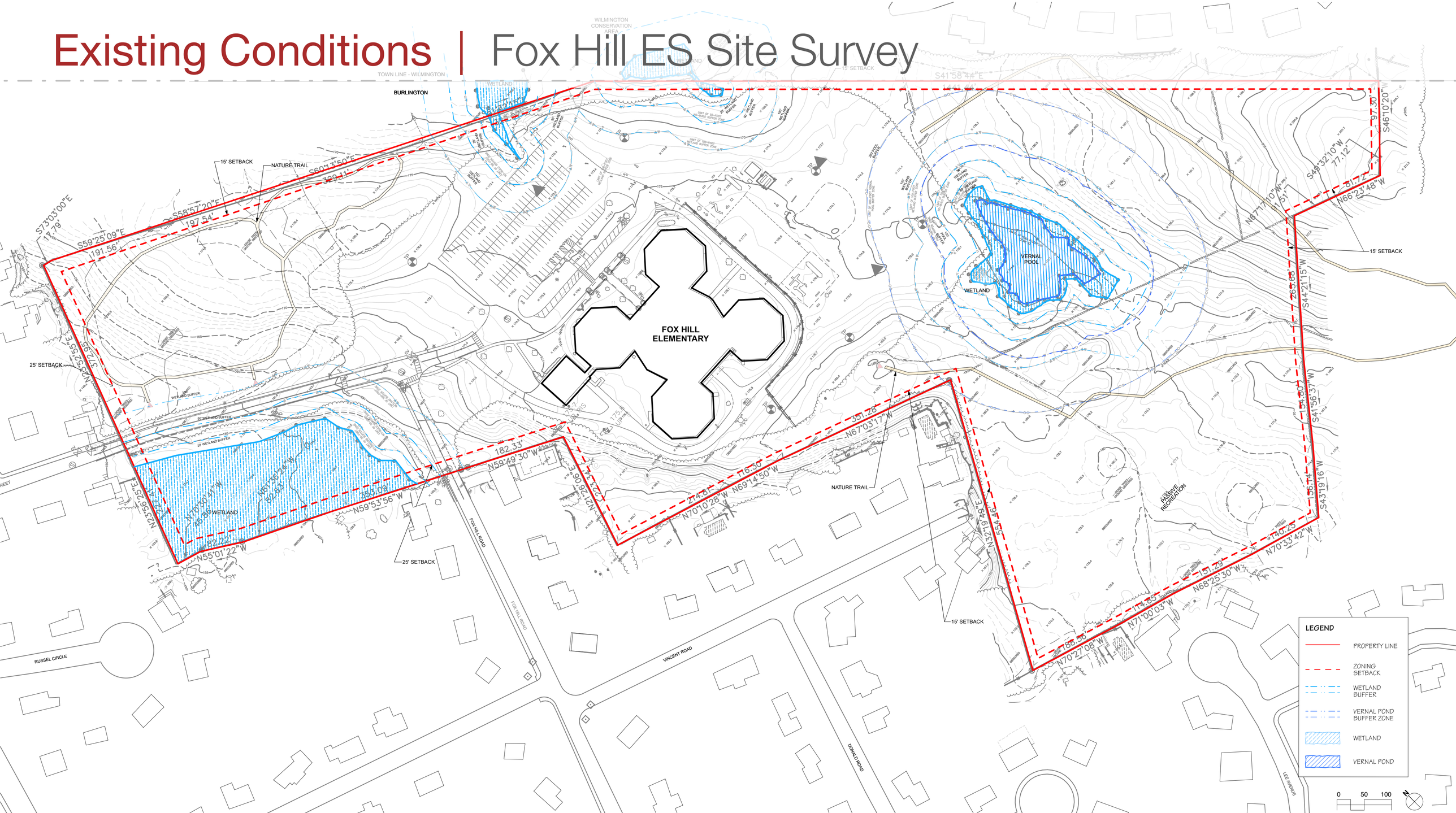
DINISCO DESIGN

NFA = Net Floor Area

Preliminary Design Program | Existing Conditions

- Existing Building and Systems Review
- HazMat Testing
- Site Survey and Wetland Flagging
- Geotech Explorations
- Traffic Analysis

Existing Conditions | Fox Hill ES Site Survey



School Building
Committee Meeting

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

DINISCO DESIGN

APRIL 13, 2023

© 2023 DiNisco Design, Inc.

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

Upcoming Dates - Meetings

- *Building Tours – 4/26 10:00am*
- *Communications Working Group*
  - *Community Meeting (May 18th)*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

Next Meetings

- *May 2nd, 2023 @ 6:00PM*
- *May 16th, 2023 @ 6:00PM*

SBC Meeting Agenda – April 13, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of March 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Upcoming Dates*
8. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
9. *Next meetings*
10. *Adjourn*

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee

DATE: March 7, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	3/7/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager		Mike Burton	DWMP
✓	John Danizio*	SBC Member		Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
✓	David Rosenblatt*	Principal	✓	Donna DiNisco	DiNisco Design
✓	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member			
✓	Tara Carroll	SBC Member			
✓	Audrey Boeri	SBC Member			
✓	George Papayannis	SBC Member			
✓	Katherine Bond*	Vice Chair of SBC			
✓	Carl Foss*	Vice Chair School Committee			
✓	Christine Monaco*	SBC Member			
✓	Martha Simon*	SBC Member			
✓	Kristen Downie	Secretary			

* SBC Voting Member

Item No.	Description	Action
5.1	**Call to Order & Intro**: 6:12 pm meeting was called to order by SBC Chair M. Massardo with 13 of 13 voting members in attendance.	Record
5.2	**Previous Topics & Approval of February 7th, 2023, Meeting Minutes:** ➢ A motion to approve the 02/07/2023 meeting minutes[1] as submitted made by M. Simon and seconded by C. Foss. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes - N. Coscia – Yes M. Massardo – Yes – D. Rosenblatt – Yes – C. Monaco – Yes – M. Simon – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – D. Rosenblatt - Yes. Abstention: K. Bond. Motion passes, minutes approved.	Record
5.3	**Public Comment:** ➢ None.	Record
5.4	**Financial Update:** ➢ A motion to approve the DiNisco Amendment No. 01 in the amount of $106,949.50, Dore + Whittier Invoice No. 04 in the amount of $17,357.50, DiNisco Invoice No. 1 in the amount of $29,545.00, made by M. Simon and seconded by J. Priest. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes - N. Coscia – Yes M. Massardo – Yes – D. Rosenblatt – Yes – C. Monaco – Yes – M. Simon – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest – Yes – K. Bond - Yes. Abstention: None. Motion passes, contracts approved. ➢ M. Cox goes into the budget breakdown in the slideshow[2]. ➢ M. Simon asks about the budget transfers. M. Cox responds saying this was a realignment, and no money was added.	Record
5.5	**Existing Conditions Update**: ➢ N. Harrigan starts by explaining what took place last week with the tours of Fox Hill and Pine Glen. They had civil, landscape architect, electrical, mechanical, plumbing, and technology consultants with them as well. N. Harrigan goes through the slideshow[2] and comments on the various photos that were provided and the condition of the overall school. ➢ D. DiNisco says they will be doing a repair only option review analysis and what the cost of that looks like. ➢ M. Simon asks if the report of the existing conditions will be a part of the communication effort to the community. D. DiNisco responds saying she agrees and that the message for the community will be that the majority of the school is past its useful life. S. Brown follows saying	Record

[1] February 7, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

	the report will be a deliverable for the MSBA process, the communication working group can decide how best to distribute the report. ➢ J. Priest asks working about with conservation and if abutters will be notified as well. V. Low responds saying yes if it does involve abutters they will be notified. ➢ V. Low talks about the Geotech surveys saying they found bedrock in one of the borings. They are waiting on the final report and once received that will be shared. ➢ E. Conti asks about the useability of the site given the findings of the report. V. Low says the wetland buffer zone may limit them more than they thought. D. DiNisco says none of it will impact the overall approach for the site, they will make the best-informed decision based on the evidence gathered about the site.	
5.6	**Educational Program Update**: ➢ D. DiNisco talks about the kickoff educational meeting that occurred today. This will be a series of visioning sessions with the staff. Currently working with E. Conti and his group to work through the educational program. This will take another month or so to finalize a plan.	Record
5.7	**Working Groups Update**: ➢ M. Cox says R. Riggs was added to the sustainability group. As time goes on these groups will get more involved, and meetings will be organized.	Record
5.8	**Project Website Update**: ➢ M. Massardo starts by talking about the letter that was sent out to the staff and parents a week ago. This was also posted on the project website for public viewing. ➢ R. Riggs asks about the contact info on the website. M. Cox says the questions go to A. Place for review.	Record
5.9	**Upcoming Dates:** ➢ S. Brown goes over the schedule graphic that is shown on the slideshow[2]. Mentions key dates are Submitting the Preliminary Design Program (PDP) to MSBA on 6/1/23, Submittal of preferred Schematic Report (PSR) to MSBA on 2/20/24, and then Submit Schematic Design to MSBA on 8/16/24. ➢ M. Cox talks about upcoming meetings, executive working group meetings on 3/22 & 4/5. Building tours will be coordinated at a later date.	Record

[1] February 7, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

5.10	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ None.	Record
5.11	**Next Meetings**: ➢ Tuesday April 4th, 2023, at 6:00PM ➢ Tuesday May 2nd, 2023, at 6:00PM	Record
5.12	**Adjourn**: 7:30 pm A motion was made M. Simon by and seconded by J. Priest to adjourn the meeting, Discussion: None.	Record

Submitted: 4/13/23

Approved: 4/13/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] February 7, 2023, Meeting Minutes
[2] D+W PowerPoint Presentation

March 7, 2023

DORE + WHITTIER

DINISCO DESIGN
architects + planners

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #5

March 7, 2023, 6:00 PM

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

Previous Meeting Minutes

1. *February 7th, 2023, Minutes*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

Invoices and Commitments for Approval

- *DiNisco Amendment No. 01 in the amount of $106,949.50 (Vote)*
- *Dore + Whittier Invoice No. 04 in the amount of $17,357.50 (Vote)*
- *DiNisco Invoice No. 01 in the amount of $29,545.00 (Vote)*

Budget Breakdown

Project Details

DWMP Project No.	22-0128	**Project Type**	Elementary School
Project Name	Burlington Fox Hill Elementary School	**Scope Type**	TBD
Project Address	Fox Hill Rd. Burlington, MA 01803	**MSBA Project?**	Yes
		MSBA Proj. No.	202000480007
Project Phase	Feasibility Study	**Enrollment**	0
Phase End-Date	12/19/2023	**Reimb. Rate**	45.52%
Phase % Complete	4%		

Edit Project Details

Budgets | Budget Transfers | Contracts | Invoices | Vendors | Meetings | Monthly Reporting

Project Budget Summary

Budget Category	Orig. Budget	Transfers	Upd. Budget	Contract Amt.	% Committed	Expended	% Expended	Contract Remain'g	Bud. Balance
0000-0000 Feasibility Study Agreement									
0001-0000: OPM - Feasibility Study	$750,000.00	-$332,071.00	$417,929.00	$400,079.00	95%	$44,642.50	11%	$355,436.50	$17,850.00
0002-0000: A&E - Feasibility Study	$500,000.00	$175,000.00	$675,000.00	$675,000.00	100%		0%	$675,000.00	$0.00
0003-0000: Environmental & Site	$100,000.00	$188,000.00	$288,000.00	$22,925.00	7%		0%	$22,925.00	$265,075.00
0004-0000: Other	$150,000.00	-$30,929.00	$119,071.00		0%		0%	$0.00	$119,071.00
Total - 0000-0000 Feasibility Study Agreement	**$1,500,000.00**	**$0.00**	**$1,500,000.00**	**$1,098,004.00**		**$44,642.50**		**$1,053,361.50**	**$401,996.00**

**Does not reflect invoices, commitments, or budget revision requests submitted for approval at this SBC Meeting.*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

SBC Meeting

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

DINISCO DESIGN

MARCH 07, 2023

© 2023 DiNisco Design, Inc.

Existing Conditions | Fox Hill ES

Existing Conditions | Fox Hill ES

EXIT

Existing Conditions | Fox Hill ES

Existing Conditions | Fox Hill ES

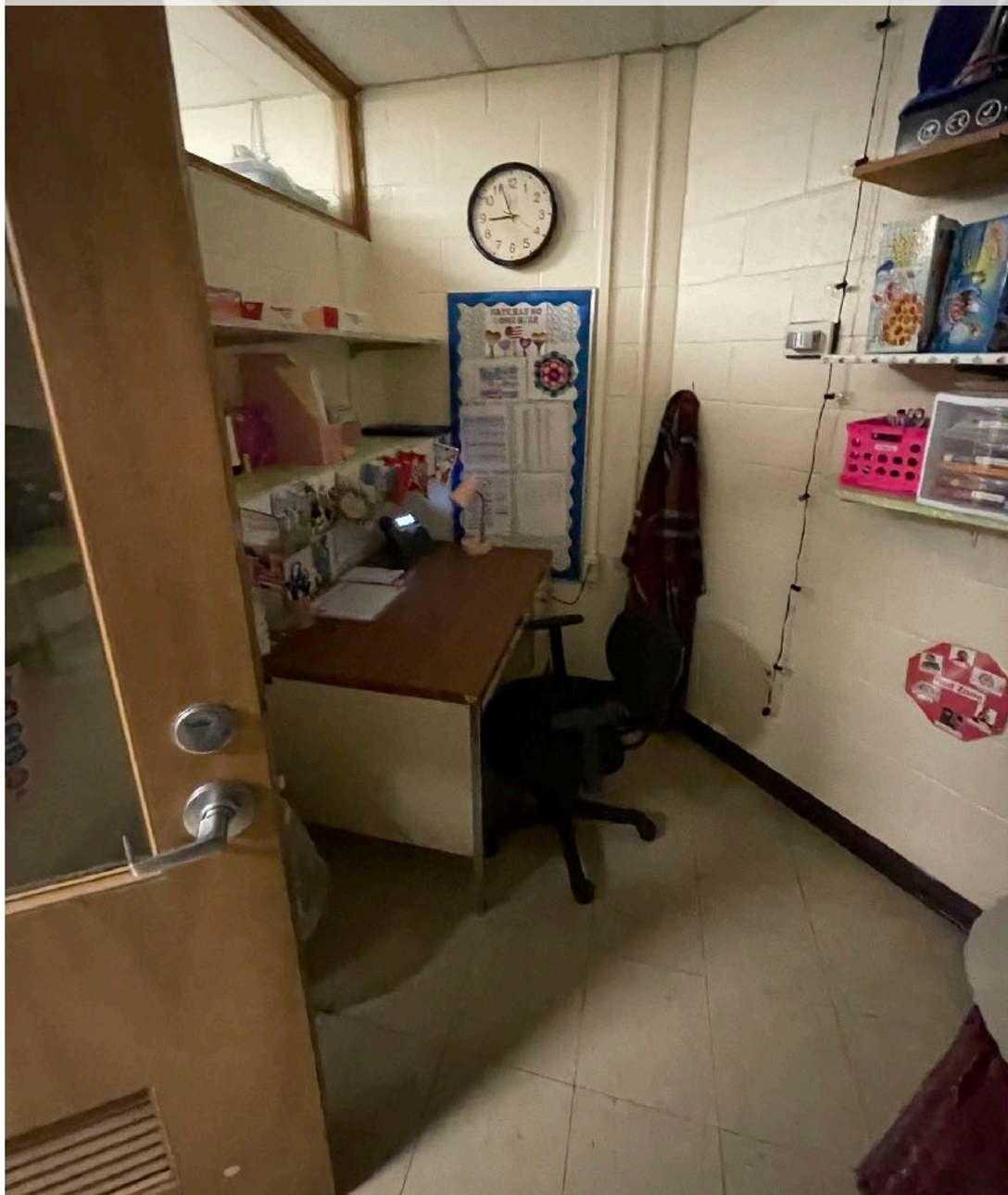
© 2022 DiNisco Design, Inc.

Existing Conditions | Fox Hill ES

Existing Conditions | Fox Hill ES

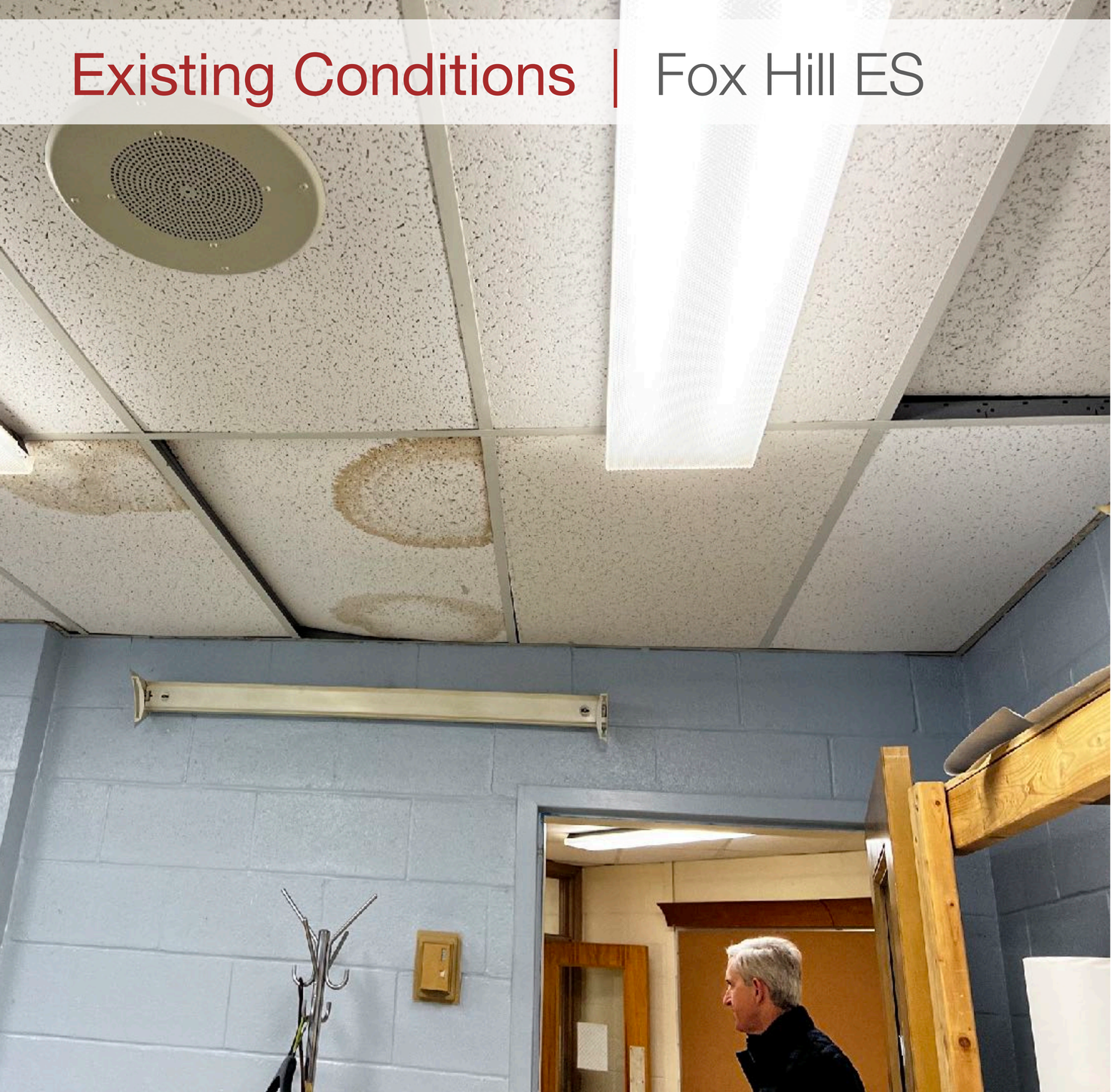
Existing Conditions | Fox Hill ES

Existing Conditions | Fox Hill ES

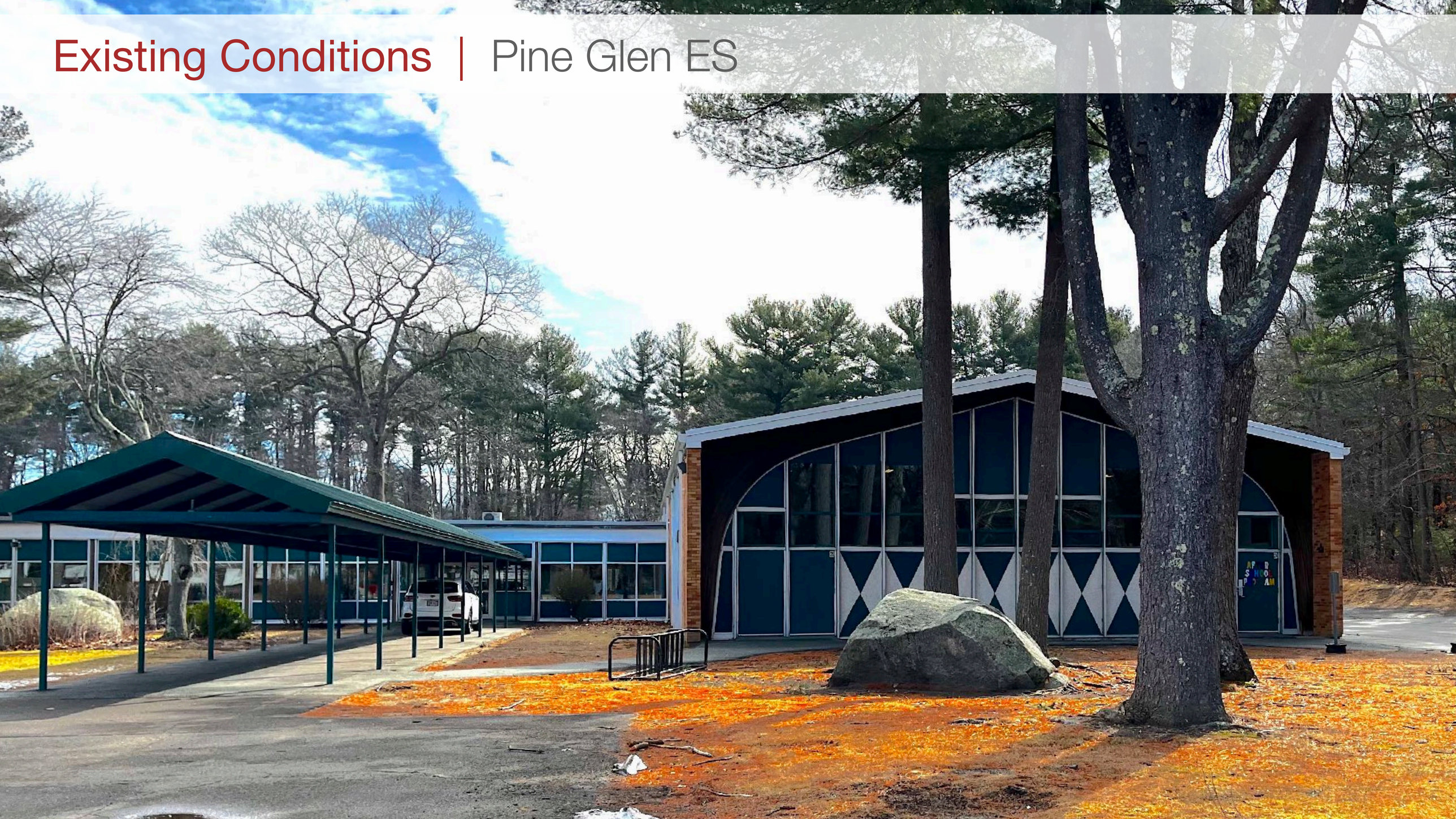


Existing Conditions | Fox Hill ES

Existing Conditions | Fox Hill ES

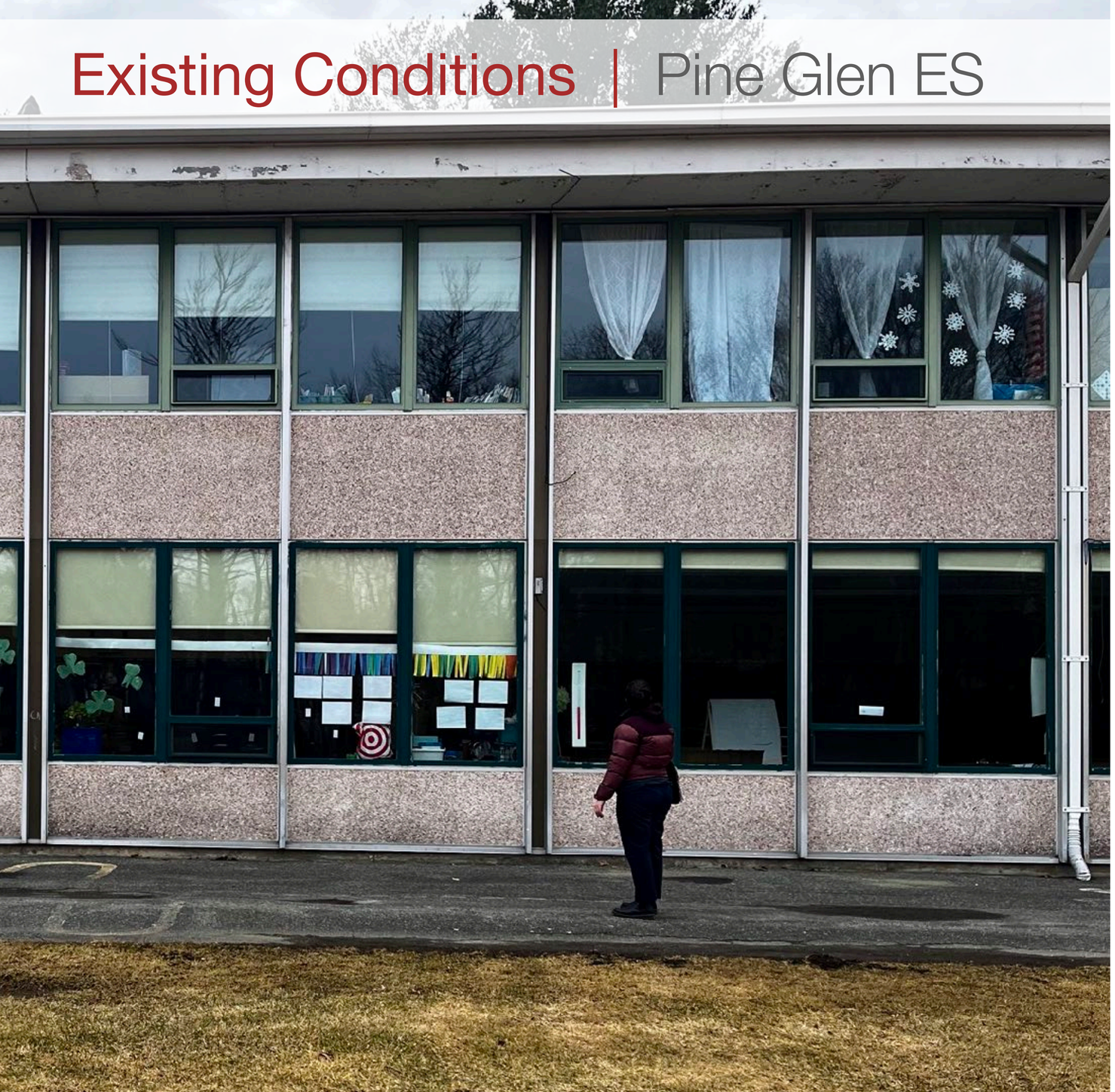


Existing Conditions | Pine Glen ES



Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES



Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES

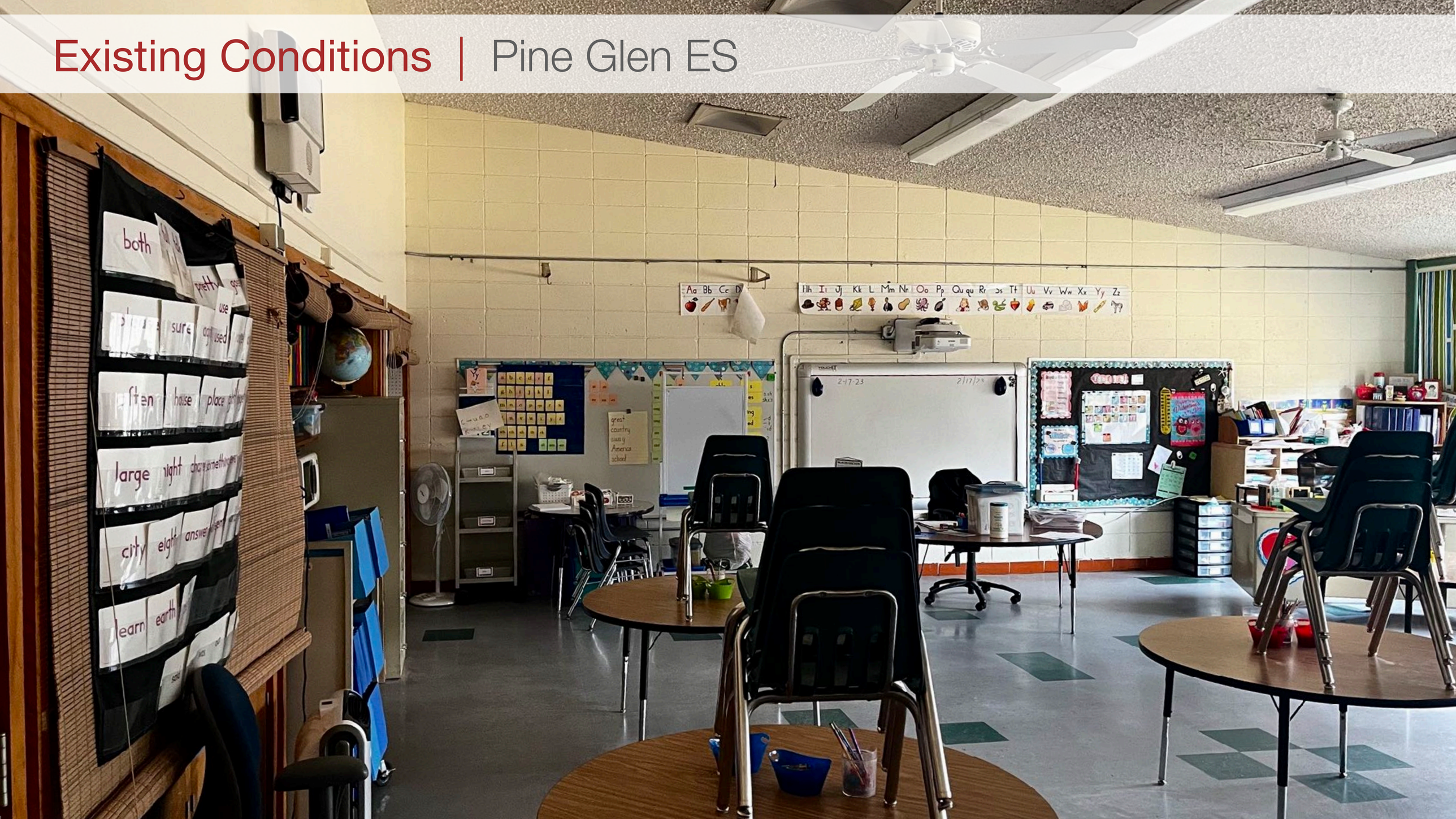
Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES

Existing Conditions | Pine Glen ES



SBC Meeting

FOX HILL ELEMENTARY SCHOOL

Burlington, MA

DINISCO DESIGN

MARCH 07, 2023

© 2023 DiNisco Design, Inc.

