efi global

BOSTON NORTH

June 6, 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
James S. Daley Middle School
150 Fleming Street
Lowell, Massachusetts
EFI Project No. 014.07795

Dear Rick:

EFI Global Inc. (EFI) is pleased to present this AHERA 3-Year Re-inspection Report prepared for the James S. Daley Middle School located at 150 Fleming Street, Lowell, Massachusetts (Site). The reinspection site visit was conducted on April 16th and 17th, 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 or at the administrative office for review. EFI relied upon the 2020 table of identified ACM along with visual assessment and bulk sampling of new materials 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 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

John Vaz
Senior Project Manager
MA Asbestos Management Planner #AP 900524

AHERA 3-YEAR REINSPECTION

FOR:

JAMES S. DALEY MIDDLE SCHOOL
150 FLEMING STEET
LOWELL, MASSACHUSETTS

PREPARED BY:

efi global
BOSTON NORTH

155 WEST STREET, SUITE 6
WILMINGTON, MASSACHUSETTS 01887

EFI PROJECT NUMBER 014.07795

June 11, 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 reinspection at the James S. Daley Middle 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 reinspection was conducted on April 16th and 17th, 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 2020 3-year reinspection table of identified ACM along with visual assessment and bulk sampling of new materials for this reinspection. The original AHERA Management Plan and other subsequent records were not made available at the school or at the administrative offices for review. The recommended response actions were prepared by MADLS-licensed Asbestos Management Planner John Vaz (AP-900524).

A summary of known and assumed ACM within the James S. Daley Middle 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 James S. Daley Middle School 150 Fleming 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 offices 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 (Rick Underwood) Training Records	No	No records available at the school or administrative offices 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 offices for review.
Annual Parental Notification Records	No	No records available at the school or administrative offices 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 offices for review.
Designated Person True and Correct Statement	No	No records available at the school or administrative offices for review.
6-month Surveillance Inspection Records	No	No records available at the school or administrative offices for review.
Previous 3-Year Reinspection Records	No	No records available at the school or administrative offices for review.
Asbestos Labels present (required in routine maintenance areas)	No	No labels 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 vibration, air erosion, water damage, 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 vibration, air erosion, water damage, 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 James S. Daley Middle School are 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 James S. Daley Middle School 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

John Vaz
Senior Project Manager
MA Asbestos Management Planner #AP 900524

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 130 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 5-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 per 2024 3-Year Reinspection

Material Description	Location(s) Sampled
Gypsum board ceiling	Lower Level – Boiler Room
Joint compound	Lower Level – Boiler Room
Red caulk on exhaust duct	Lower Level – Boiler Room
Gray HVAC duct sealant	Lower Level – Boiler Room
HVAC flex connector	Lower Level – Boiler Room, Lower Level – Emergency Generator Room
Interior metal framed door window glazing compound	Lower Level – Boiler Room, 1st Floor – Main Office
Emergency generator exhaust insulation	Lower Level – Emergency Generator Room, Lower Level – WTR Boost Pump, Lower Level – Hall at WTR Boost Pump
Sprinkler pipe thread sealant	Lower Level – WTR Boost Pump, 1st Floor – Main Office
4” vinyl cove base adhesive	Lower Level – WTR Boost Pump, 2mnd Floor – Room 215

Material Description	Location(s) Sampled
2’ x 4’ small fissured ceiling tile	Lower Level – Storage @ WTR Boost Pump, 1st Floor – Room 101
2’ x 4’ large fissured ceiling tile	Lower Level – Storage @ WTR Boost Pump, 2nd Floor – Teachers
Textured plaster ceiling on cement board	Lower Level – Boys, Lower Level - Girls
Cement board ceiling	Lower Level – Boys, Lower Level - Girls
Tan with brown terrazzo	Lower Level – Boys, 1st Floor – Stair #6
Brown terrazzo	Lower Level – Boys, 1st Floor – Stair #6
Plaster finish on concrete block walls	Lower Level – Stair #2, 1st Floor – Stair #2, 1st Floor – Stair #1, 1st Floor – Stair #3, 1st Floor – Stair #7
2’ x 2’ glacier ceiling tile	Lower Level – Hall, 2nd Floor – Stair #2
2’ x 2’ fissure ceiling tile	Lower Level – Hall, 2nd Floor – Hall
12” x 12” gray floor tile	Lower Level – Hall, Lower Level - Hall at Room 10
12” x 12” gray floor tile, mastic, black	Lower Level – Hall, Lower Level- Hall at Room 10
Gypsum board	Lower Level – Elevator Machine Room, 1st Floor – Room 111
Joint compound	Lower Level – Elevator Machine Room, 1st Floor – Room 111
Wood fiber board ceiling	Lower Level – Emergency Generator Room
2’ x 4’ flat white ceiling tile	Lower Level - Kitchen
Kitchen exhaust hood insulation	Lower Level - Kitchen
12” x 12” light gray floor tile	Lower Level – Cafeteria, 1st Floor - Room 101
12” x 12” pink floor tile	Lower Level – Cafeteria, 1st Floor - Room 101
12” x 12” blue floor tile	Lower Level – Cafeteria, 1st Floor - Room 101
Mastic associated with 12” x 12” light gray/pink/blue floor tile mastic, black	Lower Level – Cafeteria, 1st Floor - Room 101
12” x 12” gray mottled floor tile	Lower Level – Room 9, 1st Floor - Room 100
12” x 12” gray mottled floor tile, mastic, black	Lower Level – Room 9, 1st Floor - Room 100
Stainless steel sink undercoat, gray	Lower Level – Room 9, Lower level Room 12
Interior window frame caulk, white	Lower Level – Shop Annex, 1st Floor - Room 101
Plaster finish coat	1st Floor – Hall at Room 101, 1st Floor- Room 101, 1st Floor - Room 119, 1st Floor - Room 129, 2nd Floor – Room 203, 2nd Floor – Room 220, 2nd Floor – Room 230
Plaster base coat	1st Floor – Hall at Room 101, 1st Floor- Room 101, 1st Floor - Room 119, 1st Floor - Room 129, 2nd Floor – Room 203, 2nd Floor – Room 220, 2nd Floor – Room 230
6” vinyl cove base adhesive	1st Floor – Room 101, 1st Floor – Office at Room 108
Carpet adhesive on concrete	1st Floor – Teachers Room, 1st Floor – Library
2’ x 4’ ceiling tile (2’ x 2’ pattern)	1st Floor –Room 115, 1st Floor – Library
Stainless steel sink undercoat, black	1st Floor –Room 117, 1st Floor – Room 125
2” red ceramic floor tile grout	1st Floor – Faculty Rest Room at Sprinkler Room, 1st Floor – Nurse Bathroom

Material Description	Location(s) Sampled
Textured ceiling finish (Swirl pattern) on gypsum board	1st Floor – Room 126 Closet
1' x 1' ceiling tile	1st Floor - Main Entrance
Ceramic wall tile grout	1st Floor – Nurse Bathroom
Black lab bench top	1st Floor – Room 130, 1st Floor – Room 132
Red sheet flooring	1st Floor – Room 127, 1st Floor – Room 129
Red sheet flooring mastic, gray/black	1st Floor – Room 127, 1st Floor – Room 129
Dark red sheet flooring on raised platform	1st Floor – Room 127
Dark red sheet flooring on raised platform, mastic, tan	1st Floor – Room 127
Brown linoleum on windowsill	1st Floor – Room 127, 1st Floor – Room 129
Brown linoleum on windowsill, mastic, brown	1st Floor – Room 127, 1st Floor – Room 129
Exterior entry door caulk, gray	1st Floor – at Stair 7, 1st Floor – at Stair 10
Exterior HVAC uninvent louver caulk, white	1st Floor – at Room 112, Lower Level – at Room 10
Exterior overhang stucco	1st Floor – Main Entrance, 1st Floor – at Stair 7

