efi global

BOSTON NORTH

May 28, 2024

Rick Underwood
Director of Operations & Maintenance
Lowell Public Schools
155 Merrimack Street, 4th Floor
Lowell, Massachusetts 01852

via email: runderwood@lowell.k12.ma.us

RE: AHERA 3-Year Reinspection
Moody Elementary School
158 Rogers Street
Lowell, Massachusetts
EFI Project No. 014.07795

Dear Mr. Underwood:

EFI Global Inc. (EFI) is pleased to present this AHERA 3-Year Reinspection Report prepared for the Moody Elementary School located at 158 Rogers Street, Lowell, Massachusetts (Site). The reinspection site visit was conducted on April 15, 2024, and the corresponding report was completed in accordance with the United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA) regulations (40 CFR 763) and Massachusetts Department of Labor Standards "Requirements for Schools Subject to AHERA" regulations (454 CMR 28.13).

EFI relied upon previous 3-Year Inspection and Management Plan Update report from 2014 prepared by Cardo ATC, and 2017 and 2020 reinspection's prepared by EFI Global Inc. The original AHERA Management Plan and other subsequent records were not made available at the school for review. EFI relied upon the 2020 table of identified ACM for this reinspection. The school's Management Plan and records should be located and kept on file at the school and the administrative offices.

EFI is pleased to provide environmental consulting services to Lowell Public Schools. This report should be kept on file with the school's AHERA records. If you have any questions regarding the contents of this report, or are in need of additional information, please contact either of the undersigned at (800) 659-1202. Thank you for the opportunity to serve your environmental needs.

Sincerely,
EFI Global, Inc.

Derrick Calvario
Project Manager
MA Asbestos Inspector # AI 900703

Michael McCarter
Senior Project Manager
MA Asbestos Management Planner #AP 035661

AHERA 3-YEAR REINSPECTION

FOR:

MOODY ELEMENTARY SCHOOL
158 ROGERS STREET
LOWELL, MASSACHUSETTS

PREPARED BY:

efi global
BOSTON NORTH

155 WEST STREET, SUITE 6
WILMINGTON, MASSACHUSETTS 01887

EFI PROJECT NUMBER 014.07795

May 28, 2024

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INTRODUCTION

EFI Global, Inc. (EFI) was retained by Lowell Public Schools to perform a 3-Year AHERA Reinspection in accordance with United States Environmental Protection (USEPA) Asbestos Hazard Emergency Response Act (AHERA) asbestos regulations (40 CFR 763) and Massachusetts Department of Labor Standards "Requirements for Schools Subject to AHERA" regulations (454 CMR 28.13). These regulations, commonly known as the "Asbestos in Schools Rule," require under 40 CFR 763.80 and 454 CMR 28.13(2)(b)(1) that local education agencies (LEAs) must conduct a reinspection at least once every three years of all friable and nonfriable known or assumed asbestos-containing materials (ACMs). The reinspection includes all previously known and assumed ACMs, as well as any additional suspect ACM not previously included, as required by 40 CFR 763.80 and 454 CMR 28.13 in each school building leased, owned, or otherwise used as a school building. A school building is defined in 454 CMR 28.02 as including each of the following:

- Any structure suitable for use as a classroom, including a school facility such as a library, school eating facility, or facility used in the preparation of food
- Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education
- Any other facility used for the instruction or housing of students or for the administration of educational or research programs
- Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described as a school building above
- Any portico or covered exterior hallway or walkway
- Any exterior portion of a mechanical system used to condition interior space.

EFI conducted a 3-year AHERA re-inspection at the Moody Elementary School, which involved determining the condition and hazard potential of previously known and assumed ACMs, and additional confirmed and assumed ACMs observed during the 2024 reinspection. The 3-year re-inspection was conducted on April 15, 2024, by Derrick Calvario and Emma Cypherd, both EPA accredited, and Massachusetts Department of Labor Standards (MADLS) licensed Asbestos Inspectors, (license number AI-900703) and (license number AI-901189) respectively. EFI relied upon the 2020 3-year reinspection table of identified and assumed ACMs for this reinspection. The original AHERA Management Plan and subsequent records were not made available at the school or administrative office for review. The recommended response actions were prepared by MADLS-licensed Asbestos Management Planner Michael McCarter (AP-035661).

A summary of known and assumed ACM within the Moody Elementary School is presented in the AHERA Summary Table in **Attachment A**. Site Plans showing buildings and locations referenced in this report are presented in **Attachment B.**

The Designated Person for the Lowell Public Schools is Rick Underwood. Rick's contact information is:

Rick Underwood
Director of Operations & Maintenance
Lowell Public Schools
155 Merrimack Street, 4th Floor
Lowell, Massachusetts 01852
978-674-4328
runderwood@lowell.k12.ma.us

AHERA 3-YEAR REINSPECTION

A. AHERA Records Review

As part of this 3-year reinspection, EFI reviewed available AHERA records for the school, in accordance with the AHERA regulation and 454 CMR 28.13(5)(f). A summary of records reviewed is provided in the table below.

Review of AHERA Documentation Moody Elementary School 158 Rodgers Street, Lowell, Massachusetts		
Document/Record	**Present?**	**Comment**
Asbestos Management Plan (on hand at school and available for review)	No	No records available at the school or administrative office for review. The Cardo ATC 2014 3-Year Reinspection and Updated Management Plan is posted on the school's web site. EFI also relied upon in-house records from the 2017 and 2020 reinspection's.
Designated Person Training Records (for Rick Underwood)	No	No records available at the school or administrative office for review. Designated Person should receive formal designated person training or review the Designated Person Self Study Guide (available at https://www.epa.gov/sites/default/files/2015-01/documents/dp_study_guide_0.pdf).
Custodial Personnel 2-hour Awareness Training Records	No	No records available at the school or administrative office for review.
Annual Parental Notification Records	No	No records available at the school or administrative office for review. Annual notification letters should be sent or posted on the school's web site and copies kept on file with the AHERA records.
Abatement/Response Action Records (includes abatement, special cleaning activities & small scale short duration (SSSD) activities and associated monitoring reports and work plans)	No	No records available at the school or administrative office for review.
Designated Person True and Correct Statement	No	No records available at the school or administrative office for review.
6-month Surveillance Inspection Records	No	No records available at the school or administrative office for review.
Previous 3-Year Reinspection Records	No	No records available at the school or administrative office for review.
Asbestos Labels present (required in routine maintenance areas)	No	No labeling observed. Labels should be placed immediately adjacent to ACM present in routine maintenance areas (i.e., boiler rooms, utility closets, etc.)

B. ACM Application Types

ACMs are divided into the following application types:

Thermal system insulation (TSI): Insulation applied to mechanical, heating, and cooling systems such as pipes, boilers, flue breechings, ducts, tanks and fittings.

Surfacing Materials: Material that is spray-applied or trowel-applied to walls, ceilings, or structural components (i.e., plasters, acoustical finishes and fireproofing).

Miscellaneous Materials: All other asbestos materials, including but not limited to floor tiles and mastic, ceiling tiles, vinyl cove base and mastic, gypsum board and joint compound, and asbestos-cement board, etc.

C. ACM Assessment Criteria

The assessment is divided into two categories - the physical assessment and the hazard potential assessment.

Physical Assessment

The physical assessment is divided into the following seven categories and describes the material condition at the time of the inspection:

Physical Condition #1 - Damaged or significantly damaged thermal system ACM.
Physical Condition #2 - Damaged friable surfacing ACM.
Physical Condition #3 - Significantly damaged friable surfacing ACM.
Physical Condition #4 - Damaged or significantly damaged miscellaneous ACM.
Physical Condition #5 - ACM with potential for damage.
Physical Condition #6 - ACM with potential for significant damage.
Physical Condition #7 - Any remaining friable ACM or friable suspected ACM.