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

Working Groups

Burlington SBC – Working Groups

- **Executive Working Group**
  - **Eric Conti***
  - **Bob Cunha***
  - **Nichole Coscia***
  - **Melissa Massardo***

- *Communications Working Group*
  - *Bob Cunha**
  - *Melissa Massardo**
  - *Kristen Downie*
  - *Jennifer Priest**
  - *Eric Conti**
  - *Martha Simon**

- *Site Logistics*
  - *Paul Sagarino**
  - *Audrey Boeri*
  - *Katherine Bond**
  - *Bob Cunha**

- *Green Building and Sustainability Initiative Working Group*
  - *Bob Cunha**
  - *Melissa Massardo**
  - *Martha Simon**
  - *George Papyannis**
  - ***Roger Riggs***

- *Exterior Design Working Group ****
  - *Dennis Villano**
  - *Bob Cunha**
  - *Tara Carroll*
  - *Melissa Massardo**
  - *Kristen Downie**
  - *Katherine Bond**
  - *Jennifer Priest**
  - *Eric Conti**
  - *Martha Simon**

- *Interior Design Working Group ****
  - *Dennis Villano**
  - *Bob Cunha**
  - *Tara Carroll*
  - *Melissa Massardo**
  - *Kristen Downie*
  - *Katherine Bond**
  - *Jennifer Priest**
  - *Eric Conti**
  - *Martha Simon**
  - *George Papyannis*

- *Educational Programming*
  - *Christine Monaco**
  - *Dennis Villano**
  - *Katherine Bond**
  - *Tara Carroll*
  - *Eric Conti**
  - *Martha Simon**
  - *George Papyannis*

- *Financial and Bonding & Facilities Assessment Working Group*
  - *Nichole Coscia**
  - *Bob Cunha**
  - *John Danizio**
  - *Paul Sagarino**
  - *Eric Conti**
  - *Roger Riggs*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

Project Website

Fox Hill Elementary School Building Project

Home | About | Existing Conditions | Community Outreach | SBC Committee | News | FAQ | Team | Official Documents | Contact

WELCOME

Welcome to the Fox Hill Elementary School Building Project website. We encourage you to explore the site to learn more about this project and its impact on the Town and how it involves the community. Below you will find a graphic outlining the MSBA process and what stage we are currently in!

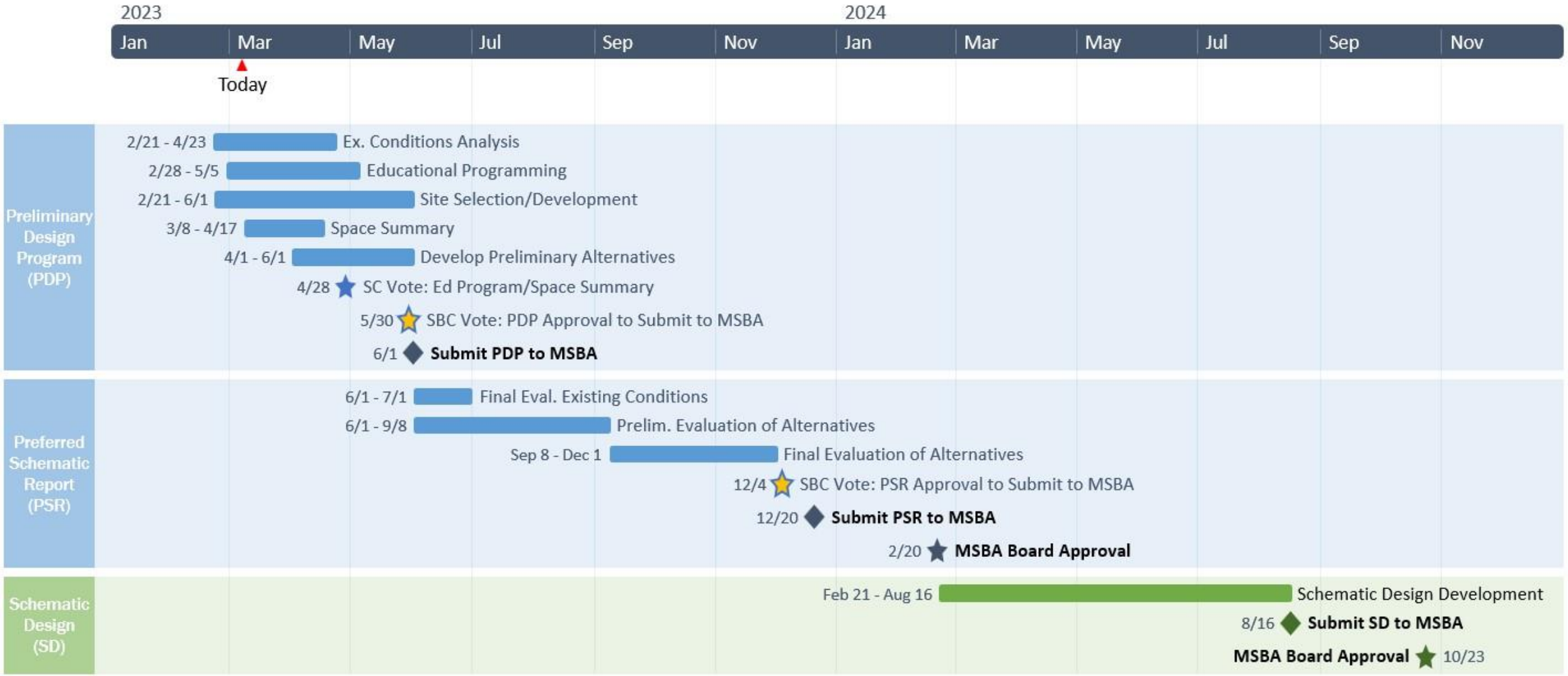
Español
Português
ગુજરાતી
हिंदी
العربية
Oluganda
中文 (繁體)
اردو

English

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

Schedule Timeline



Upcoming Dates - Meetings

- *MSBA Kickoff Meeting - 3/9/2023*
- *Executive Working Group - 3/22/2023 & 4/5/2023*
- *Building Tours – TBD*
- *Educational Programming / Visioning*
  - *Principal / Department Heads / Other*
- *Communications Working Group*
  - *Community Meeting (May/June 2023)*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

Next Meetings

- *April 4th, 2023 @ 6:00PM*
- *May 2nd, 2023 @ 6:00PM*

SBC Meeting Agenda – March 7, 2023, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of February 7th, 2023 Meeting Minutes*
3. *Public Comment*
4. *Financial Update*
5. *Existing Conditions Update*
6. *Educational Program Update*
7. *Working Groups Update*
8. *Project Website Update*
9. *Upcoming Dates*
10. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting*
10. *Next meetings*
11. *Adjourn*

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee

DATE: February 7, 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	2/7/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
✓	David Rosenblatt*	Principal	✓	Donna DiNisco	DiNisco Design
✓	Dennis Villano*	SBC Member	✓	Vivian Low	DiNisco Design
✓	Roger Riggs	SBC Member	✓	Neil Harrigan	DiNisco Design
	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member			
✓	Tara Carroll	SBC Member			
✓	Audrey Boeri	SBC Member			
✓	George Papayannis	SBC Member			
	Katherine Bond*	Vice Chair of SBC			
✓	Carl Foss*	Vice Chair School Committee			
✓	Christine Monaco*	SBC Member			
✓	Martha Simon*	SBC Member			
✓	Kristen Downie	Secretary			

* SBC Voting Member

Item No.	Description	Action
4.1	**Call to Order & Intro**: 6:02 pm meeting was called to order by SBC Chair M. Massardo with 12 of 13 voting members in attendance.	Record
4.2	**Previous Topics & Approval of January 11th, 2023, Meeting Minutes:** ➢ A motion to approve the 01/11/2023 meeting minutes[1] as submitted made by M. Simon and seconded by B. Cunha. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes - N. Coscia – Yes M. Massardo – Yes – D. Rosenblatt – Yes – C. Monaco – Yes – M. Simon – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest - Yes. Abstention: None. Motion passes, minutes approved.	Record
4.3	**Designer Introduction:** ➢ C. Dell Angelo starts by introducing D. DiNisco. D. DiNisco starts by going over their experience with numerous schools over the years. Lists Amesbury Elementary School as an example, they looked at two enrollment options for this school as well. Mentions that they will be looking at all available sites for the school. ➢ N. Harrigan goes over the DeBerry-Swan Elementary School Project. Mentions they looked at 3 total sites and multiple enrollments for this project. They considered additions and renovations, decided on consolidation of the two schools. This school was a high performance school that is net-zero. ➢ D. DiNisco then talks about high performance considerations. Mentions multiple schools that were net zero ready or better. Mentions how there are many rebates, tax credits, and other incentives for energy performance. Talks about how daylight and views are very important for the students which leads to better sleep quality and performance. Goes over the different options for sustainability such as air source heat pumps and ground source heat pumps. Each have their own advantages and disadvantages as shown in the slideshow[2]. ➢ N. Harrigan talks about the schedule and budget are very important to the project team. Says how important communication is to the team and will be communicating often with the committee. Says he will be on the project from start to finish. ➢ D. DiNisco talks about the value that listening to the committee will have on the project to make sure they understand what's important for the project. Talks about social and emotional learning and how important it is for students. Students need to feel comfortable and safe in those environments, goal will be to design a school that reflects that. Then talks about the outdoor learning opportunities that will be available for the school, they are excited to explore these options. They	Record

[1] January 11, 2023, Meeting Minutes
[2] DiNisco PowerPoint Presentation
[3] D+W PowerPoint Presentation

	will try to engage students during the construction project and a great learning opportunity. ➢ V. Low starts by talking about how they want to create a space that will have a sense of space, embrace the natural environment and have community pride. Want to harness the school's environment and incorporate it. Then goes over the site details shown in the slideshow[2]. Presents two concepts for the site in the slideshow[2]. V. Low goes over the different parts of the concept sites for each of them. V. Low then presents a movie that DiNisco put together included the slideshow[2]. ➢ P. Sagarino asks DiNisco to consider an option of keeping the existing Fox Hill Building. ➢ R. Riggs asks about a three-story building versus a two-story building. D. DiNisco says they are seeing more and more schools going to a three-story option due to more space.	
4.4	**Financial Update:** ➢ A motion to approve the DiNisco Base Contract in the amount of $675,000, the LGCI revised contract in the amount of $17,925, Dore and Whittier Amendment No. 1 in the amount of $3,204 for the project website language translation add-on, and the Budget Revision Request No. 1 made by C. Foss and seconded by M. Simon. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes - N. Coscia – Yes M. Massardo – Yes – D. Rosenblatt – Yes – C. Monaco – Yes – M. Simon – Yes – P. Sagarino – Yes – J. Danizio – Yes – J. Priest - Yes. Abstention: None. Motion passes, contracts approved. ➢ M. Cox explains the anticipated breakdown of funds that is presented in the slideshow[3]. This table shows the original budget, the updated budget and the remaining from each budget category. ➢ M. Simon asks if the contract with DiNisco is an appropriate fee for the services provided. S. Brown answers saying there isn't much negotiating room with these base contracts and that this is a fair fee for the work ahead.	Record
4.5	**Early Consultants Update**: ➢ C. Dell Angelo says UEC was on site last week on 1/30 and 2/2 and received today their revised report with information that was shared with DiNisco. Will be shared with full committee once D+W and DiNisco have reviewed it. LGCI will be on site during February break, DiNisco reviewed locations for LGCI.	Record

[1] January 11, 2023, Meeting Minutes
[2] DiNisco PowerPoint Presentation
[3] D+W PowerPoint Presentation

4.6	**Educational Program Update**: ➢ M. Cox talks about the educational program. Says that E. Conti has been working on this and asks him to share the progress with DiNisco, so the process can continue forward.	Record
4.7	**Working Groups Update**: ➢ M. Cox shares the list of working groups on the slideshow[3]. Mentions that the exterior and interior groups will have to be public meetings. Wants to confirm everyone is on the group they would like to be. ➢ M. Simon wants to get a schedule started for the Green Building Sustainability Initiative Working Group. C. Dell Angelo says that they will be scheduling tours of existing schools for the group, as well as organizing a meeting soon.	Record
4.8	**SBC Goals Update**: ➢ M. Cox goes over the project goals presented in the slideshow[3]. From here will be putting together a goals statement with the communication working group. ➢ M. Simon wants to include the statement "Building that meets the current and future enrollment needs".	Record
4.9	**Project Website Update**: ➢ M. Cox goes over how the website has been published and is now live. Will now be working to get the website translations running since approved of the amendment. ➢ M. Simon wants to make sure that there is information on where to find the link on the district website.	Record
4.10	**Upcoming Dates:** ➢ C. Dell Angelo goes over the next steps within the Feasibility Stage in the slideshow[3]. The Preliminary Design Program will take 4 months and will entail the existing conditions assessment, the educational program, and conceptual options. Then follows the Preferred Schematic Report which will take 6 months and will entail identifying preferred option, building programming, and cost estimates. ➢ C. Dell Angelo then goes over the next meeting dates in the slideshow[3]. Executive working group on 2/8 and 2/22, building tours are TBD, educational programming/visioning, as well as the communications working group. ➢ M. Massardo asks to tour the Maria Hastings School.	Record

[1] January 11, 2023, Meeting Minutes
[2] DiNisco PowerPoint Presentation
[3] D+W PowerPoint Presentation

4.11	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ T. Carroll asks to add to the website, the existing conditions section that the school does not have air conditioning.	Record
4.12	**Public Comments**: ➢ None.	Record
4.13	**Next Meetings**: ➢ Tuesday, March 7th, 2023, at 6:00PM ➢ Tuesday April 4th, 2023, at 6:00PM ➢ Tuesday May 2nd, 2023, at 6:00PM	Record
4.14	**Adjourn**: 7:16 pm A motion was made M. Simon by and seconded by J. Priest to adjourn the meeting, Discussion: None.	Record

Submitted: 3/7/23

Approved: 3/7/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] January 11, 2023, Meeting Minutes
[2] DiNisco PowerPoint Presentation
[3] D+W PowerPoint Presentation

February 7, 2023

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #4

February 7, 2023, 6:00 PM

DORE + WHITTIER

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Previous Meeting Minutes

1. January 11th, 2023, Minutes

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Invoices and Commitments for Approval

- DiNisco Base Contract in the amount of $675,000.00 (Vote)
- LGCI (REVISED) in the amount of $17,925.00 (Vote)
- Dore + Whittier Amendment No. 1 in the amount of $3,204.00 for project website language translation add- on (Weglot) - 1 year subscription (Vote)
- Budget Revision Request No. 1 (Vote)

Budget Breakdown

Anticipated breakdown of remaining funds:

	Original Budget	Update Budget	Committed	Balance
OPM - Feasibility Study	$ 750,000	$ 417,929	$ 400,079	$ 17,850
A&E - Feasibility Study	$ 500,000	$ 675,000	$ 675,000	$ -
Environmental & Site	$ 100,000	$ 288,000	$ 22,925	$ 265,075
Other	$ 150,000	$ 119,071	$ -	$ 119,071
	$ 1,500,000	$ 1,500,000	$ 1,098,004	$ 401,996

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Early Consultants Proposals

- Geotech
  - LGCI
    - Onsite February Break
- Hazmat
  - UEC
    - Onsite January 30th and February 2nd

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Working Groups

Burlington SBC – Working Groups

- **Executive Working Group**
  - **Eric Conti***
  - **Bob Cunha***
  - **Nichole Coscia***
  - **Melissa Massardo***

- Communications Working Group
  - Bob Cunha*
  - Melissa Massardo*
  - Kristen Downie
  - Jennifer Priest*
  - Eric Conti*
  - Martha Simon*

- Site Logistics
  - Paul Sagarino*
  - Audrey Boeri
  - Katherine Bond*
  - Bob Cunha*

- Green Building and Sustainability Initiative Working Group
  - Bob Cunha*
  - Melissa Massardo*
  - Martha Simon*
  - George Papyannis*

- Exterior Design Working Group ***
  - Dennis Villano*
  - Bob Cunha*
  - Tara Carroll
  - Melissa Massardo*
  - Kristen Downie*
  - Katherine Bond*
  - Jennifer Priest*
  - Eric Conti*
  - Martha Simon*

- Interior Design Working Group ***
  - Dennis Villano*
  - Bob Cunha*
  - Tara Carroll
  - Melissa Massardo*
  - Kristen Downie
  - Katherine Bond*
  - Jennifer Priest*
  - Eric Conti*
  - Martha Simon*
  - George Papyannis

- Educational Programming
  - Christine Monaco*
  - Dennis Villano*
  - Katherine Bond*
  - Tara Carroll
  - Eric Conti*
  - Martha Simon*
  - George Papyannis

- Financial and Bonding & Facilities Assessment Working Group
  - Nichole Coscia*
  - Bob Cunha*
  - John Danizio*
  - Paul Sagarino*
  - Eric Conti*
  - Roger Riggs

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

SBC Goals

- Cost efficiency
- Building efficiency
- Sustainability
- Quality of materials
- Security and Technology
- 21st Century learning
- Building that meets enrollment needs
- Building meet needs of students and staff for effective learning
- Flexible and adaptable learning space that meets ed program
- Collaborative student-centered education
- Design to accommodate future technological advances in teaching tools
- Outdoor spaces
- Community involvement and input
- Healthy Learning Environment

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Project Website

WELCOME

Welcome to the Fox Hill Elementary School Building Project website. We encourage you to explore the site to learn more about this project and its impact on the Town and how it involves the community. Below you will find a graphic outlining the MSBA process and what stage we are currently in!

Project Website

- Went live last week on January 23rd
- Languages that will be translated:
  - Spanish
  - Portuguese
  - Gujarati
  - Hindi
  - Arabic
  - Luganda
  - Chinese
  - Urdu
  - Telugu
  - Creole

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Upcoming Dates - Timeline

- **Feasibility Stage**
  - Preliminary Design Program – 4 Months (now – June 23)
    - Existing Conditions Assessment
    - Educational Program
    - Conceptual Options
  - Preferred Schematic Report – 6 Months (June 23 – Dec. 23)
    - Identify Preferred Option
    - Building Programming
    - Cost Estimates

Upcoming Dates - Meetings

- Executive Working Group 2/8/2023 & 2/22/2023
- Building Tours – TBD
- Educational Programming / Visioning
  - Principal / Department Heads / Other
- Communications Working Group
  - Website Roll Out
  - Community Meeting (May/June 2023)
  - Goal Statement

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Next Meetings

- March 7th, 2023 @ 6:00PM
- April 4th, 2023 @ 6:00PM
- May 2nd, 2023 @ 6:00PM

DORE + WHITTIER

SBC Meeting Agenda – February 7, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of January 11th, 2023 Meeting Minutes
3. Designer Introduction
4. Financial Update
5. Early Consultants Update
6. Educational Program Update
7. Working Groups Update
8. SBC Goals Update
9. Project Website Update
10. Upcoming Dates
11. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
12. Public Comment
13. Next meetings
14. Adjourn

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

RECEIVED
By Town Clerk's Office at 9:39 am, Feb 08, 2023

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee

DATE: January 11, ~~2022~~ 2023

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	1/11/2023
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations		Jason Boone	DWMP
✓	David Rosenblatt*	Principal			
✓	Dennis Villano*	SBC Member	✓	Katie Ferrier	
✓	Roger Riggs	SBC Member			
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest*	SBC Member			
✓	Tara Carroll	SBC Member			
✓	Audrey Boeri	SBC Member			
✓	George Papayannis	SBC Member			
✓	Katherine Bond*	Vice Chair of SBC			
✓	Carl Foss*	Vice Chair School Committee			
✓	Christine Monaco*	SBC Member			
✓	Martha Simon*	SBC Member			
✓	Kristen Downie	Secretary			

* SBC Voting Member

Item No.	Description	Action
3.1	**Call to Order & Intro**: 6:02 pm meeting was called to order by SBC Chair M. Massardo with 12 of 12 voting members in attendance.	Record
3.2	**Previous Topics & Approval of November 22nd, 2022, Meeting Minutes:** ➢ A motion to approve the 11/22/2022 meeting minutes[1] as submitted made by K. Bond and seconded by B. Cunha. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes - N. Coscia – Yes M. Massardo – Yes – D. Rosenblatt - Yes. Abstention: M. Simon, P. Sagarino, K. Bond. Motion passes, minutes approved.	Record
3.3	**Invoices and Commitments:** ➢ C. Dell Angelo goes over both invoices that have been sent, shows in the slideshow[2]. Those invoices are from D+W and are invoice number 2 & 3. Invoice #2 is for $14,700.00 and Invoice #3 is for $8,115.00. ➢ J. Danizio asks about viewing invoices before approval. C. Dell Angelo responds saying that is a process that can be done moving forward. Copies of invoices will be put into the shared folder before the meetings. ➢ M. Cox goes over the budget breakdown as it currently stands in the slideshow[2], shows a table breakdown in the slideshow[2]. J. Danizio asks about if the designer could come in higher than the $650,000 shown. M. Cox responds saying that the designer could come in higher, but the amount would be covered under the current budget.	Record
3.4	**Designer Procurement Update:** ➢ C. Dell Angelo goes into the designer procurement update. Goes over the next steps, which is the DSP Application Review on 1/17 then followed by DSP Interviews on 1/31. Then goes over all six proposals that were submitted. The proposals were from Arrowstreet, DiNisco Design, Jonathan Levi, MDS Architects, SMMA, & Tappe Architects. ➢ M. Simon mentions how she has heard good references about Arrowstreet. Asks for reference checks to be uploaded for the SBC to view. ➢ R. Riggs asks about the DSP meeting and what it includes. S. Brown responds saying this panel helps select the designer for the project. The panel includes 17 members, 3 being from the district. ➢ J. Danizio says that he has had experience with a couple of the architects that submitted proposals. Will share feedback with members.	Record
3.5	**SBC Goals Update**:	Record

[1] November 22, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ C. Dell Angelo goes over the different SBC goals that were submitted on the slideshow[2]. Will end up turning all the statements submitted into one bigger one later. ➢ K. Bond comments that she wants the building to meet the enrollment needs and to put that as an SBC goal as well. ➢ M. Simon asks about considering Pre-K and having the space for that. Mentions a change to one of the goals to say, "Building that meets enrollment needs now and in the future".	
3.6	**Working Groups**: ➢ C. Dell Angelo goes over the current list of working groups that have been made in the slideshow[2]. Notes the interior and exterior design groups are more than usual in terms of size. Will note if those meetings have a quorum or not as time goes on. ➢ R. Riggs asks to be taken out of the interior design group.	Record
3.7	**Project Website Update**: ➢ C. Dell Angelo talks about the communications working group meeting that was held in December on the 15th. Currently working with the district on getting the different translations needed on the website. The meeting entailed discussing how to get the website out to the public and the different ways that can be done. ➢ R. Riggs wants BCAT to be informed of the website launch as well. ➢ T. Carroll wants to inform the Fox Hill Staff about the website launch. ➢ C. Dell Angelo says will schedule next communication working group meeting to follow up about website sharing.	Record
3.8	**Early Consultants Update (Vote Expected)**: ➢ C. Dell Angelo starts by saying D+W has reached out to different consultants regarding Geotech, Topography Survey, & Hazmat. ➢ M. Simon asks about Geothermal Study. C. Dell Angelo says to they should wait until a designer comes on board and then can approve a study of Geothermal and discuss with a designer. ➢ C. Dell Angelo goes over the different proposals received, recommends that they move forward with the suggested companies to perform the work. The suggested companies are UEC and LGCI. UEC would perform the Hazmat study and LGCI would perform the Geotech study. C. Dell Angelo says the Topography Survey will not be moving forward due to the cost of estimates received being higher than expected. A survey will be done at a later date to do a more thorough study with the designer. ➢ A motion to approve the studies by UEC & LGCI to be performed as submitted made by E. Conti and seconded by M. Simon. Discussion:	Record

[1] November 22, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

	Work must not to exceed the values of both contracts, UEC to not exceed $5,000 and LGCI to not exceed $15,000. Roll Call Vote: B. Cunha – Yes – M. Simon – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes K. Bond – Yes N. Coscia – Yes M. Massardo – Yes - D. Rosenblatt – Yes – J. Danizio – Yes – C. Monaco - Yes. Abstention: P. Sagarino. Motion passes, studies approved.	
3.9	**Educational Program**: ➢ C. Dell Angelo summarizes what has been going on with the Educational Program. E. Conti says they are currently working on this, and a draft will be made available soon.	Record
3.10	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ M. Simon suggests adding another voting member to the SBC. ➢ A motion to add and approve J. Priest as a voting member to the SBC as submitted made by M. Simon and seconded by J. Danizio. Discussion: None. Roll Call Vote: B. Cunha – Yes - E. Conti – Yes D. Villano - Yes - C. Foss – Yes - N. Coscia – Yes M. Massardo – Yes – M. Simon – Yes – K. Bond – Yes – D. Rosenblatt – Yes – J. Danizio – Yes – C. Monaco - Yes. Abstention: P. Sagarino. Motion passes, voting member approved.	Record
3.11	**Public Comments**: ➢ None.	Record
3.12	**Next Meetings**: ➢ Tuesday, February 7th, 2023, at 6:00PM	Record
3.13	**Adjourn**: 7:09 pm A motion was made M. Simon by and seconded by J. Priest to adjourn the meeting, Discussion: None.	Record

Submitted: 2/7/23

Approved: 2/7/23

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] November 22, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

January 11, 2023

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #3

January 11, 2023, 6:00 PM

DORE + WHITTIER

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Previous Meeting Minutes

1. November 22nd , 2022, Minutes

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Invoices and Commitments for Approval

- Dore + Whittier Invoice No. 2 in the amount of $14,700.00
- Dore + Whittier Invoice No. 3 in the amount of $8,115.00

Budget Breakdown

Anticipated breakdown of remaining funds:

Funding approval	**$**	**1,500,000**
OPM - Base Contract	$	396,715
PDP Estimates	$	2,100
PSR Estimates	$	5,250
SD Estimate	$	10,500
Designer basic services	$	650,000
Environmental and Site	$	250,000
Other	$	185,435

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Designer Procurement Timeline

- RFS due to MSBA: November 9, 2022 - Submitted
- Ad placed in “Designer Services” section of Central Register: November 17, 2022 - Submitted
- Ad appears in Central Register: November 23, 2022
- Designer Walkthrough: December 5, 2022
- Applications due to District: December 21, 2022
- Applications due to the MSBA: December 29, 2022
- **DSP Applications Review: January 17, 2023**
- DSP Interview’s : January 31, 2023

Designer Proposals

- Received 6 proposals
  - Arrowstreet
  - DiNisco Design
  - Jonathan Levi
  - MDS Architects
  - SMMA
  - Tappe Architects

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Goals

- Cost efficiency
- Building efficiency
- Sustainability
- Quality of materials
- Security and Technology
- 21st Century learning
- Building that meets enrollment needs
- Building meet needs of students and staff for effective learning
- Flexible and adaptable learning space that meets ed program
- Collaborative student-centered education
- Design to accommodate future technological advances in teaching tools
- Outdoor spaces
- Community involvement and input
- Healthy Learning Environment

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Working Groups

Burlington SBC – Working Groups

- **Executive Working Group**
  - **Eric Conti**
  - **Bob Cunha**
  - **Nichole Coscia**
  - **Melissa Massardo**

- Community Outreach
  - Bob Cunha
  - Melissa Massardo
  - Kristen Downie
  - Jennifer Priest
  - Eric Conti
  - Martha Simon

- Site Logistics
  - Paul Sagarino
  - Audrey Boeri
  - Katherine Bond
  - Bob Cunha

- Green Building and Sustainability Initiative Working Group
  - Bob Cunha
  - Melissa Massardo
  - Martha Simon
  - George Papyannis

- Exterior Design Working Group
  - Dennis Villano
  - Bob Cunha
  - Tara Carroll
  - Melissa Massardo
  - Kristen Downie
  - Katherine Bond
  - Jennifer Priest
  - Eric Conti
  - Martha Simon

- Interior Design Working Group
  - Dennis Villano
  - Bob Cunha
  - Tara Carroll
  - Melissa Massardo
  - Kristen Downie
  - Katherine Bond
  - Jennifer Priest
  - Eric Conti
  - Martha Simon
  - George Papyannis
  - Roger Riggs

- Educational Programming
  - Christine Monaco
  - Dennis Villano
  - Katherine Bond
  - Tara Carroll
  - Eric Conti
  - Martha Simon
  - George Papyannis

- Financial and Bonding & Facilities Assessment Working Group
  - Nichole Coscia
  - Bob Cunha
  - John Danizio
  - Paul Sagarino
  - Eric Conti
  - Roger Riggs

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Project Website

WELCOME

Welcome to the Fox Hill Elementary School Building Project website. We encourage you to explore the site to learn more about this project and its impact on the Town and how it involves the community. Below you will find a graphic outlining the MSBA process and what stage we are currently in!