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 James S. Daley Middle School 150 Fleming 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**
Annually notify occupants regarding ACM materials noted in the Summary Table of Identified and Assumed ACMs.	$200

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 James S. Daley Middle School 150 Fleming Street, Lowell, Massachusetts	
Event	**Completion Date**
Annually notify occupants regarding ACM 2’ x 2” cement pegboard wall panels as recommended in the Summary Table of Identified and Assumed ACMs.	September 1, 2024
6 Month Surveillance Inspection	October 17, 2024
6 Month Surveillance Inspection	April 17, 2025
Annual Parental Notification Letter	September 1, 2025
6 Month Surveillance Inspection	October 17, 2025
6 Month Surveillance Inspection	April 17, 2026
Annual Parental Notification Letter	September 1, 2026
6 Month Surveillance Inspection	October 17, 2026
3 Year Reinspection	April 17, 2027

ATTACHMENT A

AHERA SUMMARY TABLE

AHERA 3 Year Re-Inspection Summary Table
James S. Daley Middle School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
150 Fleming Street, Lowell, MA
Dates of Inspection: April 16 and 17, 2024

Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
Green/White Sheet Flooring and Associated Adhesive	1st Floor – Assembly Area	2,600 SF	NF	Positive per Management Plan records	5	Good condition overall with minor cracking. Tile is intact.	Good condition overall with minor cracking. Monitor to determine condition does not worsen. Manage in place in accordance with the Asbestos O&M Program or replace with new non-ACM flooring. Sheet flooring 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.	
Green/White Sheet Flooring Adhesive	1st Floor – Assembly Area	2,600 SF	NF	Positive per Management Plan records	5	N/A, material not accessible for viewing.	Overlying floor tile is in good condition and mastic is not visible. Manage in place in accordance with the Asbestos O&M Program	
Flex Duct Connector	Basement – Boiler Room	2 Units	NF	Assumed Positive per Management Plan records. Sampled in 2024. No asbestos detected	-	-		
Wood Fire Door	Hallways Throughout Building	79 Units	NF	Assumed Positive per Management Plan records	5	Doors in Good Condition (interior linings not accessible for inspection)	Manage in place in accordance with the Asbestos O&M Program. Prior to disturbance, inspect the doors for suspect ACM lining insulation and collect bulk samples to determine asbestos content.	
Metal Fire Doors	Throughout Basement Hallways and 2nd Floor Roof Access	37 Units	NF	Assumed Positive per Management Plan records	5	Doors in Good Condition (interior linings not accessible for inspection)	Manage in place in accordance with the Asbestos O&M Program. Prior to disturbance, inspect the doors for suspect ACM lining insulation and collect bulk samples to determine asbestos content.	

AHERA 3 Year Re-Inspection Summary Table
James S. Daley Middle School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
150 Fleming Street, Lowell, MA
Dates of Inspection: April 16 and 17, 2024

Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
Flex Duct Connector	2nd Floor – Mechanical Room	2 Units	NF	Assumed Positive per Management Plan records. Sampled in 2024. No asbestos detected	-	-		
Flex Duct Connector	Basement – Art Supply Room	2 Units	NF	Assumed Positive per Management Plan records. Sampled in 2024. No asbestos detected	-	-		
Flex Duct Connector	Basement – Emergency Generator Room	1 Units	NF	Assumed Positive per Management Plan records. Sampled in 2024. No asbestos detected	-	-		
Pipe Insulation	Basement – Emergency Generator Room	30 LF	NF	Assumed Positive per Management Plan records. Sampled in 2024. No asbestos detected	-	-		
2' x 2' Cement Pegboard Wall Panels (material added per 2024 reinspection)	First Floor - Rooms 127 and 129	800 SF	NF	25% Chrysotile	5	Good	Annually notify occupants that 2' x 2' cement pegboard wall panels are ACM and should not be disturbed by hanging items from the ACM or other activities. 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.	September 1, 2024
Exterior Window Caulk, White	Exterior Windows	5,000 LF	NF	25% Chrysotile	5	Good	Manage in place in accordance with the Asbestos O&M Program.	

AHERA 3 Year Re-Inspection Summary Table
James S. Daley Middle School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
150 Fleming Street, Lowell, MA
Dates of Inspection: April 16 and 17, 2024

LF = Linear Feet

SF = Square Feet

NA = Not Applicable

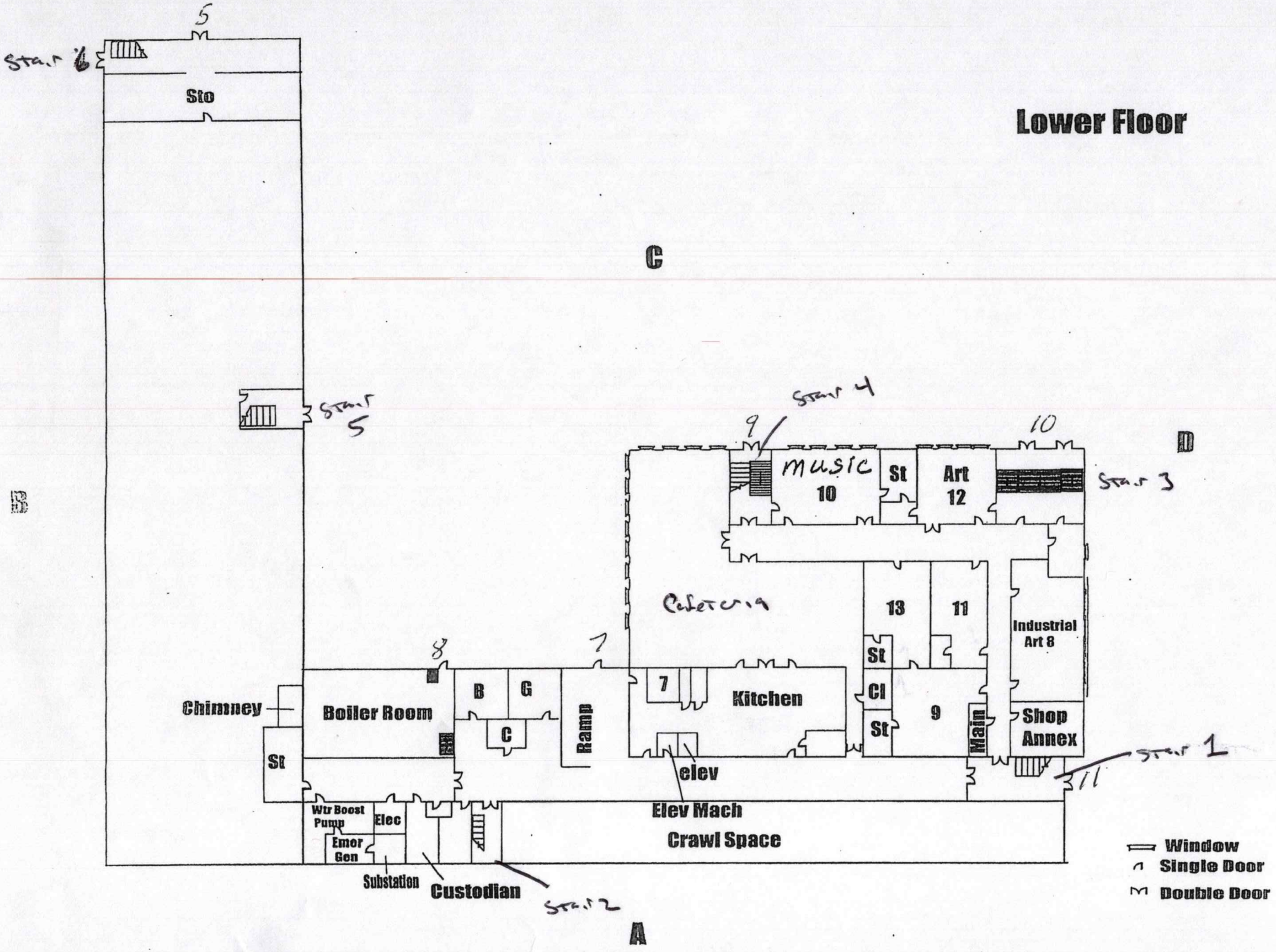
For all recommended response actions other than administrative activities, the work should be conducted by a Massachusetts licensed Asbestos Contractor and a work plan for the specific repair or removal activity should be prepared by a Massachusetts licensed Asbestos Designer.