Hazard Assessment

The hazard assessment is a combination of the physical assessment combined with the potential for disturbance (i.e., physical contact, vibration air movement) as follows:

Hazard Rank #1 – Good condition/Low potential for disturbance
Hazard Rank #2 – Good condition/ Moderate potential for disturbance
Hazard Rank #3 – Good condition/ High potential for disturbance
Hazard Rank #4 – Damaged condition/Low potential for disturbance
Hazard Rank #5 – Damaged condition/Moderate potential for disturbance
Hazard Rank #6 – Damaged condition/High potential for disturbance
Hazard Rank #7 – Significantly damaged condition

The following is the Assessment Criteria used during the inspection:

1. Homogeneous Areas (An area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in size, color and texture and was applied at approximately the same time) were quantified by location and assessed by condition. Materials are listed as friable or non-friable. Note: friable materials are materials that can be crushed and pulverized to dust by hand pressure. A general condition description for suspect materials used in this inspection is as follows:

    a. Damaged Surfacing ACM: 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 total surface area if the damage is evenly distributed or less than 25%, if the damage is localized in one area of the homogeneous area.

    b. Significantly Damaged ACM: 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 damaged is localized.

    c. Good Condition ACM: ACM with no visible damage or deterioration in less than one percent of the material and/or coverings.

    d. ACM with potential for damage: Pertains to circumstances in which:

        i. Friable ACM is in an area regularly used by building occupants, including maintenance workers, currently in intact (good) condition.

        ii. 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.

Note: All ACM in good condition is still considered to have a potential for damage, and in certain instances, has the potential for significant damage.

    e. ACM with potential for significant damage: Pertains to circumstances in which:

        i. Friable ACM is in an area regularly used by building occupants, including maintenance personnel.

        ii. Indications show 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 re-occurring damage.

        iii. 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.

D. Response Actions – General Recommendations

Specific response actions for each known and assumed ACM located at the Moody Elementary School are located in **Attachment A**. The following are general recommendations for response actions associated with managing ACMs at the school.

1. Damaged materials in the school should be repaired, if feasible, or removed in order to maintain compliance with the AHERA regulations. Damaged ACMs of any quantity listed in the report should be repaired or removed by a Massachusetts licensed asbestos abatement contractor following all applicable regulations, in accordance with a work plan design, and final clearance air testing performed in accordance with the AHERA regulations. It is the policy of the Lowell Public Schools to use licensed asbestos contractors for all response action work.

2. The AHERA regulation states that the response actions chosen for other than small scale/short duration repairs (less than 3 square or linear feet), must be designed and conducted by persons accredited to design and conduct response actions. MADLS Regulation 454 CMR 28.00 requires the services of licensed Project Designers who meet the requirements set forth in 454 CMR 28.00, as well as Massachusetts licensed Asbestos Contractors.

3. Damaged ACMs that involve small scale/short duration repairs can only be conducted by 16-hour asbestos-trained personnel or by a licensed Asbestos Contractor. EFI understands that small scale/ short duration projects will not be performed by in house personnel, and that all work will be conducted by an outside licensed Asbestos Contractor.

4. Each known and assumed ACM should be monitored for any changes in condition during the six-month periodic surveillance, or more frequently.

5. If known or suspect ACMs are to be impacted by planned renovation or demolition activities, the ACM must be removed by a Massachusetts licensed Asbestos Contractor. Note that AHERA inspections do not meet the EPA NESHAP and Commonwealth of Massachusetts Department of Environmental Protection (MADEP) requirements for a comprehensive pre-renovation or demolition survey. Prior to any planned renovation or demolition project, all renovation/demolition areas must be thoroughly surveyed to meet the requirements of EPA NESHAP and MADEP 310 CMR 7.15(4) Survey Requirements. LEA Designated Persons should make sure that pre-renovation/demolition surveys are performed in each instance that ACM may be disturbed.

E. AHERA Licensing & Training Documentation

The AHERA 3-year Reinspection report for the Moody Elementary School was performed by the following individuals who have received appropriate training and who are MADLS licensed personnel:

Derrick Calvario
Project Manager
MA Asbestos Inspector # AI 900703

Michael McCarter
Senior Project Manager
MA Asbestos Management Planner #AP 035661

F. Asbestos Bulk Sampling

Asbestos bulk sampling of suspect ACM was performed for various suspect ACMs not previously identified as ACM in portions of the building included in the AHERA program. In addition, EFI collected representative samples of floor tiles and associated mastics that were reported as ACM or assumed ACM by the 2020 reinspection for confirmation. The bulk sampling was performed by USEPA-accredited, and MADLS licensed Asbestos Inspector Derrick Calvario and Emma Cypherd. A total of 93 bulk samples of suspect ACMs were collected and transported under chain of custody protocol to EMSL Analytical, Inc., of Woburn, Massachusetts, a Massachusetts-licensed laboratory. EMSL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis, which is administered by the National Institute of Standards and Testing (NIST).

Samples were analyzed with a standard 3-day turnaround time using polarized light microscopy (PLM) in accordance with United States Environmental Protection Agency (USEPA) Method 600/R-93/116. The PLM/DS analytical method is modeled after 40 CFR Part 763, Subpart F, Attachment A: "Interim Method for the Determination of Asbestos in Bulk Insulation Samples." MADEP asbestos regulations define an ACM as any material containing greater than or equal to one percent asbestos. The findings of this report are based upon observations of accessible materials and the analysis of representative bulk samples collected. **Attachment B** contains site plans indicating locations of samples collected and analyzed as part of this reinspection. A copy of the asbestos laboratory reports is presented in **Attachment C**.

Bulk samples representing individual homogenous areas of suspect ACM, (materials that are determined to be uniform in color and texture and installed in the same construction period) were collected in a randomly distributed manner, in accordance with the EPA sampling protocol outlined in 40 CFR 763.

The following suspect ACMs sampled by EFI during the 2024 reinspection were reported by EMSL as containing no detectable concentration of asbestos:

Summary of Non-ACMs per 2024 3-Year Reinspection

Material Description	Location(s) Sampled
Plaster Skim Coat	Basement Boy's Bathroom, Basement Alarm Room, 1st Floor Janitors' Closet, 2nd Floor Hallway, 3rd Floor Gym
Plaster Base Coat	Basement Boy's Bathroom, Basement Alarm Room, 1st Floor Janitors' Closet, 2nd Floor Hallway, 3rd Floor Gym
Parge Coat on Brick	Basement Room 25, Basement Hallway, Basement Hallway/Kitchen, Basement Café/ Storage, Basement Bathroom
Crow's Feet Horizontal Ceiling Tile	Basement Hallway, 2nd Floor Hallway
Crow's Feet Vertical Ceiling Tile	Basement Hallway, 2nd Floor Hallway
Pin Prick/Hole Ceiling Tile	Basement Room Near Side A Stairs, 1st Floor Janitors' Closet
12x12 White with Speckle Floor Tile*	Basement Café/ Storage
12x12 Yellow Floor Tile*	Basement Café/ Storage
Yellow Mastic Associated with 12x12 Floor Tile and Black Mastic*	Basement Café/ Storage

Material Description	Location(s) Sampled
Gypsum Board*	Basement Boy's Bathroom, 3rd Floor Attic Space
1x1 Ceiling Squares	1st Floor Room 2, 3rd Floor Room 9
Yellow Carpet Mastic	Basement Room Next to Alarm Room, 1st Floor Office 1, 1st Floor Bathroom Off Office 1
Linoleum	1st Floor Office 1, 1st Floor Bathroom Off Office 1
White Compound Under Linoleum	1st Floor Bathroom Off Office 1
12x12 White Floor Tile	1st Floor Bathroom Off Office 1
Yellow Mastic Associated with 12x12 White Floor Tile	1st Floor Bathroom Off Office 1
12x12 Blue Floor Tile	1st Floor Room 3
Yellow Mastic Associated with 12x12 Blue Floor Tile	1st Floor Room 3
9x9 Green Floor Tile	1st Floor Office 2
Yellow Mastic Associated with 9x9 Green Floor Tile	1st Floor Office 2
9x9 Brown Floor Tile	1st Floor Near Stairwell/ Fire Escape, 1st Floor Near Stairwell Side 2
Yellow Mastic Associated with 9x9 Brown Floor Tile	1st Floor Near Stairwell/ Fire Escape, 1st Floor Near Stairwell Side 2
12x12 Light Grey with Speckle Floor Tile	1st Floor Near Stairwell/ Fire Escape
12x12 Dark Grey with Speckle Floor Tile	1st Floor Near Stairwell/ Fire Escape
Yellow Mastic Associated with 12x12 Light and Dark Grey Floor Tiles	1st Floor Near Stairwell/ Fire Escape
12x12 Black with White Speckled Floor Tile	1st Floor Near Stairwell Side 2
Yellow Mastic Associated with 12x12 Black with White Speckled Floor Tile	1st Floor Near Stairwell Side 2
Texture On Wall	1st Floor Office 1, 1st Floor Office 1 Bathroom
White Caulking	1st Floor Office 1 Bathroom
Vinyl On Staircase	Staircase A, Staircase B, Staircase C, Staircase D
Mastic Associated with Vinyl on Staircase	Staircase A, Staircase B, Staircase C, Staircase D

* EFI recommends that the material be treated and disposed of as an ACM since the associated ACM cannot be easily separated (associated ACM is listed in the AHERA 3-year reinspection table contained in Attachment A).