Project Website

- Met with Communications WG 12/15
- Working with District on multiple language translations
- Website distribution
  - Email with announcement and link to website
  - Link on District/Town’s page
  - Senior center newsletter
  - Burlington Union
  - Burlington PTO social media page
  - Recommendation to go live

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Early Consultants Proposals

- MGL Chapter 30B required to request proposals from 3 or more consultants

- Geotech
  - LGCI
  - GZA
  - McPhail
- Topography Survey
  - Hancock Associates
  - Nitsch Engineering
- Hazmat
  - CDW
  - UEC

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

DORE + WHITTIER

SBC Meeting Agenda – January 11, 2023, 6:00PM

1. Call to Order & Intro
2. Previous Topics & Approval of November 22nd, 2022 Meeting Minutes
3. Invoices and Commitments
4. Designer Procurement Update
5. SBC Goals Update
6. Working Groups
7. Project Website Update
8. Early Consultants Update (Vote Expected)
9. Educational Program
10. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
11. Public Comment
12. Next meetings
13. Adjourn

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

RECEIVED
By Town Clerk's Office at 1:07 pm, Jan 12, 2023

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee

DATE: November 22, 2022

TIME: 6:00 PM

PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA & Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	11/22/2022
Location:	Webex Conference Call	Time:	6:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
✓	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations	✓	Jason Boone	DWMP
	David Rosenblatt*	Principal			
✓	Dennis Villano*	SBC Member			
✓	Roger Riggs	SBC Member			
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest	SBC Member			
✓	Tara Carroll	SBC Member			
	Audrey Boeri	SBC Member			
	George Papayannis	SBC Member			
	Katherine Bond*	Vice Chair of SBC			
✓	Carl Foss*	Vice Chair School Committee			
	Christine Monaco*	SBC Member			
	Martha Simon*	SBC Member			
✓	Kristen Downie	Secretary			

* SBC Voting Member

Item No.	Description	Action
2.1	**Call to Order & Intro**: 6:06 pm meeting was called to order by SBC Chair M. Massardo with 7 of 12 voting members in attendance.	Record
2.2	**Previous Topics & Approval of November 1st, 2022, Meeting Minutes:** ➢ A motion to approve the 11/01/2022 meeting minutes[1] as submitted made by B. Cunha and seconded by E. Conti. Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes P. Sagarino – Yes N. Coscia – Yes M. Massardo - Yes. Abstention: None. Motion passes, minutes approved.	Record
2.3	**Invoices and Commitments for Approval:** ➢ M. Cox starts by going over the budget and references the PowerPoint Presentation[2] showing the budget as it stands. He explains that the only committed cost is the D+W Contract of $396,000. Then explains the budget balance has about $1,100,000 remaining. He then references a table in the slideshow[2] that shows a forecast for the breakdown of the remaining funds. M. Cox explains how later there will be a budget reorganization effort, the MSBA calls it a budget revision request. This means just re-aligning the four main budget items shown in the first slide[2].	Record
2.4	**SBC Voting Member Review and Approval:** ➢ C. Dell Angelo shows the current list of SBC Members[2]. Says there are 12 current voting members. ➢ M. Massardo says M. Simon wanted to add a voting member, but she is not in attendance and the committee can vote on this at next SBC meeting. M. Massardo asks if adding a voting member changes the quorum. C. Dell Angelo says it does not and will stay at 7 voting members for a quorum.	Record
2.5	**Designer Procurement Update:** ➢ C. Dell Angelo goes over the current Designer Procurement Timeline[2] saying the RFS was submitted to the MSBA on 11/9/22, the Ad was placed for Designer Services in the Central Register on 11/17/22. Then the ad will appear in the Central Register on 11/23/22. The designer walkthrough is 12/5/22, and applications are due to the district on 12/21/22. Will then submit the applications to the MSBA on 12/29/22. DSP Applications Review is then on 1/17/23, then the DSP interviews are on 1/31/23.	Record

[1] November 1, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ S. Brown then talks about putting the schedule together and how the designer selection is the next big task that will be addressed in the coming months.	
2.6	**Designer RFS Update**: ➢ A motion to approve the three members (E. Conti, P. Sagarino, & M. Massardo) to represent the Town of Burlington at the MSBA Designer Selection Panel as submitted made by B. Cunha and seconded by C. Foss Discussion: None. Roll Call Vote: B. Cunha – Yes E. Conti – Yes D. Villano - Yes C. Foss – Yes P. Sagarino – Yes N. Coscia – Yes M. Massardo - Yes. Motion Passes, Designer Selection Panel approved.	Record
2.7	**SBC Goals Update**: ➢ C. Dell Angelo says that anyone that hasn't submitted the SBC goals will be getting another email with the link so that they can fill out this form. Then will update the SBC when all responses are received.	Record
2.8	**Working Groups**: ➢ C. Dell Angelo goes over the list of working groups shown in the presentation[2]. Talks about the Executive Working Group which includes E. Conti, B. Cunha, N. Coscia, & M. Massardo. D+W will work with this group to handle matters outside the SBC. Will be setting up a bi-weekly meeting with this group. ➢ S. Brown says it is important to have a spokesperson for each working group to give updates as they see fit at SBC Meetings.	Record
2.9	**Project Website Update**: ➢ A. Place goes over how the committee received a link to the website and provided feedback on changes, those changes were made. Says the link is now ready to be shared with the community however the SBC best sees fit in doing that. ➢ R. Riggs asks how best to keep the community updated, asks if they can subscribe to the website. C. Dell Angelo says D+W will look into it and get back to the community. ➢ M. Burton suggests sending out link with monthly updates from the principal. Also suggests Facebook or Instagram as well. ➢ M. Massardo asks about the communication of the website. Wants to hold off until releasing the first set of minutes. ➢ S. Brown says D+W has to keep the website factual and presenting what has been done.	Record

[1] November 1, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

	➢ C. Foss asks about if the communication group can once a month send out an update about the project. C. Dell Angelo says that is something that can be done. ➢ M. Massardo says once meeting minutes have been approved, then they can send out website link with a straightforward message. K. Downie says that email is the best for families as she has seen. ➢ K. Downie asks about translation for the website. S. Brown says there is a translation functionality within the website. ➢ R. Riggs wants to be able to inform the whole district not just Fox Hill. ➢ C. Dell Angelo says to establish the communication group to decide what protocol will be to sharing the website. ➢ M. Burton asks who else would like to be on a working group. J. Priest says she is interested in joining one of the working groups. ➢ C. Dell Angelo will create a link to the google form and send from her email for the members to fill out.	
2.10	**Early Consultants Update**: ➢ C. Dell Angelo starts by saying D+W is currently working on getting a list of all the consultants that can be reached out too. Goal is to have information needed from each consultant then to send out to the committee by early next week. Then to get proposals in early December and meet with the executive working group committee to go over options. ➢ S. Brown says they are doing this now to get a jumpstart on these different services.	Record
2.11	**Educational Program**: ➢ J. Boone introduces himself and his background. Saying he started as a high school math teacher and then got his master's in architecture. In his role at D+W he serves as a bridge between the educator community and D+W design team. Then goes over what the educational program and how critical it is. He then opens it up for questions from the SBC. ➢ E. Conti asks about determining how many classrooms within the new building. J. Boone responds saying this document will determine how many classrooms are in the building. J. Boone advises to write what the intent is for classroom sizes and let MSBA form their opinion based on this. He says it would be unlikely MSBA will say you can not have the number of classrooms the school desires. ➢ E. Conti asks about the timeline for the document. J. Boone responds saying it would be best if the district makes a first draft before the designer comes on board. Says the more the school can document	Record

[1] November 1, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

ahead of time the better position the school will be in when the designer comes on board.

- E. Conti suggests a smaller group of educators for writing the plan. J. Boone responds saying what he has seen work best is starting with an outline and dividing up the outline to different groups who are best versed to handle a certain subject. J. Boone suggests using a google document to make assignments then everyone can contribute to one document.
- E. Conti asks if they can put a new program into the school that wasn't there previously. J. Boone responds saying yes, adding the most successful projects add programs. Advises to be thorough in moving special education programs from one school to another if they do decide to do that.
- E. Conti asks about getting regional reimbursement for having a collaborative program. J. Boone responds saying he hasn't seen a case where it hasn't been reimbursement. He says if it is serving kids, it is likely to be reimbursed.
- E. Conti asks about having to write two educational programs for each option. J. Boone responds saying that in his experience they have written about the commonalities of both options, and then noting the differences in both programs as well. M. Burton follows saying in his experience recently that the MSBA did say they wanted two separate educational plans for each scenario.
- E. Conti asks about the common spaces. J. Boone responds saying MSBA guidelines for gymnasiums are very specific. Says the standard for elementary schools is a 6,000 SF gym with a high-school size basketball court, but no bleacher seating. The school can make a plan for a bigger gym, but any overage would be at the towns expense and ineligible for reimbursement.
- E. Conti wants M. Massardo to notify the school committee that the school will be looking at both enrollment options.
- M. Massardo asks when they decide on the preferred enrollment option. S. Brown responds saying they will carry both options in the Preliminary Design Program (PDP). Can make decision to put one of the enrollment options to the side if the district makes a strong case for it. If not, then all options carried over to the Preferred Schematic Report (PSR) where then it can be decided. J. Boone follows by saying in his experience the MSBA encourages school to carry both enrollments through the PSR.
- J. Priest asks about a separate auditorium space, S. Brown responds saying the space summary with MSBA doesn't allow a separate auditorium, it is usually a combination with the gym or cafeteria.
- K. Downie asks about if the after-school programming is eligible for reimbursement. J. Boone responds that if it's dedicated for after-school activity it will most likely not be eligible for reimbursement. Designers

[1] November 1, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

	have designed multi-use spaces that have been reimbursable. Encourages for the committee to let the designer know of the issue and have them think about solutions for after-school programming. ➢ R. Riggs asks about where the after-school programming gets documented. J. Boone says it is documented in the educational plan. ➢ B. Cunha asks about spaces and MSBA allowing/not allowing classroom spaces. J. Boone responds saying he doesn't know of any cases where the district documented a need for a certain number of classrooms and the MSBA not allowing those to be reimbursable. Says if the district wanted to build extra classrooms on their own, he doesn't have any precedent for that with the MSBA.	
2.12	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ None.	Record
2.13	**Public Comments**: ➢ None.	Record
2.14	**Next Meetings**: ➢ Wednesday, January 11th, 2023, at 6PM Virtual/In-person.	Record
2.15	**Adjourn**: 7:31 pm A motion was made B. Cunha by and seconded by C. Foss to adjourn the meeting, Discussion: None.	Record

Submitted: 1/11/2023

Approved: 1/11/2023

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] November 1, 2022, Meeting Minutes
[2] D+W PowerPoint Presentation

November 22, 2022

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #2

November 22, 6:00 PM

DORE + WHITTIER

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

Previous Meeting Minutes

1. *November 1st , 2022, Minutes*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

Invoices and Commitments for Approval

Project Details

DWMP Project No.		**Project Type**	Elementary School
Project Name	Burlington Fox Hill Elementary School	**Scope Type**	TBD
Project Address	Fox Hill Rd. Burlington, MA 01803	**MSBA Project?**	Yes
		MSBA Proj. No.	202000480007
Project Phase	Forming the Team	**Enrollment**	0
Phase End-Date	01/31/2023	**Reimb. Rate**	45.52%
Phase % Complete	61%		

Edit Project Details

Budgets | Budget Transfers | Contracts | Invoices | Vendors | Meetings | Monthly Reporting

Project Budget Summary

Budget Category	Orig. Budget	Transfers	Upd. Budget	Contract Amt.	% Committed	Expended	% Expended	Contract Remain'g	Bud. Balance	Edit	Delete
0000-0000 Feasibility Study Agreement											
0001-0000: OPM - Feasibility Study	$750,000.00	$0.00	$750,000.00	$396,715.00	52%		0%	$396,715.00	$353,285.00		
0002-0000: A&E - Feasibility Study	$500,000.00	$0.00	$500,000.00		0%		0%	$0.00	$500,000.00		
0003-0000: Environmental & Site	$100,000.00	$0.00	$100,000.00		0%		0%	$0.00	$100,000.00		
0004-0000: Other	$150,000.00	$0.00	$150,000.00		0%		0%	$0.00	$150,000.00		
Total - 0000-0000 Feasibility Study Agreement	**$1,500,000.00**	**$0.00**	**$1,500,000.00**	**$396,715.00**		**$0.00**		**$396,715.00**	**$1,103,285.00**		
Total	**$1,500,000.00**	**$0.00**	**$1,500,000.00**	**$396,715.00**		**$0.00**		**$396,715.00**	**$1,103,285.00**		

Budget Breakdown

Anticipated breakdown of remaining funds:

Funding approval	**$**	**1,500,000**
OPM - Base Contract	*$*	*396,715*
PDP Estimates	*$*	*2,100*
PSR Estimates	*$*	*5,250*
SD Estimate	*$*	*10,500*
Designer basic services	*$*	*600,000*
Environmental and Site	*$*	*300,000*
Other	*$*	*185,435*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

SBC Voting Member Review and Approval

1. *Nichole Coscia**
2. *John Danizio**
3. *Paul Sagarino**
4. *Melissa Massardo**
5. *Eric Conti**
6. *Bob Cunha**
7. *David Rosenblatt**
8. *Dennis Villano**
9. *Roger Riggs*
10. *Ed Parsons*
11. *Jennifer Priest*
12. *Tara Carroll*
13. *Audrey Boeri*
14. *George Papyannis*
15. *Kristen Downie*
16. *Katherine Bond**
17. *Carl Foss**
18. *Christine Monaco**
19. *Martha Simon**

**Voting Member*

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

Designer Procurement Timeline

- *RFS due to MSBA: November 9, 2022 - Submitted*
- *Ad placed in “Designer Services” section of Central Register: November 17, 2022 - Submitted*
- *Ad appears in Central Register: November 23, 2022*
- *Designer Walkthrough: December 5, 2022*
- *Applications due to District: December 21, 2022*
- *Applications due to the MSBA: December 29, 2022*
- *DSP Applications Review: January 17, 2023*
- *DSP Interview’s : January 31, 2023*

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

Selection for Designer Selection Panel

- *Selection for Designer Selection Panel (DSP)*
  - *3 SBC Members must represent the Town of Burlington for the DSP*
  - *Recommendation:*
    - *Eric Conti, Superintendent*
    - *Paul Sagarino, Town Administrator*
    - *Melissa Massardo, School Committee Member*
      - *A motion to approve the three members above to represent the Town of Burlington at the MSBA Designer Selection Panel.*

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

Working Groups

Burlington SBC – Working Groups

- **Executive Working Group**
  - **Eric Conti**
  - **Bob Cunha**
  - **Nichole Coscia**
  - **Melissa Massardo**

- *Green Building and Sustainability Initiative Working Group*
  - *Bob Cunha*
  - *Melissa Massardo*
  - *Martha Simon*

- *Educational Programming*
  - *Christine Monaco*
  - *Dennis Villano*
  - *Katherine Bond*
  - *Tara Carroll*

- *Community Outreach*
  - *Bob Cunha*
  - *Melissa Massardo*
  - *Kristen Downie*

- *Design Working Group*
  - *Dennis Villano*
  - *Bob Cunha*
  - *Tara Carroll*
  - *Melissa Massardo*
  - *Kristen Downie*
  - *Katherine Bond*

- *Financial and Bonding & Facilities Assessment Working Group*
  - *Nichole Coscia*
  - *Bob Cunha*
  - *John Danizio*

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

Project Website

WELCOME

Welcome to the Fox Hill Elementary School Building Project website. We encourage you to explore the site to learn more about this project and its impact on the Town and how it involves the community. Below you will find a graphic outlining the MSBA process and what stage we are currently in!

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
    - Tuesday, January 10th , 2023 at 6:00 PM
15. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 22, 2022, 6:00PM

1. *Call to Order & Intro*
2. *Previous Topics & Approval of November 1st, 2022 Meeting Minutes*
3. *Invoices and Commitments for Approval*
4. *SBC Voting Member Review and Approval*
5. *Designer Procurement Update*
6. *Designer RFS Update*
7. *SBC Goals Update*
8. *Working Groups*
9. *Project Website Update*
10. *Early Consultants Update*
11. *Educational Program*
12. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
13. *Public Comment*
14. *Next meetings*
15. *Adjourn*

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

RECEIVED
By Town Clerk's Office at 3:47 pm, Nov 30, 2022

TOWN OF BURLINGTON

Meeting Minutes

Draft minutes can be posted and revised at a later date

DEPT./BOARD: Fox Hill School Building Committee

DATE: November 1, 2022

TIME: 7:00 PM

PLACE: Webex (Virtual)

See Minutes Below:

DORE + WHITTIER

MEETING MINUTES

Project:	Fox Hill Elementary School	Project No:	
Subject:	School Building Committee Meeting	Meeting Date:	11/1/2022
Location:	Webex Conference Call	Time:	7:00 PM
Distribution:	Attendees, Project File	Prepared By:	A. Place

Present	Name	Affiliation	Present	Name	Affiliation
✓	Nichole Coscia*	Business Manager	✓	Mike Burton	DWMP
✓	John Danizio*	SBC Member	✓	Christina Dell Angelo	DWMP
	Paul Sagarino*	SBC Member	✓	Mike Cox	DWMP
✓	Melissa Massardo*	SBC Chair	✓	Steve Brown	DWMP
✓	Eric Conti*	Superintendent	✓	Aidan Place	DWMP
✓	Bob Cunha*	Director of Operations			
✓	David Rosenblatt*	Principal			
✓	Dennis Villano*	SBC Member			
	Roger Riggs	SBC Member			
✓	Ed Parsons	SBC Member			
✓	Jennifer Priest	SBC Member			
	Tara Carroll	SBC Member			
	Audrey Boeri	SBC Member			
	George Papyannis	SBC Member			
✓	Katherine Bond*	SBC Member			
✓	Carl Foss*	Vice Chair of SBC			
✓	Christine Monaco*	SBC Member			
✓	Martha Simon*	SBC Member			
✓	Kristen Downie	Secretary			

* SBC Voting Member

Item No.	Description	Action
1.1	**Call to Order & Intro**: 7:02 pm meeting was called to order by SBC Chair M. Massardo with 11 of 13 voting members in attendance.	Record
1.2	**Dore + Whittier Introductions:** ➢ M. Burton starts by saying he is a partner at the firm with 29 years of construction experience and been a partner with D+W for 11 years. Prior to that he was with Turner Construction for 15 years. He has worked on 12 school projects. He will guide team through studying multiple building solutions and two enrollment options. Will help develop a total project budget and look to maximize the MSBA reimbursement. ➢ S. Brown follows by saying he will serve as the project director. Will be the day-to-day contact. Says D+W takes a team approach and will hear from every team member. Main role is to keep and maintain a clear project roadmap in terms of schedule, quality, and cost. Joined D+W in 2007 and have been working on exclusively OPM K-12 projects for most of that time. ➢ M. Cox starts by saying he will serve as the project manager of controls. Which means managing the day-to-day budget. Will do all invoice entries and work with the committee to submit all the pro-pay reimbursement requests. ➢ C. Dell Angelo introduces herself as the project manager. Says she has been in the construction and design industry for 15 years and been with D+W for over 5 years. She has worked exclusively on MSBA projects and will work with the rest of the project team. ➢ A. Place introduces himself as the assistant project manager and will support the project team. He will also manage the project website, organize meetings, and take meeting minutes. ➢ M. Burton follows up by saying what makes D+W unique is having the OPM side of the business as well as the architect side all under one company. D+W has a lot of resources that other companies do not have due to this. Goes on to introduce David Mentzer who is the in-house code and sustainability expert. He has over 20 years of experience and is an excellent resource. Then goes on to introduce Jason Boone who is the in-house educational programmer. His goal is to help generate an excellent educational program. ➢ SBC Committee introduces themselves and roles.	Record
1.3	**Previous Topics & Approval of August 2022 Meeting Minutes:**	Record

[1] August 15, 2022, Meeting Minutes
[2] August 29, 2022, Meeting Minutes
[3] August 30, 2022, Meeting Minutes
[4] August 31, 2022, Meeting Minutes
[5] D+W PowerPoint Presentation
[6] Designer Request for Services

	➢ A motion to approve the 8/15/2022 meeting minutes[1] as submitted made by M. Simon and seconded by K. Bond. Discussion: None. Roll Call Vote: C. Monaco – Yes M. Simon – Yes C. Foss - Yes E. Conti – Yes N. Coscia – Yes B. Cunha – Yes D. Villano – Yes M. Massardo - Yes. Abstention: J. Danizio, K. Bond and D. Rosenblatt. Motion passes, minutes approved. ➢ A motion to approve the 8/29/2022 meeting minutes[2] as submitted made by M. Simon and seconded by B. Cunha. Discussion: None. Roll Call Vote: C. Monaco – Yes M. Simon - Yes E. Conti – Yes N. Coscia – Yes B. Cunha – Yes M. Massardo – Yes. Abstention: J. Danizio, K. Bond, C. Foss, D. Rosenblatt, D. Villano. Motion passes, minutes approved. ➢ A motion to approve the 8/30/2022 meeting minutes[3] as submitted made by M. Simon and seconded by K. Bond. Discussion: None. Roll Call Vote: K. Bond – Yes C. Monaco - Yes M. Simon – Yes C. Foss – Yes E. Conti – Yes B. Cunha – Yes M. Massardo – Yes. Abstention: N. Coscia, J. Danizio, D. Villano, and D. Rosenblatt. Motion passes, minutes approved. ➢ A motion to approve the 8/31/2022 meeting minutes[4] as submitted made by M. Simon and seconded by K. Bond. Discussion: None. Roll Call Vote: C. Monaco – Yes M. Simon - Yes C. Foss – Yes E. Conti – Yes N. Coscia – Yes B. Cunha – Yes M. Massardo – Yes. Abstention: J. Danizio, K. Bond, D. Rosenblatt, D. Villano. Motion passes, minutes approved.	
1.4	**Invoices and Commitments for Approval:** ➢ M. Cox starts by saying this will be where the invoices and contracts that have come in that month can be voted on after being reviewed by D+W. They will be sent out before the meetings to give the committee time to look them over for approval. ➢ J. Danizio asks about invoices being uploaded to the SharePoint drive ahead of meetings so they can be looked over. S. Brown responds saying we can do this but will take time to see what process works best for the committee, will be done on a monthly cycle. M. Burton follows talking about working groups and how one can be formed to review invoices as they come in. ➢ M. Simon asks about who signed the OPM contract. N. Coscia responds sayings she signed the contract.	Record

[1] August 15, 2022, Meeting Minutes
[2] August 29, 2022, Meeting Minutes
[3] August 30, 2022, Meeting Minutes
[4] August 31, 2022, Meeting Minutes
[5] D+W PowerPoint Presentation
[6] Designer Request for Services

1.5	**SBC Voting Member Review and Approval:** ➢ C. Dell Angelo shows the last list[5] that was sent to D+W and MSBA for SBC members. Saying now we have opportunity to vote on updated member list. ➢ M. Massardo asks for advice on who gets to vote. M. Burton says it's up to the committee to decide who get to vote. Then sent to MSBA for record, M. Burton says it is not pressing and can be decided later. ➢ M. Simon has concerns about teachers or residents not having voting power. M. Simon is inclined to have at least one teacher and resident for voting rights. Asks who can be a voting member. ➢ C. Monaco says in her experience it's only been a couple members on the committee. She notes that she is willing to not be a voting member on this committee. ➢ B. Cunha states he has a concern with how the votes were close tonight in approving meeting minutes. He states attending meetings to be critical in becoming a voting member due to this. ➢ J. Priest acknowledges B. Cunha concerns about votes being close and making sure to have a quorum. ➢ M. Simon asks to vote to remove Thomas Murphy from the SBC. B. Cunha says he has already been removed and was submitted to MSBA. D+W to check for latest form on this. ➢ M. Massardo says the SBC will vote on final list of members on a later date.	Record
1.6	**Designer Procurement Timeline:** ➢ C. Dell Angelo goes into detail of the Designer Procurement Timeline[5]. Starts by saying the RFS is due to the MSBA by 11/9/22, which a draft was sent out to the committee before this meeting. Next an ad needs to be placed in the Designer Services section of the Central Register on 11/17/22. From there the ad will appear in the Central Register on 11/23/22. After the ad is placed the applications are due to the district 12/21/22. Then applications due to the MSBA 12/29/22. Finally, DSP applications review will be on 1/17/23. ➢ M. Simon asks about if a net zero requirement should be put in the RFS[6]. S. Brown responds saying MSBA requires project will achieve a certain level of sustainability. He says that net-zero is left up to the district to decide and can be put in the RFS[6] if that is a goal. M. Simon proposes a sentence to be added in the RFS[6] that an experience with net zero ready building is required.	Record