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

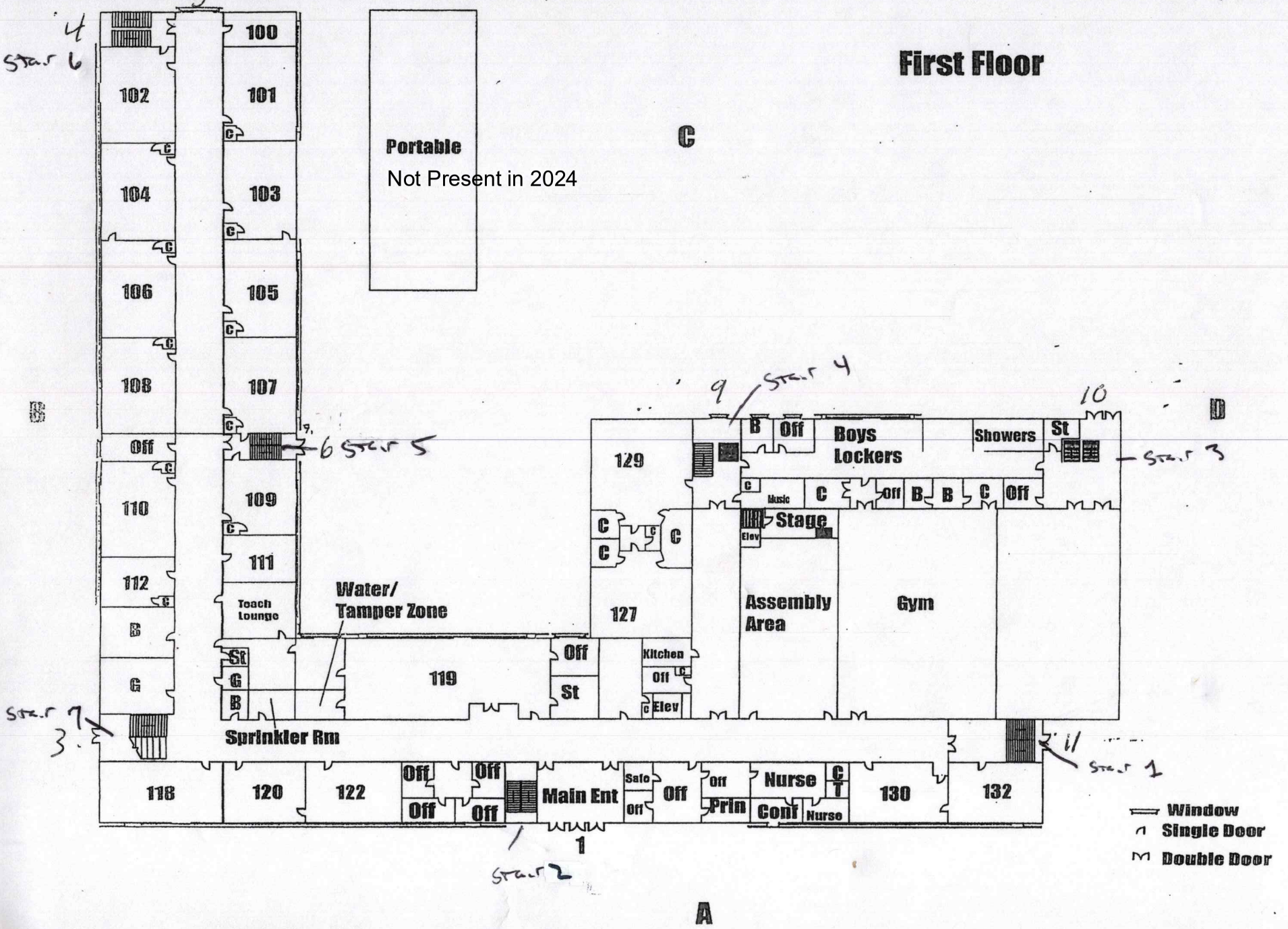
ATTACHMENT B

SITE PLANS

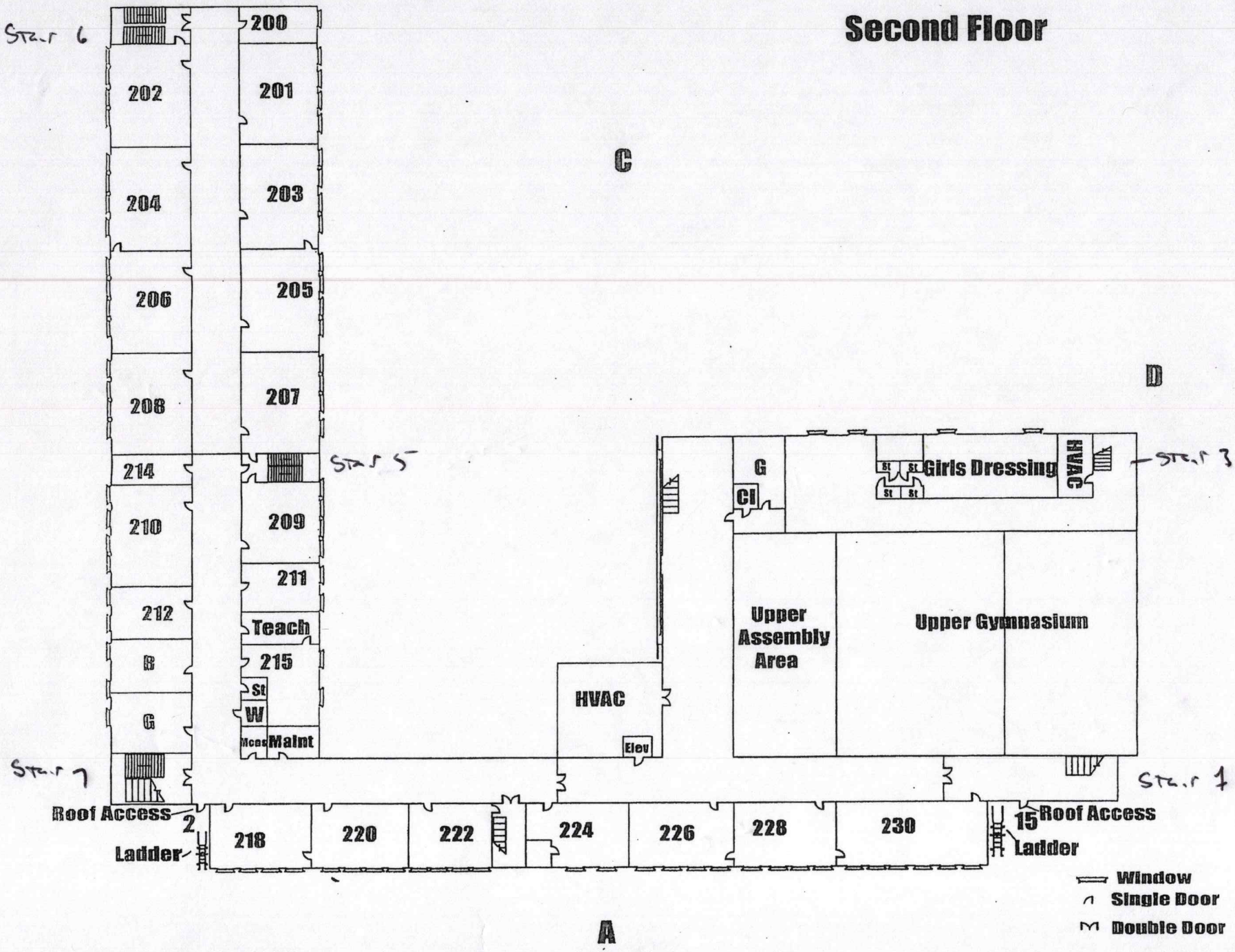
Lowell Daley Middle School



Lowell Daley Middle School



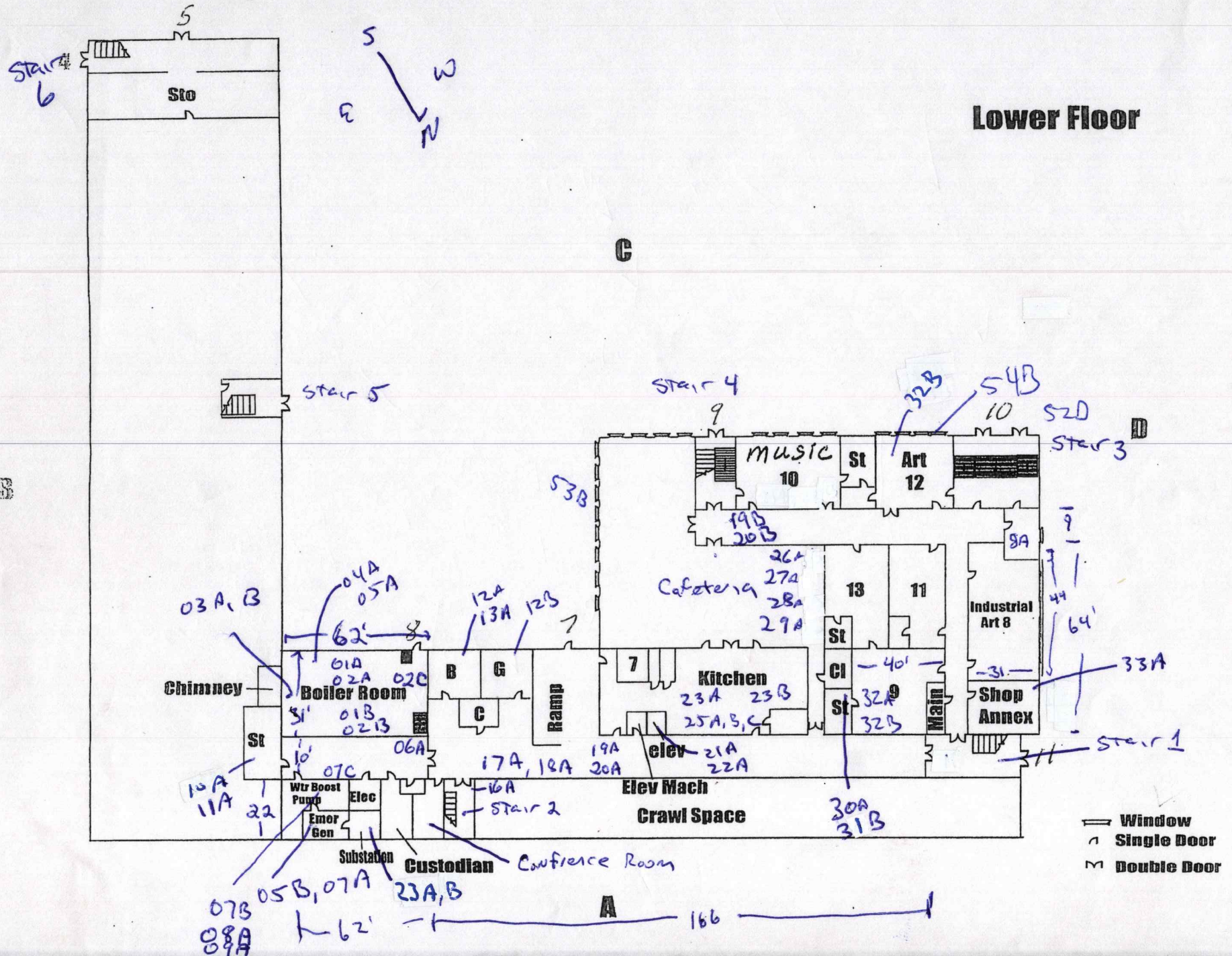
Lowell Daley Middle School



ATTACHMENT C

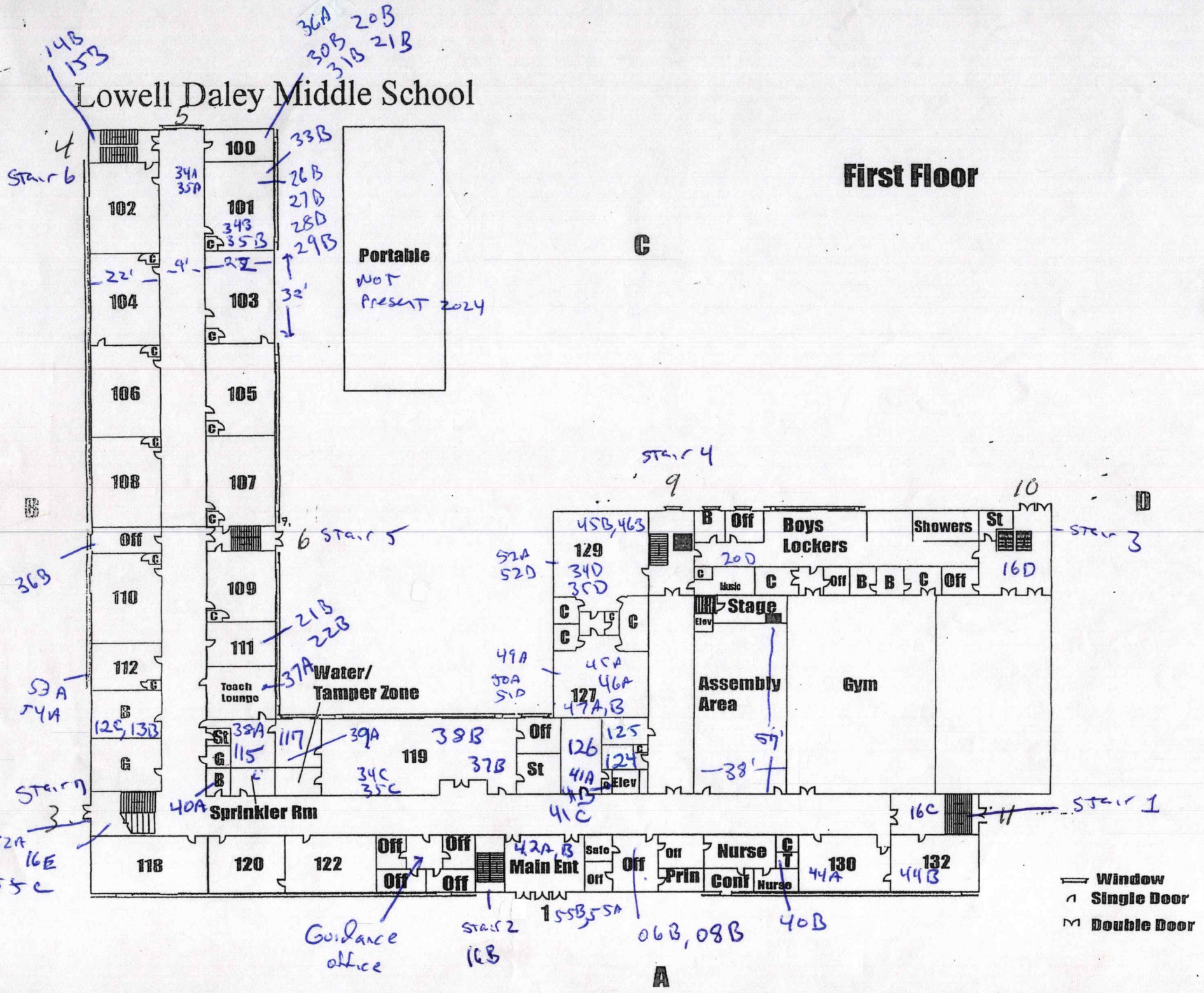
2024 REINSPECTION ASBESTOS BULK SAMPLE LOCATION PLANS

Lowell Daley Middle School

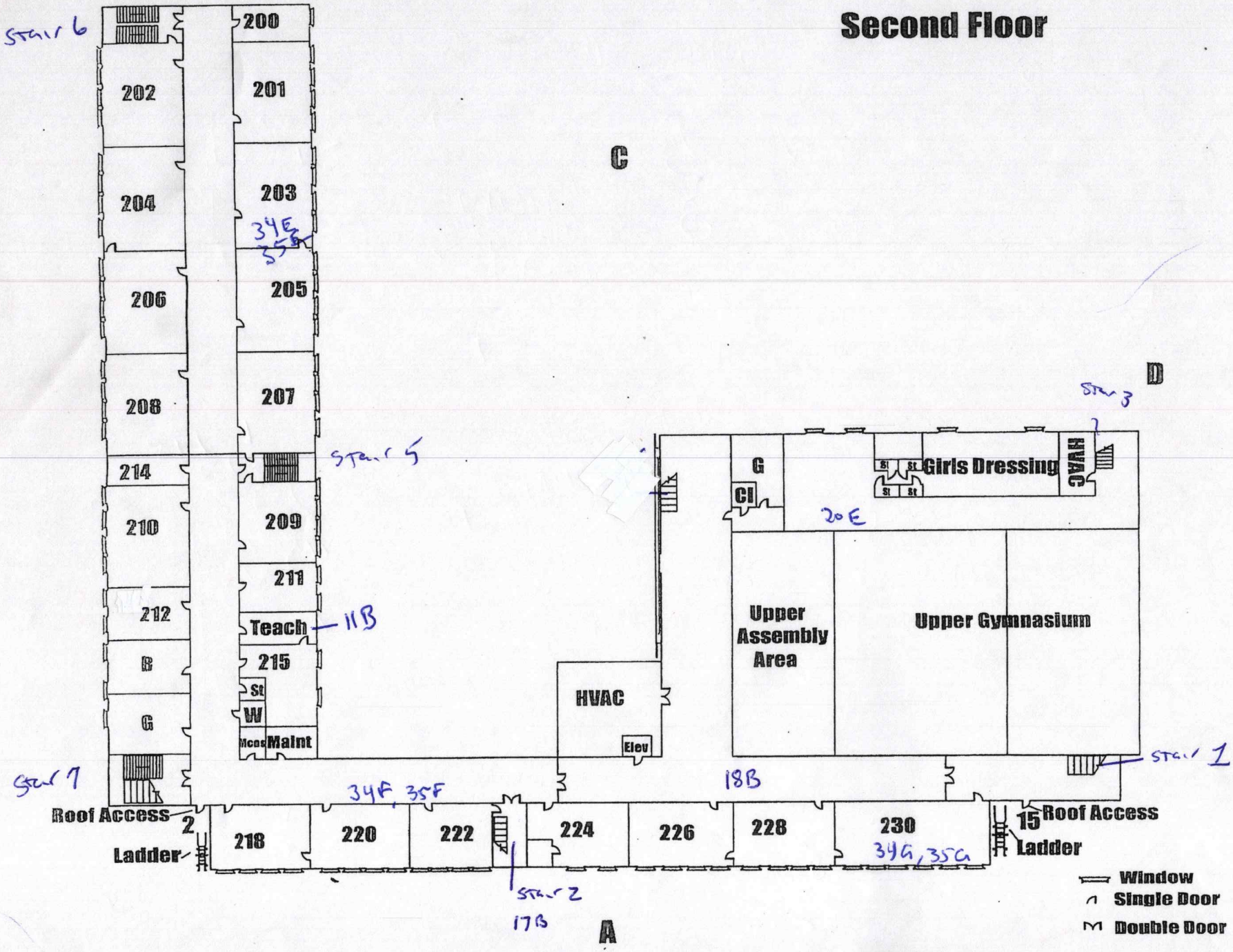


Lowell Daley Middle School

First Floor



Lowell Daley Middle School



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:	132402262
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:**	04/18/2024 11:25 AM
	Suite 6	**Analysis Date:**	04/25/2024
	Wilmington, MA 01887	**Collected Date:**	
Project:	014.07795 - Daley Middle School; 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 *132402262-0001*	Lower Level - Boiler Room - Gypsum Board Ceiling	Brown/Gray Fibrous Homogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
01B *132402262-0002*	Lower Level - Boiler Room - Gypsum Board Ceiling	Brown/Gray Fibrous Homogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
02A *132402262-0003*	Lower Level - Boiler Room - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02B *132402262-0004*	Lower Level - Boiler Room - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02C *132402262-0005*	Lower Level - Boiler Room - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A *132402262-0006*	Lower Level - Boiler Room - Red Caulk on Exhaust Duct	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03B *132402262-0007*	Lower Level - Boiler Room - Red Caulk on Exhaust Duct	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04A *132402262-0008*	Lower Level - Boiler Room - Gray HVAC Duct Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04B *132402262-0009*	Lower Level - Boiler Room - Gray HVAC Duct Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05A *132402262-0010*	Lower Level - Boiler Room - HVAC Flex Connector	White/Silver Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
05B *132402262-0011*	Lower Level - Emergency Generator Room - HVAC Flex Connector	White/Silver Fibrous Homogeneous	65% Glass	35% Non-fibrous (Other)	None Detected
06A *132402262-0012*	Lower Level - Boiler Room - Exterior Metal Framed Door Window Glazing Compound	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06B *132402262-0013*	1st Floor Main Office - Exterior Metal Framed Door Window Glazing Compound	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07A *132402262-0014*	Lower Level - Emerg. Generator Room - Emergency Generator Exhaust Insulation	Gray Fibrous Homogeneous	25% Cellulose 10% Glass	65% 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**
07B *132402262-0015*	Lower Level - WTR Boost Pump - Emergency Generator Exhaust Insulation	Gray Fibrous Homogeneous	25% Cellulose 10% Glass	65% Non-fibrous (Other)	None Detected
07C *132402262-0016*	1st Floor Main Office - Emergency Generator Exhaust Insulation	Gray Fibrous Homogeneous	25% Cellulose 10% Glass	65% Non-fibrous (Other)	None Detected
08A *132402262-0017*	Lower Level - WTR Boost Pump - Sprinkler Pipe Sealant	Gray Non-Fibrous Homogeneous	2% Fibrous (Other)	98% Non-fibrous (Other)	None Detected
08B *132402262-0018*	1st Floor - Room 101 - Sprinkler Pipe Sealant	Gray Non-Fibrous Homogeneous	2% Fibrous (Other)	98% Non-fibrous (Other)	None Detected
09A *132402262-0019*	Lower Level - Storage at WTR Boost Pump - 4" Vinyl Cove Base Adhesive	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09B *132402262-0020*	2nd Floor - Room 215 - 4" Vinyl Cove Base Adhesive	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10A *132402262-0021*	Lower Level - Storage at WTR Boost Pump - 2x4 Small Fissured CG Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
10B *132402262-0022*	1st Floor - Room 101 - 2x4 Small Fissured CG Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
11A *132402262-0023*	Lower Level - Storage at WTR Boost Pump - 2x4 Large Fissured CG Tile	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