G. ACM Hazard Assessment & Recommended Response Actions

Accessible locations were inspected and assessed to determine the presence and condition of ACM. A Summary Table of known and assumed ACMs present at the school, the physical and hazard assessments, and the recommended response action for each ACM, is presented in **Attachment A.** It should be noted that EFI did not conduct destructive evaluations of the school building to identify suspect ACM. Per USEPA NESHAP and MADEP asbestos regulations, a thorough "path of construction" survey should be conducted

prior to any renovation or repair activities that may impact suspect ACM, regardless of the date of installation.

H. Cost Estimate and Schedule for Recommended Response Actions

The confirmed and assumed ACMs outlined in the summary table in **Attachment A** that were in good condition at the time of the reinspection must be maintained in place in accordance with the Operations and Maintenance Plan. Estimated costs associated with managing known and assumed ACMs at the school are summarized below.

Cost Estimate of AHERA Considerations Moody Elementary School 158 Rodgers Street, Lowell, Massachusetts	
Training Costs	
Item	**Approximate Cost**
2-hour asbestos awareness training (New Hires, within 60 days of hire)	$500/person
Designated Person Training	$250
Maintenance Costs	
Item	**Approximate Cost**
Asbestos labeling (Place/maintain labels adjacent to ACM in routine maintenance areas)	$500
6-month surveillance inspections (Per schedule below)	$500/event
3-year re-inspection (Per schedule below)	$2,000
Response Action Costs	
Item	**Approximate Cost**
Immediately and annually notify occupants regarding ACM materials noted in the Summary Table if Identified and Assumed ACMs.	$500

A proposed schedule of events between this 3-Year reinspection and the 2027 3-Year reinspection is provided for your use:

Schedule of AHERA-Related Actions Moody Elementary School 158 Rodgers Street, Lowell, Massachusetts	
Event	**Completion Date**
Immediately and annually notify occupants regarding ACM joint compound as recommended in the Summary Table of Identified and Assumed ACMs.	By June 28, 2024, and annually thereafter.
Annual Parental Notification Letter	September 1, 2024
6 Month Surveillance Inspection	October 15, 2024
6 Month Surveillance Inspection	April 15, 2025
Annual Parental Notification Letter	September 1, 2025
6 Month Surveillance Inspection	October 15, 2025
6 Month Surveillance Inspection	April 15, 2026
Annual Parental Notification Letter	September 1, 2026

6 Month Surveillance Inspection	October 15, 2026
3 Year Reinspection	April 15, 2027

ATTACHMENT A

AHERA SUMMARY TABLE

AHERA 3 Year Re-Inspection Summary Table
Moody Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
158 Rogers Street, Lowell, MA
Dates of Inspection: 4/15/2024

Item	Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
1	12" x 12" Tan Floor Tile – See Note 1	Basement – Art Room (Formerly Cafeteria 1)	1,200 SF	NF	5% Chrysotile Asbestos	5	Good	Manage in place in accordance with the Asbestos O&M Program. Floor tile should be maintained in accordance with EPA and OSHA guidelines. Strip floors when wet using low abrasive pads and low speed buffers (175- 300 rpm), and regularly clean and maintain flooring with wax coating to maximize longevity. Consider using chair glides to minimize potential for gauging or scratching tile.	
2	Black Mastic Associated with 12" x 12" Tan Floor Tile – See Note 1	Basement – Art Room (Formerly Cafeteria 1)	1,200 SF	NF	10% Chrysotile Asbestos	5	Good	Mastic is not visible. Maintain floor tile in good condition in accordance with the O&M Program.	
3	12" x 12" Tan Floor Tile – See Note 1	Basement – Cafeteria 2	1,100 SF	NF	5% Chrysotile Asbestos	5	Good	Manage in place in accordance with the Asbestos O&M Program. Floor tile should be maintained in accordance with EPA and OSHA guidelines. Strip floors when wet using low abrasive pads and low speed buffers (175- 300 rpm), and regularly clean and maintain flooring with wax coating to maximize longevity. Consider using chair glides to minimize potential for gauging or scratching tile.	
4	Black Mastic Associated with 12" x 12" Tan Floor Tile, 12" x 12" White Speckle Floor Tile, and 12" x 12" Yellow Floor Tile – See Note 1	Basement – Cafeteria 2	1,100 SF	NF	10% Chrysotile Asbestos	5	Good	Mastic is not visible. Maintain floor tile in good condition in accordance with the O&M Program.	
5	12" x 12" Tan Floor Tile – See Note 1	Basement – Room Adjacent to Boy's Restroom	760 SF	NF	5% Chrysotile Asbestos	5	Good	Manage in place in accordance with the Asbestos O&M Program. Floor tile should be maintained in accordance with EPA and OSHA guidelines. Strip floors when wet using low abrasive pads and low speed buffers (175- 300 rpm), and regularly clean and maintain flooring with wax coating to maximize longevity. Consider using chair glides to minimize potential for gauging or scratching tile.	
6	Black Mastic Associated with 12" x 12" Tan Floor Tile – See Note 1	Basement – Room Adjacent to Boy's Restroom	760 SF	NF	10% Chrysotile Asbestos	5	Good	Mastic is not visible. Maintain floor tile in good condition in accordance with the O&M Program.	

AHERA 3 Year Re-Inspection Summary Table
Moody Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
158 Rogers Street, Lowell, MA
Dates of Inspection: 4/15/2024

Item	Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
7	12" x 12" Tan Floor Tile – See Note 1	Basement – Room Adjacent to Fort Hill Stairwell Exit	620 SF	NF	5% Chrysotile Asbestos	5	Good	Manage in place in accordance with the Asbestos O&M Program. Floor tile should be maintained in accordance with EPA and OSHA guidelines. Strip floors when wet using low abrasive pads and low speed buffers (175- 300 rpm), and regularly clean and maintain flooring with wax coating to maximize longevity. Consider using chair glides to minimize potential for gauging or scratching tile.	
8	Black Mastic Associated with 12" x 12" Tan Floor Tile – See Note 1	Basement – Room Adjacent to Fort Hill Stairwell Exit	620 SF	NF	10% Chrysotile Asbestos	5	Good	Mastic is not visible. Maintain floor tile in good condition in accordance with the O&M Program.	
9	12" x 12" Beige Floor Tile - See Note 2	Basement - Hallways	2,200 SF	NF	5% Chrysotile Asbestos	5	Damaged, ~3 square feet cracks and missing pieces at threshold	Cracked and missing pieces of floor tile are well sealed with wax and intact. Manage in place in accordance with the Asbestos O&M Program. Floor tile should be maintained in accordance with EPA and OSHA guidelines. Strip floors when wet using low abrasive pads and low speed buffers (175- 300 rpm), and regularly clean and maintain flooring with wax coating to maximize longevity. Consider using chair glides to minimize potential for gauging or scratching tile.	
10	Black Mastic Associated with 12" x 12" Beige Floor Tiles - See Note 2	Basement - Hallways	2,200 SF	NF	10% Chrysotile Asbestos	5	Good	Mastic is not visible or was sealed with wax. Maintain floor tile in good condition in accordance with the O&M Program.	
11	12" x 12" Beige Floor - See Note 2 – Material added in 2024	Basement – Room 5- Location added in 2024	500 SF	NF	5% Chrysotile Asbestos	5	Damaged, ~3 square feet cracks and missing pieces at threshold	Cracked and missing pieces of floor tile are well sealed with wax and intact. Manage in place in accordance with the Asbestos O&M Program. Floor tile should be maintained in accordance with EPA and OSHA guidelines. Strip floors when wet using low abrasive pads and low speed buffers (175- 300 rpm), and regularly clean and maintain flooring with wax coating to maximize longevity. Consider using chair glides to minimize potential for gauging or scratching tile.	