[1] August 15, 2022, Meeting Minutes
[2] August 29, 2022, Meeting Minutes
[3] August 30, 2022, Meeting Minutes
[4] August 31, 2022, Meeting Minutes
[5] D+W PowerPoint Presentation
[6] Designer Request for Services

	➢ C. Monaco asks about meeting with the school committee and discussing the two options for the school. She is concerned about designing building with MSBA number of people in classroom. M. Burton responds saying Jason Boone has done this before and is experienced this area. S. Brown says its one of the first things that is finalized. ➢ M. Burton says most designers have done a net zero project in the past. M. Simon says she is concerned with the process of building a net zero building. M. Burton says he is confident with the language in the RFS[6] as is to allow the opportunity for a net zero building.	
1.7	**Designer RFS Review and Approval to Submit to MSBA**: ➢ A motion to approve the Designer RFS[6] as submitted made by E. Conti and seconded by N. Coscia. Discussion: K. Downie states a minor change in the wording of the RFS to be fixed. D+W to send revised RFS with corrections to MSBA & K. Downie for review. E. Conti amends motion to include K. Downie's corrections. Roll Call Vote: K. Bond – Yes C. Monaco – Yes M. Simon – Yes C. Foss – Yes E. Conti – Yes N. Coscia – Yes B. Cunha – Yes J. Danizio – Yes D. Rosenblatt – Yes D. Villano - Yes M. Massardo - Yes. Motion Passes, Designer RFS approved.	Record
1.8	**SBC Goals**: ➢ C. Dell Angelo starts saying one of the most important things are goals for the SBC and goes over previous projects goals as an example[5]. D+W wants to send out questionnaire for the goals that the SBC wants and will collect responses. Will be sending out a questionnaire for these goals. Once collected D+W will compile into goal statements. M. Burton says that these goals will be added to the project website.	Record
1.9	**Working Groups**: ➢ S. Brown starts by saying there can be some strategic ways to split up working groups based on availability and/or expertise. These working groups will not make any decision necessarily, but to discuss topics that would need a deeper discussion on. Says in the next few meetings the SBC can establish the working groups and who will be on them. ➢ M. Burton says D+W will send a poll out asking members what working groups should be made and what members would like to be on them. ➢ E. Parsons says the working groups would be helpful and supports the creation of them.	Record

[1] August 15, 2022, Meeting Minutes
[2] August 29, 2022, Meeting Minutes
[3] August 30, 2022, Meeting Minutes
[4] August 31, 2022, Meeting Minutes
[5] D+W PowerPoint Presentation
[6] Designer Request for Services

1.10	**Project Website**: ➢ A. Place introduces the idea of the project website. Mentions how this site is customizable based on what the committee wants to show and upload. There will be different pages for people who want to know more about the project, access meeting agendas and meeting minutes, and a place to see project updates. A. Place asks about what URL the committee would like to have for the website, the committee decides on foxhillbuildingproject.com. ➢ S. Brown says the website can be a place where the committee can access information about the project that is accurate. He says all information will be vetted before going up to ensure accuracy. ➢ M. Burton then mentions how a communication working group would be beneficial to read over and vet certain information to be uploaded to the website. ➢ K. Bond asks about getting the link for the website out to the public. M. Burton says D+W would meet with the IT director to post the link to the website wherever makes the most sense.	Record
1.11	**Early Consultants**: ➢ S. Brown speaks to the different early consultants that will be brought on which include performing site surveys, traffic study, phase 1 environmental assessment, geotechnical, and hazmat. Next few weeks D+W will be asking more questions about this process to get these study's going. ➢ E. Conti asks if SBC must decide on enrollment size before conducting traffic study. S. Brown says that the traffic study is to understand existing traffic patterns and the second part would be the designer making some conclusions based on that traffic study. E. Conti then asks how going about hiring a traffic consultant works. S. Brown says D+W has to work within the constraints of public procurement. ➢ M. Simon asks about bringing on consultant before designer is due to saving time. S. Brown responds saying that is correct. ➢ B. Cunha asks if it falls under the first appropriation and if its reimbursable. M. Burton responds yes to both questions. ➢ M. Simon asks about geotechnical and geothermal survey and at what point would these be considered. M. Burton responds saying much later in the process after the designer is brought on board. ➢ M. Massardo asks about the time frame for these early consultants. M. Burton says he is trying to pull information together for a better understanding of the time frame the committee has.	Record

[1] August 15, 2022, Meeting Minutes
[2] August 29, 2022, Meeting Minutes
[3] August 30, 2022, Meeting Minutes
[4] August 31, 2022, Meeting Minutes
[5] D+W PowerPoint Presentation
[6] Designer Request for Services

	Vote: ➢ A motion to instruct Dore + Whittier to investigate engaging a site survey, a traffic study, phase one environmental assessment, geotechnical and hazmat consultants contingent upon availability as submitted made by E. Parsons and seconded by M. Simon. Discussion: None. Roll Call Vote: K. Bond – Yes C. Monaco – Yes M. Simon – Yes C. Foss – Yes E. Conti – Yes N. Coscia – Yes B. Cunha – Yes J. Danizio – Yes D. Rosenblatt – Yes D. Villano - Yes M. Massardo - Yes. Motion Passes.	
1.12	**Educational Program**: ➢ S. Brown starts by saying this an important document that is the districts responsibility to make. D+W does have an in-house resource in Jason Boone to share others that have been generated. This tends to be written by a committee or a group. S. Brown says this is one of the primary deliverables that goes into the first milestone with the MSBA. ➢ E. Conti asks about examples to be put in the folder that was shared with the committee. S. Brown says that they will be uploaded to the SharePoint folder shared with the committee. ➢ K. Bond asks about how soon the committee can see the timeline. S. Brown responds says D+W is currently building out that schedule. ➢ M. Massardo asks is MSBA going to question educational plan. M. Burton responds saying D+W will ask Jason Boone and get back to the committee.	Record
1.13	**Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:** ➢ None.	Record
1.14	**Public Comments**: ➢ None.	Record
1.15	**Next Meetings**: ➢ Tuesday, November 22nd at 7PM Virtual/In-person.	Record
1.16	**Adjourn**: 8:50 pm A motion was made E. Conti by and seconded K. Bond by to adjourn the meeting, Discussion: None.	Record

[1] August 15, 2022, Meeting Minutes
[2] August 29, 2022, Meeting Minutes
[3] August 30, 2022, Meeting Minutes
[4] August 31, 2022, Meeting Minutes
[5] D+W PowerPoint Presentation
[6] Designer Request for Services

Date Submitted: 11/22/22

Date Approved: 11/22/22

Sincerely,
DORE + WHITTIER
Aidan Place
Assistant Project Manager
Cc: Attendees, File
The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.

[1] August 15, 2022, Meeting Minutes
[2] August 29, 2022, Meeting Minutes
[3] August 30, 2022, Meeting Minutes
[4] August 31, 2022, Meeting Minutes
[5] D+W PowerPoint Presentation
[6] Designer Request for Services

November 1, 2022

Burlington Fox Hill Elementary School Project

School Building Committee Meeting #1

November 1, 7:00 PM

DORE + WHITTIER

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

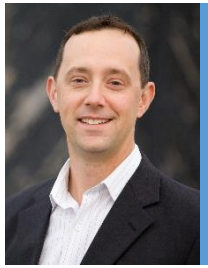
DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

Team Introduction

Mike Burton
Partner in Charge



Steve Brown
Project Director

Michael Cox
Project Manager - Controls

Christina Dell Angelo
Project Manager

Aidan Place
Assistant Project Manager

Dave Mentzer
Code Review & Sustainability

Jason Boone
Ed Programming Review

Peter Bradley
PM&C
Cost Estimating

Albert R. Russell,
Architect
Design Review

Victor Verma
RSV Assoc.
Structural Peer Review

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

Previous Meeting Minutes

1. *August 15th, 2022, Minutes*
2. *August 29th, 2022, Minutes*
3. *August 30th, 2022, Minutes*
4. *August 31st, 2022, Minutes*

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

MSBA Contract Approval to select D&W as the OPM

Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

October 12, 2022

Mr. Paul F. Sagarino, Jr., Town Administrator
Town of Burlington
Burlington Town Hall
29 Center Street
Burlington, MA 01803

Re: Town of Burlington, Fox Hill Elementary School, Owner's Project Manager Approval Letter

Dear Mr. Sagarino:

Pursuant to the provisions of G.L. c. 149, s. 44A ½ and 963 CMR 2.11, the Town of Burlington (the "Town") is required to procure the services of an Owner's Project Manager (the "OPM") for the Fox Hill Elementary School project using a qualifications based selection process. As required by 963 CMR 2.11 (3), the Town has certified in writing to the Massachusetts School Building Authority (the "MSBA") that it has used a qualifications based selection process that complies with Massachusetts law. Pursuant to 963 CMR 2.11 (2) and G.L. c. 70B, s. 2, the - Town has requested in writing that the MSBA approve its selection of Dore & Whittier Management Partners, LLC as the OPM for the Fox Hill Elementary School project.

The MSBA has reviewed the information submitted by the Town in support of its selection of Dore & Whittier Management Partners, LLC. Based upon the information provided by the Town, the MSBA hereby approves its selection of Dore &Whittier Management Partners, LLC for the Fox Hill Elementary School project and to the key personnel and consultants identified by Dore & Whitter Management Partners, LLC in the proposal that was submitted to the Town and reviewed by the MSBA, and as presented to the MSBA's Owner's Project Manager Review Panel on October 3, 2022. The MSBA's approval is specific to Dore &Whittier Management Partners, LLC and to the key personnel identified by Dore &Whittier Management Partners, LLC in the proposal that was submitted and reviewed by the MSBA. Pursuant to the provisions of 963 CMR 2.11 (4) and the applicable requirements of any agreements between the MSBA and

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

SBC Voting Member Review and Approval

1. *Nichole Coscia**
2. *John Danizio**
3. *Paul Sagarino**
4. *Melissa Massardo**
5. *Eric Conti**
6. *Bob Cunha**
7. *David Rosenblatt**
8. *Dennis Villano**
9. *Roger Riggs*
10. *Ed Parsons*
11. *Jennifer Priest*
12. *Tara Carroll*
13. *Audrey Boeri*
14. *George Papyannis*
15. *Thomas Murphy Jr.**
16. *Katherine Bond**
17. *Carl Foss**
18. *Christine Monaco**
19. *Martha Simon**

**Voting Member*

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

Designer Procurement Timeline

- *RFS due to MSBA: (two weeks before Ad appears in Central Register) November 9, 2022*
- *Ad placed in "Designer Services" section of Central Register: November 17, 2022*
- *Ad appears in Central Register: November 23, 2022*
- *Applications due to District: December 21, 2022*
- *Applications due to the MSBA: December 29, 2022*
- *DSP Applications Review:* **January 17, 2023**

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

Draft Designer RFS

REQUEST FOR DESIGNER SERVICES (RFS)

[Town] of _Burlington_____, MA
_Burlington_____ Public Schools

[Fox Hill Elementary School Project]

_10____ _05___, 2022

Invitation: The ***Town)*** of __Burlington_____ ("Owner") is seeking the services of a qualified "Designer" within the meaning of M.G.L. Chapter 7C, Section 44 to provide professional design and construction administration services for the __Fox Hill Elementary School_____ in ___Burlington_____, Massachusetts. Selection of a Designer will be made by the Designer Selection Panel of the Massachusetts School Building Authority ("MSBA") in accordance with the MSBA's Designer Selection Procedures.

The Owner is seeking design services to conduct a Feasibility Study which will include the development and evaluation of potential alternative solutions and continue through the Schematic Design Phase of the preferred alternative initially. Subject to the approval of a Project by the MSBA and further subject to adequate funding authorized by the Owner, the contract between the Owner and the Designer may be amended to include continued designer services through design development, construction contract documents, bidding, award of construction contract(s), construction administration, final closeout and warranty period of the potential Project. A potential Project may include a renovation of the existing school, a renovation of and addition to the existing school and/or new construction. Upon the completion of a Feasibility Study (Module 3), and if the District's preferred option is determined to be new construction, the District may consider participation in the MSBA Model School Program.

Draft Designer RFS

**Motion to submit the Designer RFS to the MSBA for review and approval*

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

SBC Goals

Step 1 – Project Goals

- *Ensure the fair representations of the school district and the community at large during the decision-making process. Also, be transparent and actively and frequently engage and inform all stake holders.*

Step 2 – Gathering SBC Member Project Goals

- *Questionnaire*

Step 3 – Combining SBC Member Project Goals

- *Compile responses*

Step 4 – Creating Project Goals Statements

- *Example: "The goal of the Burlington Fox Hill ES Project as set forth by the School Building Committee is a well-designed, site-specific project that supports the educational program; creates collaborative, flexible spaces; and incorporates technology for continuing the educational excellence.*

Step 5 – Publishing the Project Goals on the Website

SBC Goals

"Designing/building a school that **meets the needs** of the district and the taxpayers."

"**Cost** efficiency -- the Essex Elementary School will be next so both towns have to see that this can be done within a **reasonable** budget and in a way that does not prevent/preclude or substantially delay a future redo of EES"

"**Balance**! I want a good learning environment for students and staff that does not **cost** so much it is called Taj Mahal."

"**Educational program** for students -- innovative and current to prepare students for a dynamic and ever-changing world"

"**Design** and **cost** are the two top items of most importance. Because of the constrained site conditions, the building layout and configuration are or paramount concern to assure the **mandates of the Ed program** are met."

"Building what we need (not more than we need), on time and on **budget**; Ensuring that design meets educational needs; Ensuring that we go to the towns knowing that we will get a YES vote for Construction"

"Budget, **sustainability** (maintenance and green construction) and a final product that will be serviceable, both physically and programmatically, for many years."

"To strike a compromise: between **program** and **cost**; energy efficiency and simplicity; design and pragmatism."

"**21st Century learning**, architecture conducive to learning and collaboration, cost efficiency, scheduling"

"**Excellence of the overall project**, resolving any political differences between Essex and Manchester regarding cost, keeping the existing auditorium, not reducing size of the existing gymnasium"

"Being proactive on **budget management** and communications. Ensuring **quality construction**. Sensitivity to needs of multiple constituencies. Timely follow up from partners (OPM, Designer, Contractor). Detailed record keeping."

"A building designed to support **21st century learning**, a building process that is sensitive to the needs of the current school while in operation, flexibility of design (ie. grade level configurations can change from year to year), traffic flow/patterns, parking, etc."

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

Working Groups

Burlington SBC – Workgroup descriptions 11-2-22

The potential / proposed work groups list below illustrates options for the SBC to organize in a non-public meeting forum to investigate issues and make a recommendation to the SBC, before a SBC vote or action is taken. There is no requirement to have a "Workgroup" organization or structure, this is simply an option presented for consideration if the members of the SBC want more time to study segments of the process. Examples of "potential working groups" are listed below.

- **Education programming and learning technology**
- **Existing Facilities assessment**
- **Public relations/information sharing**
- **Financial review**
- **Green buildings and sustainability initiatives**
- **Interior design**
- **Exterior design/Landscaping**
- **Resident / community facility use**
- **Site logistics and phased occupancy**

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

Project Website

English | Español

Fox Hill Elementary School Building Project

Home About Existing Conditions Community Outreach Committee News FAQ Team Contact

WELCOME

Welcome to the Fox Hill Elementary School Building Project website. We encourage you to explore the site to learn more about this project and its impact on the Town and how it involves the community.

© 2022 Burlington Public Schools

BURLINGTON PUBLIC SCHOOLS

Massachusetts School Building Authority

DORE + WHITTIER

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

Early Consultants

1. *Site survey*
2. *Traffic study*
3. *Phase 1 environmental assessment*
4. *Geotechnical*
5. *Hazmat*

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
16. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
    - *November 22nd or December 6th*
16. *Adjourn*

DORE + WHITTIER

SBC Meeting Agenda – November 1, 2022, 7:00PM

1. *Call to Order & Intro*
2. *Dore & Whittier Introductions*
3. *Previous Topics & Approval of August 2022 Meeting Minutes*
4. *Invoices and Commitments for Approval*
5. *SBC Voting Member Review and Approval*
6. *Designer Procurement Timeline*
7. *Designer RFS Review and Approval to Submit to MSBA*
8. *SBC Goals*
9. *Working Groups*
10. *Project Website*
11. *Early Consultants (Hazmat/Geotech)*
12. *Educational Program*
13. *Other Topics not Reasonably Anticipated 48 hours prior to the meeting.*
14. *Public Comment*
15. *Next meetings*
    - *November 22nd or December 6th*
16. *Adjourn*

Cost Effective

Thoughtful

Collaborative

Proactive

Detailed

Committed

Creative

Experienced

DORE + WHITTIER

RECEIVED
By Town Clerk's Office at 8:45 am, Nov 07, 2022

FOX HILL SCHOOL BUILDING COMMITTEE MEETING MINUTES

Special Session – Joint OPM (Owner's Project Manager) Selection Committee

DATE: Wednesday, August 31, 2022
TIME: 4:00 pm
LOCATION: 123 Cambridge Street, Burlington, MA 01803
Administrative Offices, School Committee Room

ATTENDEES

VOTING MEMBER(S) PRESENT: Superintendent Dr. Eric Conti, School Building Committee Chair Mrs. Melissa Massardo, School Committee Member Ms. Martha Simon, Director of Operations Mr. Bob Cunha
VOTING MEMBER(S) REMOTE: School Committee Vice Chair Mr. Carl Foss, Business Manager Ms. Nichole Coscia
VOTING MEMBER(S) ABSENT: School Committee Chair Mrs. Katherine Bond, School Committee Member Mrs. Christine Monaco, Fox Hill Principal Mr. David Rosenblatt, Director of Technology Integration Mr. Dennis Villano, Town Accountant Mr. John Danizio, Town Manager Mr. Paul Sagarino
NON-VOTING MEMBER(S) PRESENT: Fox Hill Parent Mrs. Jennifer Priest
NON-VOTING MEMBER(S) REMOTE: Ways & Means Committee Member Mr. Roger Riggs, Fox Hill Parent Mr. Edward Parsons
NON-VOTING MEMBER(S) ABSENT: Fox Hill Grade 4 Teacher Mrs. Tara Carroll, Fox Hill Special Education Teacher Mrs. Audrey Boeri, Fox Hill Community Member Mr. George Papayannis
VENDOR(S) PRESENT: Skanska: Project Director Mr. Jim Burrows, Project Manager Ms. Sy Nguyen, Assistant Project Manager Ms. Iryna Nos, Sustainability Expert Ms. Elsa Mullin, Site Representative Mr. Vincent Vadeboncoeur

INTRODUCTION

School Building Committee Chair Massardo called the meeting to order at 4:00 pm and read the following statement: The public can also access this meeting via WebEx Technology. The Fox Hill School Building Committee will hear public comment in person and virtually. WebEx Meeting Number: 2330 943 2303 | Password: Burlington

PUBLIC PARTICIPATION - None.

NEWS & UPDATES - None.

OPM (Owner's Project Manager) Interview & Discussion

Shanska presented an overview[1] of their team experience, services, projects and proposal of the Fox Hill Elementary School building project. Projects highlighted included: C.T. Douglas-Gates Elementary School in Acton, MA, Vinson-Owen Elementary School in Winchester, MA, DeBerry-Homer Elementary School in Springfield, MA, Brightwood-Lincoln Elementary School in Springfield, MA, as well as Winchester High School in Winchester, MA and Arlington High School in Arlington, MA. Consultants spent time reviewing site logistics of a draft new construction plan allowing the existing school to operate while the new school was being built. Consultants spent time reviewing communication and community engagement as well as sustainability. Consultants reviewed and shared experience with LEED/CHPS certification as well as Zero Net Energy. Consultants reviewed an estimated timeline as well as information on their budget approach. Model School information and experience was also shared by the team. After the presentation, consultants answered questions asked by the Fox Hill School Building Selection Committee members.

ADJOURNMENT

Motion was made by Mrs. Priest to adjourn at 4:55 pm; seconded by Ms. Simon. Mr. Foss - aye, Ms. Coscia - aye, Ms. Simon - aye, Mr. Cunha - aye, Dr. Conti - aye, Mrs. Massardo - aye. Motion Carried 6-0-0 by Roll Call Vote.

SUBMITTED

Respectfully,

Kristen Downie

Kristen Downie
Recording Secretary

Date Submitted: 11/1/22
Date Approved: 11/1/22

[1] Shanska: OPM Services for the Fox Hill Elementary School

RECEIVED
By Town Clerk's Office at 8:47 am, Nov 07, 2022

FOX HILL SCHOOL BUILDING COMMITTEE
MEETING MINUTES
Special Session – Joint OPM (Owner's Project Manager) Selection Committee

DATE: Tuesday, August 30, 2022
TIME: 6:00 pm
LOCATION: 123 Cambridge Street, Burlington, MA 01803
Administrative Offices, School Committee Room

ATTENDEES

VOTING MEMBER(S) PRESENT: Superintendent Dr. Eric Conti, School Building Committee Chair Mrs. Melissa Massardo, School Committee Chair Mrs. Katherine Bond, School Committee Member Ms. Martha Simon, Director of Operations Mr. Bob Cunha
VOTING MEMBER(S) REMOTE: School Committee Vice Chair Mr. Carl Foss, School Committee Member Mrs. Christine Monaco
VOTING MEMBER(S) ABSENT: Fox Hill Principal Mr. David Rosenblatt, Business Manager Ms. Nichole Coscia, Director of Technology Integration Mr. Dennis Villano, Town Accountant Mr. John Danizio, Town Manager Mr. Paul Sagarino
NON-VOTING MEMBER(S) PRESENT: Fox Hill Parent Mrs. Jennifer Priest
NON-VOTING MEMBER(S) REMOTE: Ways & Means Committee Member Mr. Roger Riggs, Fox Hill Parent Mr. Edward Parsons
NON-VOTING MEMBER(S) ABSENT: Fox Hill Grade 4 Teacher Mrs. Tara Carroll, Fox Hill Special Education Teacher Mrs. Audrey Boeri, Fox Hill Community Member Mr. George Papayannis
VENDOR(S) PRESENT: Dore & Whittier: Firm Partner Mr. Mike Burton, Project Director Mr. Steve Brown, Project Manager Ms. Christina Dell Angelo, Project Manager Mr. Michael Cox, Ed Programming Mr. Jason Boone
PUBLIC REMOTE: Town Meeting Member Ms. Shari Ellis

INTRODUCTION

School Building Committee Chair Massardo called the meeting to order at 6:00 pm and read the following statement: The public can also access this meeting via WebEx Technology. The Fox Hill School Building Committee will hear public comment in person and virtually. WebEx Meeting Number: 2347 239 2973 | Password: Burlington

PUBLIC PARTICIPATION - None.

NEWS & UPDATES - None.

OPM (Owner's Project Manager) Interview & Discussion

Dore & Whittier presented an overview[1] of their team experience, services, projects and proposal of the Fox Hill Elementary School building project. Three projects relevant to the Fox Hill Building project were highlighted: Maria Hastings School in Lexington, MA, Manchester Memorial School in Manchester-by-the-Sea, MA, and Bancroft School in Andover, MA. Consultants reviewed existing site conditions and presented three MSBA options: Renovation, Repair/Addition, New Construction. Consultants spent a short time sharing their experience that the Fox Hill building project is facing with MSBA: consolidation, enrollment and class size guidelines; as well as their LEED and Zero Net Energy Ready projects. Consultants prepared a community outreach website which would be used for updates and engagement. After the presentation, consultants answered questions asked by the Fox Hill School Building Selection Committee members.

ADJOURNMENT

Motion was made by Mrs. Bond to adjourn at 7:02 pm; seconded by Mrs. Priest. Ms. Simon - aye, Mr. Cunha - aye, Mrs. Monaco - aye, Dr. Conti - aye, Mrs. Bond - aye. Motion Carried 5-0-0 by Roll Call Vote.

SUBMITTED

Respectfully,

Kristen Downie

Kristen Downie
Recording Secretary

Date Submitted: 11/1/22
Date Approved: 11/1/22

[1] Dore & Whittier: Burlington Fox Hill Elementary School presentation

RECEIVED
By Town Clerk's Office at 8:44 am, Nov 07, 2022

FOX HILL SCHOOL BUILDING COMMITTEE MEETING MINUTES

Special Session – Joint OPM (Owner's Project Manager) Selection Committee

DATE: Monday, August 29, 2022
TIME: 4:00 pm
LOCATION: 123 Cambridge Street, Burlington, MA 01803
Administrative Offices, School Committee Room

ATTENDEES

VOTING MEMBER(S) PRESENT: Superintendent Dr. Eric Conti, School Building Committee Chair Mrs. Melissa Massardo, Director of Operations Mr. Bob Cunha, Business Manager Ms. Nichole Coscia
VOTING MEMBER(S) REMOTE: School Committee Member Ms. Martha Simon, School Committee Member Mrs. Christine Monaco
VOTING MEMBER(S) ABSENT: School Building Committee Vice Chair Mrs. Katherine Bond, School Committee Vice Chair Mr. Carl Foss, Fox Hill Principal Mr. David Rosenblatt, Director of Technology Integration Mr. Dennis Villano, Town Accountant Mr. John Danizio, Town Manager Mr. Paul Sagarino
NON-VOTING MEMBER(S) PRESENT: Fox Hill Parent Mrs. Jennifer Priest
NON-VOTING MEMBER(S) REMOTE: Ways & Means Committee Member Mr. Roger Riggs, Fox Hill Parent Mr. Edward Parsons
NON-VOTING MEMBER(S) ABSENT: Fox Hill Community Member Mr. George Papayannis, Fox Hill Grade 4 Teacher Mrs. Tara Carroll, Fox Hill Special Education Teacher Mrs. Audrey Boeri
VENDOR(S) PRESENT: PMA Consultants, LLC: Project Executive Mr. Chris Carroll, Project Director Mr. Kevin Nigro, Project Manager Mr. Marco Zappala, Site/Project Representative Mr. Kevin Smith, Community Outreach Ms. Julia Roberto
PUBLIC REMOTE: Town Meeting Member Ms. Shari Ellis

INTRODUCTION

School Building Committee Chair Massardo called the meeting to order at 4:00 pm and read the following statement: The public can also access this meeting via WebEx Technology. The Fox Hill School Building Committee will hear public comment in person and virtually. WebEx Meeting Number: 2341 497 3762 | Password: Burlington

PUBLIC PARTICIPATION - None.

NEWS & UPDATES - None.

OPM (Owner's Project Manager) Interview & Discussion

PMA Consultants presented an overview[1] of their team experience, services, projects and proposal of the Fox Hill Elementary School building project. Projects highlighted included: Ivan G. Smith Elementary in Danvers, Veterans Early Learning Center in Saugus, Belmonte Upper Elementary School in Saugus, Saugus Middle-High School in Saugus, Major Howard W. Beal Elementary School in Shrewsbury, MA, and Sharon High School in Sharon, MA. Consultants reviewed existing site conditions and presented three MSBA options: Repair, Renovation, New Construction. Consultants spent a short time sharing their experience incorporating sustainability goals into projects and community outreach. After the presentation, consultants answered questions asked by the Fox Hill School Building Selection Committee members.

ADJOURNMENT

Motion was made by Mr. Cunha to adjourn at 5:05 pm; seconded by Ms. Simon. Ms. Simon - aye, Mr. Cunha - aye, Mrs. Monaco - aye, Dr. Conti - aye, Mrs. Massardo - aye. Motion Carried 5-0-0 by Roll Call Vote.