11B *132402262-0024*	1st Floor - Teachers - 2x4 Large Fissured CG Tile	Gray/White Fibrous Homogeneous	60% Cellulose 25% Min. Wool	15% Non-fibrous (Other)	None Detected
12A *132402262-0025*	Lower Level - Boys - Textured Master Ceiling on Cement Board	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B *132402262-0026*	Lower Level - Girls - Textured Master Ceiling on Cement Board	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12C *132402262-0027*	1st Floor - Boys at Stair - Textured Master Ceiling on Cement Board	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12D *132402262-0028*	1st Floor - Boys Locker Room - Textured Master Ceiling on Cement Board	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12E *132402262-0029*	1st Floor - Girls Locker Room - Textured Master Ceiling on Cement Board	Gray/White 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**
13A *132402262-0030*	Lower Level - Boys - Cement Board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B *132402262-0031*	1st Floor - Boys at Stair - Cement Board	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A *132402262-0032*	Lower Level - Boys Room - Tan w. Brown Terrazzo	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14B *132402262-0033*	1st Floor - Stair 6 - Tan w. Brown Terrazzo	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15A *132402262-0034*	Lower Level - Boys Room - Brown Terrazzo	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B *132402262-0035*	1st Floor - Stair 6 - Brown Terrazzo	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16A *132402262-0036*	Lower Level - Stair 2 - Plaster Finish Coat on Concrete, Black	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16B *132402262-0037*	1st Floor - Stair 2 - Plaster Finish Coat on Concrete, Black	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16C *132402262-0038*	1st Floor - Stair 1 - Plaster Finish Coat on Concrete, Black	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16D *132402262-0039*	1st Floor - Stair 3 - Plaster Finish Coat on Concrete, Black	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16E *132402262-0040*	1st Floor - Stair 7 - Plaster Finish Coat on Concrete, Black	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17A *132402262-0041*	Lower Level - Hall - 2x2 Glacier CG Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
17B *132402262-0042*	1st Floor - Stair 2 - 2x2 Glacier CG Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
18A *132402262-0043*	Lower Level - Hall - 2x2 Fissured CG Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
18B *132402262-0044*	2nd Floor - Hall - 2x2 Fissured CG Tile	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
19A *132402262-0045*	Lower Level - Hall - 12x12 Gray Floor Tile	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B *132402262-0046*	Lower Level - Hall at Room 10 - 12x12 Gray Floor Tile	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20A *132402262-0047*	Lower Level - Hall - 12x12 Gray Floor Tile, Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20B *132402262-0048*	Lower Level - Hall at Room 10 - 12x12 Gray Floor Tile, Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
21A *132402262-0049*	Lower Level Elevator Machine Room - Gypsum Board	Brown/White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
21B *132402262-0050*	1st Floor - Room 111 - Gypsum Board	Brown/White Fibrous Homogeneous	15% Cellulose	85% Non-fibrous (Other)	None Detected
22A *132402262-0051*	Lower Level Elevator Machine Room - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22B *132402262-0052*	1st Floor - Room 111 - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23A *132402262-0053*	Lower Level - Emerg. Generator Room - Wood Fiber Board Ceiling	Tan/White Non-Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
23B *132402262-0054*	Lower Level - Emerg. Generator Room - Wood Fiber Board Ceiling	Tan/White Fibrous Homogeneous	50% Cellulose	50% Non-fibrous (Other)	None Detected
24A *132402262-0055*	Lower Level - Kitchen - 2x4 Flat White Ceiling Tile	Gray Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