AHERA 3 Year Re-Inspection Summary Table
Moody Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
158 Rogers Street, Lowell, MA
Dates of Inspection: 4/15/2024

Item	Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
12	Black Mastic Associated with 12" x 12" Beige Floor Tiles - See Note 2 – Material added in 2024	Basement – Room 5 - locationadded in 2024	500 SF	NF	10% Chrysotile Asbestos	5	Good	Mastic is not visible. Maintain floor tile in good condition in accordance with the O&M Program.	
13	9" x 9" Green Floor Tile and Associated Mastic	1st Floor – Director's Office Bathroom	25 SF	NF	NAD (See Note 3)				
14	9" x 9" Green Floor Tile and Associated Mastic	1st Floor – Director's Office Sink Room	25 SF	NF	NAD (See Note 3)				
15	9" x 9" Green Floor Tile and Associated Mastic	2nd Floor – Seminar Room Bathroom	25 SF	NF	NAD (See Note 3)				
16	9" x 9" Green Floor Tile and Associated Mastic	2nd Floor – Seminar Room Sink Room	25 SF	NF	NAD (See Note 3)				
17	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – Hallway(s)	8,260 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum wallboard and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
18	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – Boys Bathroom	1,440 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.

AHERA 3 Year Re-Inspection Summary Table
Moody Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
158 Rogers Street, Lowell, MA
Dates of Inspection: 4/15/2024

Item	Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
19	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – Preschool Room (22A)	8,640 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
20	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – ST Room Under Stairs	4,800 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
21	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – Storage Room	260 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
22	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – Café # 1	260 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
23	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – Girls Bathroom	1,440 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
24	Joint Compound on Gypsum Wallboard (material added in 2024)	Basement – Art Room	9,800 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.

AHERA 3 Year Re-Inspection Summary Table
Moody Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
158 Rogers Street, Lowell, MA
Dates of Inspection: 4/15/2024

Item	Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
25	Joint Compound on Gypsum Wallboard (material added in 2024)	First Floor – Hallway(s)	21,120 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
26	Joint Compound on Gypsum Wallboard (material added in 2024)	First Floor – Office and Conference Rooms Areas	10,000 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
27	Joint Compound on Gypsum Wallboard (material added in 2024)	Second Floor – Hallway(s)	21,120 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.
28	Joint Compound on Gypsum Wallboard (material added in 2024)	Second Floor – Library	8,640 SF	NF	2% Chrysotile Asbestos (note: associated gypsum board is non-ACM)	5	Good	Immediately and annually thereafter notify occupants of the ACM joint compound associated with gypsum board walls and ceilings and do not disturb the material by hanging items or storing materials against the joint compound. Manage in place in accordance with the Asbestos O&M Program. Routine inspections of ACM for physical damages due to occupancy or other factors can be performed more frequently, such as every three months.	Notify by June 28, 2024, and annually thereafter.

SF = Square Feet

Note 1 = Identified in the 2020 reinspection as 12” x 12” Newer Brown Floor Tile and Associated Mastic ACM without supporting sample documentation. EFI collected samples of the suspect material and described it as 12” x 12” Tan Floor Tile and Associated Black Mastic (tile appeared to be more tan than brown). It is noted that EFI collected samples of patched areas of 12” x 12” White Speckle Floor Tile, and 12” x 12” Yellow Floor Tile floor tile and associated mastic in Basement Cafeteria 2. The laboratory analytical report for the patched areas of floor tile and associated mastic reported the 12” x 12” White Speckle Floor Tile, and 12” x 12” Yellow Floor Tiles no asbestos detected and the associated mastics were reported to be ACM.

Note 2 = Identified in the 2020 reinspection as 12” x 12” Older Brown Floor Tile and Associated Mastic ACM without supporting sample documentation. EFI collected samples of the suspect material and described it as 12” x 12” Beige Floor Tile and Associated Black Mastic (tile appeared to be more beige than brown).

AHERA 3 Year Re-Inspection Summary Table
Moody Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
158 Rogers Street, Lowell, MA
Dates of Inspection: 4/15/2024

Note 3 = Identified in the 2020 reinspection as an assumed ACM. EFI collected samples of the suspect materials and they were reported by laboratory analysis as containing no detectable concentrations of asbestos.

For recommended response actions other that administrative actions, the work should be conducted by a Massachusetts licensed Asbestos Contractor and a work plan for the specific repair or removal activity should be prepared by a Massachusetts licensed Asbestos Designer.

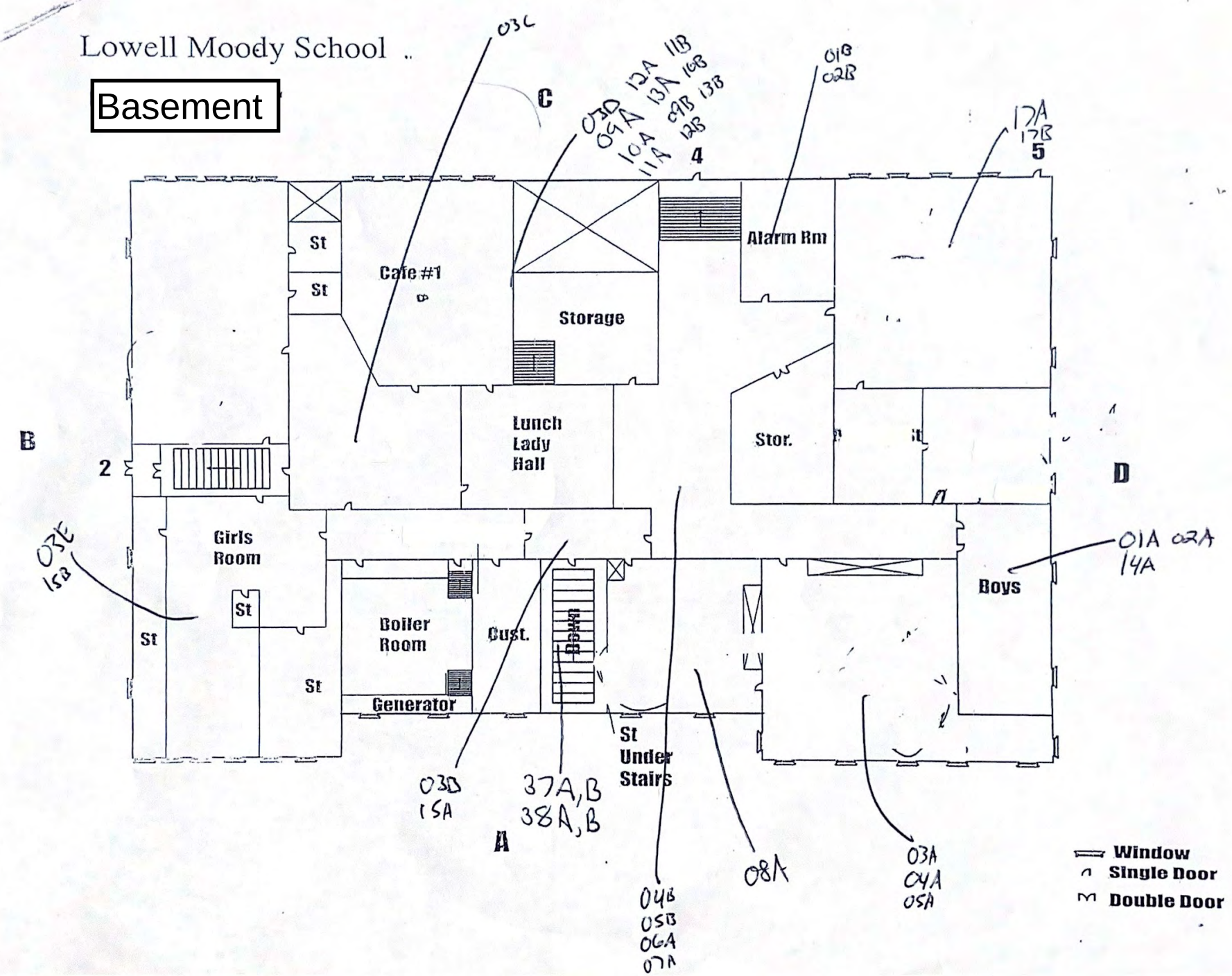
Physical Assessment Category
1 – Damaged or Significantly Damaged Thermal System ACM
2 – Damaged Friable Surfacing ACM
3 – Significantly Damaged Surfacing ACM
4 – Damaged or Significantly Damaged Friable Miscellaneous ACM
5 – ACM with Potential for Damage
6 – ACM with Potential for Significant Damage
7 – Any Remaining friable ACM or friable suspect ACM