SUBMITTED

Respectfully,

Kristen Downie

Kristen Downie
Recording Secretary

Date Submitted: 11/1/22
Date Approved: 11/1/22

[1] PMA Consultants: Burlington Fox Hill Elementary School presentation and handout

RECEIVED
By Town Clerk's Office at 8:43 am, Nov 07, 2022

FOX HILL SCHOOL BUILDING COMMITTEE MEETING MINUTES

DATE: Monday, August 15, 2022
TIME: 7:00 pm
LOCATION: 123 Cambridge Street, Burlington, MA 01803
Administrative Offices, School Committee Room

ATTENDEES

VOTING MEMBER(S) PRESENT: Director of Operations Mr. Bob Cunha, School Building Committee Chair Mrs. Melissa Massardo, School Committee Member Ms. Martha Simon
VOTING MEMBER(S) REMOTE: Superintendent Dr. Eric Conti
VOTING MEMBER(S) ABSENT: School Building Committee Vice Chair Mrs. Katherine Bond, School Committee Vice Chair Mr. Carl Foss, School Committee Member Mrs. Christine Monaco, Fox Hill Principal Mr. David Rosenblatt, Business Manager Ms. Nichole Coscia, Director of Technology Integration Mr. Dennis Villano, Town Accountant Mr. John Danizio, Town Manager Mr. Paul Sagarino
NON-VOTING MEMBER(S) PRESENT: Fox Hill Parent Mrs. Jennifer Priest, Fox Hill Community Member Mr. George Papayannis
NON-VOTING MEMBER(S) REMOTE: Fox Hill Grade 4 Teacher Mrs. Tara Carroll, Fox Hill Special Education Teacher Mrs. Audrey Boeri
NON-VOTING MEMBER(S) ABSENT: Ways & Means Committee Member Mr. Roger Riggs, Fox Hill Parent Mr. Edward Parsons
PUBLIC PARTICIPATION REMOTE: Mr. Marco Zappala (PMA Consultants), Ms. Julia Roberto (PMA Consultants), Ms. Tina Stanislaski (HMFH Architects)

INTRODUCTION

School Building Committee Chair Massardo called the meeting to order at 7:00 pm and read the following statement: The public can also access this meeting via WebEx Technology. The Fox Hill School Building Committee will hear public comment in person and virtually. WebEx Meeting Number: 2342 448 4800 | Password: Burlington

APPROVAL of MINUTES

Motion was made by Ms. Simon to approve the minutes of the June 23, 2022[1] Fox Hill School Building Committee Meeting as submitted; seconded by Mr. Cunha. Dr. Conti - aye, Mr. Cunha - aye, Ms. Simon - aye, Mrs. Massardo - abstain. Motion Carried 3-0-1 by Roll Call Vote.

PUBLIC PARTICIPATION

None.

NEWS & UPDATES

A. OPM (Owner's Project Manager) Selection Process
Mr. Cunha reviewed the timeline explaining that the OPM is currently advertised and out to bid. On Tuesday, August 9th, seven vendors participated in a walk through at Fox Hill School. On Wednesday, August 10th, one additional vendor participated remotely. Mr. Cunha further explained that proposals are due no later than Wednesday, August 17th by 1:00 pm. Each is time stamped as received and sealed. Mr. Cunha and Ms. Coscia will then review the proposals received to be sure they meet the qualifications. Mr. Cunha stressed the next few weeks are critical to meet the MSBA (Massachusetts School Building Authority) September 7th deadline to submit the OPM recommendation.

Timeline Discussed:
- August 19th, end of day - Mr. Cunha and Ms. Coscia review complete
- August 24th, end of day - Selection Committee (SC) score sheets complete for all proposals received
- August 26th - September 1st - SC conducts interviews and reference checks with top three scored firms
- September 1st-7th - Ms. Coscia will conduct fee negotiations with first choice firm
- September 7th by 5:00 pm - Submit OPM recommendation to MSBA
- October 3rd - MSBA Board Vote to approve OPM recommendation

[1] June 23, 2022 FH SBC Meeting Minutes

Mr. Cunha explained the role of the Selection Committee (SC). The SC represents the whole School Building Committee (SBC) to score proposals, schedule and participate in interviews, and perform reference checks. At the end of the interview process, the SC will score the top three vendors based on interviews and reference checks. Ms. Coscia will then negotiate fees with the top choice vendor. Mr. Cunha explained that any SBC member can attend the Interviews. Dr. Conti commented on the reference check process; he will plan to call the Superintendent(s) of the school district(s) where the vendor has completed a project.

SBC members discussed the SC members. After some discussion it was decided to allow up to nine SBC members with a minimum of six members completing the work.

Motion was made by Ms. Simon to amend the previous vote to allow up to nine School Building Committee members on the Selection Committee with a minimum of six members to complete the work for each stage; seconded by Mr. Cunha. Dr. Conti - aye, Mr. Cunha - aye, Ms. Simon - aye, Mrs. Massardo - aye. Motion Carried 4-0-0 by Roll Call Vote.

Motion was made by Mr. Cunha to nominate the following nine members for the Selection Committee: Eric Conti, Bob Cunha, John Danizio, Nichole Coscia, Jennifer Priest, Martha Simon, Ed Parsons, Carl Foss, Melissa Massardo; seconded by Ms. Simon. Dr. Conti - aye, Mr. Cunha - aye, Ms. Simon - aye, Mrs. Massardo - aye. Motion Carried 4-0-0 by Roll Call Vote.

Members concluded the meeting discussing the next steps in having the full SBC committee meet with the OPM after the MSBA board vote on October 3rd.

ADJOURNMENT

Motion was made by Ms. Simon to adjourn at 7:45 pm; seconded by Mr. Cunha. Dr. Conti - aye, Mr. Cunha - aye, Ms. Simon - aye, Mrs. Massardo - aye. Motion Carried 4-0-0 by Roll Call Vote.

SUBMITTED

Respectfully,

Kristen Downie

Kristen Downie
Recording Secretary

Date Submitted: 11/1/22
Date Approved: 11/1/22

RECEIVED
By Town Clerk's Office at 11:36 am, Jun 09, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30A, c §18-25)

BOARD: School Committee
DATE: June 13, 2023
TIME: 7:00 p.m.
PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA
NOTE: The Ways & Means Education Subcommittee will also be meeting at this meeting and deliberating on the agenda items.

The public can also access this meeting via WebEx Technology (see below). The Burlington School Committee will hear public comments in person and virtually. Meetings are also broadcast live on Burlington Cable Access TV (BCAT) and video/audio recordings are being made.

This meeting/hearing of **the Burlington School Committee** will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Equity Statement
Educational Equity means that every child belongs and receives whatever support he/she/they need to develop his/her/their full academic, emotional, and social potential to learn and thrive every day. This begins with kindness and valuing the humanity of every child/individual.

AGENDA**

1. Pledge of Allegiance

2. Approval of Warrant

3. Approval of Meeting Minutes – 5/23/23

4. Public Participation – Remote attendees can access through WebEx. The WebEx information is below.

5. Information/Reports
   a.) Student Report
   b.) Subcommittee Reports
   Fox Hill School Building Committee Update
   - Education Program
   - Space Summary Review

   c.) Ways & Means
   d.) Other Announcements

6. Learning, Equity, Thriving (10 minutes)
   a.) Canada Trip in February - Vote
   b.) 2023/2024 School Committee Schedule - Discussion
   c.) MASC Policies Section E & F – 1st Reading

7. Facilities/Finance (20 minutes)
   a.) Financial Update – Discussion
   b.) Cafeteria Update - Discussion
   c.) Fox Hill School Building Committee – Standing Agenda Item
   d.) BHS Update – BHS School Building Committee - Standing Agenda Item
   e.) Pine Glen Update – Standing Agenda item

8. Adjournment

Agenda subject to change**

Tuesday, June 13, 2023

7:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 3 hrs

Join meeting

More ways to join:

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m77499b090bc0f0663c1edb8f80a2bf3a

Join by meeting number

Meeting number (access code): 2330 165 9873

Meeting password: Tuesday

Tap to join from a mobile device (attendees only)

+1-408-418-9388,,23301659873## United States Toll

Join by phone

+1-408-418-9388 United States Toll

Global call-in numbers

Join from a video system or application

Dial 23301659873@townofburlington.webex.com

You can also dial 173.243.2.68 and enter your meeting number.

Need help? Go to https://help.webex.com

RECEIVED
By Town Clerk's Office at 12:05 pm, Jun 22, 2023

TOWN OF BURLINGTON

Meeting Posting

Notice of Public Meeting – (As required by G.L. c. 30A, c §18-25)

BOARD: School Committee
DATE: June 26, 2023
TIME: 7:00 p.m.
PLACE: School Committee Room, 123 Cambridge Street, Burlington, MA
NOTE: The Ways & Means Education Subcommittee will also be meeting at this meeting and deliberating on the agenda items.

The public can also access this meeting via WebEx Technology (see below). The Burlington School Committee will hear public comments in person and virtually. Meetings are also broadcast live on Burlington Cable Access TV (BCAT) and video/audio recordings are being made.

This meeting/hearing of **the Burlington School Committee** will be held in-person at the location provided on this notice. Members of the Public are welcome to attend this in-person meeting. Please note that while an option for remote attendance and/or participation is being provided as a courtesy to the public, the meeting/hearing will not be suspended or terminated if technological problems interrupt the virtual broadcast, unless otherwise required by law. Members of the public with particular interest in any specific item on this agenda should make plans for in-person vs. virtual attendance accordingly.

Equity Statement
Educational Equity means that every child belongs and receives whatever support he/she/they need to develop his/her/their full academic, emotional, and social potential to learn and thrive every day. This begins with kindness and valuing the humanity of every child/individual.

AGENDA**

1. Pledge of Allegiance

2. Approval of Meeting Minutes – 6/7/23 & 6/13/23

3. Public Participation – Remote attendees can access through WebEx. The WebEx information is below.

4. Information/Reports
   a.) Subcommittee Reports
   Fox Hill School Building Committee Update – 2nd Reading
   - Educational Programs Review and Approval
   - Space Summaries Review and Approval

   b.) Ways & Means
   c.) Other Announcements

5. Learning, Equity, Thriving (10 minutes)
   a.) School Committee Meeting Dates in April – Discussion
   b.) MASC Policies Section E & F – 1st Reading
   c.) Superintendent Evaluation – Discussion

6. Facilities/Finance (20 minutes)
   a.) Fox Hill School Building Committee Update – Standing Agenda Item
   b.) BHS Update – Standing Agenda Item
   c.) Pine Glen Update – Standing Agenda Item
   d.) Summer Projects – Update

7. Executive Session: M.G.L. Chapter 30A, Section 21(a), Subsection (3): To discuss strategy with respect To collective bargaining if an open meeting may have a detrimental effect on the bargaining position of the School District and Chair so declares - BEA Union contract.
   a.) BEA Contract
   b.) Superintendent Contract - Vote

8. Adjournment

Agenda subject to change**

Monday, June 26, 2023

7:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 3 hrs.

Join meeting

More ways to join:

Join from the meeting link

https://townofburlington.webex.com/townofburlington/j.php?MTID=m72feb55552eb6350073227187580d6af

Join by meeting number

Meeting number (access code): 2335 686 9769

Meeting password: Tuesday

Tap to join from a mobile device (attendees only)

+1-408-418-9388,,23356869769## United States Toll

Join by phone

+1-408-418-9388 United States Toll

Global call-in numbers

Join from a video system or application

Dial 23356869769@townofburlington.webex.com

You can also dial 173.243.2.68 and enter your meeting number.

Need help? Go to https://help.webex.com

RECEIVED
By Town Clerk's Office at 9:25 am, Jun 27, 2023

BURLINGTON PUBLIC SCHOOLS

SCHOOL COMMITTEE MEETING MINUTES

Watch on BCAT

DATE: Tuesday, June 13, 2023
TIME: 7:00 pm
LOCATION: 123 Cambridge Street, Burlington, MA 01803
Administrative Offices, School Committee Room

ATTENDEES

MEMBER(S) PRESENT: Chair, Ms. Martha Simon, Vice Chair Ms. Melissa Massardo, Mr. Jeremy Brooks, Ms. Chris Monaco, Ms. Katherine Bond, Superintendent Dr. Eric Conti, Assistant Superintendent-to-be Dr. Lisa Chen, Finance Director, Ms. Nichole Coscia, Director of Operations Mr. Bob Cunha
MEMBER(S) REMOTE: None
MEMBER(S) ABSENT: None
GUEST(S) PRESENT: Donna DiNisco from DiNisco Design, Inc., Christina Dell Angelo (Dore & Whittier), and Neil Harrigan (DiNisco Design)
GUEST(S) REMOTE: None
PUBLIC PRESENT: Clinical Social Worker Michelle Wexelblat, Resident-Veteran James Sparks, Resident-BEC Barbara Martinez, Resident-BEC Martha Duffield, Resident Gloria Doherty, Resident Donald Doherty, Resident David Woodilla, Resident Melissa Interess, Resident Andrea Bono-Bunker, Resident Valerie Bono-Bunker, Resident/TMM Shari Ellis, Resident Cindy Phillips, Resident-TMM Eileen Sickler, Resident-TMM Sara Carley, Resident Karmela Schmailde, Resident Adam Heisler, Resident Deirdre Heisler, BHS Student Nate Carey, BHS Student Jack Carey, Resident/TMM Nicci Kadilack, Resident-Parent Kerry Abramov, Resident-Parent Nila Almstrom, Resident-Parent Elizabeth Melo, Resident and Teacher Judy Crossman, Resident Kristin Russo, and Resident Jessica Dubadey
PUBLIC PARTICIPATION REMOTE: Presbyterian Church Pastor Burlington Rev. Trina Portillo, Amanda Laskowski

CALL TO ORDER

Chair Simon called the meeting to order at 7:00 p.m., and read the following statement: The public can also access this meeting via WebEx Technology. The Burlington School Committee will hear public comment in person and virtually. Meetings are also broadcast live on Burlington Cable Access TV (BCAT) as usual. Chair Simon reminded participants that comments and statements are limited to 3 minutes each. Meeting Access Code: Meeting number (access code): 2330 165 9873 | Password: Tuesday.

EQUITY STATEMENT

Educational equity means **that every child belongs and receives whatever support he/she/they need to develop his/her/their full academic, emotional, and social potential to learn and thrive every day.** This begins with kindness and valuing the humanity of every child or individual.

The Burlington School Committee supports our LGBTQ+ students, staff, families and community members. We regret that there have been recent incidents in the middle school which have been painful to the LGBTQ+ community, as well as incidents targeting other groups through antisemitism and racism.

The Burlington Public Schools are focused on the students and making sure that all perspectives are welcome and all students feel like they belong. The Marshall Simonds Middle School held a Pride theme day on June 2nd to support the LGBTQ+ community. It is an established practice at the school to hold theme days to celebrate student life. Unfortunately, during the Pride theme day there were behaviors that were hurtful to students and the school community. We are now involved in a healing process. We do not think that there are any "hateful" middle school students. Students at this age are finding their voices or changing their voices or challenging adult voices. Middle school should be a safe place for ALL students to express themselves, to make mistakes, and to learn from each other. We provided support to students and staff who were negatively affected, and administered consequences for behavior that is against our policies. The school met with the entire student body in classroom based groups to educate them about how their behaviors affect others, to take responsibility for their behaviors, and to help us become a more inclusive community where all of us feel that we belong. Although we do not publicize every aspect of the schools' response, the middle school dedicated significant time last week to process with students to help them better understand how their words and behaviors impact others.

Burlington is a community made up of many different people and groups - diversity is one of our strengths. We are doing our best to help our students learn to communicate, empathize, and care for one another across differences, and to embrace our many commonalities.

Dr. Conti stated he is disappointed in the behavior of some middle school students during the events organized by the middle school Spectrum Club recognizing Pride month but wanted to remind everybody these are middle school age children and most behaved appropriately. While consequences are sometimes appropriate, it is the follow-up conversations that are most important with children of this age. Dr. Conti reiterated what he stated in his community message, "like any spirit day celebration participation is optional, respectful behavior across the entire student body however, is non-negotiable." Dr. Conti noted that in response to the June 2nd event at the middle school, he has received various kinds of communications including requests to quickly hire a DEI Director. The need for a DEI Director and the middle school incident from June 2nd are related, but not causal. Middle school age children reflect what they see adults do without thinking about the consequences of their actions. Ascribing hate to middle school children who are not fully developed, is a mistake. Dr. Conti stated his top priority in filling the DEI Director position is thoughtful development and not hasty repetition. Dr. Conti stated it was important to hire an Assistant Superintendent, first. Dr. Lisa Chen joins the team on July 1st and will quickly get to know Burlington, the Equity Audit will be completed in several weeks, and the district will be working with a DEI coach from William James College. Dr. Conti stated he will continue to work with his DEI coach in prioritizing the findings of the audit report to address a concrete path forward and will shape the DEI job posting around these priorities. Those of us paying attention to DEI efforts around the state and country should appreciate this approach in light of the backlash against DEI efforts occurring everywhere. Burlington is not immune to the divisive and polarized political climate of the country. Many adults are siloed in regards to their culture, religion and personal history. Public schools, however, are not siloed by design. Our schools have become the places where all perspectives, religions, cultures and personal identities come together. Most of our students, your children, experience more diversity everyday than the rest of us. Learning to collaborate across these differences is a critical skill in the world your children will be living and working in as adults. I don't want public education to back away from promoting tolerance and inclusivity or its critical role in protecting our democracy. At the next School Committee meeting, I will speak more completely about the district's DEI efforts in September, but for this evening I want to state unequivocally, that here in the Burlington Public Schools we are committed to tolerance and inclusivity for all, and that includes our LGBTQ+ students. We are committed to working hard so that all students feel safe and supported so they can reach the depth and breadth of their abilities.

APPROVAL of WARRANT

Ms. Monaco made a motion to approve the warrant as submitted; seconded by Ms. Bond.
Ms. Monaco - aye, Mr. Brooks – aye, Ms. Massardo – aye, Ms. Bond – aye, Ms. Simon – aye.
Motion Carried 5:0:0 by Roll Call Vote.

APPROVAL OF MINUTES

Ms. Bond made a motion to approve the meeting minutes of 5/23/23; seconded by Ms. Massardo
Ms. Monaco - aye, Mr. Brooks – aye, Ms. Massardo – aye, Ms. Bond – aye, Ms. Simon – aye.
Motion Carried 5:0:0 by Roll Call Vote.

PUBLIC PARTICIPATION

The following individuals spoke about the MSMS Pride Day Event: Nate Carey, Parent Kerry Abramov, Michelle Wexelblat, James Robert Sparks, Nicci Kadillac, Amanda Laskowski, Ericka Holly, Kate Mun (Kate Mun read a statement from Meredith Benston), Karmela Schmarlde, Martha Duffield, Nila Almstrom, Barbara Martinez, Melissa Interess, Sherry Ellis, Andrea Bono-Bunker, Jessica Dubadey and Rev. Trina Portillo.

Rev. Portillo read a statement on behalf of Rabbi Susan Abramson; Temple Shalom Emeth; Rev. Ed Koonz, United Church of Christ Burlington; Chais DiMaggio; Ranjani Saigal, Hindu priest; Ekal Vidyalaya Foundation of USA; The Rev. Daniel Bell, Priest-in-Charge, St. Mark's Episcopal Church.

Ms. Simon thanked everyone who came to speak and support the LGBTQ+ community.

INFORMATION / REPORTS

Student Reports

Mr. Matt Shannon re-introduced himself as the Student Representative to the School Committee, a position that he was re-elected for next year by the student council members throughout the high school. Mr. Shannon shared BHS news that the Class of 2023 graduated; BHS held the Junior Book Awards, where top performing students are awarded different distinctions based on their merit; and students from MSMS and BHS are currently at the University of Maryland competing in the National History Day competition. The BHS sports teams have made deep runs in the playoffs, namely the Varsity Softball team will play in the Division 2 final four facing off Westfield in Worcester. Furthermore, during the last week of school the students are eagerly awaiting summer vacation but this also means an intense week for the high school students as this a week of finals.

Mr. Shannon concluded with a statement regarding the recent events at MSMS, noting that this ~~i~~is an issue that needs to be talked about by teachers, students, parents and Burlington community members.

Subcommittee Reports

Fox Hill School Building Committee Update

Dr. Conti stated that Ms. Donna DiNisco from DiNisco Design is in attendance this evening to review the timeline of the design process with the committee. Dr. Conti noted this is a first reading so it doesn't need a vote now but there will be a need for a vote at the next meeting. The Educational Program and Space Summary review is a critical part of the design process and the application needs to be submitted to the MSBA.

Ms. DiNisco stated that the educational program is the first step in the feasibility study stage. The BPS is fortunate to have been selected to be part of the MSBA core program. It shows a true need but with that there is a prescriptive process that must be completed. Ms. DiNisco continued with her presentation and asked the committee to review the packet she distributed at the meeting in order to vote on the educational programs and space summary at the next meeting.

Ms. Simon confirmed that a vote to approve the educational programs and space summary will need to take place at the next meeting on Monday, June 26, 2023. This approval will then go to the Burlington Elementary Building committee in order for them to submit it to the MSBA. Ms. Simon clarified that two different educational programs are written because we are considering all options; one is if we just rebuild the Fox Hill School for 325 students and the other is if we combine both schools, Fox Hill and Pine Glen, for 640 students.

Ways & Means

None.

Other Announcements

Ms. Simon congratulated all the graduates and stated she attended both graduations, the BHS and the Evening Academy. Ms. Simon stated the BHS softball team won their 13th League Championship in a row and are now in the final four on Wednesday in Worcester and the Lacrosse teams are still in the running. Congratulations to all those students.

LEARNING, EQUITY, THRIVING

Canada Trip in February

Dr. Conti explained that the BHS World Language department is requesting approval for a trip to Canada with the student travel company, Prométour. Prométour Education Tours deliver customized trips to teachers and their students throughout Canada. Our BHS French teacher, Ms. Yuxia Peng, would like to offer our BHS French students a five-day trip to Québec and Montréal during the week of February break 2024. Ms. Yuxia Peng has been collaborating with Ms. Laura Feig, former BHS French teacher and current French teacher at Lincoln-Sudbury High School, and they would like to offer this travel opportunity to both schools as a combined trip. The cost of the trip per student will decrease significantly because the number of student participants will rise with the two schools working together.

Ms. Monaco made a motion to approve the BHS French student five-day trip to Québec and Montréal during the February break 2024; seconded by Ms. Bond.
Ms. Monaco - aye, Mr. Brooks – aye, Ms. Massardo – aye, Ms. Bond – aye.
Motion Carried 4:0:0 (Ms. Simon was not present during this vote).

2023/2024 School Committee Schedule

Dr. Conti proposed the following School Committee meeting dates for 2023/2024 school year, which are the second and fourth Tuesday of each month: September 12; September 26; October 10; October 24; November 14; December 12; January 9; January 23; February 13; February 27; March 12; March 26; April 9; April 23; May 14; May 28; June 11 & June 25.

Ms. Simon noted the April dates will need to be changed. It was agreed to revisit this issue at the next meeting.

MASC Policies Section E & F – 1st Reading

There was consensus to table this agenda item until the next meeting on Monday, June 26, 2023.

FACILITIES / FINANCE

Finance Update

Ms. Coscia reported that all capital articles and revolving accounts are in good standing. There are no concerns or significant changes from last month with the operating or accommodated accounts so no issues with closing out the year. Within the next few meetings,

Ms. Coscia will have information on the capital articles that are completed but still have balances, in order to close out the articles that are no longer needed.

Cafeteria Update
Dr. Conti stated he and Mr. Cunha will meet with the cafeteria staff and union representatives on Friday to follow-up, as the committee requested.

School Lunch Program
Ms. Coscia distributed a document to the committee with the lunch program information. Ms. Coscia's chart illustrated the lunch participation at the elementary, middle, and high school levels with a comparison of the same months with the prior school year. In addition, it takes into consideration any change in enrollments, etc. Ms. Coscia stated that the flow of expenses and revenues still flow through the school lunch revolving account.

Discussion ensued.

In summary, Ms. Coscia confirmed that by the end of school year, there should be approximately $881,000 in the account, and if not, Whitsons is responsible to make the district whole.

Fox Hill School Building Committee
Mr. Cunha and Ms. Massardo noted that there are Building School Committee meetings on June 20th, June 28th, July 13th and a Community Forum on July 11th.

BHS Update
Mr. Cunha stated he has started discussions with the principal and talked with parents, teachers and students in an attempt to put together a list for a BHS Building Committee. Once a committee list is established, he will make the recommendations to the School Committee. Mr. Cunha will use the MSBA template that was used to form the Fox Hill School Building Committee.

Dr. Conti stated he will reach out to the Ways and Means to find out if anyone wants to serve on the BHS Building Committee.

Ms. Massardo nominated Ms. Bond as Chair of the BHS Building Committee; seconded by Mr. Brooks.
Ms. Monaco - aye, Mr. Brooks – aye, Ms. Massardo – aye, Ms. Bond – aye, Ms. Simon – aye.
Motion Carried 5:0:0.

Ms. Bond nominated Ms. Simon to be Vice Chair of the BHS Building Committee; seconded by Mr. Brooks.
Ms. Monaco - aye, Mr. Brooks – aye, Ms. Massardo – aye, Ms. Bond – aye, Ms. Simon – aye.
Motion Carried 5:0:0.

Pine Glen
Dr. Conti reminded the committee that for the Educational Program and Space Summary that is being voted on at the next meeting, one of the programs is for Pine Glen; it is included as a Pine Glen/Fox Hill combined program.

Ms. Simon reminded the committee that the next meeting is Monday, 6/26/23.

ADJOURNMENT
Ms. Monaco moved to adjourn the meeting at 9:22 p.m.; seconded by Ms. Bond.
Ms. Monaco - aye, Mr. Brooks – aye, Ms. Massardo – aye, Mr. Bond – aye, Ms. Simon – aye.
Motion Carried 5:0:0 by Roll Call Vote.

SUBMITTED

Respectfully,
Marianne Fabbri
Recording Secretary

Date Submitted: 6/26/23
Date Approved: 6/26/23

BURLINGTON PUBLIC SCHOOLS

FOX HILL ELEMENTARY SCHOOL

PINE GLEN ELEMENTARY SCHOOL

Educational Visioning Workshop Notes and Highlights

The following pages offer a summary of notes taken and information gathered during the Fox Hill Elementary School Educational Visioning Workshops that took place during the months of March – April, 2023. If you have questions about the workshops or would like to add comments or ideas to this evolving narrative, please contact David Stephen at david@newvistadesign.net.

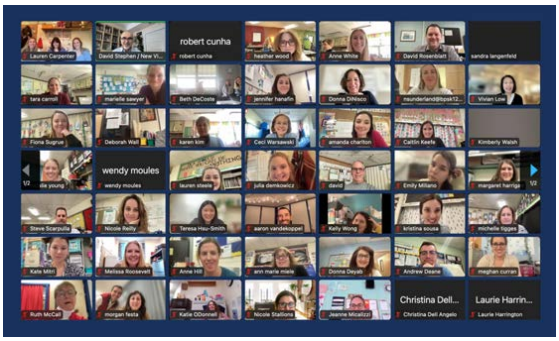
Table of Contents

- Executive Summary ..... Page 2
- Visioning Schedule and Agendas ..... Page 6
- Kick-Off Meeting Notes ..... Page 7
- Fox Hill Faculty Workshop Notes ..... Page 13
- Pine Glen Faculty Workshop Notes ..... Page 22
- Leadership Team Workshop Notes ..... Page 31
- Guiding Principles ..... Page 33
- Bubble Diagrams ..... Page 34
- Community and SBC Meeting Notes ..... Page 37

During the months of March and April 2023, a series of meetings and workshops were held with Burlington Public Schools (BPS) leadership, Fox Hill Elementary School faculty, Pine Glen Elementary School faculty, the BPS School Building Committee, and Burlington community members to establish priorities for a renovated and/or new Fox Hill Elementary School or a combined Fox Hill and Pine Glen Elementary School facility. Each workshop was a collaborative session designed to inform the Fox Hill Elementary School Feasibility Study that was awarded to the town of Burlington by the Massachusetts School Building Authority (MSBA). During the workshops, participants were led through a step-by-step visioning process aimed at capturing their high-level thinking about Fox Hill and Pine Glen Elementary Schools' current and future educational goals and priorities and connecting them to best practices and possibilities in innovative school facility design. The following two-page executive summary offers key workshop findings. A more in-depth recording of participant feedback can be found in the notes that follow.

Workshop Schedule:

- **March 7, 2023** Leadership Team Kick-Off Meeting
- **March 22, 2023** Fox Hill Faculty Workshop
- **March 29, 2023** Pine Glen Faculty Workshop
- **April 12, 2023** Leadership Team Workshop
- **April 13, 2023** Community and SBC Meeting



Project Priorities

The following are highlights from the educational, architectural, and community priorities that were determined during the workshops for the design of the renovated and/or new Fox Hill Elementary School or a combined Fox Hill and Pine Glen elementary school. The priorities highlighted in red indicate high level themes that came up in each of the above shareholder groups.

Educational Priorities

Leadership Team

- Collaborative and Flexible Learning
- Inclusive/Differentiated Learning
- Outdoor Learning
- Small Group Learning
- Community Connections
- Specialized Support and Services
- Meeting Long-Term Community Needs
- Dynamic and Inspiring Programming
- Accessibility for all Students
- Support for District Initiatives

Fox Hill Faculty

- Student-Centered Learning
- Inclusive/ Differentiated Learning
- Collaborative Learning
- Outdoor Learning
- Community Connections
- Safety and Welcome
- STEAM and Project-Based Learning

Pine Glen Faculty

- Student Centered Learning
- Inclusive/Differentiated Learning
- Collaborative Learning
- Outdoor Learning
- Community Partnerships
- Small Group Work
- Social Emotional Learning
- School Community and Culture
- Enrichment Opportunities
- Flexible Classrooms and Spaces
- Classroom Neighborhoods
- Healthy Building

Architectural Priorities

Leadership Team

- Safety
- Innovative Design
- Inclusive Environment
- Good Acoustics
- Environmental Sustainability
- Outdoor Learning Spaces
- Counseling Suite
- Flexible and Multi-Use Spaces
- Gathering /Collaboration Spaces
- Good Wayfinding
- Accessible Bathrooms
- Washer/Dryer

Fox Hill Faculty

- Safety and Welcome
- Safe Drop-Off and Pick-Up
- Innovative Learning Spaces
- Differentiated Instruction
- Good Acoustics
- Sustainability
- Outdoor Learning and Play
- Healthy Buildings
- Bathrooms
- Teacher Workspaces & Support
- Good Storage
- Robust Technology
- More Space
- Visual and Performing Arts

Pine Glen Faculty

- Good Storage
- Good Acoustics
- Thermal Comfort
- Bathrooms
- Natural Light
- Professional Workspaces
- Counseling and Therapy Suite
- Quiet Spaces
- Performance Spaces
- Expanded Cafeteria Options
- Display and Exhibition
- Specialist Spaces

Community Priorities

Leadership Team

- Community Use and Access
- Outdoor Spaces and Connections
- Maintenance of Small Class Sizes
- Clear Community Benefit
- Space for Community Partners
- Community Buy-In and Support
- Good Community Fit
- After-School Programming
- Display and Exhibition
- Traffic Impact

Fox Hill Faculty

- Safe Community Access and Use
- Access to Outdoor Spaces
- Display and Exhibition
- Long Term Viability
- Community Gathering Spaces

Pine Glen Faculty

- Safe Community Access
- Outdoor Spaces
- Inclusivity and Access
- Display & Exhibition
- Community Feel
- Afterschool Space
- Safety and Parking

Guiding Principles 1.0

The following Guiding Principles 1.0 for the design of the renovated and/or new Fox Hill Elementary School, or a combined Fox Hill and Pine Glen Elementary School facility were brainstormed by the district leadership team. Guiding Design Principles offer a framework of educational and architectural priorities that can be referenced throughout the various phases of the design process.

1. Whole Child and Joyful Learning
2. Warmth and Welcome
3. School as Community Resource
4. Sustainability

Priority Design Patterns

The following are highlights from the Design Patterns that were prioritized during the workshops for the design of the renovated and/or new Fox Hill Elementary School or a combined Fox Hill and Pine Glen elementary school. The Design Patterns highlighted in red indicate high level priorities that appeared in the top 15 Design Patterns prioritized by two or more of the four stakeholder groups listed.

Priority Fox Hill Design Patterns

1. Flexible Classrooms and Spaces
2. Breakout and Pull Over Spaces
3. Good Storage/Cubbies
4. Welcoming Arrival/Safe Drop-Off
5. Professional Work Areas
6. Security and Welcome
7. Push-In Special Education
8. Engaged Outdoor Play
9. Outdoor Connections and Learning
10. Collaborative Environments
11. Library Learning Commons
12. Flexible Furniture
13. Cafetoriums/Multi-Purpose Space
14. Wayfinding and Streetscapes
15. Classroom Neighborhoods
16. Nooks, Caves, and Quiet Spaces
17. Greeting and Gatekeeping
18. Sustainability
19. Classroom Zones
20. Branding and Identity
21. Building as Teacher
22. Gathering Hubs/ Presentation Spaces
23. Display and Exhibition
24. Clusters of Learning
25. Heart of the School

Priority Pine Glen Design Patterns

1. Flexible Classrooms and Spaces
2. Security and Welcome
3. Good Storage/Cubbies
4. Breakout and Pull Over Spaces
5. Professional Work Areas
6. Welcoming Arrival/Safe Drop-Off
7. Cafetoriums/Multi-Purpose Space
8. Collaborative Environments
9. Heart of the School
10. Library Learning Commons
11. Extended Learning
12. Enrichment Spaces
13. Wayfinding and Streetscapes
14. Engaged Outdoor Play
15. Classroom Zones
16. Display and Exhibition
17. Outdoor Connections and Learning
18. Greeting and Gatekeeping
19. Gathering Hubs and Presentation Spaces
20. Sustainability
21. Classroom Neighborhoods
22. Push-In Special Education
23. Community Access
24. STEM/STEAM and Makerspaces
25. Flexible Furniture

Priority Design Patterns

The following are highlights from the Design Patterns that were prioritized during the workshops for the design of the renovated and/or new Fox Hill Elementary School or a combined Fox Hill and Pine Glen elementary school. The Design Patterns highlighted in red indicate high level priorities that appeared in the top 15 Design Patterns prioritized by two or more of the four stakeholder groups listed.

Priority Leadership Design Patterns

1. Flexible Classrooms and Space
2. Classroom Zones
3. Clusters of Learning
4. Good Storage and Cubbies
5. Push-In Special Education
6. Breakout and Pullover Spaces
7. Professional Work Areas
8. Outdoor Connections and Learning
9. Engaged Outdoor Play
10. Library Learning Commons
11. Collaborative Environments
12. STEM/STEAM and Makerspaces
13. Security and Welcome
14. Safe Community Access
15. Enrichment Spaces
16. Branding and Identity
17. Wayfinding and Streetscapes
18. Classroom Neighborhoods
19. Heart of School
20. Extended Learning Spaces
21. Flexible Furniture
22. Display and Exhibition
23. Cafetoriums
24. Welcoming Arrival/Safe Drop-Off/Pick-Up
25. Sustainability

Priority SBC and Community Design Patterns

1. Flexible Classrooms and Spaces
2. STEM/STEAM and Makerspaces
3. Engaged Outdoor Play
4. Outdoor Connections and Learning
5. Library Learning Commons
6. Enrichment Spaces
7. Security and Welcome
8. Safe Community Access
9. Sustainability
10. Breakout and Pull Over Spaces
11. Flexible Furniture
12. Cafetoriums/Multi-Purpose Space
13. Professional Work Areas
14. Push-In Special Education
15. Classroom Neighborhoods
16. Heart of the School
17. Display and Exhibition
18. Good Storage/Cubbies
19. Welcoming Arrival/Safe Drop-Off
20. Collaborative Environments
21. Clusters of Learning
22. Branding and Identity
23. Wayfinding and Streetscapes
24. Classroom Zones
25. Extended Learning Spaces

Educational Visioning Schedule and Agendas

An in-person Kick-Off Leadership Team Meeting took place Tuesday, March 7, 2023, from 4:00 – 6:00 PM and explored the following topics:

- **Priority Goals** for the Fox Hill and Pine Glen educational programs and the renovated and/or new facility
- **Future-Ready Teaching and Learning Practices** that are important to Burlington Public Schools
- **Virtual Visioning Workshop Logistics** and scheduling

A virtual Fox Hill Faculty Workshop took place on March 22, 2023, from 2:30 – 4:30 PM
A virtual Pine Glen Faculty Workshop took place on March 29, 2023, from 2:30 – 4:30 PM
Each Faculty Workshop explored the following topics:

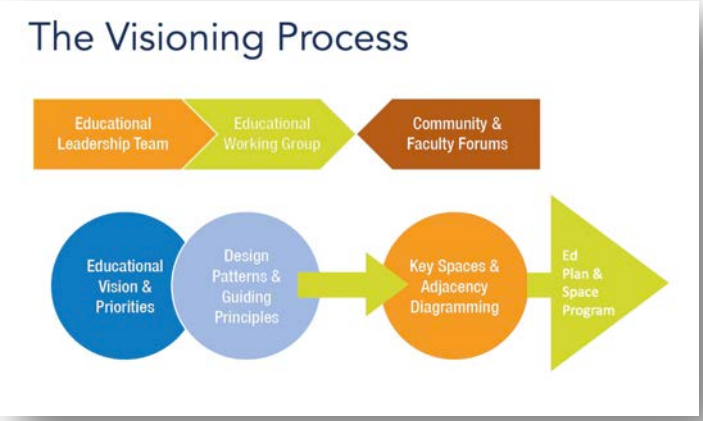
- **Priority Goals** for the Fox Hill and Pine Glen educational programs and the renovated and/or new facility
- **Future-Ready Teaching and Learning Practices** that are important to BPS and each school
- **21st Century Design Patterns** that innovative elementary schools throughout the U.S. have put into practice
- **Blue Sky Ideas** that participants would like to see in new school program and facility

An in-person Leadership Team Workshop took place on April 12, 2023, from 9:00 – 11:30 AM and explored the following topics:

- **Review of Priority Goals** established during visioning meetings thus far
- **Review 21st Century Design Patterns** established during visioning meetings thus far and further prioritization
- **Guiding Principles Brainstorm** of big-picture priorities for the project
- **Bubble Diagramming** of desired spaces and adjacencies

A virtual School Building Committee and Community Meeting took place on April 13, 2023, from 7:30 – 9:00 PM and explored the following topics:

- **Review of Priority Goals** established during visioning meetings thus far, with opportunities for community feedback
- **Review of Future-Ready Teaching and Learning Practices** prioritized during visioning meetings thus far with community input
- **Review 21st Century Design Patterns** established during visioning meetings thus far with community input



A group of Burlington Public Schools, Fox Hill Elementary School, and Pine Glen Elementary School administrators participated in a 2-hour Educational Visioning Kick-Off Meeting on March 7, 2023. The purpose of the meeting was to present an overview of the Educational Visioning process, discuss overarching priorities for the design of the renovated and/or new Fox Hill Elementary School facility, and establish a framework and schedule for Educational Visioning workshops. The following notes highlight information gathered during the meeting.

Meeting Participants

- Christina Cicolini — Director of Special Education
- Christine Conceison — Director of Mental Health
- Eric Conti — Superintendent
- Nicole Coscia — Business Manager
- Bob Cunha — Director of Operations
- Carrie Fortmato — Math Coach K-5
- Kerri Lamprey — Director of English Learning
- John Lyons — Pine Glen Principal
- Melissa Massardo — School Committee
- Robyn Miliano — Director of Student Info Office
- Wend Paviler Tyberczy — Director of K-5 Science
- David Rosenblatt — Fox Hill Principal
- Renee Sacco — Director of Literacy
- Dennis Villano — Director of Technology

- Donna DiNisco — DiNisco Design
- Neil Harrigan — DiNisco Design
- Vivian Low — DiNisco Design
- David Stephen — New Vista Design

Greatest Hopes

When asked to share their Greatest Hopes for the Fox Hill Elementary School project, BPS leadership shared the following thoughts, which have been organized thematically.

An Inclusive and Welcoming Environment

- An equitable and welcoming environment for all students and staff that encompasses all aspects of education and learning
- Eliminate the building as the limiting factor in educating all children
- A welcoming environment for all students and staff
- The building facilitates growth and learning for students
- I envision a school where the students and community in general feel connected and welcomed
- A new facility that will allow growth in the future without having enrollment issues each year

Innovative Design

- School with flexible and adaptable learning spaces
- Lots of storage and breakout spaces
- Space for students and teachers to collaborate for group projects, planning, etc.
- A spacious building

Specialized Support and Services

- Space for learners to receive specialized supports and services and for the professionals who provide those supports
- Space for wrap-around services for families
- Continued small class sizes

Greatest Hopes *Continued*

Environmental Sustainability

- Efficient HVAC
- Advanced technology

Community Buy-In and Support

- Unanimous community support

Bulldoze the Snowflake

Meeting Long-Term Community Needs

- Create a community asset that serves Burlington for decades
- A school that meets the needs of our students, staff, and community
- Fulfill the needs of our students for the next 50+ years!
- Building that meets the changing needs of our students for the life of the building

Project Priorities

The following Educational, Architectural, and Community Priorities for Fox Hill Elementary School's renovated and/or new facility were brainstormed by workshop participants during the Kick-Off Meeting. Responses have been grouped by like-themes.

Educational Priorities

Dynamic and Inspiring Programming

- Creative spaces for innovative design
- Dynamic spaces that can adapt to changing learning needs in the future
- Makerspaces and programming
- Project-based learning spaces programming
- Learning is a fun and joyful experience

Accessibility for all Students

- Collaborative, inclusive, welcoming, high expectations, the needs of all diverse learners are met
- Support for growing EL (English Language Learning) student population
- Small class sizes and inclusive classrooms

Support for District Initiatives

- BPS is a CS for ALL district, and we are prioritizing computer science education of all students in grades PreK-5
- Whole grade level programs (large learning space)

Outdoor Learning

- Outdoor learning space/nature walk area (keep current areas at both elementary schools)

Collaborative and Flexible Learning

- Social emotional learning (large group and small group workspace, staff community space)
- Breakout rooms for educators to work with all students in either the classroom or outside the classroom
- Well-equipped classrooms that allow teachers to provide large group and small group instruction - when appropriate
- Teacher collaboration spaces

Small Group Learning

- Small group work
- Plenty of space for small group intervention, special Ed groups, etc.
- Need to have space for small group learning (tiering, EL, Special Ed) prioritized
- Students engage in flexible groupings based on individual needs
- Comprehensive mental health support, including individualized spaces and small group workspaces

Community Connections

- Families are active participants in learning experiences within the school community
- Larger spaces for communities to gather
- Maintain class size and opportunities for the community to use the building at night and weekends

Architectural Priorities

Inspirational Building

- Inspirational for students to think outside the box
- Multicultural and multilingual features
- Ways for student voice/work to be shown that are embedded within the design
- Water feature

Safety

- Invisible security features
- Secure and welcoming

Flexible and Multi-Use Spaces

- Flexible spaces with movable walls and furniture
- Flexible spaces with storage and attached offices
- Spaces that can be used for evolving needs over time. In prior building projects that was a challenge only a few years after the projects were completed
- Spacious, bright classrooms
- Easily accessible breakout areas
- Designated spaces for after-school clubs

Gathering and Collaboration Spaces

- Teacher collaborative workspaces
- Spaces for collaboration among students and teachers
- Big cafeteria or gymnasium to have whole school assemblies

Good Wayfinding

- Fluidity throughout building
- A building layout that allows for grades levels to be grouped together easily (classroom neighborhoods)

Counseling Suite

- Individual offices
- Waiting area- with room for coping corner
- Small group room (availability for 10-15 students)
- Flex office for partnerships/embedded clinicians

Outdoor Learning Spaces

- Maximize the use of the site
- Outdoor learning opportunities
- Garage doors in the cafe for indoor/outdoor dining
- Sugar Maple grove for making maple syrup

Sustainability

- Energy efficiency
- Lots of natural light
- Water accessibility
- Kitchen and cafe space for more sustainable policies like dish washing or composting
- Area for composting and recycling
- Enough outlets in convenient areas

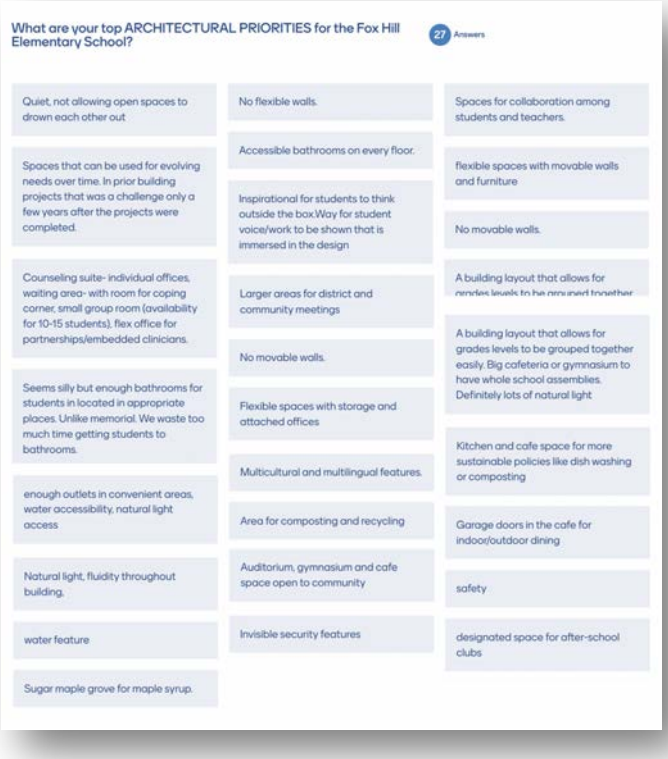
Good Acoustics

- No flexible walls
- No movable walls
- Quiet, not allowing open spaces to drown each other out

Bathrooms

- Accessible bathrooms on every floor
- Enough bathrooms for students located in appropriate places, unlike memorial. We waste too much time getting students to bathrooms

Washer/Dryer



Community Priorities

Community Use and Access

- Welcoming, easy to navigate
- Safe community access
- Separation between public access to site and property near school
- Spaces for district and community events and gathering
- Auditorium, gymnasium, and cafe space open to community
- Easy access to community spaces
- Accessible to parents/community members
- Space for evening classes and events

Good Community Fit

- Fits within the neighborhood “feel"/"design"

Clear Community Benefit

- A state-of-the-art facility that will serve the community for decades to come

After-School Programming

- After school program space for ALL students
- Plenty of afterschool space, outdoor fields

Outdoor Spaces and Connections

- Integrates the outdoors
- Outdoor spaces open to all community members (walking trails, playgrounds, fields)
- Access to indoor sport facilities, walking trails and outdoor features
- Outdoor movie screen for drive-in student features
- Innovative playground

Display and Exhibition

- Areas to showcase student work to community members

Traffic Impact

- Sufficient Parking
- Minimal traffic impact for neighboring residents
- Not to increase traffic to the neighborhood

Space for Community Partners

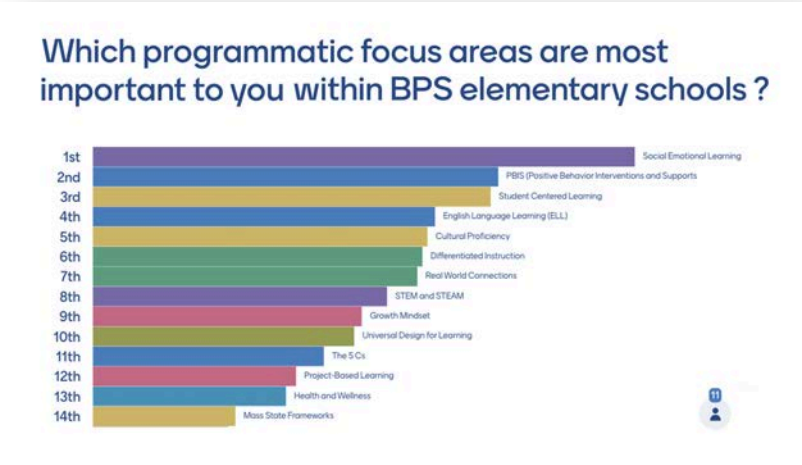
- Space for LABBB Collaborative Programming
- District placement - DSC, LABBB, pre-school, special education

Maintenance of Small Class Sizes

BPS Priority Elementary Educational Focus Areas

The following listing of priority educational focus areas was created by the BPS Leadership Team during the Kick-Off Meeting. These focus areas will be further explored during Workshop One.

1. Social Emotional Learning
2. PBIS –Pos Behavioral Interventions & Supports
3. Student Centered Learning
4. ELL (English Language Learning)
5. Cultural Proficiency
6. Differentiated Instruction
7. Real World Connections
8. STEM and STEAM
9. Growth Mindset
10. Universal Design for Learning
11. The 5 Cs
12. Project Based Learning
13. Health and Wellness
14. Massachusetts State Frameworks



Additional Program Focus Areas

When asked if anything was missing from this listing of priority educational focus areas for BPS elementary schools, participants responded with the following comments.

- Direct Instruction
- Comprehensive school-based mental health
- Pre-school program
- District programs - sub separate space (up to 6 classrooms) LABBB space (3) classrooms
- Early Childhood Center (BECC)

Project Considerations

When asked if there are project considerations and sensitivities that the design team should be aware of, participants responded with the following concerns.

- Growing EL, mental health, and special instruction student needs
- Space for in-district programming
- Impact on the other elementary schools - specialized programming
- Along with enrollment numbers, planning for district program(s) to be housed in our collaborative classrooms
- LABBB Collaborative Programming space
- District programs and growth in the EL population
- OT/PT Room
- English Learner students need separate learning spaces as well as collaboration within the general classroom
- Abutters - concerns about traffic, noise, and public access

Workshop Schedule and Logistics

The following workshop dates and focus areas were discussed:

A **Virtual Fox Hill Faculty Visioning Workshop** is scheduled to take place from 2:30-4:40 PM on March 22, 2023. The first hour of the workshop will be attended by all faculty and the second hour of the workshop will be voluntary. The following focus areas will be explored**:**

- **Priority Goals** for the Fox Hill educational program and the renovated and/or new facility
- **Future-Ready Teaching and Learning Practices** that are being prioritized by the school and district
- **21st Century Design Patterns** for innovative elementary schools: presentation and prioritization
- **Strengths, Challenges, Opportunities, and Goals (SCOG Analysis)** associated with BPS elementary schools
- **Blue Sky Ideas**

A **Virtual Pine Glen Faculty Visioning Workshop** is scheduled to take place from 2:30-4:40 PM on March 29, 2023. The first hour of the workshop will be attended by all faculty and the second hour of the workshop will be voluntary. The following focus areas will be explored**:**

- **Priority Goals** for the Fox Hill educational program and the renovated and/or new facility
- **Future-Ready Teaching and Learning Practices** that are being prioritized by the school and district
- **21st Century Design Patterns** for innovative elementary schools: presentation and prioritization
- **Strengths, Challenges, Opportunities, and Goals (SCOG Analysis)** associated with BPS elementary schools
- **Blue Sky Ideas**

Workshop Schedule and Logistics

A **Virtual Community Workshop** will be scheduled to take place from 6:00-8:00 PM sometime during the first two weeks of April 2023. The following focus areas will be explored**:**

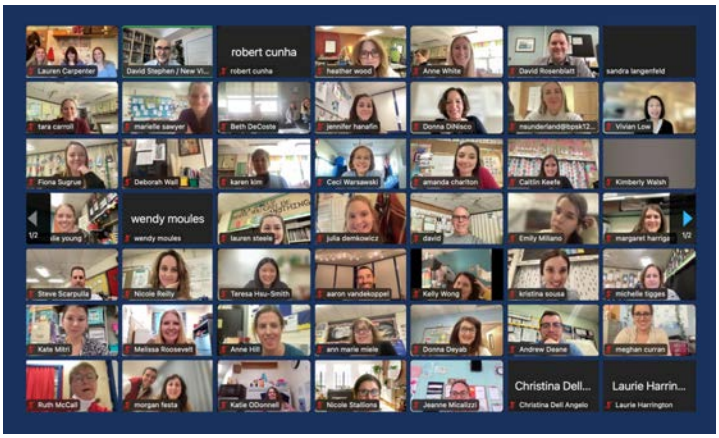
- **Overview** of Fox Hill Feasibility Study
- **Future-Ready Teaching and Learning Practices** that are being prioritized by the school and district
- **Review of Priority Goals** set by BPS Leadership and Teachers
- **Community Priority Goal Setting** for the Fox Hill educational program and the renovated and/or new facility
- **Review and Prioritization of 21st Century Design Patterns** for innovative elementary schools
- **Blue Sky Ideas**

An in-person, 2.5-hour **Leadership Team Workshop** will be scheduled to take place sometime during the first two weeks of April 2023. The following focus areas will be explored**:**

- **Highlights of Priorities** gathered during faculty workshops
- **Strengths, Challenges, Opportunities, and Goals (SCOG Analysis)** associated with BPS elementary schools
- **21st Century Design Patterns** for innovative elementary schools: presentation and prioritization
- **Guiding Principles for Design**
- **Blue Sky Ideas**

Fox Hill Elementary School Faculty Workshop 3.22.23

The Fox Hill Elementary School faculty participated in an Educational Visioning Workshops from 2:30 – 4:30 PM on March 22, 2023. The Visioning Workshop was facilitated by New Vista Design and DiNisco Design, with the goal of leading participants through a step-by-step visioning process aimed at capturing their best thinking about Fox Hill Elementary Schools' current and future educational goals and priorities and connecting them to best practices and possibilities in future-thinking school facility design. If you have questions about the workshops or would like to add additional priorities to the list below, please email them to David Stephen at david@newvistadesign.net



Project Priorities

The following Educational, Architectural, and Community Priorities for the Fox Hill Elementary School's educational programs and their renovated and/or new school facility, were brainstormed by workshop participants during the Faculty Workshop. Responses have been grouped thematically.