24B *132402262-0056*	Lower Level - Kitchen - 2x4 Flat White Ceiling Tile	Gray Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
25A *132402262-0057*	Lower Level - Kitchen - Kitchen Exhaust Hood Insulation	White Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
25B *132402262-0058*	Lower Level - Kitchen - Kitchen Exhaust Hood Insulation	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
25C *132402262-0059*	Lower Level - Kitchen - Kitchen Exhaust Hood Insulation	White Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
26A *132402262-0060*	Lower Level - Cafeteria - 12x12 Light Gray Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26B *132402262-0061*	1st Floor - Room 101 - 12x12 Light Gray Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27A *132402262-0062*	Lower Level - Cafeteria - 12x12 Pink Floor Tile	Pink Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27B *132402262-0063*	1st Floor - Room 101 - 12x12 Pink Floor Tile	Pink Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28A *132402262-0064*	Lower Level - Cafeteria - 12x12 Blue Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28B *132402262-0065*	1st Floor - Room 101 - 12x12 Blue Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A *132402262-0066*	Lower Level - Cafeteria - Mastic assoc. w. #26, 27, 28	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
29B *132402262-0067*	1st Floor - Room 101 - Mastic assoc. w. #26, 27, 28	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30A *132402262-0068*	Lower Level - Room 9 - 12x12 Gray Mottled Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30B *132402262-0069*	1st Floor - Room 100 - 12x12 Gray Mottled Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31A *132402262-0070*	Lower Level - Room 9 - 12x12 Gray Mottled Floor Tile, Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31B *132402262-0071*	1st Floor - Room 100 - 12x12 Gray Mottled Floor Tile, Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32A *132402262-0072*	Lower Level - Room 9 - Stainless Steel Sink Undercoat, Gray	Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
32B *132402262-0073*	Lower Level - Room 12 - Stainless Steel Sink Undercoat, Gray	Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
33A *132402262-0074*	Lower Level - Shop Annex - Interior Window Frame Caulk, White	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33B *132402262-0075*	1st Floor - Room 101 - Interior Window Frame Caulk, White	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34A *132402262-0076*	1st Floor - Hall at Room 101 - Plaster Finish Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34B *132402262-0077*	1st Floor - Room 101 - Plaster Finish Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34C *132402262-0078*	1st Floor - Room 119 - Plaster Finish Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34D *132402262-0079*	1st Floor - Room 129 - Plaster Finish Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34E *132402262-0080*	2nd Floor - Room 203 - Plaster Finish Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34F *132402262-0081*	2nd Floor - Hall at 220 - Plaster Finish Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34G *132402262-0082*	2nd Floor - Room 230 - Plaster Finish Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35A *132402262-0083*	1st Floor- Hall at Room 101 - Plaster Base Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35B *132402262-0084*	1st Floor - Room 101 - Plaster Base Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35C *132402262-0085*	1st Floor - Room 119 - Plaster Base Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
35D *132402262-0086*	1st Floor - Room 129 - Plaster Base Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35E *132402262-0087*	2nd Floor - Room 203 - Plaster Base Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35F *132402262-0088*	2nd Floor - Hall at Room 220 - Plaster Base Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35G *132402262-0089*	2nd Floor - Room 230 - Plaster Base Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