ATTACHMENT B

SITE PLANS AND 2024 REINSPECTION ASBESTOS BULK SAMPLE LOCATIONS

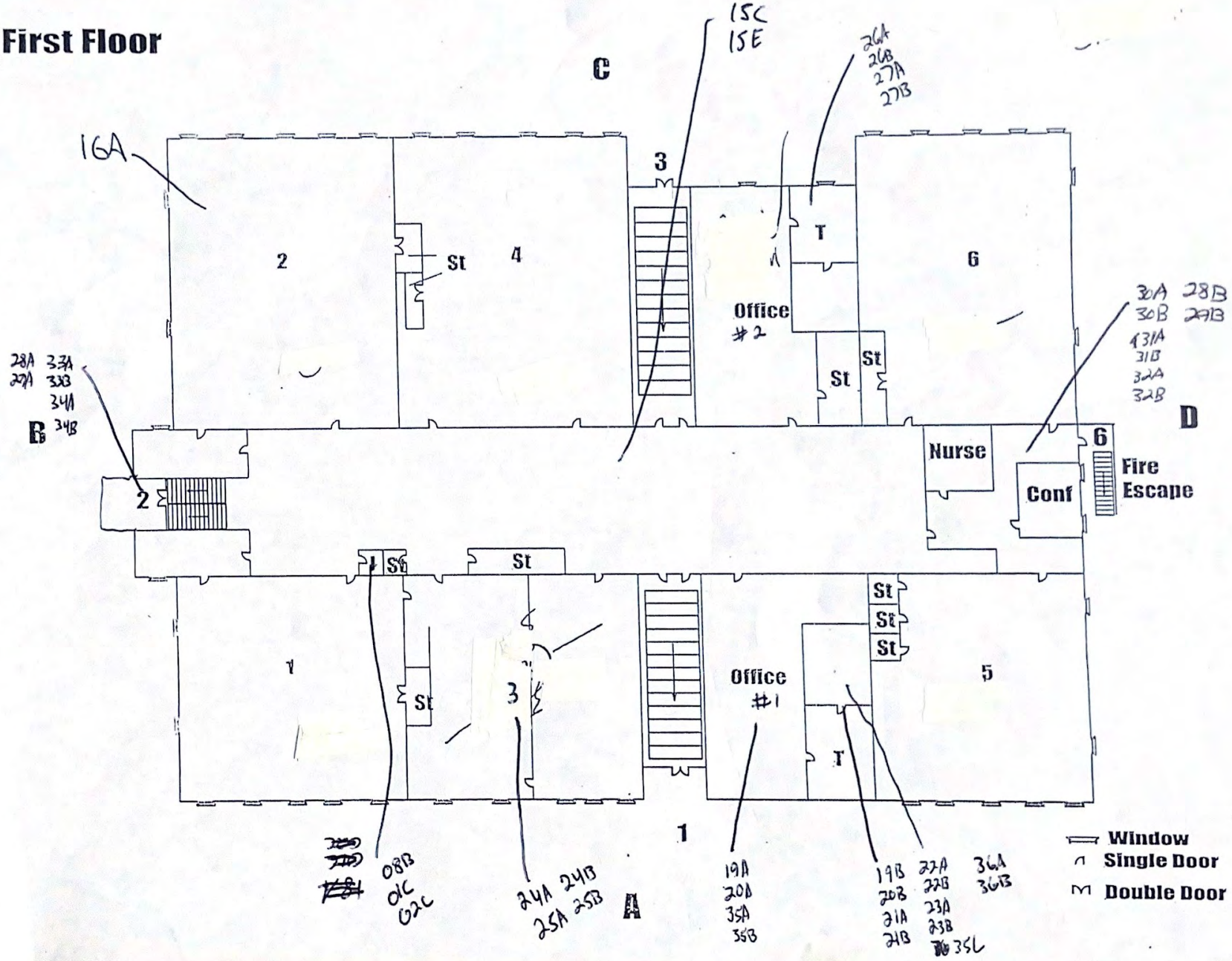
Lowell Moody School

Basement



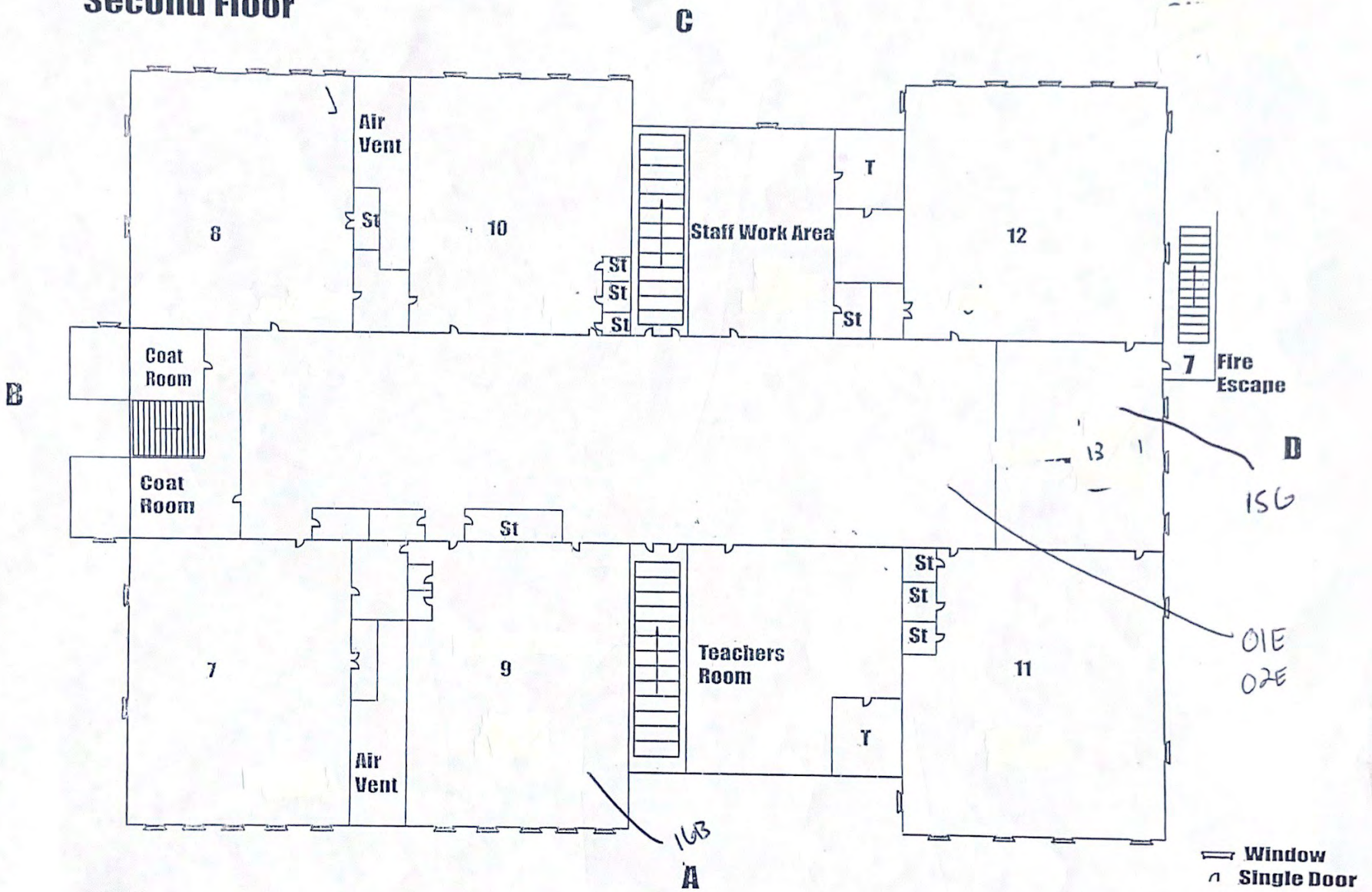
Lowell Moody School

First Floor



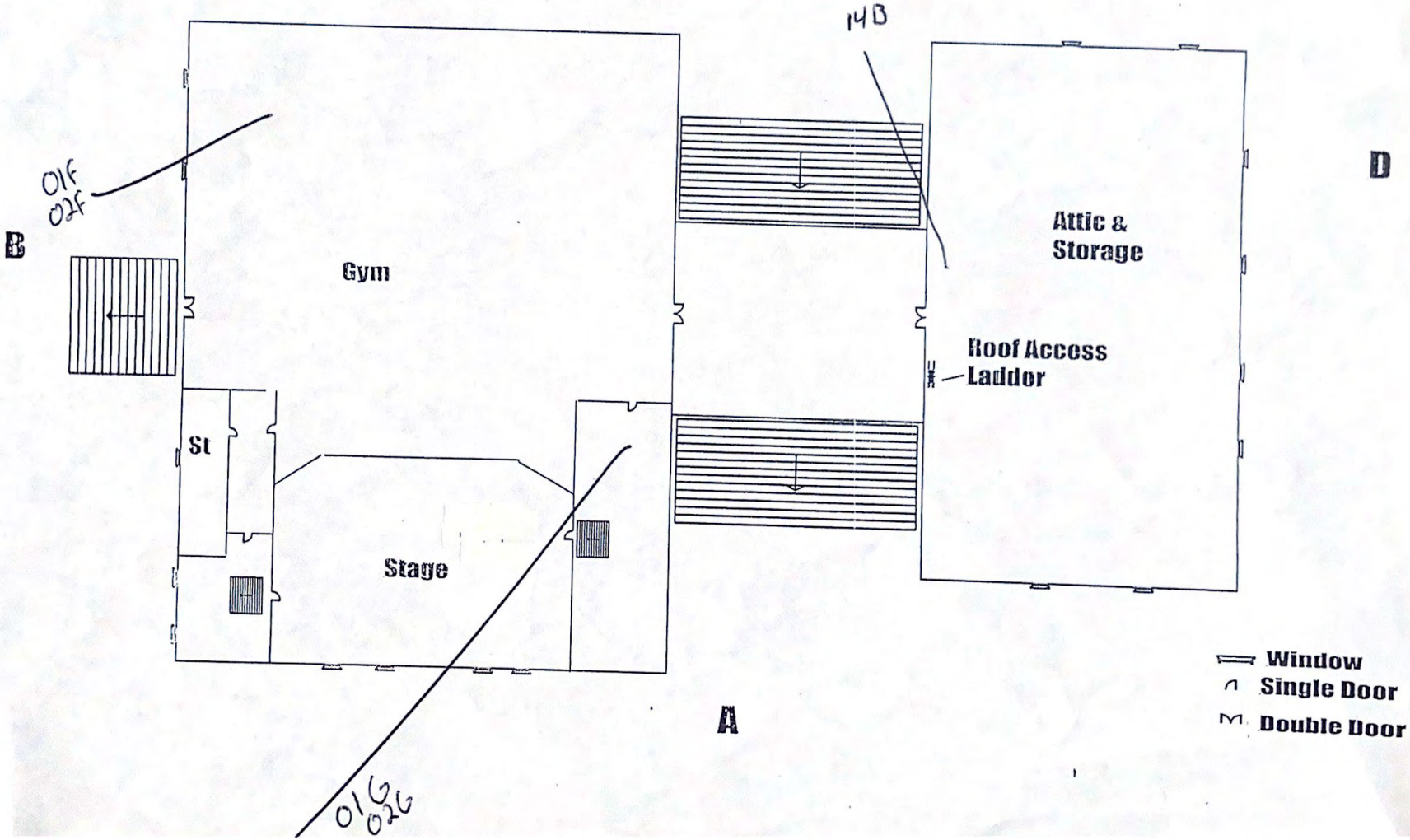
Lowell Moody School

Second Floor



Lowell Moody School

Third Floor



ATTACHMENT C

2024 REINSPECTION ASBESTOS BULK SAMPLE LABORATORY REPORT

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:	132402088
Customer ID:	EAFI66
Customer PO:	
Project ID:	

Attention:	Derrick Calvario	**Phone:**	(978) 688-3736
	EFI Global, Inc.	**Fax:**	(978) 688-5494
	155 West Street	**Received Date:**	04/15/2024 11:55 AM
	Suite 6	**Analysis Date:**	04/17/2024
	Wilmington, MA 01887	**Collected Date:**	04/15/2024
Project:	014.07795 - 158 Rodgers Street; Lowell, 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

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
01A *132402088-0001*	Basement - Boys Bathroom - Plaster Skim Coat - Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01B *132402088-0002*	Basement - Alarm Room - Plaster Skim Coat - Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01C *132402088-0003*	1st Floor - Janitors Closet - Plaster Skim Coat - Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01D *132402088-0004*	2nd Floor - Hallway - Plaster Skim Coat - Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01E *132402088-0005*	2nd Floor - Hallway - Plaster Skim Coat - Ceiling	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01F *132402088-0006*	3rd Floor - Gym - Plaster Skim Coat - Wall	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01G *132402088-0007*	3rd Floor - Gym - Plaster Skim Coat - Wall	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02A *132402088-0008*	Basement - Boys Bathroom - Plaster Base Coat - Ceiling	Gray Fibrous Homogeneous	3% Hair	97% Non-fibrous (Other)	None Detected
02B *132402088-0009*	Basement - Alarm Room - Plaster Base Coat - Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02C *132402088-0010*	1st Floor - Janitors Closet - Plaster Base Coat - Ceiling	Gray Fibrous Homogeneous	3% Hair	97% Non-fibrous (Other)	None Detected
02D *132402088-0011*	2nd Floor - Hallway - Plaster Base Coat - Ceiling	Gray Fibrous Homogeneous	3% Hair	97% Non-fibrous (Other)	None Detected
02E *132402088-0012*	2nd Floor - Hallway - Plaster Base Coat - Ceiling	Gray Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
02F *132402088-0013*	3rd Floor - Gym - Plaster Base Coat - Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02G *132402088-0014*	3rd Floor - Gym - Plaster Base Coat - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A *132402088-0015*	Basement - Room 25 - Parge Coat over Brick - Wall	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03B *132402088-0016*	Basement - Hallway - Parge Coat over Brick - Wall	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/18/2024 07:09:48