Educational Priorities

Safety and Welcome

- Students have a space where they feel welcomed, affirmed, and respected
- My greatest hope for this project is to create a safe, supportive school community with spaces for families, staff, and students to collaborate and use cutting edge technology
- Safe and supportive school

Student-Centered Learning

- Small group learning
- Small group instruction
- Co-teaching

Collaborative Learning

- Progressive use of instructional spaces
- Flexible seating areas
- Being able to gather all get together
- Multi-purpose rooms
- Spaces for grade-level collaboration

STEAM and Project-Based Learning

- STEAM and STEM programming
- Hands-on Learning
- Project-based learning

Inclusive and Differentiated Learning

- Inclusive learning for students within the LABBB program
- Sensory support
- Quiet spaces for testing
- Social emotional learning space and opportunities
- Social emotional break space
- Special Education wing

Outdoor Learning

- Flexible outdoor play
- Outdoor learning

Community Connections

- Community service projects

Architectural Priorities

Safety and Welcome

- Increased safety and security
- Welcoming entryway for families
- Key fobs for classroom doors - can be disconnected during lockdown
- Better door locks

Innovative and Flexible Learning Spaces

- State-of-the-Art Facility
- Multiple areas for multiple teachers in one room
- Options for more traditional classroom setups
- Subject specific rooms
- Multi-purpose rooms
- Connecting classrooms

Support for Differentiated Instruction

- Appropriate size sensory/occupational/physical therapy rooms
- Relaxation/Sensory Room for self-regulation
- Rooms for small group instruction
- Ample space for special education- small and large group learning
- Appropriate space/conditions for therapeutic activities (i.e., counseling, testing, group counseling, lunch bunch groups, etc.)
- Special ed learning center for each grade level

Robust Technology

- Wireless access throughout the building
- Adjustable intercoms

Sustainability

- Energy Efficient/Green energy
- Heat pump HVAC
- Natural light and big windows
- Working fans

Good Acoustics

- Acoustics to increase students' ability to hear teachers
- Sound absorbing walls in the gym

More Space

- More offices and classrooms

Health and Wellness

- Larger health office with separate care areas
- Ventilation
- Warm/hot water in rooms
- Clean water
- Lighting
- Good lighting with dimming
- Windows that open in all working rooms

Teacher Workspaces and Support

- Ample space for teachers to take lunch/breaks in
- Work room with machines
- Meeting rooms for teachers
- Teacher's lounge with space
- Support staff given their own areas to store materials, leave personal belongings
- Appropriate size classroom spaces for specialist teachers to teach smaller groups with natural light and thermal comfort.
- Teacher bathrooms close to classrooms
- Tutor and special education office/spaces

Good Storage

- Storage behind closed doors and cabinets
- Plentiful storage

Bathrooms

- Teacher bathrooms

Visual and Performing Arts

- Two music rooms with open space for movement activities, and separate spaces for band/orchestra lessons
- Sinks in art room
- Auditorium

Architectural Priorities *Continued*

Outdoor Learning and Play

- Access to outdoors from gymnasium
- Rubber play surface
- Fenced recess area
- Outdoor spaces for class projects and teaching
- Outside spaces to learn
- Trees and green space
- Access to outdoors from different spots in the school
- Separate outdoor play areas
- Shaded areas outdoors
- Several playgrounds, shaded outdoor space
- Space for those that might not be so rigorously inclined outside at recess
- Green space that is not restricted for soccer leagues or other sports
- More outdoor benches
- Outdoor lunch area

Safe Drop-Off and Pick-Up

- Ample parking for larger events
- Safe drop off and pick up area
- Traffic fluidity

Community Priorities

Safe Community Access and Use

- Safety- restricted community access during certain times
- Same locks for all doors in the building so we can use only one key
- Lobby for parents to wait
- Secure doors that lock automatically
- Safe areas for all people
- Community room for scouts to use
- Ample parking

Long Term Viability

- Creating a green school
- A building that matches our environment
- Foresee increase student body increases

Community Gathering Spaces

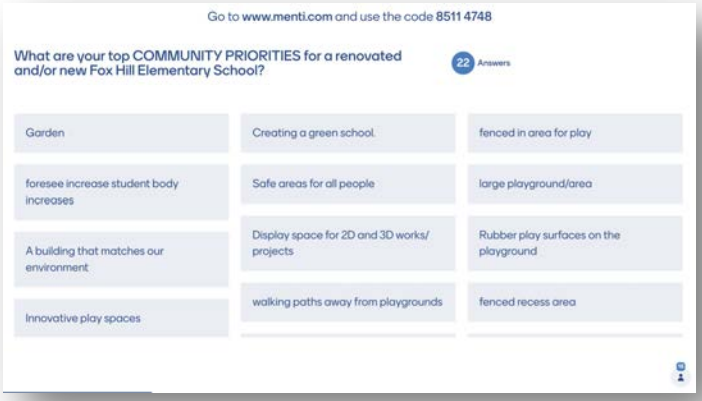
- Auditorium
- Multi-Purpose Space

Display and Exhibition

- Display space for 2D and 3D works/ projects
- Welcoming spaces

Access to Outdoor Spaces

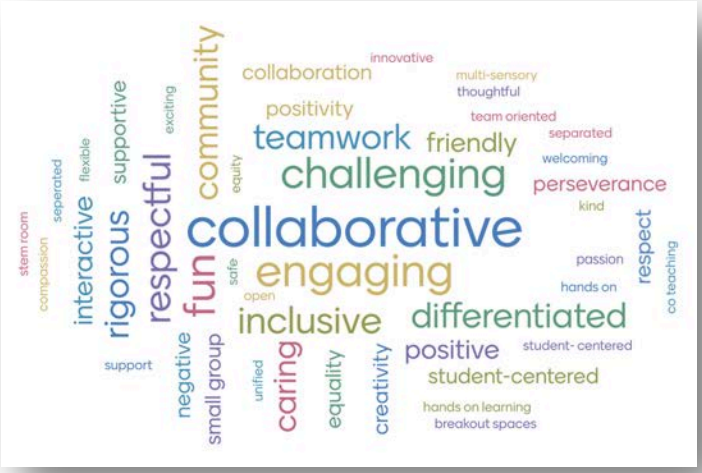
- Fenced in area for play
- Large playground/area
- Rubber play surfaces on the playground
- Walking paths away from playgrounds
- Outdoor space for more individual play (art reading cards)
- Outdoor benches and tables
- Shaded outdoor areas
- Space in recess area for students that are not so rigorously inclined
- Garden



Fox Hill Elementary Schools Culture of Teaching and Learning

When asked to share three words that best describe Fox Hill Elementary School's culture of teaching and learning, workshop participants created the following Word Cloud.

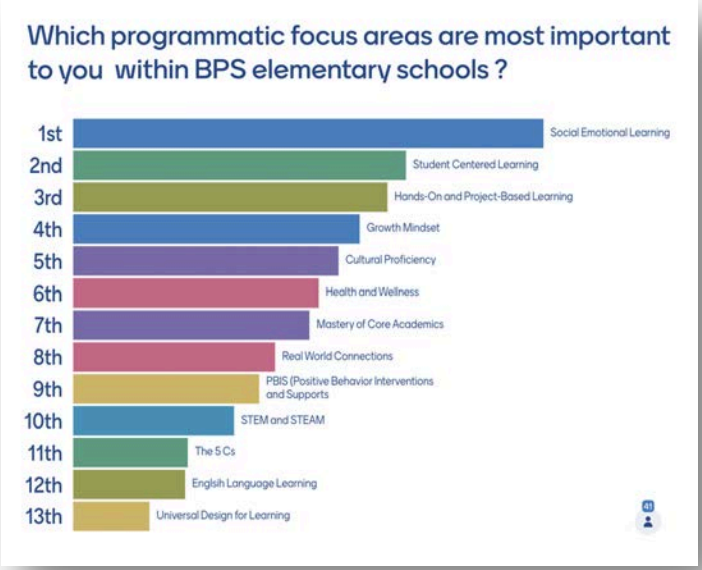
- Collaborative (25 mentions)
- Engaging (11)
- Challenging (9)
- Respectful (9)
- Fun (9)
- Teamwork (6)
- Inclusive (6)
- Community (6)
- Positive (5)
- Rigorous (5)
- Differentiated (5)
- Caring (4)
- Friendly (3)
- Supportive (3)
- Student-Centered (3)
- Interactive (3)
- Creativity (2)
- Perseverance (2)
- Hands On Learning (2)
- Small Group (2)
- Equality (2)
- Separated (2)
- Negative (2)
- Open
- Passion
- Kind
- Equity
- Exciting
- Thoughtful
- Welcoming
- Compassion
- Unified
- Innovative
- Safe
- Multi-sensory
- Co-Teaching
- Breakout Spaces
- STEM Room



Fox Hill Elementary Schools' Priority Educational Focus Areas

A set of priority educational focus areas were introduced to Fox Hill faculty as being of key importance to Burlington Public Schools and Fox Hill leadership. Workshop participants then rated them in order based on their own priorities, resulting in the following listing.

1. Social Emotional Learning
2. Student-Centered Learning
3. Hands-On and Project-Based Learning
4. Growth Mindset
5. Cultural Proficiency
6. Health and Wellness
7. Mastery of Core Academics
8. Real World Connections
9. PBIS - Positive Behavioral Interventions and Supports
10. STEM and STEAM
11. The 5 Cs
12. English Language Learning
13. Universal Design for Learning



Fox Hill Educational Focus Areas in Practice

When asked to respond to the following list of educational focus areas and describe what they look like in practice at Fox Hill Elementary School, either now or in an aspirational future, workshop participants responded with the following comments.

1. Social Emotional Learning
2. PBIS
3. Student Centered Learning
4. Real world Connections
5. Cultural Proficiency
6. English Language Learning
7. STEM and STEAM

Present Practices

- Social Emotional Learning is happening
- There are SEL spaces within classrooms
- Students have choices
- We try to be as inclusive and differentiated as possible
- We support neurodiversity, self-advocacy, and self-regulation
- Now, one size fits all for students
- For English Learning - A space that shows they are valued
- Special Education wing-Learning centers at each grade level to provide a space for all learners
- Restorative justice is predominantly non-existent
- Space for student belongings (coats, backpacks, etc.)
- Small work rooms/areas for students in library
- Amplification/Mics for teachers to use

Desired Future Practices and Spaces

- Spaces in each class as well as around the school to better support students SEL at different levels of need
- Easily monitored break spaces/sensory spaces for SEL breaks in an environment that is also calming
- Flexible space for teachers to use
- More staff resources
- Updated projectors/connections for projecting
- More community Involvement
- More assemblies and presentations from community
- Improved communication methods/translation for ELL families
- Improved inclusive/differentiated Instruction
- Restorative justice needs to be welcomed and embraced by all staff
- Enhanced integration and collaboration space and opportunities with school-based sub separate program
- Quiet spaces that allow students to regulate themselves within the classroom
- Storage in smaller specialist classrooms for supplies and personal possessions
- Small dining rooms with round tables
- Rethinking educator day, load and time could lead to stem specialists seeing students for Sci/cs periods that would offer more prep/collab time for teachers

Fox Hill Educational Focus Areas in Practice

When asked to respond to the following list of educational focus areas and describe what they look like in practice at Fox Hill Elementary School, either now or in an aspirational future, workshop participants responded with the following comments.

Present Practices

- These values are built into our culture, though the staff must be very creative in how to enact them
- Growth Mindset is addressed with students
- We stress perseverance
- We can walk around the building "horseshoe"
- Lots of windows for sunlight
- Windows that open for fresh air
- Encouraging making mistakes
- Health and wellness for students with the stress and pressure that comes with being a kid today
- There is outdoor storage for outdoor play equipment
- There is lots of space for football and soccer games at recess

8. Growth Mindset
9. Universal Design for Learning
10. The 5 Cs
11. Health and Wellness
12. Mastery of Core Academics
13. Hands-On and Project-Based Learning

Desired Future Practices and Spaces

- It would be great to still have a space for walking a large loop or something like that
- Better kitchen design to support adequate nutrition and choices for students and teachers
- Growth Mindset continues to be addressed with students
- Growth Mindset as a community through assemblies
- Stress perseverance
- Sensory Walls
- Sensory related walking pathway
- Break up rooms for quiet reflection or calming for special ed students
- Smaller studios for movement- dance, yoga, etc.
- Different size small classrooms to support different class sizes
- Less isolated rooms to encourage collaboration and connection between classrooms and grades
- Smaller common spaces for grade level meetings/activities with kids that can happen outside of the classroom but not in cafetorium
- More tables in open areas for student groups
- Room placement that fosters collaboration and connection between grades and with LABBB
- Workout studio and kitchen for teachers
- Outdoor learning spaces where we could teach regularly would go far toward student health and well- being. They need sun and air
- Areas/supplies for active free play (bikes, jump ropes, scooters, etc.)
- Keep large outdoor spaces
- More games available in the recess space that can be played with or without balls

Blue Sky Ideas

When asked to share their Blue-Sky aspirational ideas for a renovated and/or new Fox Hill facility, faculty responded with the following comments.

Flexible Classrooms
- Classrooms grouped together by grade level
- Flexible seating available for all classrooms
- Projection in all classrooms
- Control our own heating/AC in the classrooms/offices (2)
- Bathrooms in every classroom (2)
- Magnetic white boards in all rooms (2)
- Hard-wired clocks

Outdoor Learning and Play
- Outdoor tables (2)
- Outdoor water fountains near recess space
- Outdoor storage
- Garden
- Trees and shade structures

Sustainability
- Solar panels (2)
- Compost
- Air filtering

Teacher Amenities
- Separate eating and teacher workspace (2)
- Teacher locker room/ changing area (2)
- Space for nursing moms
- Rooftop dining space for teachers
- On site chef for teachers

Indoor Movement Opportunities
- Indoor play space
- Regulation size gymnasium
- Swimming pool

Storage
- Lockers/storage for students (3)

Security and Welcome
- Welcoming entryway
- Key fobs instead of keys for classroom doors - could be turned off during lockdown

Differentiated Instruction
- Sensory rooms not shared with OT
- ELL classrooms that reflect equity

NextGen Science
- STEM room
- Hydroponics

Gathering Spaces
- Common spaces and areas for small group instruction
- Collaborative spaces

Health and Wellness
- Functional health office in collaboration with the nurses

Ease of Access
- Covered walkways into the building and covered walkways to parent drop off
- Underground parking

Room for Growth
- Extra classrooms/offices for growth

Fine Arts
- Kiln room and storage spaces attached to art space

Desired 21st Century Design Patterns 1.0

The following set of priority "21st Century Design Patterns" for the design of the renovated and/or new Fox Hill Elementary School was developed by faculty members during the Faculty Workshop. Workshop participants were introduced to 32 "Design Patterns" that represent varied architectural design features of, and approaches to 21st century school facility design. Individual participants first rated each Design Pattern with a heart, thumbs up, or thumbs down, and were then given the opportunity to rate Design Patterns collectively in order of importance. The resulting list of Design Patterns has been placed in priority order based on the cumulative total of hearts, thumbs up, and priority ratings that each received.

Top 10 Design Patterns

1. Flexible Classrooms and Spaces (60 votes)
2. Breakout and Pull Over Spaces (58 votes)
3. Good Storage/Cubbies (54 votes)
4. Welcoming Arrival/Safe Drop-Off (53 votes)
5. Professional Work Areas (53 votes)
6. Security and Welcome (51 votes)
7. Push-In Special Education (51 votes)
8. Engaged Outdoor Play (51 votes)
9. Outdoor Connections and Learning (47 votes)
10. Collaborative Environments (46 votes)

Next 15 Design Patterns

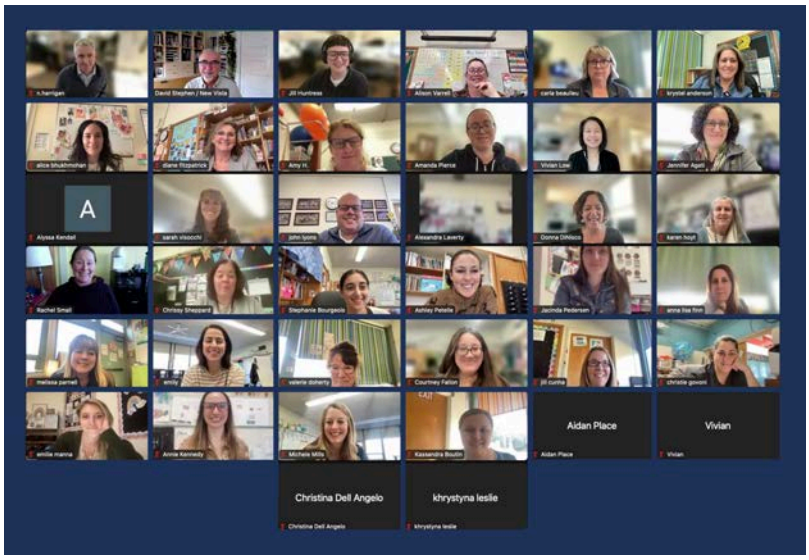
11. Library Learning Commons (44 votes)
12. Flexible Furniture (44 votes)
13. Cafetoriums/Multi-Purpose Space (44 votes)
14. Wayfinding and Streetscapes (42 votes)
15. Classroom Neighborhoods (41 votes)
16. Nooks, Caves, and Quiet Spaces (41 votes)
17. Greeting and Gatekeeping (40 votes)
18. Sustainability (40 votes)
19. Classroom Zones (39 votes)
20. Branding and Identity (37 votes)
21. Building as Teacher (36 votes)
22. Gathering Hubs and Presentation Spaces (35 votes)
23. Display and Exhibition (35 votes)
24. Clusters of Learning (32 votes)
25. Heart of the School (32 votes)

Remaining Design Patterns

26. STEM/STEAM and Makerspaces (32 votes)
27. Safe community Access (30 votes)
28. Extended Learning (27 votes)
29. Distributed Resources (22 votes)
30. Visible Learning and Transparency (18 votes)
31. Hallway Learning (15 votes)
32. History and Storytelling (12 votes)

Pine Glen Elementary School Faculty Workshop 3.29.23

The Pine Elementary School faculty participated in an Educational Visioning Workshops from 2:30 – 4:30 PM on March 29, 2023. The Visioning Workshop was facilitated by New Vista Design and DiNisco Design, with the goal of leading participants through a step-by-step visioning process aimed at capturing their best thinking about Pine Glen Elementary Schools' current and future educational goals and priorities and connecting them to best practices and possibilities in future-thinking school facility design. If you have questions about the workshops or would like to add additional priorities to the list below, please email them to David Stephen at david@newvistadesign.net



Project Priorities

The following Educational, Architectural, and Community Priorities for the Pine Glen Elementary School's educational programs and their renovated and/or new school facility, were brainstormed by workshop participants during the Faculty Workshop. Responses have been grouped thematically.

Educational Priorities

Inclusive and Differentiated Learning

- Inclusivity for students of all backgrounds, abilities, and learning styles
- Support for all learners
- Students are kind and empathetic

Student Centered Learning

- Supporting students to become passionate and lifelong learners
- Small class sizes
- Small group learning spaces
- Time to create and perform
- Small grade level size
- Areas to show, present, celebrate student work

Collaborative Learning

- Working together as a family
- Flexibility for multiple teacher-led groups simultaneously with little distraction
- Having role models for positive behavior

Social Emotional Learning

- Focus on Social Emotional Learning and Growth Mindset
- Classrooms and programming that include SEL components (rug, flexible seating, calm down corners, etc.)
- Providing different learning options (e.g. quiet zones) close to classrooms

Educational Priorities *Continued*

School Community and Culture

- Keeping the Pine Glen community together
- Community feel and supporting all
- Community activities
- Maintaining community spirit
- Small community school in which all staff and students know and are therefore able to support one other
- Neighborhood/community schools

Enrichment Opportunities

- Enrichment opportunities to teach and think outside traditional approaches

Community Partnerships

- Real World Connections
- Connect learning with BCAT (Burlington Cable Access Television)

Outdoor Learning

- Indoor and outdoor space for lessons and play
- Outdoor learning space
- Large outdoor area
- Community garden

Architectural Priorities

Inclusion and Access

- Inclusive spaces
- Provide appropriate learning environment/spaces based on student needs
- Sensory rooms in classrooms
- Accessible cafeteria for all

Flexible Classrooms and Spaces

- Flexible walls to create different spaces
- Provide spaces and resources for all as needed
- Space in classrooms that have flexibility for multiple teacher-led groups simultaneously with little distraction
- Possibly two presentation spaces within 1 room to accommodate smaller groups

Classroom Neighborhoods

- Grade levels/rooms that are in close proximity to each other to promote multi-age learning experiences
- Neighborhood school community feel

Small Group and Meeting Spaces

- Quiet and calm spaces
- Spaces for meetings
- Multiple testing spaces
- Dedicated classrooms for interventionists apart from breakout spaces

Collaborative Learning and Gathering Spaces

- Space to allow gathering and bonding of community at large
- Welcoming and inclusive school that's easy to navigate - grade level teams near each other
- Have a large Learning Commons for students (at the front of the school) to have space for students to learn by doing
- "Town Common" area that is separate from recess area

Healthy Building

- Better ventilation
- Sustainability

Outdoor Learning Spaces

- Indoor and outdoor space for lessons and play
- Outdoor common area with seating for lunch during nice weather
- Large outdoor area
- Community garden

Robust Technology

- Good WIFI
- Instructional spaces that allow for wireless presentation and boards are in a centralized place
- Communication systems/TVs for daily announcements

Architectural Priorities *Continued*

Good Storage

- Easy access to resources
- Space for shared resources - books, etc.
- Storage for learning materials and books
- Storage and/or shelving that is reachable for teachers
- Classroom storage space
- Usable Storage and shelving
- Cubbies inside classrooms for younger kids
- Designated storage for books not associated with the library
- Storage for after school program

Thermal Comfort

- Windows that open
- Air conditioning

Natural Light

- Natural light
- Many windows for natural light in gym
- Lights with a dimmer rather than overhead fluorescent lighting
- Big windows

Counseling and Therapy Suite

- A therapy suite with a large sensory motor room
- Counseling suite with space for groups, individuals, storage, sensory items, etc.

Professional Workspaces

- Teachers room with full kitchen (dishwasher, stove, etc.) and plenty of seating
- Small meeting places for teachers

Quiet Spaces

- Quiet and comfortable spaces for students to come and read independently

Performance Spaces

- Adequate performance space

Expanded Cafeteria Options

- Cafeteria set up to serve larger menu options

Display and Exhibition

- Spaces to display student work to the community
- Inside and outside art exhibit

Specialist Spaces

- Space for all non-classroom teachers

Good Acoustics

- Acoustics within the classroom and cafe to help buffer sound
- Acoustics in gym

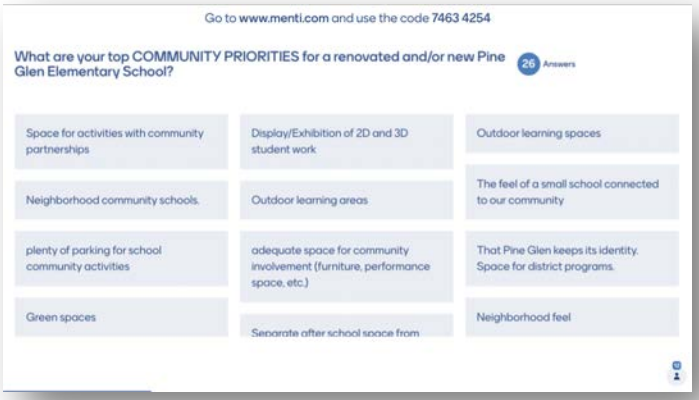
Bathrooms

- Classroom bathrooms
- Staff bathrooms
- Bathrooms either in or near Kindergarten classrooms

Community Priorities

Safe Community Access

- Space for activities with community partnerships
- Adequate space for community involvement (furniture, performance space, etc.)
- Spaces for large community gatherings (in and out)
- Space for community events in the evening where all can join
- Ability to lock off classroom space when community is using part of the school for other use
- Easily accessed for community members to drive to and through. (Drop off and pick up, special family events, etc.).



Community Priorities *Continued*

Inclusivity and Access

- Inclusiveness
- Space for district programs
- Separate sensory space for district program

Community Feel

- Neighborhood community school
- The feel of a small school connected to our community
- That Pine Glen keeps its identity
- Keep the small school feel

Afterschool Space

- Separate after school space from classrooms

Display & Exhibition

- Display/Exhibition of 2D and 3D student work
- Space for community flyers/information for parents

Outdoor Spaces

- Outdoor learning spaces
- Green spaces
- Youth sports complex
- Fields for sports
- Passive recreation space

Safety and Parking

- Traffic flow controlled and safe spaces for walkers/car drop off
- Plenty of parking for school community activities
- Ample community/staff parking

Pine Glen Elementary Schools Culture of Teaching and Learning

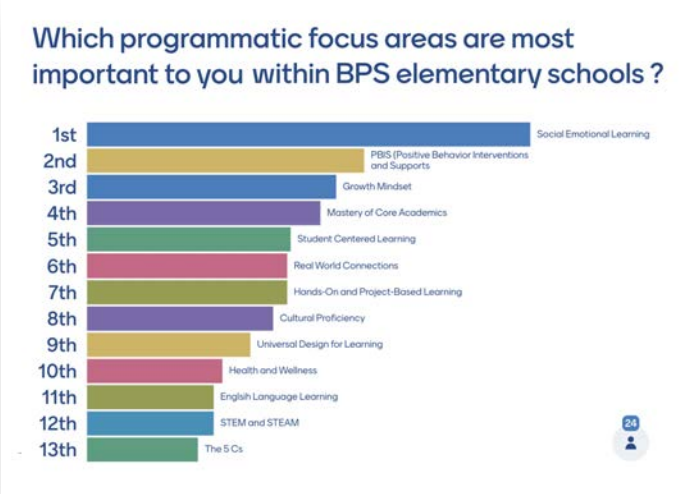
When asked to share three words that best describe Pine Glen Elementary School's culture of teaching and learning, workshop participants created the following Word Cloud.

- Community 15
- Family 10
- Collaboration 9
- Inclusive 9
- Small 6
- Intimate 6
- Team 5
- Caring 5
- Fun 4
- Supportive 3
- Friendly 2
- Relationships 2
- Connections 2
- Adaptive / Flexible 2
- Creative /Innovative 2
- Culture
- Positive
- Dedication
- Unique
- Diverse
- Understanding
- Loyal
- Laid-back
- Rigorous
- Independent
- Strong

Pine Glen Elementary Schools' Priority Educational Focus Areas

A set of priority educational focus areas were introduced to Pine Glen faculty during the workshop as being of key importance to Burlington Public Schools and Pine Glen leadership. Workshop participants then rated them in order based on their own priorities, resulting in the following listing.

14. Social Emotional Learning
15. PBIS - Positive Behavioral Interventions and Supports
16. Growth Mindset
17. Mastery of Core Academics
18. Student-Centered Learning
19. Real World Connections
20. Hands-On and Project-Based Learning
21. Cultural Proficiency
22. Universal Design for Learning
23. Health and Wellness
24. English Language Learning
25. STEM and STEAM
26. The 5 Cs



Pine Glen Educational Focus Areas in Practice

When asked to respond to the following list of educational focus areas and describe what they look like in practice at Pine Glen Elementary School, either now or in an aspirational future, workshop participants responded with the following comments.

Present Practices

- Morning/Afternoon Meetings (Responsive Classroom)
- Social emotional learning isn't truly the top priority, although it should be
- Mostly classroom by classroom activities
- SEL looks like daily check ins, collaborative problem solving, modeling/teaching strategies for when they are feeling upset or sad about something, building community and relationships
- Children can move, use tools/furniture that they need, work with teachers/small groups/large groups/supplies as needed for tasks
- Outdoor activities to apply outdoor learning

8. Social Emotional Learning
9. PBIS
10. Student Centered Learning
11. Real world Connections
12. Cultural Proficiency
13. English Language Learning
14. STEM and STEAM

Desired Future Practices and Spaces

Social Emotional Learning

- SEL more inclusive meetings with other classrooms/grades
- More physical space for Social Emotional Instruction

Student Centered Learning

- Providing more spaces to encourage different opportunities for kids to work together, play, and. problem solve
- School store, cafe/restaurant for learning social skills in real world context
- Time and space to explore, play, and create with materials
- Arts interdisciplinary social studies, math, reading, etc.

STEM/STEAM

- More school wide STEM/STEAM activities or days
- Common areas where students and teachers can collaborate on STEM and STEAM activities together
- STEAM/STEM space with storage
- More opportunities for kids experience the arts in other areas of the curriculum besides their specialist classrooms
- Storage for STEM makerspace supplies

Co-Teaching and Instruction Support

- More co-teaching particularly for EL
- Ability to "zoom" into class and have cameras that will follow the teacher around
- Communication! Monitors in hallways with messages, pictures, student work

Pine Glen Educational Focus Areas in Practice

When asked to respond to the following list of educational focus areas and describe what they look like in practice at Pine Glen Elementary School, either now or in an aspirational future, workshop participants responded with the following comments.

Present Practices

- Project-based learning and instruction within the classroom
- Rooms can be cramped with furniture and students when population size is larger which prevents space for these activities and prep to be done successfully
- Hallways often become decompression places

14. Growth Mindset
15. Universal Design for Learning
16. The 5 Cs
17. Health and Wellness
18. Mastery of Core Academics
19. Hands-On and Project-Based Learning

Desired Future Practices and Spaces

UDL and Growth Mindset

- More emphasis on UDL and growth mindset
- A space to display school-wide goals to encourage growth and perseverance
- Real world connections

Health and Wellness

- Wellness space for students but also one for teachers
- Possibly a teacher gym and space for other wellness activities
- Calming space for students with kinesthetic paths/activities
- Room for students that need a calm space to regroup

Hands-On and Project-Based Learning

- Play in classrooms
- Hands-on/Project Based learning
- Students can travel easily and quickly to art room, gym, music room, etc. from classroom
- Appropriate space for movement and for teacher prep for project-based learning
- More collaboration with other grades/specialists to do projects and hands-on learning"
- More emphasis and opportunity for 5C's, supporting play in classrooms

Blue Sky Ideas

When asked to share their Blue-Sky aspirational ideas for a renovated and/or new Pine Glen facility, faculty responded with the following comments.

