efi global

BOSTON NORTH

March 13, 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
Green Elementary School (former) - Abisi Adult Education Center
408 Merrimack Street
Lowell, Massachusetts
EFI Project No. 014.07795

Dear Rick:

EFI Global Inc. (EFI) is pleased to present this AHERA 3-Year Reinspection Report prepared for the Green Elementary School (former) - Abisi Adult Education Center located at 408 Merrimack Street, Lowell, Massachusetts (Site). The reinspection site visit was conducted on February 21, 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 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.

Michael McCarter
Senior Project Manager
MA Asbestos Inspector # AI 001825

Jennifer L. Archacki
Environmental Service Line Principal
MA Asbestos Management Planner #AP 033118

AHERA 3-YEAR REINSPECTION

FOR:

GREEN ELEMENTARY SCHOOL (former) – ABISI ADULT EDUCATION CENTER
408 MERRIMACK STREET
LOWELL, MASSACHUSETTS

PREPARED BY:

efi global
BOSTON NORTH

155 WEST STREET, SUITE 6
WILMINGTON, MASSACHUSETTS 01887

EFI PROJECT NUMBER 014.07795

March 13, 2024

TABLE OF CONTENTS

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 reinspection at the former Green Elementary School (currently the Abisi Adult Education Center), 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 reinspection was conducted on February 20, 2024, by Michael McCarter, an EPA accredited and Massachusetts Department of Labor Standards (MADLS) licensed Asbestos Inspector, (license number AI-001825). EFI relied upon the previous three reports from 2014, 2017 and 2020. The original AHERA Management Plan and other subsequent records were not made available at the school for review. The recommended response actions were prepared by MADLS-licensed Asbestos Management Planner Jennifer Archacki (AP-033118).

A summary of known and assumed ACM within the Green Elementary School (former) – current Abisi Adult Education Center 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 Green Elementary School (former) - Abisi Adult Education Center 408 Merrimack 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 for review. The Cardo ATC 2014 3-Year Reinspection and Updated Management Plan is posted on the schools web site.
Designated Person (Rick Underwood) Training Records	No	No records available at the school 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 for review.
Annual Parental Notification Records	No	No records available at the school for review. Annual notification letters should be sent, 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 for review.
Designated Person True and Correct Statement	No	No records available at the school for review.
6-month Surveillance Inspection Records	No	No records available at the school for review.
Previous 3-Year Reinspection Records	No	No records available at the school 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 Green Elementary School (former) - Abisi Adult Education Center 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 to maintain compliance with the AHERA regulation. Damaged ACMs of any quantity listed in the report should be repaired or removed by a Massachusetts licensed Asbestos 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 Green Elementary School (former) - Abisi Adult Education Center was performed by the following individuals who have received appropriate training and who are MADLS licensed personnel:

Michael McCarter
Senior Project Manager
MA Asbestos Inspector # AI 001825

Jennifer L. Archacki
Environmental Service Line Principal
MA Asbestos Management Planner #AP 033118

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. The bulk sampling was performed by USEPA-accredited, and MADLS licensed Asbestos Inspector Michael McCarter. A total of 48 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 C** 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 D**.

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 from 2024 Reinspection

Material Description	Location(s) Sampled
Gypsum board	Basement Room 10, 2nd Floor Room 6
Joint compound	Basement Room 10, 2nd Floor Room 6
2’ x 4’ Fissured ceiling tile	Basement Room 10, 1st Floor Hall
12” x 12” Blue floor tile	Basement Room 10, 1st Floor Room 2
12” x 12” Blue floor tile mastic	Basement Room 10, 1st Floor Room 2
Horsehair plaster	Basement Room 10, Basement Room 9, Basement Room 12, 1st Floor Room 2, 1st Floor Room 4, 2nd Floor Hall, 2nd Floor Room 8

Material Description	Location(s) Sampled
Rough textured ceiling	Boiler Room
Blue vinyl cove base adhesive	1st Floor Room 2, 2nd Floor Room 6

G. ACM Hazard Assessment & Recommended Response Actions

Accessible locations were inspected and assessed to determine the presence and condition of known and assumed 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 Green Elementary School (former) - Abisi Adult Education Center 408 Merrimack 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 reinspection (Per schedule below)	$2,000
Response Action Costs	
Item	**Approximate Cost**
No Recommended response actions	NA

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 Green Elementary School (former) - Abisi Adult Education Center 408 Merrimack Street, Lowell, Massachusetts	
6 Month Surveillance Inspection	August 20, 2024
Annual Parental Notification Letter	September 1, 2024
6 Month Surveillance Inspection	February 20, 2025
6 Month Surveillance Inspection	August, 2025
Annual Parental Notification Letter	September 1, 2025
6 Month Surveillance Inspection	February 20, 2026
6 Month Surveillance Inspection	August 20, 2026
Annual Parental Notification Letter	September 1, 2026
3 Year Reinspection	February 20, 2027

ATTACHMENT A

AHERA SUMMARY TABLE

AHERA 3 Year Reinspection Summary Table
Green Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
408 Merrimack Street, Lowell, MA
Date of Inspection: 2/21/2024

Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
Fire doors with interior lining insulation (material added in 2024)	Basement, 1st Floor, 2nd Floor – Classrooms, hallways, common areas, etc.	75 Doors	NF	Not sampled. Assumed ACM.	5	Good	Interior linings associated with fire doors are assumed to contain asbestos. Maintain the fire doors in good condition in accordance with the Asbestos O&M Program. Collect bulk samples to determine asbestos content prior to any disturbance.	
Interior door and partition wall window glazing compound – various types (material added in 2024)	Lower Level/Main Level/Upper Level – Classrooms, hallways, common areas, etc.	95 windows	NF	Not sampled. Assumed ACM.	5	Good	Manage in place in accordance with the Asbestos O&M Program. Collect bulk samples to determine asbestos content prior to any disturbance.	
Window/Door caulk and glazing compounds – various types (material added in 2024)	Exterior windows and doors	10 Doors 70 Windows	NF	Not sampled. Assumed ACM.	5	Good	Material was observed to be located on interior and/or exterior side of windows and doors. Manage in place in accordance with the Asbestos O&M Program. Collect bulk samples to determine asbestos content prior to any disturbance.	
Pipe Fitting Insulation	Basement - Book Storage (next to front stairs)	14 Elbows	NF	Positive per Management Plan records	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Avoid storing books, ladders, or shelving units near the pipe fitting insulation.	
Pipe Fitting Insulation	Basement - Girls Room (Referenced as Women's Room on Site plan)	1 Elbows	NF	Positive per Management Plan records	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Since the pipe fitting insulation is in reach of the students and is occupied daily, the fitting insulation can be inspected regularly for damages, such as every 3 months, by trained maintenance personnel.	

AHERA 3 Year Reinspection Summary Table
Green Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
408 Merrimack Street, Lowell, MA
Date of Inspection: 2/21/2024

Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
Pipe Fitting Insulation (material added in 2024)	Basement – Storage Room adjoining Women's Room	12 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Avoid storing books, ladders, or shelving units near the pipe fitting insulation. Collect bulk samples to determine asbestos content prior to any disturbance.	
Pipe fitting insulation (material added in 2024)	Basement – Hall/Center Room	8 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	5	Good condition, jacketing material is intact	Pipe fitting insulation is located above suspended ceiling. Manage in place in accordance with the Asbestos O&M Program. Collect bulk samples to determine asbestos content prior to any disturbance.	
Pipe fitting insulation (material added in 2024)	Basement – Hall/Center Room at Entrance to Custodian Office	2 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	5	Good condition, jacketing material is intact	Pipe fitting insulation is located above suspended ceiling. Manage in place in accordance with the Asbestos O&M Program. Collect bulk samples to determine asbestos content prior to any disturbance.	
Pipe fitting insulation (material added in 2024)	Basement -Storage Room next to Custodian Office	12 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Avoid storing ladders, shelving units, or equipment near the pipe fitting insulation. Collect bulk samples to determine asbestos content prior to any disturbance.	
Pipe fitting insulation (material added in 2024)	Basement – Room 12	2 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	5	Good condition, jacketing material is intact	Pipe fitting insulation is located above ceiling tiles. Manage in place in accordance with the Asbestos O&M Program. Collect bulk samples to determine asbestos content prior to any disturbance.	

AHERA 3 Year Reinspection Summary Table
Green Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
408 Merrimack Street, Lowell, MA
Date of Inspection: 2/21/2024

Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
Pipe Fitting Insulation	1st Floor - Main Office	7 Elbows	NF	Positive per Management Plan records	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Since the pipe fitting insulation is in reach of the faculty and is occupied daily, the fitting insulation can be inspected regularly for damages, such as every 3 months, by trained maintenance personnel.	
Pipe fitting insulation (material added in 2024)	1st Floor – Room 4	10 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Since pipe fitting insulation is in reach of the occupants. The fitting insulation can be inspected regularly for damages, such as every 3 months, by trained maintenance personnel.	
Pipe fitting insulation (material added in 2024)	1st Floor – Room 2	10 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Since pipe fitting insulation is in reach of the occupants. The fitting insulation can be inspected regularly for damages, such as every 3 months, by trained maintenance personnel.	
Pipe fitting insulation (material added in 2024)	1st Floor –Staff Bathroom	2 Elbows	NF	Not Sampled, appears homogeneous to other areas of confirmed ACM. Assumed ACM.	6	Good condition, jacketing material is intact	Manage in place in accordance with the Asbestos O&M Program. Since pipe fitting insulation is in reach of the occupants. The fitting insulation can be inspected regularly for damages, such as every 3 months, by trained maintenance personnel.	

LF = Linear Feet

SF = Square Feet

Assumed ACM = This material was not identified in the Management Plan records and was not sampled during the 2024 Re-inspection. Prior to any planned disturbance by maintenance, renovation, or demolition activities, EFI recommends bulk sampling and analysis to determine asbestos content.

For all recommended response 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.