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EMSL Order:	132402088
Customer ID:	EAFI66
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**
03C *132402088-0017*	Basement - Hallway/Old Kitchen - Parge Coat over Brick - Wall	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03D *132402088-0018*	Basement - Café #1/Storage - Parge Coat over Brick - Wall	Various Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03E *132402088-0019*	Basement - Girls Bathroom - Parge Coat over Brick - Wall	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04A *132402088-0020*	Basement - Room 25 - 12x12 Beige Floor Tile w. White/Brown Spec	Tan Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
04B *132402088-0021*	Basement - Hallway - 12x12 Beige Floor Tile w. White/Brown Spec				Positive Stop (Not Analyzed)
05A *132402088-0022*	Basement - Room 5 - Assoc. Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
05B *132402088-0023*	Basement - Hallway - Assoc. Black Mastic				Positive Stop (Not Analyzed)
06A *132402088-0024*	Basement - Hallway - Ceiling Tile Crows Feet Horizontal	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
06B *132402088-0025*	2nd Floor - Hallway - Ceiling Tile Crows Feet Horizontal	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
07A *132402088-0026*	Basement - Hallway - Ceiling Tile Crows Feet Vertical	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
07B *132402088-0027*	2nd Floor - Hallway - Ceiling Tile Crows Feet Vertical	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
08A *132402088-0028*	Basement - Room near Side A Stairs - Ceiling Tile Pin Prick/Hole	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
08B *132402088-0029*	1st Floor - Janitors - Ceiling Tile Pin Prick/Hole	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
09A *132402088-0030*	Basement - Café #1/Storage - 12x12 White w. Spec Floor Tile	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09B *132402088-0031*	Basement - Café #1/Storage - 12x12 White w. Spec Floor Tile	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10A *132402088-0032*	Basement - Café #1/Storage - 12x12 Tan Floor Tile	Tan Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
10B *132402088-0033*	Basement - Café #1/Storage - 12x12 Tan Floor Tile				Positive Stop (Not Analyzed)

Initial report from: 04/18/2024 07:09:48

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http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132402088
Customer ID: EAFI66
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**
11A *132402088-0034*	Basement - Café #1/Storage - 12x12 Yellow Floor Tile	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B *132402088-0035*	Basement - Café #1/Storage - 12x12 Yellow Floor Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A *132402088-0036*	Basement - Café #1/Storage - Yellow Mastic assoc. w. 12x12 Floor Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B *132402088-0037*	Basement - Café #1/Storage - Yellow Mastic assoc. w. 12x12 Floor Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13A *132402088-0038*	Basement - Café #1/Storage - Black Mastic assoc. w. 12x12 Floor Tile	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
13B *132402088-0039*	Basement - Café #1/Storage - Black Mastic assoc. w. 12x12 Floor Tile				Positive Stop (Not Analyzed)
14A *132402088-0040*	Basement - Boys Room - Gypsum Board - Wall	Brown/White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
14B *132402088-0041*	3rd Floor - Attic Space - Gypsum Board - Wall	Brown/Gray Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
15A *132402088-0042*	Basement - Hallways - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B *132402088-0043*	Basement - Girls Room - Joint Compound - Wall	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15C *132402088-0044*	1st Floor - Hallways - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15D *132402088-0045*	2nd Floor - Hallways - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15E *132402088-0046*	1st Floor - Hallways - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15F *132402088-0047*	2nd Floor - above Ceiling/Hallway - Joint Compound - Wall	White Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
15G *132402088-0048*	3rd Floor - Room 13 - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16A *132402088-0049*	1st Floor - Room 2 - 1x1 Ceiling Squares	Gray/White Fibrous Homogeneous	25% Cellulose 60% Min. Wool	15% Non-fibrous (Other)	None Detected
16B *132402088-0050*	3rd Floor - Room 9 - 1x1 Ceiling Squares	Gray/White Fibrous Homogeneous	25% Cellulose 60% Min. Wool	15% Non-fibrous (Other)	None Detected
17A *132402088-0051*	Basement - Room next to Alarm Room - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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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**
17B *132402088-0052*	Basement - Room next to Alarm Room - Yellow Carpet Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19A *132402088-0053*	1st Floor - Office 1 - Yellow Carpet Mastic on Linoleum	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B *132402088-0054*	1st Floor - Bathroom off Office 1 - Yellow Carpet Mastic on Linoleum	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20A *132402088-0055*	1st Floor - Office 1 - Linoleum under Carpet	Gray/Green Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
20B *132402088-0056*	1st Floor - Bathroom off Office 1 - Linoleum under Carpet	Gray/Green Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
21A *132402088-0057*	1st Floor - Bathroom off Office 1 - White Compound under Linoleum	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21B *132402088-0058*	1st Floor - Bathroom off Office 1 - White Compound under Linoleum	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22A *132402088-0059*	1st Floor - Bathroom off Office 1 - 12x12 White Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22B *132402088-0060*	1st Floor - Bathroom off Office 1 - 12x12 White Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23A *132402088-0061*	1st Floor - Bathroom off Office 1 - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23B *132402088-0062*	1st Floor - Bathroom off Office 1 - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24A *132402088-0063*	1st Floor - Room 3 - 12x12 Blue Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24B *132402088-0064*	1st Floor - Room 3 - 12x12 Blue Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25A *132402088-0065*	1st Floor - Room 3 - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25B *132402088-0066*	1st Floor - Room 3 - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26A *132402088-0067*	1st Floor Office #2 Bathroom - 9x9 Green Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26B *132402088-0068*	1st Floor Office #2 Bathroom - 9x9 Green Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27A *132402088-0069*	1st Floor Office #2 Bathroom - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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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**
27B *132402088-0070*	1st Floor Office #2 Bathroom - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28A *132402088-0071*	1st Floor - near Stairwell Side #2 - 9x9 Brown Floor Tile	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28B *132402088-0072*	1st Floor - near Stairwell Fire Escape - 9x9 Brown Floor Tile	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A *132402088-0073*	1st Floor - near Stairwell Side #2 - Assoc. Yelow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29B *132402088-0074*	1st Floor - near Stairwell Fire Escape - Assoc. Yelow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30A *132402088-0075*	1st Floor - near Stairwell Fire Escape - 12x12 Light Gray w. Spec Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30B *132402088-0076*	1st Floor - near Stairwell Fire Escape - 12x12 Light Gray w. Spec Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31A *132402088-0077*	1st Floor - near Stairwell Fire Escape - 12x12 Dark Gray w. Spec Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31B *132402088-0078*	1st Floor - near Stairwell Fire Escape - 12x12 Dark Gray w. Spec Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32A *132402088-0079*	1st Floor - near Stairwell Fire Escape - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32B *132402088-0080*	1st Floor - near Stairwell Fire Escape - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33A *132402088-0081*	1st Floor - near Stairwell Side #2 - 12x12 Black w. White Spec Floor Tile	White/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33B *132402088-0082*	1st Floor - near Stairwell Side #2 - 12x12 Black w. White Spec Floor Tile	White/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34A *132402088-0083*	1st Floor - near Stairwell Side #2 - Assoc. Yellow/Tan Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34B *132402088-0084*	1st Floor - near Stairwell Side #2 - Assoc. Yellow/Tan Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35A *132402088-0085*	1st Floor - Office #1 - Texture on Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/18/2024 07:09:48

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: 132402088
Customer ID: EAFI66
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**
35B *132402088-0086*	1st Floor - Office #1 - Texture on Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35C *132402088-0087*	1st Floor - Office #1 Bathroom - Texture on Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
36A *132402088-0088*	Office #1 Bathroom Floor - Caulk (White)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
36B *132402088-0089*	Office #1 Bathroom Floor - Caulk (White)	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37A *132402088-0090*	Vinyl on Staircase	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37B *132402088-0091*	Vinyl on Staircase	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38A *132402088-0092*	Mastic assoc. w. Staircase Vinyl	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38B *132402088-0093*	Mastic assoc. w. Staircase Vinyl	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
John McCarthy (89)

Steve Grise, Laboratory Manager
or Other Approved Signatory

Initial report from: 04/18/2024 07:09:48

OrderID: 132402088

efi global

132402088

BOSTON NORTH
155 West Street | Suite 6 | Wilmington, MA 01887 | PHONE 978.688.3736 | FAX 978.688.5494 | FREE 800.659.1202

BULK SAMPLE CHAIN OF CUSTODY FORM

Report to (Inspector Name):	Derrick Calvario	**Bill To:**	Accounts Payable
Company:	EFI Global, Inc.	**Address:**	Same
Address:	155 West Street	**City, State, Zip:**	Same
	Suite 6	**Telephone:**	800-659-1202
City, State, Zip:	Wilmington, MA 01887	**Email:**	US-EFIGlobal-BostonEnviroPC@efiglobal.com
Inspector Cell:	781-825-5012		

Project Information

Project No./ Description:	014.07795 - 158 Rodgers Street Lowell, MA
Email Report to:	Derrick.Calvario@efiglobal.com
Alternate:	