36A *132402262-0090*	1st Floor - Room 101 - 6" Vinyl Cove Base Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
36B *132402262-0091*	1st Floor - Office at Room 108 - 6" Vinyl Cove Base Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37A *132402262-0092*	1st Floor - Teachers Lounge - Carpet Adhesive on Concrete	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
37B *132402262-0093*	1st Floor - Library - Carpet Adhesive on Concrete	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38A *132402262-0094*	1st Floor - Room 115 - 2x4 Ceiling Tile, 2x2' Pattern	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
38B *132402262-0095*	1st Floor - Library - 2x4 Ceiling Tile, 2x2' Pattern	Gray/White Fibrous Homogeneous	50% Cellulose 35% Min. Wool	15% Non-fibrous (Other)	None Detected
39A *132402262-0096*	1st Floor - Room 117 - Stainless Steel Sink Undercoat, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39B *132402262-0097*	1st Floor - Room 125 - Stainless Steel Sink Undercoat, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40A *132402262-0098*	1st Floor - Faculty Restroom at Sprinkler Room - 2" Red Ceramic Floor Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40B *132402262-0099*	1st Floor - Nurse Bathroom - 2" Red Ceramic Floor Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41A *132402262-0100*	1st Floor - Room 126 Closet - Textured Ceiling Finish, Swirl Pattern on Gypsum Board	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41B *132402262-0101*	1st Floor - Room 126 Closet - Textured Ceiling Finish, Swirl Pattern on Gypsum Board	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
41C *132402262-0102*	1st Floor - Room 126 Closet - Textured Ceiling Finish, Swirl Pattern on Gypsum Board	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
42A *132402262-0103*	1st Floor - Main Entry - 1x1 Ceiling Tile	Gray/White Fibrous Homogeneous	45% Cellulose 40% Min. Wool	15% Non-fibrous (Other)	None Detected
42B *132402262-0104*	1st Floor - Main Entry - 1x1 Ceiling Tile	Gray/White Fibrous Homogeneous	45% Cellulose 40% Min. Wool	15% Non-fibrous (Other)	None Detected
43A *132402262-0105*	1st Floor - Nurse Bathroom - Ceramic Wall Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
43B *132402262-0106*	1st Floor - Nurse Bathroom - Ceramic Wall Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
44A *132402262-0107*	1st Floor - Room 130 - Black Lab Bench Top	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
44B *132402262-0108*	1st Floor - Room 132 - Black Lab Bench Top	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
45A *132402262-0109*	1st Floor - Room 127 - Red Sheet Flooring	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
45B *132402262-0110*	1st Floor - Room 129 - Red Sheet Flooring	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
46A *132402262-0111*	1st Floor - Room 127 - Red Sheet Flooring, Gray/Black Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
46B *132402262-0112*	1st Floor - Room 129 - Red Sheet Flooring, Gray/Black Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
47A *132402262-0113*	1st Floor - Room 127 - Dark Red Sheet Floor on Raised Platform	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
47B *132402262-0114*	1st Floor - Room 127 - Dark Red Sheet Floor on Raised Platform	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
48A *132402262-0115*	1st Floor - Room 127 - Dark Red Sheet Flooring, Tan Mastic	Yellow Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
48B *132402262-0116*	1st Floor - Room 127 - Dark Red Sheet Flooring, Tan Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
49A *132402262-0117*	1st Floor - Room 127 - 2x2 Cement Pegboard Wall Panel	Gray Fibrous Homogeneous		75% Non-fibrous (Other)	**25% Chrysotile**
50A *132402262-0118*	1st Floor - Room 127 - Brown Linoleum on Window Sill	Brown Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
50B *132402262-0119*	1st Floor - Room 129 - Brown Linoleum on Window Sill	Brown Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