AHERA 3 Year Reinspection Summary Table
Green Elementary School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
408 Merrimack Street, Lowell, MA
Date of Inspection: 2/21/2024

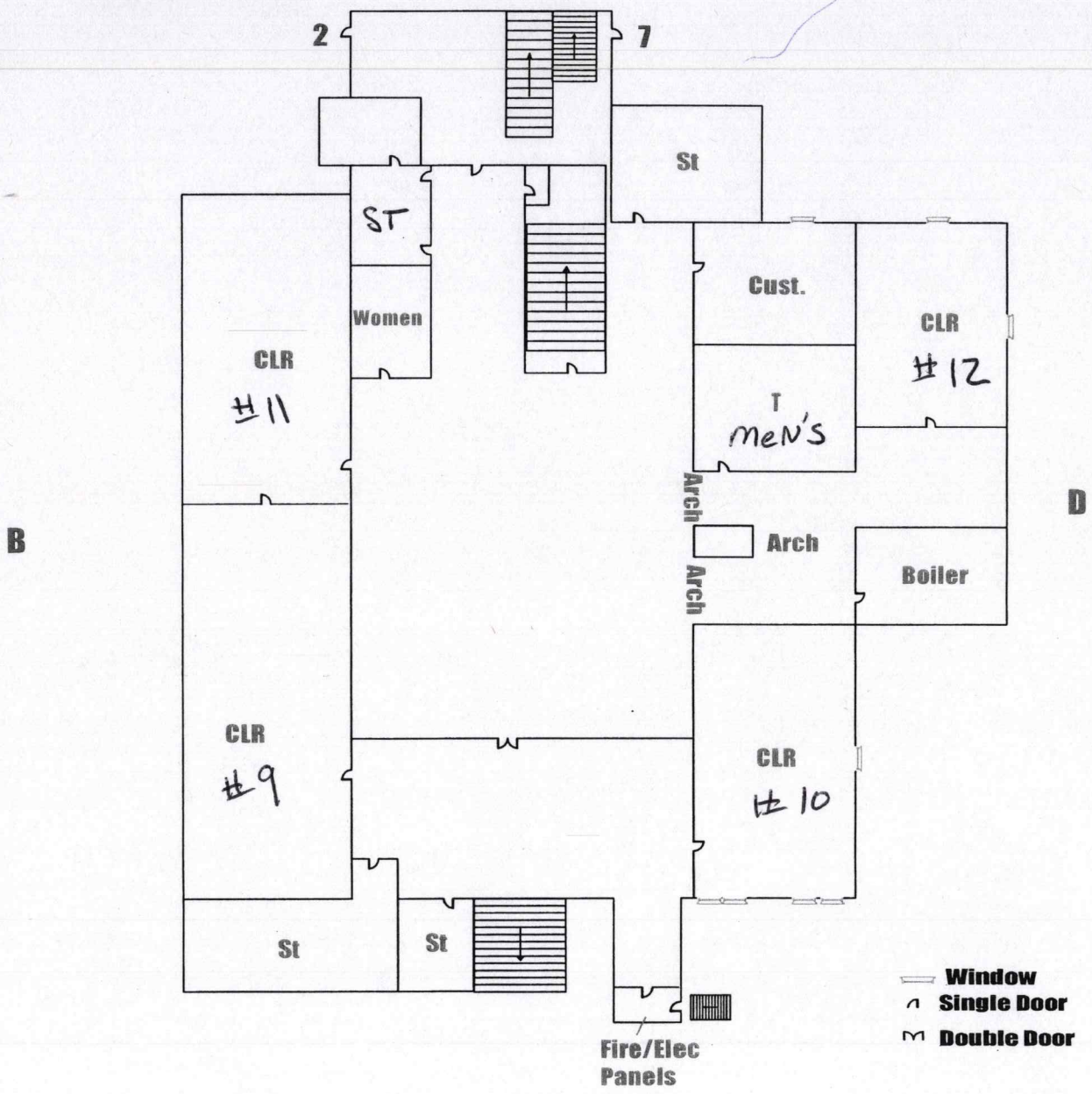
Physical Assessment Category
1 – Damaged or Significantly Damaged Thermal System ACM
2 – Damaged Friable Surfacing ACM
3 – Significantly Damaged Surfacing ACM
4 – Damaged or Significantly Damaged Friable Miscellaneous ACM
5 – ACM with Potential for Damage
6 – ACM with Potential for Significant Damage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