Requested Turnaround Time:

☐ RUSH (6hr)	☐ 1 day (24hr)	☐ 2 day (48hr)	☒ 3 day (72hr)	☐ 5 day

Media and Methodology

Type of Analysis:	PLM	**Check for Positive Stop:**	☒
Notes:	Analyze all plaster and joint compound samples	**Date Collected:**	4/15/24

Sample ID	Type of Material	Location
01A	Plaster Skim Coat - Ceiling	Basement - Boys Bathroom
01B	" " - Ceiling	" - Alarm Room
01C	" " - Ceiling	1st floor - Janitors Closet
01D	" " - Ceiling	2nd floor - Hallway
01E	" " - Ceiling	2nd floor - Hallway
01F	" " - wall	3rd floor - gym
01G	" " - wall	3rd floor - gym
02A	Plaster Base Coat - Ceiling	Basement - Boys Bathroom
02B	" " - Ceiling	" - Alarm Room
02C	" " - Ceiling	1st floor - Janitors Closet

Total Number of Samples Submitted: ~~89~~ 93

Samplers Name: Derrick Calvario Samplers Signature

Relinquished By (Client): Date: 4/15/24 Time:

RECD EMSL-BOSTON APR 15 2024

Received By (Lab): Date: Time:

efi global 132402088

Sample ID	Type of Material	Location
02D	Plaster Base Coat - Ceiling	2nd Floor ~~Hallway~~ - hallway
02E	" " - Ceiling	2nd ~~floor~~ floor - hallway
02F	" " - Wall	3rd floor - gym
02G	" " - Wall	3rd floor - gym
03A	Parge Coat over Brick - Wall	Basement - Rm 25
03B	" "	- hallway
03C	" "	- hallway/old kitchen
03D	" "	- Cafe #1/Storage
03E	" "	- Girls Bathroom
04A	12x12 Beige floor tile w white/brown spec	Basement_Rm25
04B	" "	Basement - hallway
05A	associated Black mastic	Basement - Room 5
05B	" "	Basement - hallway
06A	Ceiling tile Crows feet horizontal	Basement - hallway
06B	" "	2nd floor - hallway
07A	Ceiling tile Crows feet vertical	Basement - hallway
07B	" "	2nd floor - hallway
08A	Ceiling tile pin prick/hole	Basement - Room near side A stairs
08B	" " "	1st floor - Janitors
09A	12x12 White w/ spec Floor Tile	Basement - Cafe #1/Storage
09B	" "	" "
10A	12x12 Tan Floor Tile	Basement - Cafe #1/Storage
10B	" "	" "
11A	12x12 Yellow Floor Tile	Basement - Cafe #1/Storage
11B	" "	" "
12A	Yellow Mastic assoc. w/ 12x12 Floor Tile	Basement - Cafe #1/Storage
12B	" "	" "
13A	Black Mastic assoc. w/ 12x12 Floor Tile	Basement - Cafe #1/Storage

REC'D EMSL-BOSTON APR 15 2024

OrderID: 132402088

efi global 132402088

Sample ID	Type of Material	Location
13B	Black Mastic assoc w/ 12x12 Floor Tile	Basement - Cafe #1/Storage
14A	Gypsum Board - wall	Basement - Boys Room
14B	" " - wall	3rd floor - attic space
15A	Joint Compound - wall	Basement - Hallways
15B	" " - wall	Basement - Girls Room
15C	" " - wall	1st floor - Hallways
15D	" " - wall	2nd floor - Hallways
15E	" " - wall	1st floor - hallways
15F	" " - wall	2nd floor - above Ceiling/hammer
15G	" "	3rd Floor - Room 13
16A	1x1 Ceiling Squares	1st floor - Room 2
16B	" "	3rd Floor - Room 9
17A	Yellow Carpet mastic	Basement - Room next to alarm room
17B	" "	" " - " "
~~18A~~	~~Pinhole Ceiling tile~~	~~1st floor - Janitors Closet~~
~~18B~~	~~" "~~	
19A	Yellow Carpet mastic on linoleum	1st floor - Office 1
19B	" " "	- Bathroom off office 1
20A	linoleum under Carpet	- Office 1
20B	" "	- Bathroom off office 1
21A	White Compound under linoleum	- Bathroom off office 1
21B	" "	- " "
22A	12x12 white floor tile	- Bathroom off office 1
22B	" "	- " "
23A	associated Yellow mastic	- " "
23B	" "	- " "
24A	12x12 Blue floor tile	1st floor - Room 3
24B	" "	" "
25A	associated Yellow mastic	1st floor - Room 3
25B	" "	" "

REC'D EMSL-BOSTON APR 15 2024

Page 3 Of 4

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Sample ID	Type of Material	Location
26A	9x9 Green floor tile	1st floor Office #2 Bathroom
26B	" "	" "
27A	associated Yellow mastic	1st floor Office #2 Bathroom
27B	" "	" "
28A	9x9 Brown floor tile	1st floor near stairwell side #2
28B	" "	1st floor near stairwell fire escape
29A	associated Yellow mastic	- " " side #2
29B	" "	- " " fire escape
30A	12x12 light grey w/spec floor tile	1st floor near stairwell ~~side~~ fire escape
30B	" "	- " "
31A	12x12 dark grey w/spec floor tile	- " "
31B	" "	- " "
32A	associated Yellow mastic	- " "
32B	" "	- " "
33A	12x12 Blue w/ white spec floor tile	1st floor - near stairwell side #2
33B	" "	- " "
34A	associated Yellow Brown mastic	- " "
34B	" "	- " "
35A	texture on wall	1st floor - office #1
35B	" "	- " "
~~35~~ 35C	" "	- office #1 Bathroom
36A	Caulk (white)	Office #1 Bathroom Floor
36B	" "	" "
37A	Vinyl on Staircase	
37B	" "	
38A	Mastic assoc. w/ Staircase Vinyl	
38B	" "	

REC'D EMSL-BOSTON APR 15 2024

ATTACHMENT D

LICENSES AND TRAINING CERTIFICATES OF ASBESTOS INSPECTOR & MANAGEMENT PLANNER

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

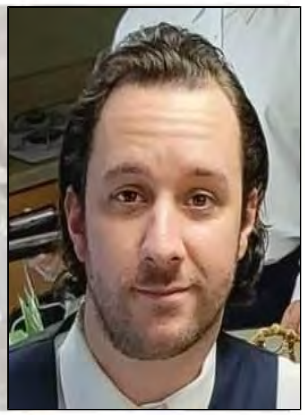
Michael Flanagan
Director

ASBESTOS INSPECTOR

DERRICK W. CALVARIO
Eff.Date: 11/03/2023
Exp.Date: 11/02/2024
AI900703

Member C.O.N.E.S.
WB - NEW

24



This is to certify that

Derrick W. Calvario

39 Valleywood Road, Hopkinton, MA 01748
MA DLS Asbestos Inspector License# AI900703

has completed requisite training by Video Conference, and has passed an examination for reaccreditation as:

Asbestos Inspector Refresher

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646

Course Location
Zoom Video Conference
Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

August 3, 2023
Course Dates

August 03, 2023
Examination Date

23-4811-106-265405
Certificate Number

August 03, 2024
Expiration Date

Training Director

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Michael Flanagan
Director

ASBESTOS MANAGEMENT PLANNER

MICHAEL MCCARTER
Eff.Date: 09/08/2023
Exp.Date: 09/07/2024
AP035661

Member C.O.N.E.S.

24

This is to certify that

Michael L. McCarter

7 Millstone Road, Windham, NH 03087

MA DLS Asbestos Management Planner License# AP035661

has completed the requisite training by Video Conference, and has passed an examination for reaccreditation

Asbestos Management Planner Refresher

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646

Course Location

Zoom Video Conference

Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

March 21, 2024

Course Dates

24-5264-136-219102

Certificate Number

March 21, 2024

Examination Date

March 21, 2025

Expiration Date

Training Director

16 Upton Drive, Wilmington, MA 01887 Telephone 978.658.5272 www.ieetrains.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION