efi global

BOSTON NORTH

May 23, 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
Joseph G. Pyne Elementary School (former) – Joseph G. Pyne Arts Management School
145 Boylston Street
Lowell, Massachusetts
EFI Project No. 014.07795

Dear Mr. Underwood:

EFI Global Inc. (EFI) is pleased to present this AHERA 3-Year Reinspection Report prepared for the Joseph G. Pyne Elementary School (former) – Joseph G Pyne Arts Management School, located at 145 Boylston Street in Lowell, Massachusetts (Site). The reinspection site visit was conducted on April 19, 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 the 2017 reinspection 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 2017 O&M Plan with identified ACMs for this reinspection. The school's Management Plan and records should be located and kept on file at the school and the administrative offices.

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

Sincerely,
EFI Global, Inc.

Derrick Calvario
Project Manager
MA Asbestos Inspector # AI 900703

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

AHERA 3-YEAR REINSPECTION

FOR:

JOSEPH G. PYNE ELEMENTARY SCHOOL (former) – JOSEPH G. PYNE ARTS MANAGEMENT SCHOOL
145 BOYALSTON STREET
LOWELL, MASSACHUSETTS

PREPARED BY:

efi global
BOSTON NORTH

155 WEST STREET, SUITE 6
WILMINGTON, MASSACHUSETTS 01887

EFI PROJECT NUMBER 014.07795

May 23, 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 re-inspection at the Joseph G. Pyne Elementary School (former) – current Joseph G. Pyne Arts Management School, which involved determining the condition and hazard potential of previously known and assumed ACMs, and additional confirmed and assumed ACMs observed during the 2024 reinspection. The 3-year re-inspection was conducted on April 19, 2024, by Derrick Calvario and Emma Cypherd, both EPA accredited, and Massachusetts Department of Labor Standards (MADLS) licensed Asbestos Inspectors, (license number AI-900703) and (license number AI-901189) respectively. EFI relied upon the 2017 O&M plan for identified and assumed ACMs for this reinspection. The original AHERA Management Plan and subsequent records were not made available at the school for review.

It is noted that ACM was not identified in the 2014 and 2017 reinspection's and bulk sampling documentation was not contained in the reports. EFI sampled all suspect ACM observed during this 3-year reinspection. Based on our visual observations and results of the bulk samples collected, no ACMs were identified or assumed at the school. It is noted that an Asbestos Operations and Maintenance Plans and other regulatory requirements for annual surveillance, and 3-year reinspection's do not apply to school were the appropriate documentation states that no identified or assumed ACM are present, however specific requirements of the AHERA Management Plan are required to be maintained as described the Conclusions and Recommendations.

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 Joseph G. Pyne Elementary School (former) - Joseph G. Pyne Arts Management School 145 Boylston Street, Lowell, Massachusetts		
Document/Record	**Present?**	**Comment**
Asbestos Management Plan (on hand at school and available for review)	No	No records available at the school or administrative office for review. The Cardo ATC 2014 3-Year Reinspection and Updated Management Plan is posted on the school web site. EFI also relied upon in-house records from the 2017 reinspection.
Designated Person Training Records (for Rick Underwood)	No	No records available at the school or administrative office for review. Designated Person should receive formal designated person training or review the Designated Person Self Study Guide (available at https://www.epa.gov/sites/default/files/2015-01/documents/dp_study_guide_0.pdf).
Custodial Personnel 2-hour Awareness Training Records	No	No records available at the school or administrative office for review.
Annual Parental Notification Records	No	No records available at the school or administrative office for review. Annual notification letters should be sent and copies kept on file with the AHERA records.
Abatement/Response Action Records (includes abatement, special cleaning activities & small scale short duration	No	No records available at the school or administrative office for review.

(SSSD) activities and associated monitoring reports and work plans)		
Designated Person True and Correct Statement	No	No records available at the school or administrative office for review.
6-month Surveillance Inspection Records	No	No records available at the school or administrative office for review.
Previous 3-Year Reinspection Records	No	No records available at the school or administrative office for review.
Asbestos Labels present (required in routine maintenance areas)	No	Not applicable. No ACM identified at the school.

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. 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. It is noted that ACM was not identified in the 2014 and 2017 reinspection's and there was no sampling documentation for suspect ACMs at the site. EFI sampled all suspect ACMs observed during this 3-year reinspection. The bulk sampling was performed by USEPA-accredited, and MADLS licensed Asbestos Inspector Derrick Calvario and Emma Cypherd. A total of 75 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 A** 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 B**.