ATTACHMENT B

SITE PLANS

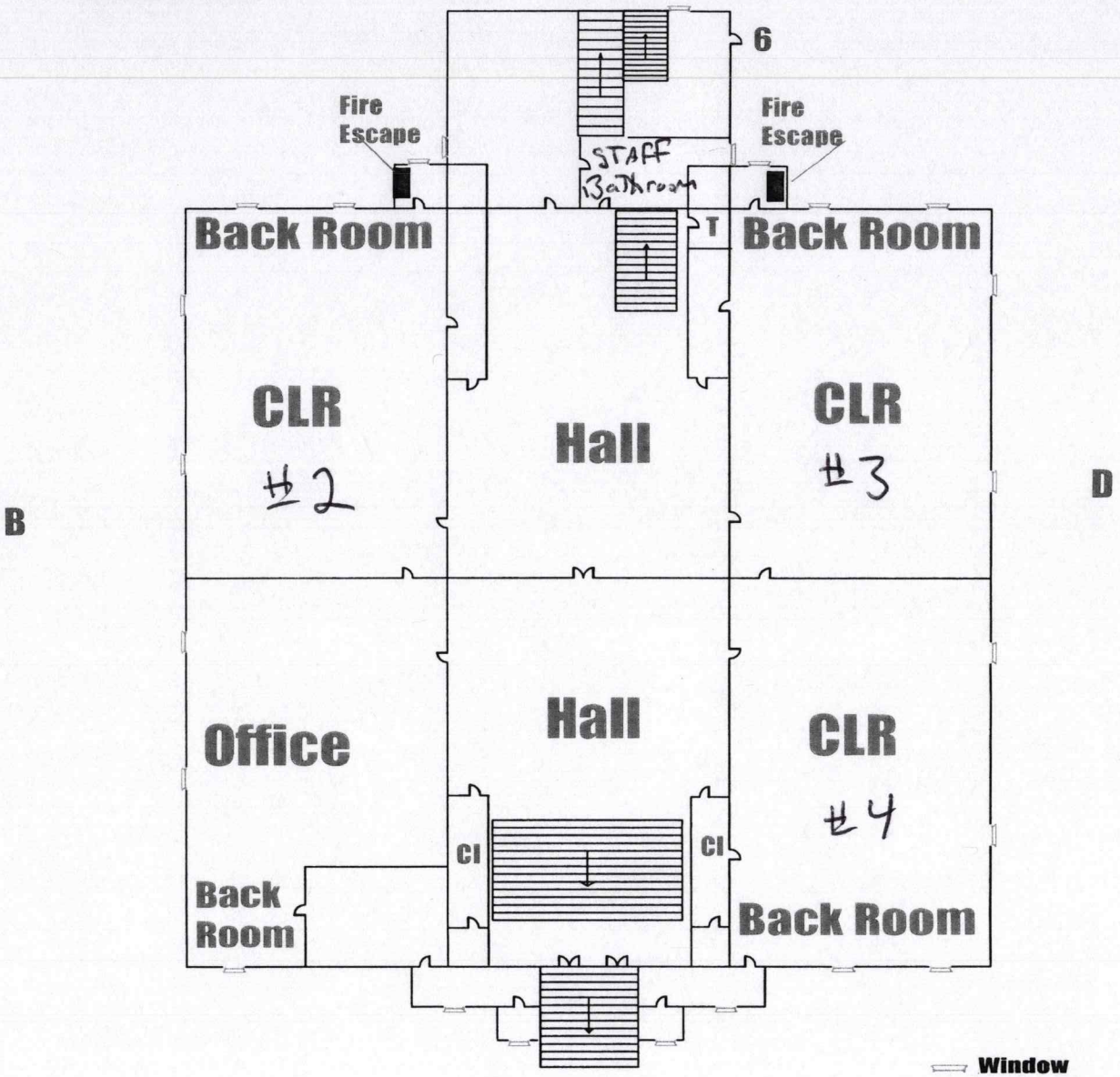
Lowell Adult Education (Green) School

Bottom Floor



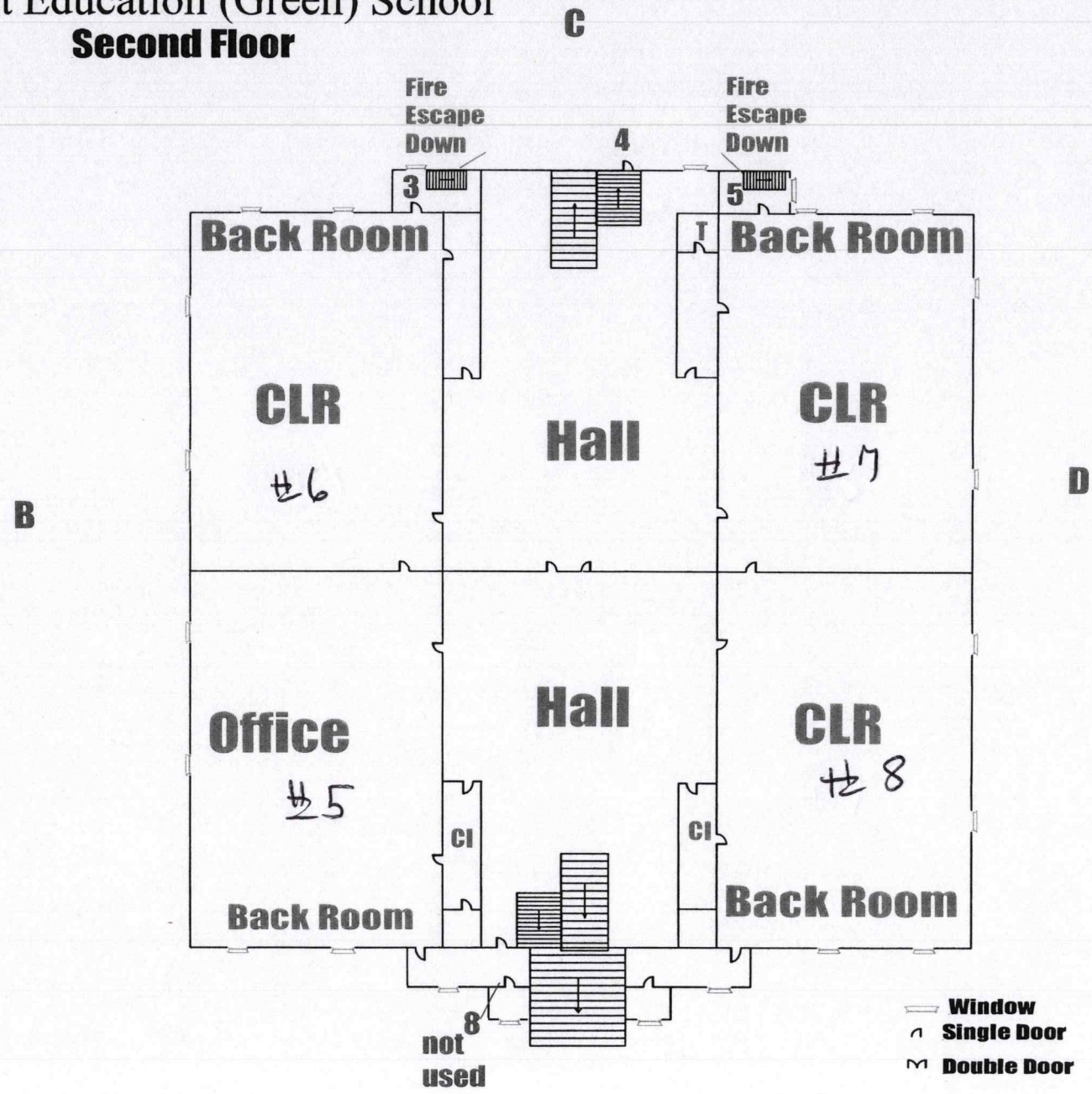
Lowell Adult Education (Green) School

First Floor



Lowell Adult Education (Green) School

Second Floor

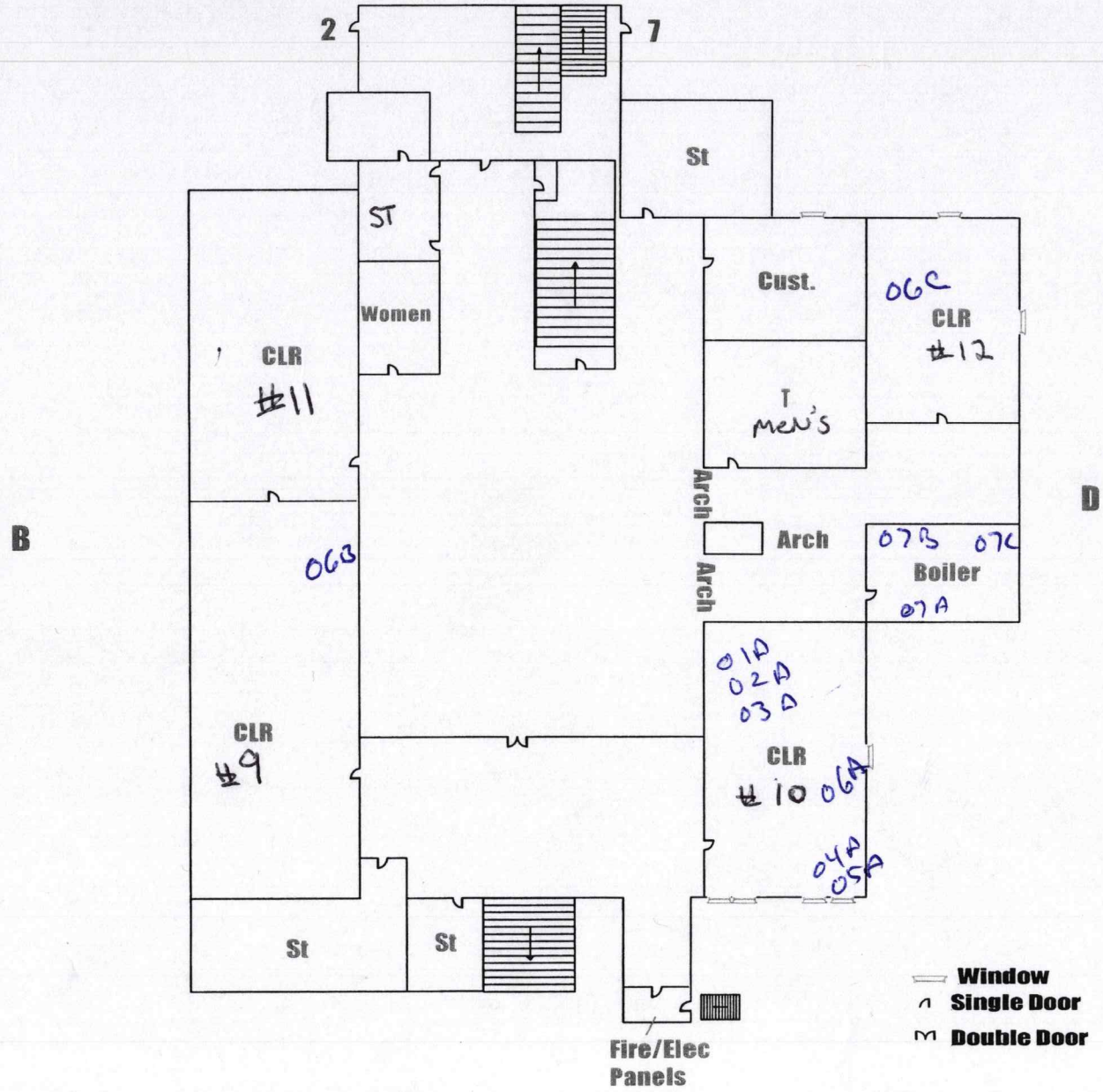


ATTACHMENT C

2024 REINSPECTION ASBESTOS BULK SAMPLE LOCATION PLANS

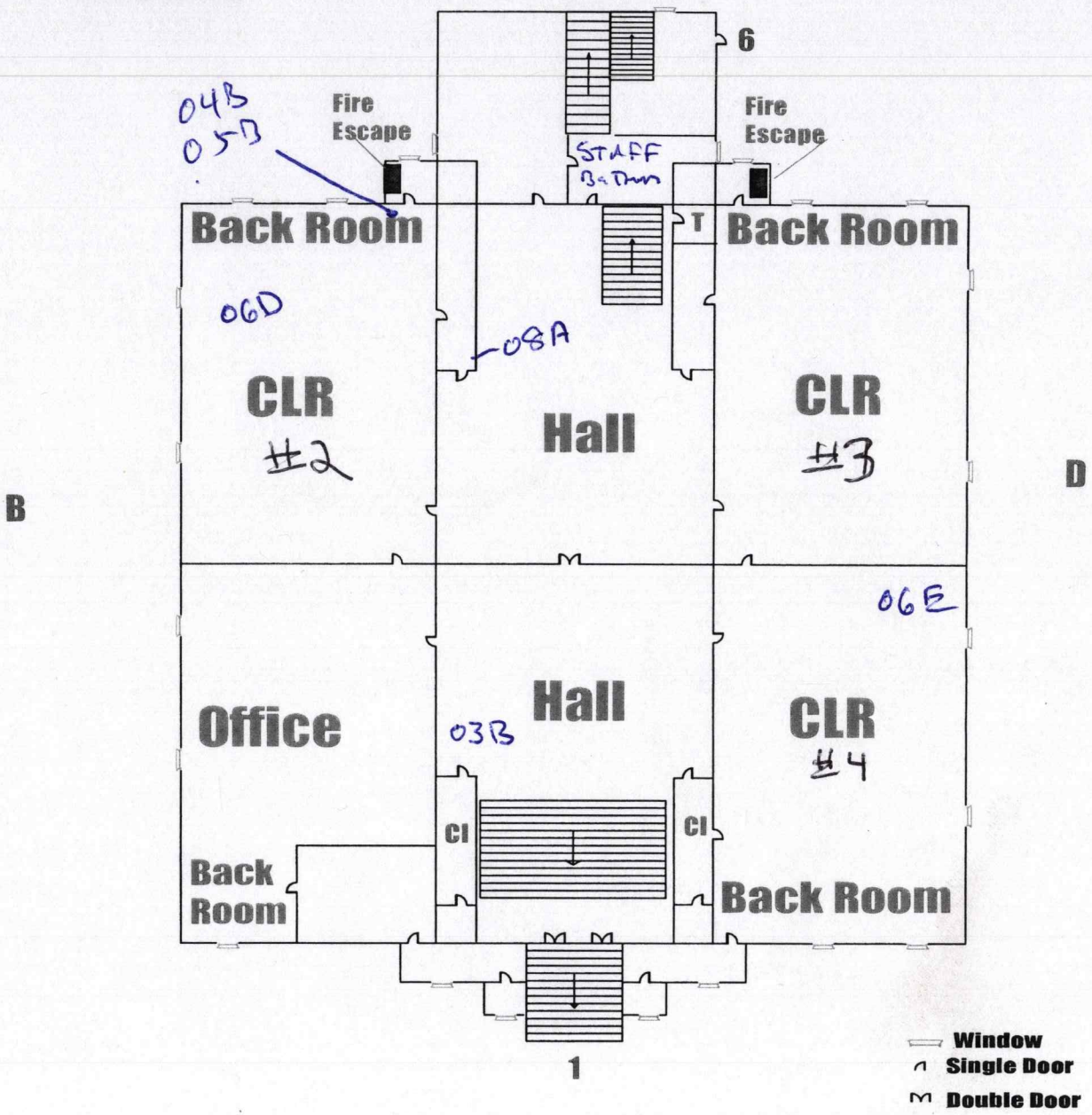
Lowell Adult Education (Green) School c

Bottom Floor



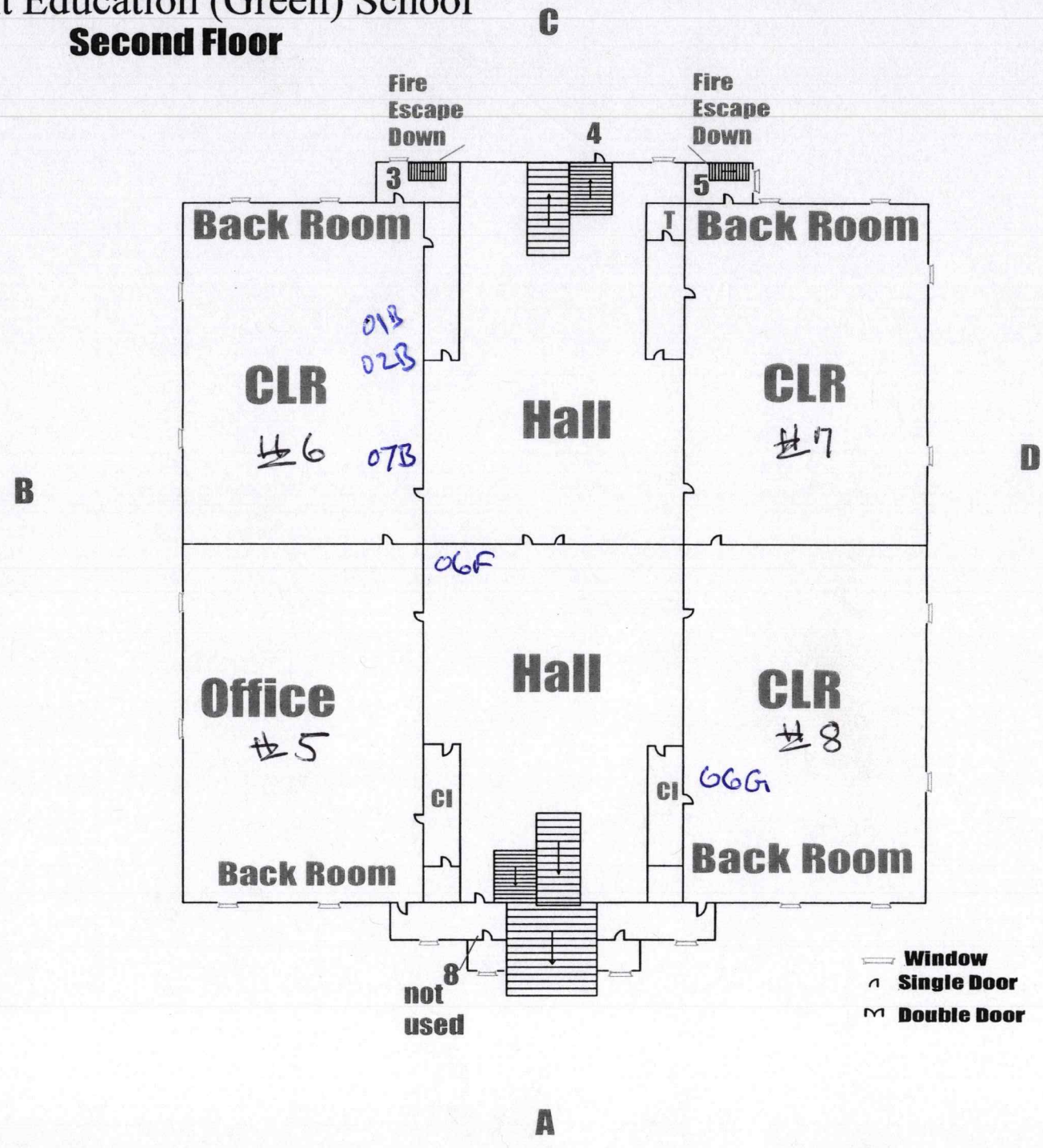
Lowell Adult Education (Green) School

First Floor



Lowell Adult Education (Green) School

Second Floor



ATTACHMENT D

2024 REINSPECTION ASBESTOS BULK SAMPLE REPORTS

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:	132401063
Customer ID:	EAFI66
Customer PO:	
Project ID:	

Attention:	Michael McCarter	**Phone:**	(978) 688-3736
	EFI Global, Inc.	**Fax:**	(978) 688-5494
	155 West Street	**Received Date:**	02/23/2024 10:10 AM
	Suite 6	**Analysis Date:**	02/23/2024 - 02/26/2024
	Wilmington, MA 01887	**Collected Date:**	02/21/2024
Project:	014.07795 - Former Green Elementary; A6151 Adult Education		

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 *132401063-0001*	Basement Room 10 - Gypsum Board	Brown/Tan Non-Fibrous Homogeneous	12% Cellulose	88% Non-fibrous (Other)	None Detected
01B *132401063-0002*	2nd - Room 6 - Gypsum Board	Brown/Tan Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
02A *132401063-0003*	Basement Room 10 - Joint Compound	White Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
02B *132401063-0004*	Basement Room 10 - Joint Compound	White Non-fibrous Homogenious	2% Cellulose	98% Non-fibrous (Other)	None Detected
03A *132401063-0005*	Basement Room 10 - 2x4 Fissured Ceiling Tile	Tan Fibrous Homogeneous	92% Min. Wool	8% Non-fibrous (Other)	None Detected
03B *132401063-0006*	1st - Hall - 2x4 Fissured Ceiling Tile	Tan Fibrous Homogenious	92% Min. Wool	8% Non-fibrous (Other)	None Detected
04A *132401063-0007*	Basement Room 10 - 12x12 Blue Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04B *132401063-0008*	1st - Room 2 - 12x12 Blue Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05A *132401063-0009*	Basement Room 10 - 12x12 Blue Floor Tile Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05B *132401063-0010*	1st - Room 2 - 12x12 Blue Floor Tile Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06A *132401063-0011*	Basement - Room 10 - Horse Hair Plaster	Gray/Tan/White Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
06B *132401063-0012*	Room 9 - Horse Hair Plaster	Gray/Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06C *132401063-0013*	Room 12 - Horse Hair Plaster	Gray/Tan/White Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
06D *132401063-0014*	Room 2 - Horse Hair Plaster	Gray/Tan/White Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
06E *132401063-0015*	Room 4 - Horse Hair Plaster	Gray/Tan/White Non-Fibrous Homogeneous	1% Hair	99% Non-fibrous (Other)	None Detected
06F *132401063-0016*	2nd Floor Hall - Horse Hair Plaster	Gray/Tan/White Non-Fibrous Homogeneous	1% Hair	99% Non-fibrous (Other)	None Detected

Initial report from: 02/26/2024 07:53:58

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: 132401063
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**
06G *132401063-0017*	Room 8 - Horse Hair Plaster	Gray/Tan/White Non-Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
07A *132401063-0018*	Boiler Room - Rough Textured Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07B *132401063-0019*	Boiler Room - Rough Textured Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07C *132401063-0020*	Boiler Room - Rough Textured Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08A *132401063-0021*	1st - Room 2 - Blue Vinyl Cove Base Adhesive	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08B *132401063-0022*	2nd - Room 6 - Blue Vinyl Cove Base Adhesive	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Ava Kopellas (20)

Steve Grise, Laboratory Manager
or Other Approved Signatory

Initial report from: 02/26/2024 07:53:58

OrderID: 132401063

132401063

efi global

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):	Michael McCarter	**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:	978-604-7662		
Project Information			
Project No./ Description:	014.07795 Former Green Elementary - Abisi Adult Education		
Email Report to:	Michael.mccarter@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:	EPA Method 600/R-93/116	**Check for Positive Stop:**	X
Notes:		**Date Collected:**	2-21-24

Sample ID	Type of Material	Location
01A	Gypsum Board	Basement Room 10
01B	"	2nd floor - Rm 6
02A	Joint compound	Basement Room 10
02B	"	2nd floor Rm 6
03A	2x4 fissured ceiling tile	Basement Room 10
03B	"	1st - Hall
04A	12x12 Blue floor tile	Basement Room 10
04B	"	1st - Room 2
05A	" - MASTIC,	Basement Room 10
05B	" - "	1st Room 2

Total Number of Samples Submitted: 22

Samplers Name: Michael McCarter Samplers Signature [signature]

Relinquished By (Client): Michael McCarter Date: _____ Time: _____

Received By (Lab): _____ Date: 2/23/24 Time: 10AM

REC'D EMSL-BOSTON FEB 23 2024

(1/3)

fx 8172 7451 6681

OrderID: 132401063

132401063

efi global

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

Sample ID	Type of Material	Location
06F	Horse Hair plaster	Basement - Room 10
06B	↓	↓ - Room 9
06C	↓	↓ - Room 12
06D	↓	1st fl - Room 2
06E	↓	↓ - Room 4
06F	↓	2nd fl - 2nd fl Hall
06G	↓	↓ - Room 5
07A	Rough Textured Ceiling	Boiler Room
07B	↓	↓
07C	↓	↓
08A	Blue Vinyl Cove Base Adhesive,	1st - Room 2
08D	↓	2nd - Room 6

Project Number/Description 014.07795
Former Green Elementary
408 Merrimack ST, Lowell

Page 2 of 2

RECD EMSL-BOSTON FEB 23 2024

ATTACHMENT E

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

MICHAEL MCCARTER

Eff.Date: 09/11/2023
Exp.Date: 09/10/2024
AI001825

Member C.O.N.E.S.

24

This is to certify that

Michael L McCarter

7 Millstone Road, Windham, NH 03087

MA DLS Asbestos Inspector License# AI001825

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

April 21, 2023
Course Dates

23-4804-106-219102
Certificate Number

April 21, 2023
Examination Date

April 21, 2024
Expiration Date

Training Director

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

INSTITUTE FOR ENVIRONMENTAL EDUCATION

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

Michael Flanagan
Director

ASBESTOS MANAGEMENT PLANNER

JENNIFER L. ARCHACKI
Eff.Date: 12/20/2023
Exp.Date: 12/19/2024
AP033118

Member C.O.N.E.S.

24

This is to certify that

Jennifer L. Archacki

31 Pickman Rd., Salem, MA 01970

MA DLS Asbestos Management Planner License# AP033118

INSTITUTE FOR ENVIRONMENTAL EDUCATION

IEE

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

April 21, 2023
Course Dates

23-4930-136-200894
Certificate Number

April 21, 2023
Examination Date

April 21, 2024
Expiration Date

Training Director

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

INSTITUTE FOR ENVIRONMENTAL EDUCATION