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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**
51A *132402262-0120*	1st Floor - Room 127 - Brown Linoleum on Window Sill, Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
51B *132402262-0121*	1st Floor - Room 129 - Brown Linoleum on Window Sill, Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
52A *132402262-0122*	at Stair 7 - Exterior Door Caulk, Gray	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
52B *132402262-0123*	at Stair 10 - Exterior Door Caulk, Gray	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
53A *132402262-0124*	at Room 112 - Exterior Window Caulk, White	Gray/Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	**2% Chrysotile**
53B *132402262-0125*	at Cafeteria - Exterior Window Caulk, White				**Positive Stop (Not Analyzed)**
54A *132402262-0126*	at Room 112 - Exterior HVAC Unit Vent Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
54B *132402262-0127*	at Room 10 - Exterior HVAC Unit Vent Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
55A *132402262-0128*	at Main Entrance - Exterior Overhang Stucco	Gray Non-Fibrous Homogeneous	<1% Fibrous (Other)	100% Non-fibrous (Other)	None Detected
55B *132402262-0129*	at Main Entrance - Exterior Overhang Stucco	Gray Non-Fibrous Homogeneous	<1% Fibrous (Other)	100% Non-fibrous (Other)	None Detected
55C *132402262-0130*	at Stair 7 - Exterior Overhang Stucco	Gray Non-Fibrous Homogeneous	<1% Fibrous (Other)	100% Non-fibrous (Other)	None Detected

Analyst(s)
John McCarthy (129)

Steve Grise, Laboratory Manager
or Other Approved Signatory

Initial report from: 04/25/2024 18:24:20

OrderID: 132402262

132402262

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 - Daley Middle School, Lowell, MA		
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:**	4/16/24 + 4/17/24

Sample ID	Type of Material	Location
01A	Gypsum Board Ceiling	Lower Level - Boiler Room
01B	↓	↓
02A	Joint Compound	
02B	↓	
02C	↓	
03A	Red Caulk on Exhaust Duct	
03B	↓	
04A	Gray HVAC Duct Sealant	
04B	↓	↓

Total Number of Samples Submitted: 130

Samplers Name: Michael McCarter Samplers Signature

Relinquished By (Client): Michael McCarter Date: 4/17/24 Time:

Received By (Lab): Date: 11 25 Time:

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within

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Sample ID	Type of Material	Location
05A	HVAC Flex Connector	Lower level - Boiler Rm
05B	↓	- Emergy Generator Rm
06A	Interior Metal Framed Doors Window Glazing	- Boiler Room
06B	↓ Caulk	First floor MAIN office
07A	Emergency Generator Exhaust	Lower Level - Emerg. Generator Room
07B	↓ Insulation	- WTR Boost pump
07C	↓	- Hall @ WTR Boost Pump
08A	Sprinkler pipe sealant	- WTR Boost pump
08B	↓	1st floor MAIN office
09A	4" vinyl Cove Base Adhesive	Lower level - WTR Boost Pump
09B	↓	2nd floor - Room 215
10A	2x4 small fissured tile	Lower level - storage @ WTR Boost Pump
10B	↓	1st floor - Room 101
11A	2x4 Large fissured tile	Lower level - storage @ WTR Boost Pump
11B		1st floor - Teachers
12A	Textured Plaster ceiling on Cement Board	Lower level Boys
12B	↓	↓ Girls
12C		1st floor - Boys @ Stair 7
12D	↓	- Boys locker Rm
12E		- Girls locker Room
13A	Cement Board	Lower-level-Boys
13B	↓	1st floor - Boys @ Stair 7
14A	TAN W BROWN TERRAZZO	Lower level Boys Room
14B	↓	1st floor - Stair 6
15A	BROWN terrazzo	Lower level - Boys Room
15B	↓	1st floor - Stair 6

Project Number/Description 614.07745
Daly Middle School

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Sample ID	Type of Material	Location
16A	Plaster Finish Coat on Concrete	Lower level - Stair 2
16B	↓ Block	1st floor - Stair 2
16C	↓	1st floor - Stair 1
16D	↓	1st floor - Stair 3
16E	↓	1st floor - Stair 4
17A	2x2 Glacier Cg tile	Lower level - Hall
17B	↓	2nd floor - Stair 2
18A	2x2 Fissured cg tile	Lower level - Hall
18D	↓	2nd floor - Hall
19A	12x12 Gray floor tile	Lower level - Hall
19D	↓	↓ - Hall @ Room 10
20A	↓ = MASTIC, Black	Lower level - Hall
20D	↓ - ↓	↓ - Hall @ Room 10
21A	Gypsum Board	Lower level Elevator machine Rm
21B	↓	1st floor - Room 111
22A	Joint compound	Lower level Elevator machine Rm
22B	↓	1st floor - Room 111
23A	Wood Fiber Board Ceiling	Lower level - Emerg. Generator Rm
23D	↓	↓ - ↓
24A	2x4 flat white ceiling tile	Lower level - Kitchen
24B	↓	↓
25A	Kitchen exhaust Hood insulation	Lower level - Kitchen
25B	↓	↓
25C	↓	↓
26A	12x12 LT Gray floor tile	Lower level Cafeteria
26D	↓	1st floor - Room 101

Project Number/Description 014.07745 Daley Middle School

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Sample ID	Type of Material	Location
27A	12x12 pink floor tile	Lower level Cafeteria
27D	↓	1st fl - Room 101
28A	12x12 Blue floor tile	Lower level Cafeteria
28B	↓	1st Floor Room 101
29A	MASTIC Associated with # 26, 27, 28	Lower level - Cafeteria
29B	↓	1st floor - Room 101
30A	12x12 Gray Mottled floor tile	Lower level - Room 9
30B	↓	1st floor - Room 100
31A	↓ MASTIC	Lower level - Room 9
31D	↓ ↓	1st floor - Rm 100
32A	Stainless steel sink undercoat	Lower level - Room 9
32B	↓ Gray	↓ - Room 12
33A	interior window frame caulk, white	Lower level - Shop Annex
33D	↓	1st floor - Room 101
34A	Plaster finish coat	1st floor - Hall @ Room 101
34D	↓	↓ - Room 101
34C	↓	↓ - Room 119
34D	↓	↓ - Room 129
34E	↓	2nd floor - Room 203
34F	↓	↓ - Hall @ 220
34G	↓	↓ - Rm 230
35A	Plaster Base Coat	1st floor - Hall @ Room 101
35B	↓	↓ - Room 101
35C	↓	↓ - Room 119
35D	↓	↓ - Room 129
35E	↓	2nd floor - Room 203
35F	↓	↓ - Hall @ Room 220

Project Number/Description 04.07795 Oxley Middle School

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REC'D EMSL-BOSTON APR 18 2024

OrderID: 132402262

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Sample ID	Type of Material	Location
35G	Plaster Base Coat	2nd floor - Room 230
36A	6" vinyl cove base adhesive	1st floor - Room 101
36B	↓	↓ - office @ Room 108
37A	Carpet adhesive on concrete	1st floor - Teacher's Lounge
37B	↓	↓ - Library
38A	2x4 ceiling tile, 2'x2' pattern	1st floor - Room 115
38B	↓	↓ - Library
39A	Stainless steel sink undercoat, Black	1st floor - Room 117
39B	↓	1st floor - Room 125
40A	2" Red ceramic floor tile Grout	1st floor - Faculty Restroom @ Sprinkler Rm
40B	↓	↓ - Nurse Bathroom
41A	Textured ceiling Finish, swirle	1st floor - Rm 126 closet
41B	↓ pattern	↓ - ↓
41C	↓ on Gypsum Board	↓ - ↓
42A	1x1 ceiling tile	1st floor - Main Entry
42B	↓	↓ ↓
43A	Ceramic wall Tile Grout	1st Floor - Nurse Bathroom
43B	↓	↓ ↓
44A	Black Lab Bench top	1st floor - Room 130
44B	↓	↓ - Room 132
45A	Red sheet flooring	1st floor - Room 127
45B	↓	- Room 129
46A	, Mastic, Gray/Black	- Room 127
46B	↓	↓ - Rm 129
47A	Dark Red sheet floor, on Raised Platform	1st floor - Room 127
47B	↓	↓ - ↓

Project Number/Description 04.07995 Daly middle school

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Sample ID	Type of Material	Location
48A	Dark Red sheet flooring MASTIC, TAN	1ST floor - Room 127
48B	↓	↓ ↓
49A	2x2 Cement Pegboard wall panel	1ST floor, Room 127
50A	Brown Linoleum on window sill	↓ - Room 127
50B	↓	- Room 129
51A	↓ MASTIC	↓ - Room 127
51B	↓	- Room 129
52A	Exterior Door caulk, Grey	ⓒ STAIR M
52B	↓	ⓒ STAIR D
53A	Exterior window caulk, white	ⓒ Room 112
53B	↓	ⓒ Cafeteria
54A	Exterior HVAC ~~CONVERT~~ UNIT VENT caulk	ⓒ Room 112
54B	↓	ⓒ Room 10
55A	Exterior overhang STUCCO	ⓒ MAIN Entrance
55B	↓	↓
55C	↓	ⓒ STAIR M

Project Number/Description 014.07795

Delay make short

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REC'D EMSL-BOSTON APR 18 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

john vaz
Eff.Date: 05/03/2024
Exp.Date: 05/03/2025
AP900524

Member C.O.N.E.S.

25

This is to certify that

John A. Vaz

14 Johnson Terrace, Rockland, MA 02370

has completed the requisite training, and has passed an examination for accreditation as:

Asbestos Management Planner

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

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

March 14-15, 2024
Course Dates

March 15, 2024
Examination Date

24-5258-103-233848
Certificate Number

March 15, 2025
Expiration Date

Training Director