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
Interior White Caulk on Door	1st Floor Door 10, 1st Floor Door 9

Material Description	Location(s) Sampled
Interior White Joint Caulk on CMU	1st Floor Hallway Near Door 10, 1st Floor Hallway Near Door 13
12x12 White with Blue Speckled Floor Tile	1st Floor Cafeteria, Room 1033
Yellow Mastic Associated with 12x12 Floor Tile	1st Floor Cafeteria, Room 1033
12x12 Sandy Grey Floor Tile	1st Floor Cafeteria, Room 1164
12x12 Light Blue with Speckled Floor Tile	Hallway Near 1107, Lower-Level Sprinkler/Pump Room
12x12 Blue with Speckled Floor Tile	Room 1164, Room 2014
12x12 Dark Blue with Speckled Floor Tile	Room 1164, Room 0016
12x12 Red with Speckled Floor Tile	Room 0018, Room 2002
12x12 Light Green with Speckled Floor Tile	Hallway Near Room 2014, Hallway Near Room 2018
12x12 Dark Green with Speckled Floor Tile	Hallway Near Room 2014, Hallway Near Room 2018
Floor Leveler	Room 1164, Lower-Level Near Stair 2
Pin/Crows Feet Ceiling Tile	Hallway Near 1127, Hallway Near Stair 2
Ceramic Tile Grout	Room 1128, Room 2001, Main Entrance, Bathroom off Nurse, Main Floor off Hallway
Ceramic Tile Thinset	Hallway Near Room 1113, Hallway Near Room 1161, Main Entrance, Bathroom off Nurse, Main Floor off Hallway
Cove Base	Hallway Near Room 1126, Gym
Yellow Mastic Associated with Cove Base	Hallway Near Room 1126, Gym
Lab Bench	Room 2018
Gypsum Board	Room 1103, Room 2006
Joint Compound	Room 1107, Room 1127, Room 1008, Lower-Level Sprinkler/Pump Room, Room 2001, Room 2006, Room 2014
Ceramic Tile (Red) Grout	Kitchen off Cafeteria
Green Epoxy Flooring	Kitchen Rear off Cafeteria
Exterior White Caulk on Old Building	Front Entrance
Exterior White Caulk on New Building	Front Entrance, Lower-Level Hallway Near Elevator, Front Entrance Pillar
Yellow Carpet Mastic	Room 1001, Library
Interior Black Caulk on Green Windows	Hallway Near Room 1029, Hallway Near Room 006,
White Window Caulk	Room 1028, Lower-Level outside Sprinkler Room
Stair Tread	Lower-Level Near Stair 2, 2nd Floor Near Stair 2
Yellow Mastic Associated with Stair Tread	Lower-Level Near Stair 2, 2nd Floor Near Stair 2
Exterior White Window and Door Caulking	Front Entrance Left Windows, Door 6

If suspect ACMs other than the above-referenced materials are identified during future renovation or demolition activities, EFI recommends that they be assumed ACM until sampled by a MADLS licensed asbestos inspector and analyzed by a Massachusetts-licensed asbestos analytical laboratory prior to disturbance.

E. Conclusions and Recommendations

No confirmed and assumed ACMs were identified at the Joseph G. Pyne Elementary School (former) – Joseph G Pyne Arts Management School.

Asbestos Operations and Maintenance Plans and other regulatory requirements such as annual surveillance, and 3-year reinspection's, custodial staff training, etc. do not apply to school were the appropriate documentation states that no identified or assumed ACM are present, however specific requirements of the AHERA Management Plan are required to be maintained by the LEA such record keeping, annual notification, documenting asbestos content of newly installed materials (i.e., suspect ACM installed after April 19, 2024), etc.

Please note that AHERA inspections are not intended to satisfy federal and state regulations for pre-renovation/demolition level surveys. Therefore, prior to any future planned renovation/demolition activities, additional inspection is required to meet the EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements and MADEP survey requirements as outlined in 310 CMR 7.15.

F. AHERA Licensing & Training Documentation

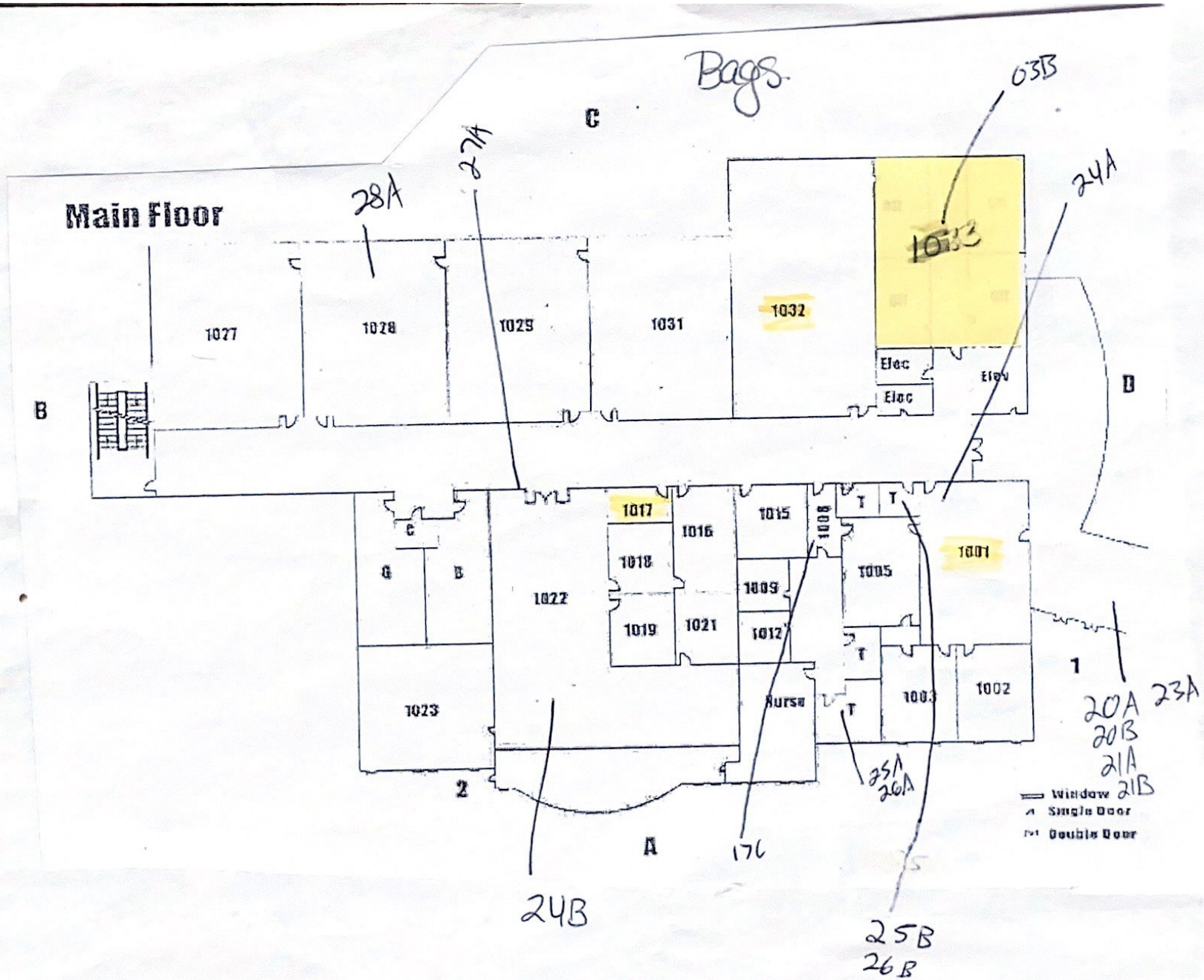
The AHERA 3-year Reinspection report for the Joseph G. Pyne Elementary School was performed by the following individuals who have received appropriate training and who are MADLS licensed personnel:

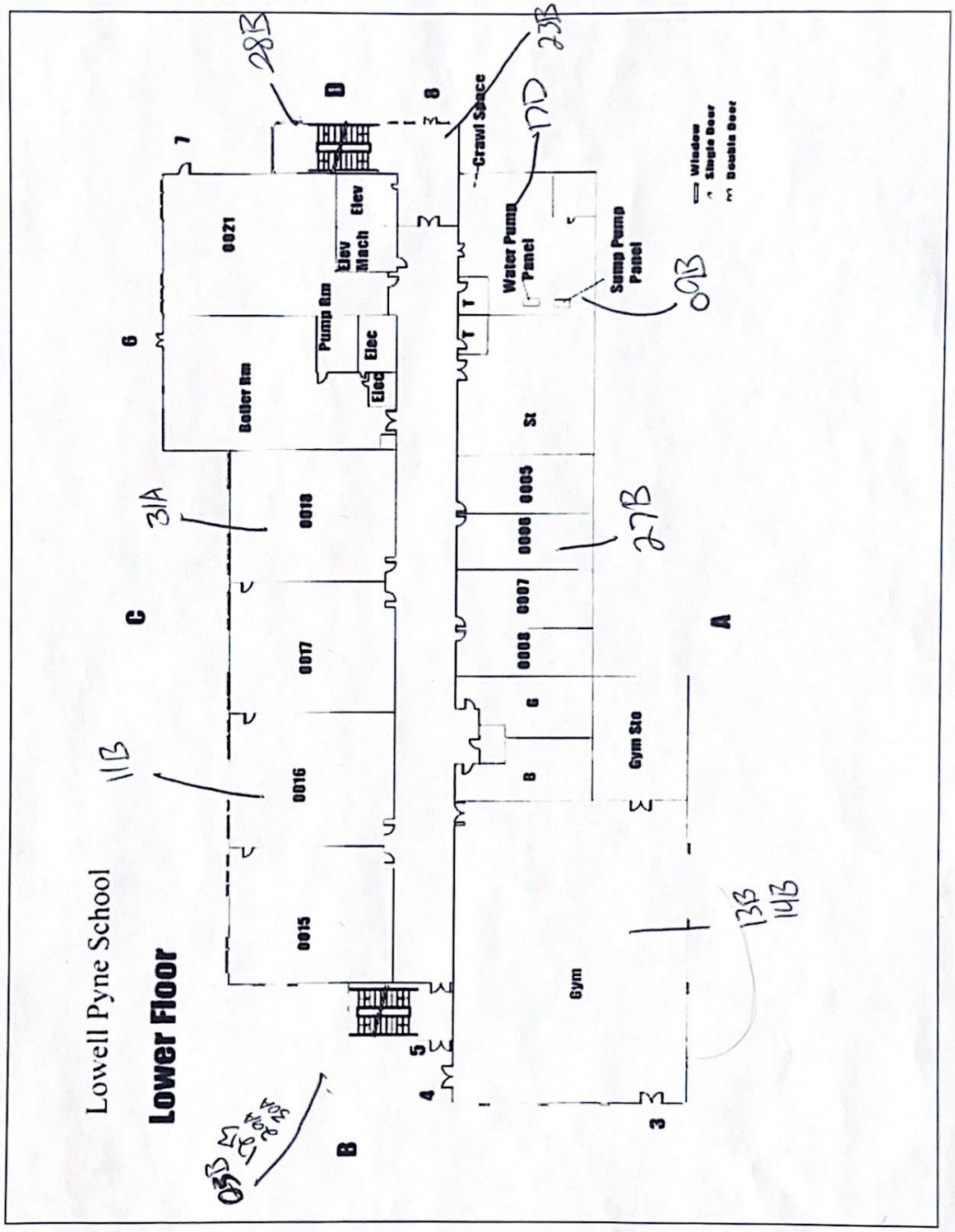
Derrick Calvario
Project Manager
MA Asbestos Inspector # AI 900703