Neighborhood Feel
- Maintaining neighborhood feel outside and inside (3 mentions)
- Keep Pine Glen small (2)
- Pine Glen as a separate school
- Two small buildings at two different locations
- Pine Glen Community

More Space
- More space for learning (2)

Gathering and Collaboration Spaces
- Large gathering space (2)

Outdoor Learning
- Garden
- Lots of green space around the building (not all paving)
- Outdoor/nature learning opportunities

Combined Fox Hill and Pine Glen
- Combine both schools
- Create a shared space between both buildings

Flexible Furniture
- Classroom floors and chairs less noisy

Thermal Comfort
- Classroom controlled HVAC

Integrated Specialist Classrooms
- Specialist classrooms are as close to classrooms as possible (keeping transitions between subjects minimal travel time)
- Instructional spaces to house multiple teachers that do simultaneous small-group instruction

Communication
- Messaging communication monitors

Mudroom
- Before kids come in from the play area, a place to clean sneakers

Good Storage
- Appropriate storage for teachers of multiple grade levels

Science Nooks
- Science nooks for exploration

Natural Light

Desired 21st Century Design Patterns 1.0

The following set of priority "21st Century Design Patterns" for the design of the renovated and/or new Pine Glen Elementary School was developed by faculty members during the Faculty Workshop. Workshop participants were introduced to 32 "Design Patterns" that represent varied architectural design features of, and approaches to 21st century school facility design. Individual participants first rated each Design Pattern with a heart, thumbs up, or thumbs down, and were then given the opportunity to rate Design Patterns collectively in order of importance. The resulting list of Design Patterns has been placed in priority order based on the cumulative total of hearts, thumbs up, and priority ratings that each received.

Top 10 Design Patterns

1. Flexible Classrooms and Spaces (41 votes)
2. Security and Welcome (35 votes)
3. Good Storage/Cubbies (31 votes)
4. Breakout and Pull Over Spaces (30 votes)
5. Professional Work Areas (29 votes)
6. Welcoming Arrival/Safe Drop-Off (28 votes)
7. Cafetoriums/Multi-Purpose Space (28 votes)
8. Collaborative Environments (28 votes)
9. Heart of the School (28 votes)
10. Library Learning Commons (28 votes)

Next 15 Design Patterns

11. Extended Learning (27 votes)
12. Enrichment Spaces (27 votes)
13. Wayfinding and Streetscapes (26 votes)
14. Engaged Outdoor Play (24 votes)
15. Classroom Zones (24 votes)
16. Display and Exhibition (24 votes)
17. Outdoor Connections and Learning (24 votes)
18. Greeting and Gatekeeping (23 votes)
19. Gathering Hubs and Presentation Spaces (23 votes)
20. Sustainability (22 votes)
21. Classroom Neighborhoods (22 votes)
22. Push-In Special Education (19 votes)
23. Community Access (19 votes)
24. STEM/STEAM and Makerspaces (19 votes)
25. Flexible Furniture (19 votes)

Remaining Design Patterns

33. Clusters of Learning (18 votes)
34. Branding and Identity (18 votes)
35. Building as Teacher (17 votes)
36. Hallway Learning (16 votes)
37. Nooks, Caves, and Quiet Spaces (15 votes)
38. History and Storytelling (14 votes)
39. Visible Learning and Transparency (10 votes)

Burlington Public Schools
Leadership Team Meeting

The BPS Leadership Team participated in an Educational Visioning Workshop for the Fox Hill Elementary School project on April 12, 2023, from 9:00 – 11:30 AM. The meeting included an interactive presentation by DiNisco Design and New Vista Design with the goal of sharing initial educational and architectural priorities that have been established thus far by BPS leadership and Fox Hill and Pine Glen faculty for the Fox Hill Elementary School Feasibility Study which has been awarded to the city of Burlington by the MSBA (Massachusetts School Building Authority). The following notes offer a compilation of information and feedback shared by district leadership during the meeting.

Meeting Participants

- Christina Cicolini — Director of Special Education
- Christine Conceison — Director of Mental Health
- Eric Conti — Superintendent
- Nicole Coscia — Business Manager
- Bob Cunha — Director of Operations
- Carrie Fortmato — Math Coach K-5
- Kerri Lamprey — Director of English Learning
- John Lyons — Pine Glen Principal
- Melissa Massardo — School Committee
- Robyn Miliano — Director of Student Info Office
- Wend Paviler Tyberczy — Director of K-5 Science
- David Rosenblatt — Fox Hill Principal
- Renee Sacco — Director of Literacy
- Dennis Villano — Director of Technology

- Donna DiNisco — DiNisco Design
- Neil Harrigan — DiNisco Design
- Vivian Low — DiNisco Design
- David Stephen — New Vista Design

Desired 21st Century Design Patterns 1.0

The following set of "21st Century Design Patterns" for the design of the renovated and/or new Fox Hill and Pine Glen Elementary Schools was created by the BPS Leadership Team. Meeting participants were introduced to 24 "Design Patterns" that represent varied architectural design features of, and approaches to 21st century school facility design. The first 19 Design Patterns were those that had been prioritized by Fox Hill and Pine Glen and faculty members during previous visioning workshops. Meeting participants were first given the opportunity to rate each Design Pattern with a heart, thumbs up, or thumbs down, and were then given the opportunity to rate Design Patterns collectively in order of importance. The resulting list of Design Patterns has been placed in priority order based on the cumulative total of hearts, thumbs up, and priority ratings that each received.

Top 10 Design Patterns

1. Flexible Classrooms and Space (18 votes)
2. Classroom Zones (16 votes)
3. Clusters of Learning (16 votes)
4. Good Storage and Cubbies (15 votes)
5. Push-In Special Education (15 votes)
6. Breakout and Pullover Spaces (15 votes)
7. Professional Work Areas (15 votes)
8. Outdoor Connections and Learning (15 votes)
9. Engaged Outdoor Play (15 votes)
10. Library Learning Commons (14 votes)

Next 15 Design Patterns

11. Collaborative Environments (13 votes)
12. STEM/STEAM and Makerspaces (14 votes)
13. Security and Welcome (13 votes)
14. Safe Community Access (13 votes)
15. Enrichment Spaces (12 votes)
16. Branding and Identity (12 votes)
17. Wayfinding and Streetscapes (11 votes)
18. Classroom Neighborhoods (11 votes)
19. Heart of School (10 votes)
20. Extended Learning Spaces (10 votes)
21. Flexible Furniture (9 votes)
22. Display and Exhibition (9 votes)
23. Cafetoriums (8 votes)
24. Welcoming Arrival/Safe Drop-Off/Pick-Up (8 votes)
25. Sustainability (7 votes)

Fox Hill and Pine Glen Elementary Schools
Guiding Principles 1.0

The following set of "Guiding Principles 1.0" for design of the renovated and/or new Fox Hill Elementary School or a combined Fox Hill/Pine Glen Elementary School facility was developed by the BPS Leadership Team. Guiding Principles are big picture educational and architectural priorities that provide an invaluable framework for making design decisions and choices as the design process unfolds.

The Leadership Team was introduced to three Case Studies of recent elementary school projects in which the Guiding Principles for each school were reviewed as connected to design decisions that were made for the project. Participants then collectively brainstormed the draft list of Guiding Principles 1.0 for the Fox Hill Elementary School project that can be found below. These Guiding Principles have been grouped thematically below. They will likely continue to evolve as the project progresses.

1. **Whole Child and Joyful Learning** (18 mentions)
   - Balance Academic Achievement with Personal Well-Being
   - Thriving Children and Adults
   - Creative and Flexible Classrooms
   - Collaborative Learning

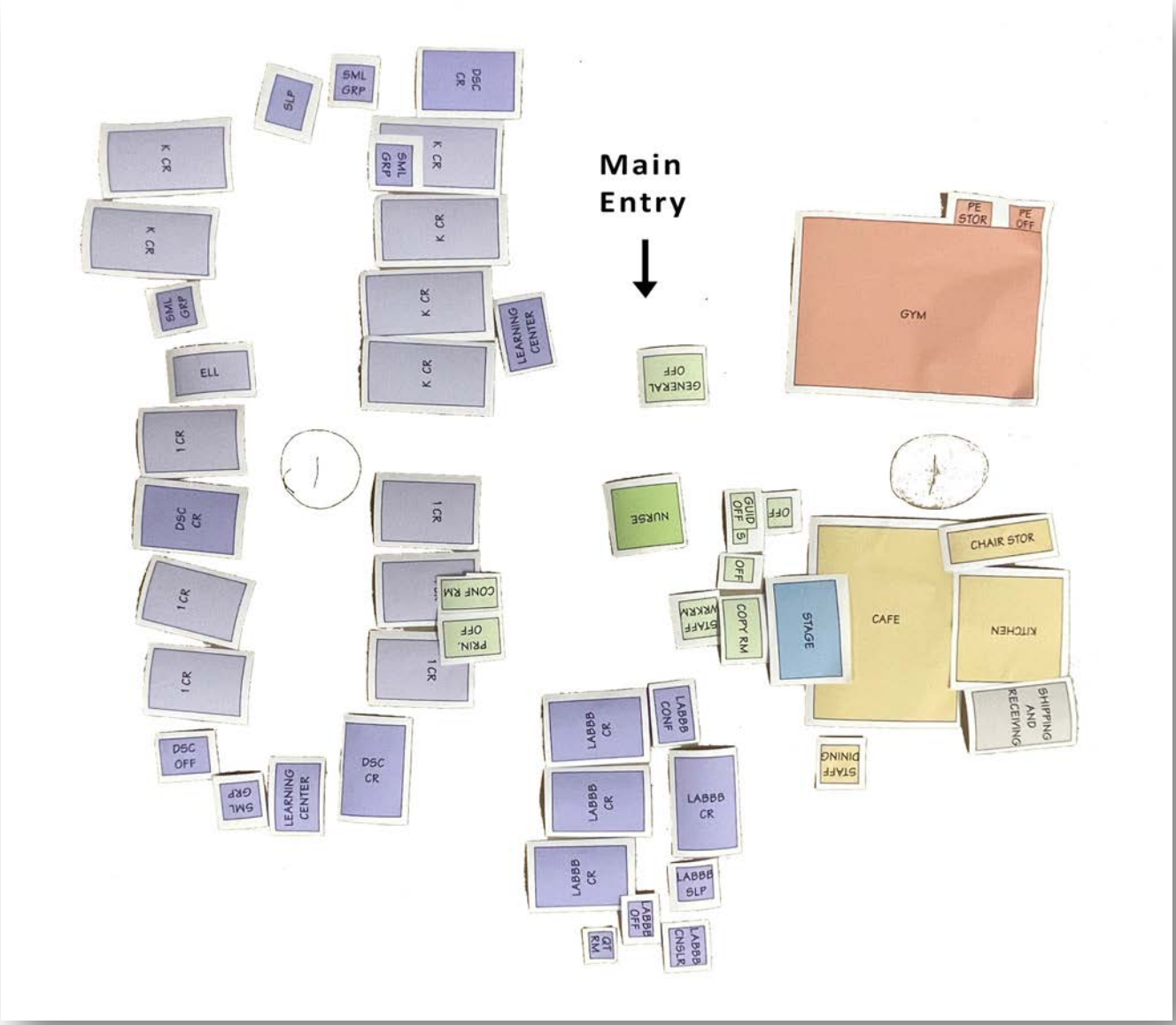
2. **Warmth and Welcome** (12 mentions)
   - Belonging and Ownership
   - Neighborhood Grade-Level Clusters
   - Wayfinding and Connection

3. **School as Community Resource** (9 mentions)
   - Community Partnerships
   - Center of Community
   - Leveraging Community Resources

4. **Sustainability** (9 mentions)
   - Eye Toward the Future
   - Educationally Sustainable Spaces
   - Sustainable Facility with Room for Evolution

Combined School Adjacency Map

This Combined School Adjacency Map was created by a small group of workshop participants with the assistance of a member of the architectural design team to communicate their ideas about spatial adjacencies for the renovated and/or new Fox Hill and Pine Glen Elementary Schools facility.

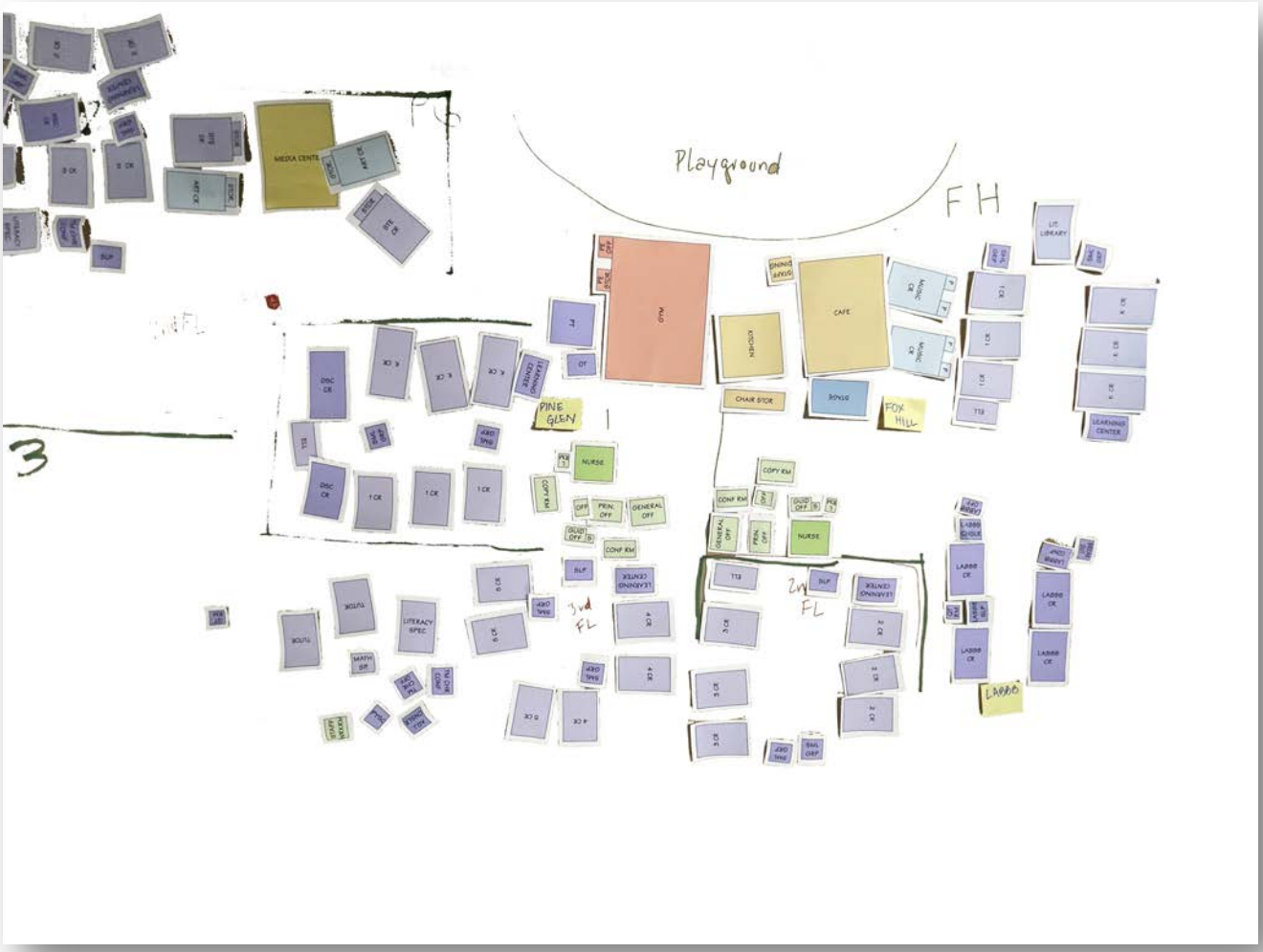


Hybrid School Adjacency Map

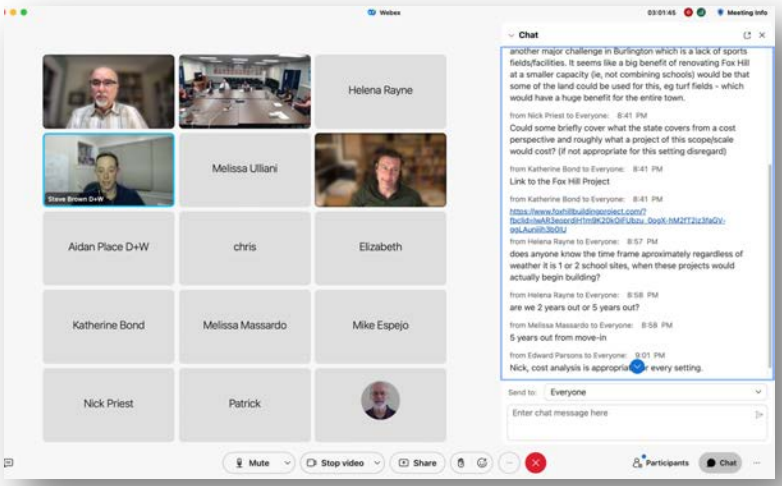
This Hybrid School Adjacency Map was created by a small group of workshop participants with the assistance of a member of the architectural design team to communicate their ideas about spatial adjacencies for the renovated and/or new Fox Hill and Pine Glen Elementary Schools facility.

Separate Schools Adjacency Map

This Separate Schools Adjacency Map was created by a small group of workshop participants with the assistance of a member of the architectural design team to communicate their ideas about spatial adjacencies for the renovated and/or new Fox Hill and Pine Glen Elementary Schools facility.



Burlington Public Schools Community and SBC Meeting



Burlington community members and Burlington Public Schools (BPS) School Building Committee (SBC) members participated in an Educational Visioning Meeting for the Fox Hill Elementary School project on April 13, 2023, from 7:30 – 8:45 PM. The meeting included an interactive presentation by DiNisco Design and New Vista Design with the goal of sharing initial educational and architectural priorities that have been established thus far by BPS leadership and Fox Hill and Pine Glen faculty, for the Fox Hill Elementary School Feasibility Study which has been awarded to the city of Burlington by the MSBA (Massachusetts School Building Authority). In addition to the members of the SBC, approximately 10 Burlington community members participated in the meeting, during which they were given the opportunity to share their own priorities as well as ask questions about the project. The following notes offer a compilation of information and feedback shared by participants during the meeting.

Project Priorities

The following Educational, Architectural, and Community Priorities for the Fox Hill Elementary School's educational programs and their renovated and/or new school facility, were brainstormed by workshop participants during the Faculty Workshop. Responses have been grouped thematically.

Educational Priorities

Academic Excellence

- Prioritize small class sizes
- Reading, writing, math, and science
- Literacy Excellence

Safety and Security

- Needs to feel safe with built-in safety measures
- A design that emphasizes safety and security
- Safe drop-off and pick-up
- Big sidewalks and well-marked crosswalks for children
- No easy access for non-faculty
- Safe community use

Collaborative Learning

- Supportive of collaboration with teachers and students
- Students learning to collaborate

Student-Centered Learning

- Small group learning
- Social Emotional Learning
- Flexible learning spaces

Inclusive and Differentiated Learning

- Prioritize the needs of neurodiverse
- Address special Ed needs early in their education
- Meet needs of neurodiverse students with robust support staff

Educational Priorities *Continued*

STEAM

- Science, Technology, Engineering, Art and Math programming and spaces

Robust Technology

- Needs to be able to accommodate the everchanging technologies and technological growth

A Practical and Cost-Effective Solution

- A school that is best use of fiscal resources
- A facility that best meets the needs of the students and the town
- Needs to be an environment to support our teachers needs while taking into consideration our ever-changing students' needs
- Consider a combined school to maximize resources

Maintaining Small Neighborhood Schools

- Maintain two school communities on two different properties that prioritize the needs and integrity of all students in both distinct neighborhoods
- The Fox Hill area cannot handle the influx of people and cars for two schools on one location

Outdoor Access and Learning

- Maintain accessible nature walks

Architectural Priorities

Safety and Welcome

- Safe and welcoming entrance
- SAFETY given the world we live in now
- Keeping an outside exit in each classroom as much as possible
- Don't like to bring this up, but safety measure to secure classrooms if there is a safety issue
- Safety and ability for teachers to protect our kids

Small School Feel

- Multi-level schools lose the small school community feel that foster the social emotional health of our kids
- Room size sustainable to have individual attention on our kids
- Maintain two separate schools where they currently exist. Small neighborhood schools top priority
- Creating the small school community feel

Good Flow and Wayfinding

- Good flow between spaces and uses while still having separation and independence
- Avoid bottleneck in entry/exit… there are already huge amounts of backup at Fox Hill
- Garage doors

Robust Technology

- Technology infrastructure

Outdoor Connections

- Outdoor access
- Connection to the outdoor environment
- Outdoor movie screen
- Outdoor dining
- Outdoor Wi-Fi

Traffic Control

- The traffic flow and safety of our neighborhood
- Increasing traffic will be extremely inconvenient for the neighborhood and dangerous for kids (there are a lot of children that walk to/from school)

Sustainability

- Solar Power
- Environmental impact of cars idling if school size is increased
- Open and natural light spaces
- Air quality
- Efficient HVAC systems
- Modularity to manage space and improve infrastructure easily

Appropriate Aesthetics

- Slanted roof

Community Priorities

Long Term Viability

- Best education spaces possible
- Enough classrooms for growth of enrollment
- To ensure that the school we build will not be outgrown immediately
- Combined school to take advantage of economies of scale and get the most classrooms using state funds
- Combine the schools and open up the current Pine Glen for Pre-K use (at the very least)

Maintaining Neighborhood Schools

- Small community feel, neighborhood school, small class sizes
- Small community feel should not be exchanged for federal dollars
- Neighborhood schools
- Two separate schools, Fox Hill is not made for a super school. Small classrooms, keep the community neighborhood schools

Safe Community Access and Use

- Shared facilities that can benefit the entire community throughout the year (auditorium, gyms, fields, etc.)
- Gymnasium space that will support the school and community needs
- Shared community resources like fields, gyms, performing arts center
- Resources for the community for after school hours
- Welcoming to community but with boundaries

Consideration of Traffic Flow

- Improved traffic flow
- Traffic for combined school on site will overwhelm neighborhood streets
- Traffic increase will also be dangerous for kids walking to and from school
- The larger schools should be on main roads, the Fox Hill site is not the place for a large school
- Less traffic on side streets

Safety and Security

- Environmental impact of cars idling if enrollment increases
- More crosswalks and raised tables would be required instead of shaved down speed bumps

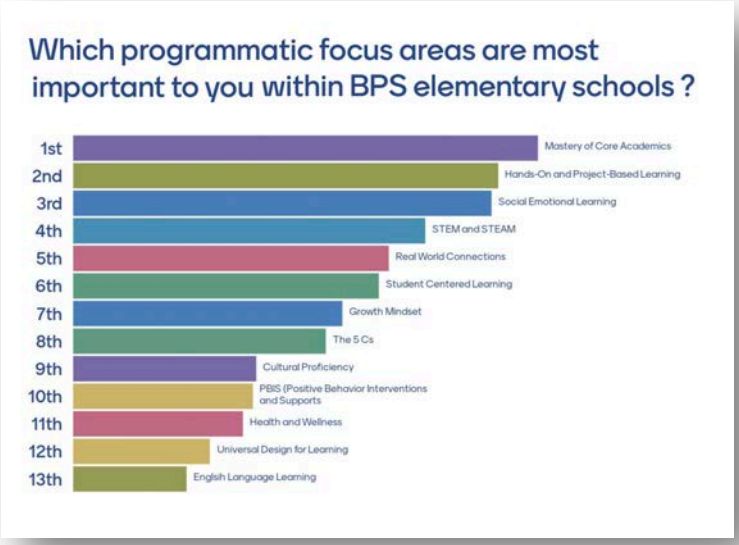
Access to Outdoor Spaces

- Updated playgrounds
- Outdoor dining
- Shaded areas
- State of the art playground
- Outdoor Wi-Fi and classroom
- Walking trails for the community (mental health)
- Splash pad
- Outdoor classroom learning space

Fox Hill and Pine Glen Elementary Schools' Priority Educational Focus Areas

A set of priority educational focus areas were introduced to the SBC and the Burlington community as being of key importance to Burlington Public Schools leadership. Participants then rated them in order based on their own priorities, resulting in the following listing.

27. Mastery of Core Academics
28. Hands-On and Project-Based Learning
29. Social Emotional Learning
30. STEM and STEAM
31. Real World Connections
32. Student-Centered Learning
33. Growth Mindset
34. The 5 Cs
35. Cultural Proficiency
36. PBIS - Positive Behavioral Interventions and Supports
37. Health and Wellness
38. Universal Design for Learning
39. English Language Learning



Additional Priority Educational Focus Areas

When asked to share additional educational focus areas that are most important to them, participants shared the following focus areas.

- Mental health supports (2 mentions)
- Movement space (2 mentions
- Effective and flexible special education program
- Reading programs that address individual student needs and learning styles
- School based reading clinics for children with special Ed needs
- Self-directed learning and curiosity
- Activity based learning
- More focus on play especially at the younger grades
- Cultural inclusiveness
- Recess
- Music
- Responsible computer use
- Quality teaching staff
- Tutors
- Healthy lunch options
- Vegetarian entrees

Desired 21st Century Design Patterns 1.0

The following set of "21st Century Design Patterns" for the design of the renovated and/or new Fox Hill and Pine Glen Elementary Schools was created by Burlington community participants and SBC members. Participants were introduced to 24 "Design Patterns" that represent varied architectural design features of, and approaches to 21st century school facility design. The first 19 Design Patterns were those that had been prioritized by Fox Hill and Pine Glen and faculty members during previous visioning workshops. Participants were first given the opportunity to rate each Design Pattern with a heart, thumbs up, or thumbs down, and were then given the opportunity to rate Design Patterns collectively in order of importance. The resulting list of Design Patterns has been placed in priority order based on the cumulative total of hearts, thumbs up, and priority ratings that each received.

Top 10 Design Patterns

1. Flexible Classrooms and Spaces (23 votes)
2. STEM/STEAM and Makerspaces (21 votes)
3. Engaged Outdoor Play (20 votes)
4. Outdoor Connections and Learning (20 votes)
5. Library Learning Commons (19 votes)
6. Enrichment Spaces (19 votes)
7. Security and Welcome (18 votes)
8. Safe Community Access (18 votes)
9. Sustainability (17 votes)
10. Breakout and Pull Over Spaces (17 votes)

Next 15 Design Patterns

11. Flexible Furniture (16 votes)
12. Cafetoriums/Multi-Purpose Space (16 votes)
13. Professional Work Areas (15 votes)
14. Push-In Special Education (15 votes)
15. Classroom Neighborhoods (15 votes)
16. Heart of the School (15 votes)
17. Display and Exhibition (15 votes)
18. Good Storage/Cubbies (14 votes)
19. Welcoming Arrival/Safe Drop-Off (14 votes)
20. Collaborative Environments (12 votes)
21. Clusters of Learning (12 votes)
22. Branding and Identity (12 votes)
23. Wayfinding and Streetscapes (11 votes)
24. Classroom Zones (10 votes)
25. Extended Learning Spaces (9 votes)

Personal Favorite Design Patterns 1.0

When asked to share their top 3-5 personal favorite Design Patterns, participants responded with the following design patterns, which have been listed in priority order based on the number of times they were submitted.

- Security and Welcome (8 Mentions)
- Outdoor Connections (6 Mentions)
- Flexible Classrooms (6 Mentions)
- Sustainability (5 Mentions)
- STEM/ STEAM and Makerspaces (4 Mentions)
- Push-In Special Education (4 Mentions)
- Library Learning Commons (4 Mentions)
- Safe Community Access (4 Mentions)
- Heart of School (3 Mentions)
- Flexibility (3 Mentions)
- Engaged Outdoor Play (3 Mentions)
- Professional Work Areas (3 Mentions)
- Combined Schools (2 Mentions)
- Enrichment Spaces
- Collaborative
- Outdoor
- Branding and Identity
- Good Storage
- Display and Exhibition