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

ATTACHMENT A

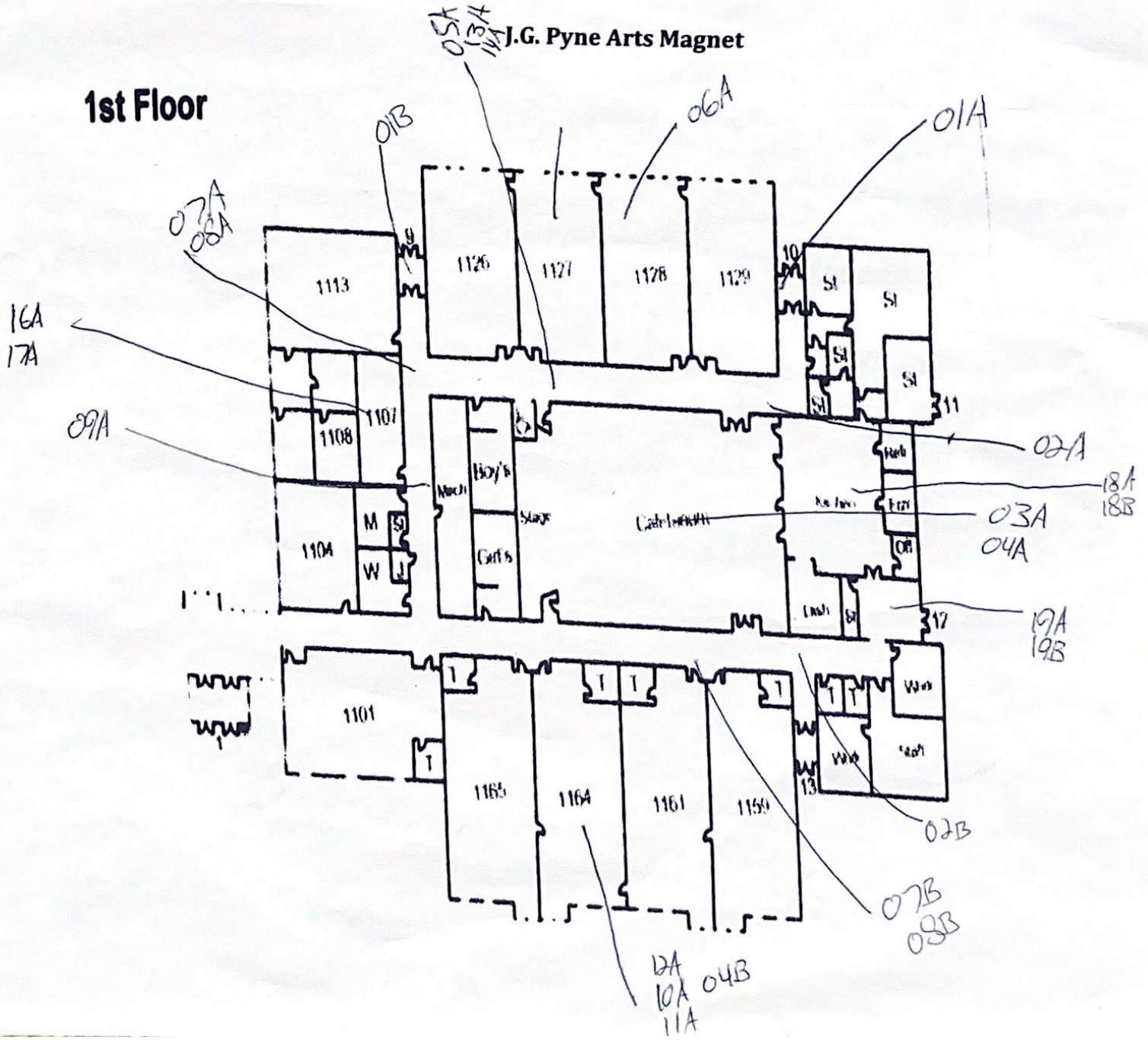
SITE PLANS AND 2024 REINSPECTION ASBESTOS BULK SAMPLE LOCATIONS

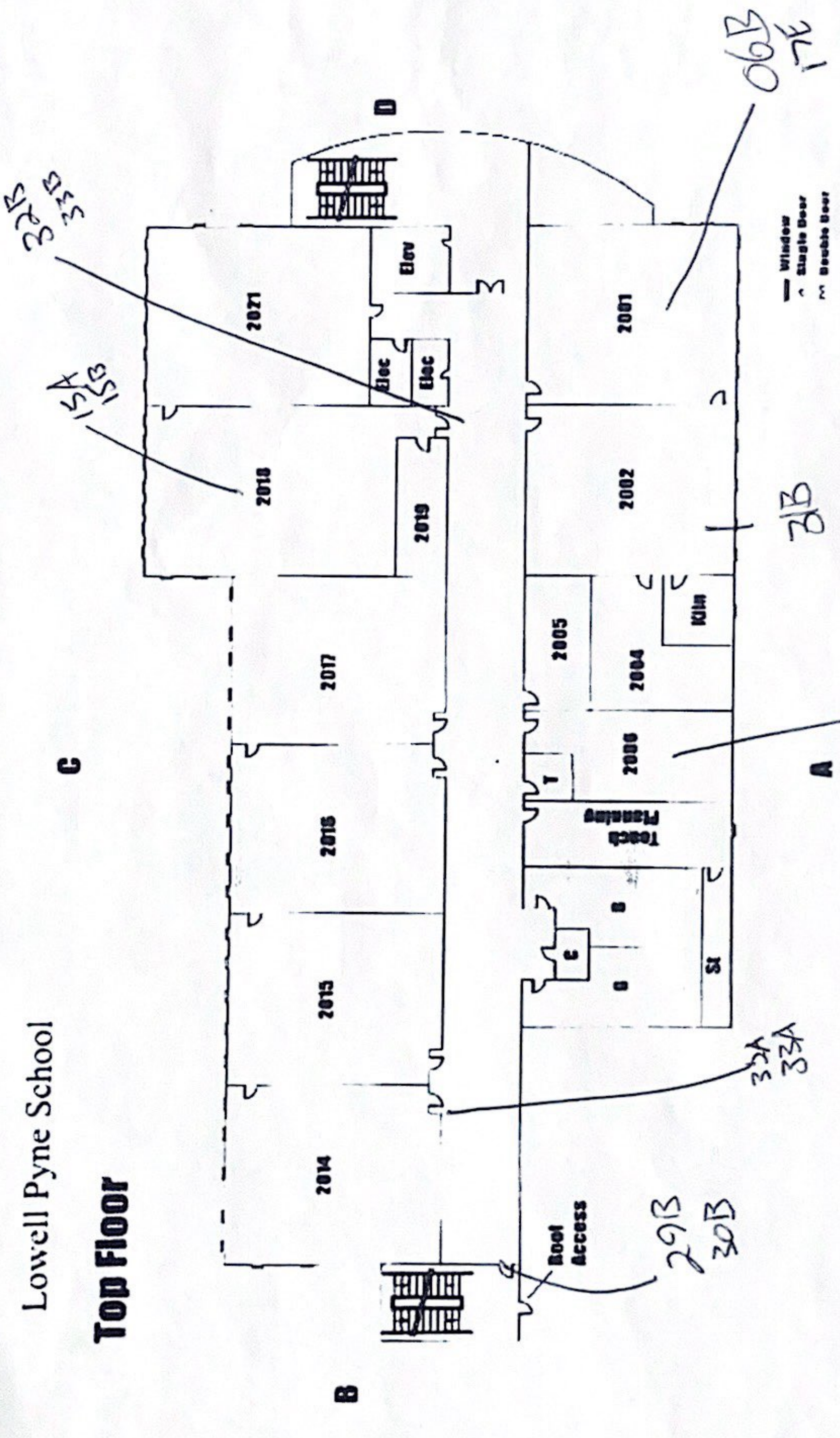

Bags
03B
C
27A
28A
24A
Main Floor
1033
1027
1028
1029
1031
1032
Elec
Elec
Elev
B
D
1017
1016
1015
1008
1018
1009
1005
1001
1022
1019
1021
1012
1023
Nurse
1003
1002
1
2
A
17C
24B
25B
26B
25A
26A
20A
20B
21A
21B
23A
Window
Single Door
Double Door


Lowell Pyne School
Lower Floor
Crawl Space
Water Pump Panel
Sump Pump Panel
Window
Single Door
Double Door
Elev
Elev Mech
Pump Rm
Elec
Elec
Boiler Rm
St
Gym Sto
Gym
0021
0018
0017
0016
0015
0006
0005
0008
0007
A
B
C
D
1
2
3
4
5
6
7
8

J.G. Pyne Arts Magnet

1st Floor




Lowell Pyne School
Top Floor
2014
2015
2016
2017
2018
2019
2021
Elec
Elec
Elev
2001
2002
2005
2004
Kiln
2006
T
Teach Planning
B
C
G
St
Roof Access
A
B
C
D
Window
Single Door
Double Door
32B
33B
15A
15B
06B
17E
3B
17F
16B
32A
33A
29B
30B

ATTACHMENT B

2024 REINSPECTION ASBESTOS BULK SAMPLE LABORATORY REPORT

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

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

EMSL Order:	132402243
Customer ID:	EAFI66
Customer PO:	
Project ID:	

Attention:	Derrick Calvario	**Phone:**	(978) 688-3736
	EFI Global, Inc.	**Fax:**	(978) 688-5494
	155 West Street	**Received Date:**	04/22/2024 8:30 AM
	Suite 6	**Analysis Date:**	04/25/2024
	Wilmington, MA 01887	**Collected Date:**	04/19/2024
Project:	014.07795 - Lowell Joseph G. Pyne Art School		

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 *132402243-0001*	Interior 1st Floor Door 10 - White Caulk on Door	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01B *132402243-0002*	Interior 1st Floor Door 9 - White Caulk on Door	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02A *132402243-0003*	Interior 1st Floor Hallway near Door 10 - White Joint Caulk on CMU	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02B *132402243-0004*	Interior 1st Floor Hallway near Door 13 - White Joint Caulk on CMU	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A *132402243-0005*	1st Floor - Cafeteria - 12x12 White w. Blue Spec Floor Tile	White/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03B *132402243-0006*	Main Floor - 1033 - 12x12 White w. Blue Spec Floor Tile	White/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04A *132402243-0007*	1st Floor - Cafeteria - Assoc. Yellow Mastic on 12x12 Floor Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04B *132402243-0008*	Main Floor - 1033 - Assoc. Yellow Mastic on 12x12 Floor Tile	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05A *132402243-0009*	1st Floor - Cafeteria - 12x12 Sandy Gray Floor Tile	Gray/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05B *132402243-0010*	1st Floor - Room 1164 - 12x12 Sandy Gray Floor Tile	Gray/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06A *132402243-0011*	1st Floor - Hallway near 1127 - Pin/Crows Feet Ceiling Tile	Gray/Tan/White Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected
06B *132402243-0012*	Lower Level - Hallway near Stair 2 - Pin/Crows Feet Ceiling Tile	Gray/Tan/White Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected
07A *132402243-0013*	1st Floor - Room 1128 - Ceramic Tile Grout	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07B *132402243-0014*	2nd Floor - Room 2001 - Ceramic Tile Grout	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08A *132402243-0015*	1st Floor - Hallway near 1113 - Ceramic Tile Thinset	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/25/2024 10:51:30

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:	132402243
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**
08B *132402243-0016*	1st Floor - Hallway near 1161 - Ceramic Tile Thinset	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09A *132402243-0017*	1st Floor - Hallway near 1107 - 12x12 Light Blue w. Spec Floor Tile	Gray/White/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09B *132402243-0018*	Lower Level - Sprinkler/Pump Room - 12x12 Light Blue w. Spec Floor Tile	Gray/White/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10A *132402243-0019*	1st Floor - Room 1164 - 12x12 Blue w. Spec Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10B *132402243-0020*	2nd Floor - Room 2014 Hallway - 12x12 Blue w. Spec Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11A *132402243-0021*	1st Floor - Room 1164 - 12x12 Dark w. Spec Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B *132402243-0022*	Lower Level - Room 0016 - 12x12 Dark w. Spec Floor Tile	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A *132402243-0023*	1st Floor - Room 1164 - Floor Leveler (Gray)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B *132402243-0024*	Lower Level - near Stair 2 - Floor Leveler (Gray)	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13A *132402243-0025*	1st Floor - Hallway near 1126 - Cove Base	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B *132402243-0026*	Lower Level - Gym - Cove Base	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A *132402243-0027*	1st Floor - Hallway near 1126 - Assoc. Yellow Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14B *132402243-0028*	Lower Level - Gym - Assoc. Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15A *132402243-0029*	2nd Floor - Room 2018 - Lab Bench	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B *132402243-0030*	2nd Floor - Room 2018 - Lab Bench	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16A *132402243-0031*	1st Floor - Room 1103 - Gypsum Board - Wall	Brown/White Non-Fibrous Homogeneous	15% Cellulose 1% Glass	84% Non-fibrous (Other)	None Detected
16B *132402243-0032*	2nd Floor - Room 2006 - Gypsum Board - Wall	Brown/White Non-Fibrous Homogeneous	3% Cellulose 1% Glass	96% Non-fibrous (Other)	None Detected
17A *132402243-0033*	1st Floor - Room 1107 - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/25/2024 10:51:30

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: 132402243
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**
17B *132402243-0034*	1st Floor - Room 1127 - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17C *132402243-0035*	Main Floor - Room 1008 - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17D *132402243-0036*	Lower Level - Sprinkler Room - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17E *132402243-0037*	2nd Floor - Room 2001 - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17F *132402243-0038*	2nd Floor - Room 2006 - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17G *132402243-0039*	2nd Floor - Room 2014 - Joint Compound - Wall	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18A *132402243-0040*	1st Floor Kitchen off Cafeteria - Ceramic Tile (Red) Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18B *132402243-0041*	1st Floor Kitchen off Cafeteria - Ceramic Tile (Red) Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19A *132402243-0042*	1st Floor Kitchen/Rear Area off Cafeteria - Green Epoxy Floor	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B *132402243-0043*	1st Floor Kitchen/Rear Area off Cafeteria - Green Epoxy Floor	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20A *132402243-0044*	Main Floor - Entrance - Ceramic Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20B *132402243-0045*	Main Floor - Entrance - Ceramic Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21A *132402243-0046*	Main Floor - Entrance - Ceramic Tile Thinset	Gray/Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21B *132402243-0047*	Main Floor - Entrance - Ceramic Tile Thinset	Gray/Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22A *132402243-0048*	Exterior Front Entrance also on Interior - White Caulk on Old Building	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22B *132402243-0049*	Exterior Front Entrance - White Caulk on Old Building	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23A *132402243-0050*	Main Floor - Front Entrance - White Caulk on New Building	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/25/2024 10:51:30

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:	132402243
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**
23B *132402243-0051*	Lower Level - Hallway near Elevator - White Caulk on New Building	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24A *132402243-0052*	Main Floor - Room 1001 - Yellow Carpet Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
24B *132402243-0053*	Main Floor - Library - Yellow Carpet Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25A *132402243-0054*	Main Floor - Bathroom off Nurse - Ceramic Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25B *132402243-0055*	Main Floor - Bathroom off Hallway - Ceramic Tile Grout	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26A *132402243-0056*	Main Floor - Bathroom off Nurse - Ceramic Tile Thinset	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26B *132402243-0057*	Main Floor - Bathroom off Hallway - Ceramic Tile Thinset	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27A *132402243-0058*	Main Floor - Hallway near 1029 - Black Caulk on Interior Green Windows	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
27B *132402243-0059*	Lower Level - Hallway near 006 - Black Caulk on Interior Green Windows	Gray/Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28A *132402243-0060*	Main Floor - Room 1028 - White Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28B *132402243-0061*	Lower Level - Outside Sprinkler Room - White Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29A *132402243-0062*	Lower Level - near Stair 2 - Stair Tread	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29B *132402243-0063*	2nd Floor - near Stair 2 - Stair Tread	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30A *132402243-0064*	Lower Level - near Stair 2 - Assoc. Yellow Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
30B *132402243-0065*	2nd Floor - near Stair 2 - Assoc. Yellow Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31A *132402243-0066*	Lower Level - Room 0018 - 12x12 Red w. Spec Floor Tile	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
31B *132402243-0067*	2nd Floor - Room 2002 - 12x12 Red w. Spec Floor Tile	Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32A *132402243-0068*	2nd Floor - Room 2014 Hallway - 12x12 Light Green w. Spec Floor Tile	Blue/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/25/2024 10:51:30

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:	132402243
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**
32B *132402243-0069*	2nd Floor - Room 2018 Hallway - 12x12 Light Green w. Spec Floor Tile	Blue/Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33A *132402243-0070*	2nd Floor - Room 2014 Hallway - 12x12 Dark Green w. Spec Floor Tile	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
33B *132402243-0071*	2nd Floor - Room 2018 Hallway - 12x12 Dark Green w. Spec Floor Tile	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34A *132402243-0072*	Exterior - Front Entrance - White Caulk on Pillar	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
34B *132402243-0073*	Exterior - Front Entrance - White Caulk on Pillar	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35A *132402243-0074*	Exterior Windows Left Front - White Door/Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
35B *132402243-0075*	Exterior Door #6 - White Door/Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Ava Kopellas (75)

Steve Grise, Laboratory Manager
or Other Approved Signatory

Initial report from: 04/25/2024 10:51:30

OrderID: 132402243

efi global 132402243

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

BULK SAMPLE CHAIN OF CUSTODY FORM

Report to (Inspector Name):	Derrick Calvario	**Bill To:**	Accounts Payable
Company:	EFI Global, Inc.	**Address:**	Same
Address:	155 West Street	**City, State, Zip:**	Same
	Suite 6	**Telephone:**	800-659-1202
City, State, Zip:	Wilmington, MA 01887	**Email:**	US-EFIGlobal-BostonEnviroPC@efiglobal.com
Inspector Cell:	781-821-5012		

Project Information

Project No./ Description:	014.0 7795 - Lowell Joseph G. Pyne Art school
Email Report to:	Derrick.Calvario@efiglobal.com
Alternate:	

Requested Turnaround Time:

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

Media and Methodology

Type of Analysis:	PLM	**Check for Positive Stop:**	☒
Notes:	Analyze all plaster and joint compound samples	**Date Collected:**	4/19/24

Sample ID	Type of Material	Location
01A	White Caulk on door	Interior 1st floor door 10
01B	" "	Interior 1st floor door 9
02A	White Joint Caulk on CMU	Interior 1st floor Hallway near door 10
02B	" "	Interior 1st floor hallway near door 13
03A	12X12 white w/ blue spec floor tile	1st floor - Cafeteria
03B	" "	Main floor - 1033
04A	associated Yellow Mastic on 12X12 floor tile	1st floor - Cafeteria
04B	" "	1st floor - Room 1164
05A	12X12 Sandy ~~Beige~~ floor tile	1st floor - Hallway near 1127
05B	" "	Lower level - Hallway near Stair 2

Total Number of Samples Submitted: 75

Samplers Name: Derrick Calvario Samplers Signature

Relinquished By (Client): Date: 4/19/24 Time:

Received By (Lab): RMB Date: Time: 0830

REC'D EMSL-BOSTON APR 29 2024

DRCP BSA

OrderID: 132402243

efi global 1324022243

Sample ID	Type of Material	Location
06A	Pin/crowsfeet Ceiling tile	1st floor - Room 1128
06B	" "	2nd floor - Room 2001
07A	Ceramic ~~tile~~ tile grout	1st floor - Hallway near 1113
07B	" "	1st floor - Hallway near 1161
08A	Ceramic ~~tile~~ tile thinset	1st floor - Hallway near 1113
08B	" "	1st floor - Hallway near 1161
09A	12x12 light blue w/ spec floor tile	1st floor - Hallway near 1107
09B	" "	lower level - Sprinkler/Pump room
10A	12x12 blue w/ spec floor tile	1st floor - Room 1164
10B	" "	2nd floor - Room 2014 hallway
11A	12x12 dark w/ spec floor tile	1st floor - Room 1164
11B	" "	lower level - Room 0016
12A	floor leveler (grey)	1st floor - Room 1164
12B	" "	lower level - near stair 2
13A	Cove base	1st floor - Hallway near 1126
13B	" "	lower level - gym
14A	associated yellow mastic	1st floor - Hallway near 1126
14B	" "	lower level - gym
15A	lab bench	2nd floor - Room 2018
15B	" "	" "
16A	Gypsum board - wall	1st floor - Room 1107
16B	" "	2nd floor - Room 2006
17A	Joint Compound - wall	1st floor - Room 1107
17B	" "	1st floor - Room 1127
17C	" "	main floor - Room 1008
17D	" "	lower level - sprinkler room
17E	" "	2nd floor - Room 2001
17F	" "	2nd floor - Room 2006
17G	" "	2nd floor - Room 2014

RLB

RECD EMSL-BOSTON APR 22 2024

efi global 132402243

Sample ID	Type of Material	Location
18A	Ceramic tile (red) grout	1st floor kitchen off Cafeteria
18B	" "	" "
19A	green epoxy floor	1st floors kitchen /rear area of cafeteria
19B	" "	" "
20A	Ceramic tile grout	main floor - entrance
20B	" "	" "
21A	Ceramic tile thinset	" "
21B	" "	" "
22A	white Caulk on old building	exterior front entrance also on Interior
22B	" "	exterior front entrance on exterior
23A	white Caulk on new building	~~1st floor Interior main building~~ Main floor - front entrance
23B	" "	lower level - Hallway near elevator
24A	Yellow Carpet mastic	Main floor - Room 1001
24B	" "	Main floor - Library
25A	Ceramic ~~tile~~ tile grout	Main floor - Bath room off nurse
25B	" "	~~Main 2nd~~ floor - Bathroom off hallway
26A	Ceramic ~~tile~~ tile thinset	Main floor - Bathroom off nurse
26B	" "	~~Main 2nd~~ floor - Bathroom off hallway
27A	Black Caulk on Interior green windows	Main floor - Hallway near 1029
27B	" "	lower level - Hallway near C006
28A	white window Caulk	main floor - Room 1028
28B	" "	lower level - outside sprinkler room
29A	Stair tread	lower level - near stair 2
29B	" "	2nd floor - near Stair 2
30A	associated yellow mastic	lower level - near Stair 2
30B	" "	2nd floor - near Stair 2
31A	12X12 red w/speck floor tile	lower level - Room 0018
31B	" "	2nd floor - Room ~~2018 hallway~~ 2002
32A	12X12 light green w/speck floor tile	2nd floor - Room 214 hallway
32B	" "	2nd floor - Room 2018 hallway

RECD RHS EMSL-BOSTON APR 22 2024

OrderID: 132402243

efi global 132402243

Sample ID	Type of Material	Location
~~328~~ 33A	12x12 dark green w/spec floor tile	2nd floor - Room 214 hallway
33B	" "	2nd floor - Room 208 hallway
34A	White Caulk on pillar	Exterior - front entrence
34B	" "	" "
35A	White window Caulk	Exterior windows left front
35B	" "	Exterior door #6

REC'D RJR APR 22 2024 EMSL-BOSTON

ATTACHMENT C

LICENSES AND TRAINING CERTIFICATES OF ASBESTOS INSPECTOR & MANAGEMENT PLANNER

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

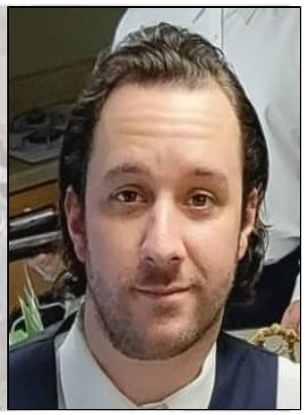
Michael Flanagan
Director

ASBESTOS INSPECTOR

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

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

24



This is to certify that

Derrick W. Calvario

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

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

Asbestos Inspector Refresher

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

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

August 3, 2023
Course Dates

August 03, 2023
Examination Date

23-4811-106-265405
Certificate Number

August 03, 2024
Expiration Date

Training Director

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

Michael Flanagan
Director

ASBESTOS MANAGEMENT PLANNER

MICHAEL MCCARTER

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

Member C.O.N.E.S.

24

This is to certify that

Michael L. McCarter

7 Millstone Road, Windham, NH 03087

MA DLS Asbestos Management Planner License# AP035661

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

Asbestos Management Planner Refresher

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

Course Location

Zoom Video Conference

Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

March 21, 2024

Course Dates

24-5264-136-219102

Certificate Number

March 21, 2024

Examination Date

March 21, 2025

Expiration Date

Training Director