The City of WORCESTER

Administration & Finance – Purchasing Division
Christopher J. Gagliastro, MCPPO – Purchasing Director
455 Main Street, Room 201, Worcester, MA 01608
P | 508-799-1220
purchasing@worcesterma.gov

August 25, 2023

To All Bidders:

Subject: **8064-W4, Roof Replacement-Senior Center/DPF-CDBG**

ADDENDUM NO. 1

To Whom It May Concern:

With reference to our proposal request relative to the above subject, please refer to the changes/modifications/clarifications to the original proposal request.

- **PLEASE SEE BELOW FOR GENERAL BID CLARIFICATIONS.**

Proposers are requested to acknowledge and/or include this addendum with submission. All other terms, conditions and specifications remain unchanged.

Very truly yours,

Maureen McKeon
Assistant Purchasing Director

The City of WORCESTER

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8064-W4, Roof Replacement-Senior Center/DPF-CDBG

ADDENDUM NO. 1

SPECIFICATIONS:

1. Section 08.62.00 - Unit Skylights

   A. Paragraph 2.02, Section B: Change “CMD-3" to “CMD-4".

   B. Paragraph 2.02, Section C: Change “three layers of polycarbonate sheet” to “one layer of polycarbonate sheet”. Change “interstitial airspace between, sealed with gasketing material” to “flat multiwall polycarbonate sheet with light-diffusing coating.”

   C. Paragraph 2.04, Section A: Change “model[s] [CMD2] [and] [DMD2]” to “model CMD4".

QUESTIONS:

1. Q: Is there a base layer of insulation, or just the 1/8" tapered? If a base layer, what should the thickness be, or what is the overall/average R Value to be achieved?

   A. Refer to Typ. New Roof Detail in the margin of Sheet A3. Thickness varies by taper - see Sheet A2 for thickness.

2. Q: The only asbestos is on the entire roof with TC 1 and TC 2, and then just TC 7 under Metal Edging, correct?

   A. Refer to Asbestos Testing Report, included in this addendum.

3. Q: Will the solar array be removed by other prior to roofing?

   A. No, all equipment will remain and need to be protected and worked around.

4. Q: Will any of the Verizon equipment be removed prior to roofing?

   A. No, all equipment will remain and need to be protected and worked around.

ATTACHMENTS:

1. Asbestos Testing Report (8.5" x 11") on 16 pages (see below)

73 William Franks Drive
West Springfield. MA 01089
Telephone: (413) 781-0070
www: oneatlas.com

May 16, 2023

Mr. Steve VanDyke
Nault Architects Inc.
71 Hope Avenue
Worcester, MA 01603

Re: Asbestos Roof Sampling Report
Worcester Senior Center
Roof Replacement – 1968 Section
128 Providence Street
Worcester, Massachusetts

Dear Mr. VanDyke:

Atlas Technical Consultants, LLC (ATLAS) was retained by Nault Architects Inc., to perform asbestos roof sampling at the Worcester Senior Center located at 128 Providence Street in Worcester, Massachusetts. Specifically, ATLAS's Scope of Work included the following:

1. Performance of a limited Asbestos Inspection for accessible suspect asbestos-containing roofing materials subject to disturbance by the forthcoming roof removal project at the 1968 section of the building.
2. Samples were collected from roof cores that were advanced and repaired by the Roofing Contractor retained by Nault Architects Inc.
3. All bulk samples were analyzed for asbestos content using Polarized Light Microscopy (PLM) with Dispersion Staining EPA Method 600/R-93-116 per 40 CFR 763. To qualify as asbestos containing, the material must be determined to contain *greater than one percent (>1%)* asbestos from a homogeneous material area set of samples.

The following Table summarizes the results of ATLAS's sampling:

LOCATION	MATERIAL	RESULT
Low Roof Center (Roof Composite #1)	Roof Membrane	No Asbestos Detected
Low Roof Center (Roof Composite #1)	Roof Membrane Mastic	No Asbestos Detected
Low Roof Center (Roof Composite #1)	Roof Membrane Tar	No Asbestos Detected
Low Roof Center (Roof Composite #1)	White Paper	No Asbestos Detected
Low Roof Center (Roof Composite #1)	Foam Insulation	No Asbestos Detected
Low Roof Center (Roof Composite #1)	Built-Up Roofing	No Asbestos Detected
Low Roof Center (Roof Composite #1)	Perlite Insulation	No Asbestos Detected
Low Roof Northeast Corner (Roof Composite #2)	Foam Insulation	No Asbestos Detected
Low Roof Northeast Corner (Roof Composite #2)	Roofing Tar	No Asbestos Detected
Low Roof Northeast Corner (Roof Composite #2)	Roofing Felt	No Asbestos Detected
Low Roof Northeast Corner (Roof Composite #2)	Roof Membrane	No Asbestos Detected
Low Roof Northeast Corner (Roof Composite #2)	Roofing Tar #2	No Asbestos Detected
Low Roof Northeast Corner (Roof Composite #2)	Tar Paper	No Asbestos Detected

LOCATION	MATERIAL	RESULT
Low Roof – Perimeter	Roof Membrane	No Asbestos Detected
Low Roof – Perimeter	Roofing Felt	No Asbestos Detected
Low Roof – Perimeter	Mastic Under Membrane	No Asbestos Detected
Low Roof – Perimeter	ISO Foam Insulation	No Asbestos Detected
Low Roof - West Brick Wall (Roof Composite #3)	Roofing Tar/Felt	No Asbestos Detected
Low Roof - West Brick Wall (Roof Composite #3)	Felt Paper	No Asbestos Detected
Low Roof - West Brick Wall (Roof Composite #3)	Roof Membrane	No Asbestos Detected
Low Roof - West Brick Wall (Roof Composite #3)	Foam Insulation	No Asbestos Detected
Low Roof - West Brick Wall (Roof Composite #3)	Roof Mastic	No Asbestos Detected
Low Roof - West Brick Wall (Roof Composite #3)	Roofing Felt	No Asbestos Detected
Low Roof - West Brick Wall (Roof Composite #3)	**Built-Up Roofing**	**4% Asbestos**
Low Roof - West Brick Wall (Roof Composite #3)	White Paper	No Asbestos Detected
Low Roof – West Brick Wall	Grey Caulk on Metal Flashing	No Asbestos Detected
Low Roof	Black Caulk on Skylight	No Asbestos Detected
Middle Roof – Center (Roof Composite #4)	Tan Foam	No Asbestos Detected
Middle Roof – Center (Roof Composite #4)	Yellow Foam	No Asbestos Detected
Middle Roof – Center (Roof Composite #4)	Roofing Tar	No Asbestos Detected
Middle Roof – Center (Roof Composite #4)	Gypsum Board	No Asbestos Detected
Middle Roof – Center (Roof Composite #4)	Roofing Felt	No Asbestos Detected
Middle Roof – North (Roof Composite #5)	Foam	No Asbestos Detected
Middle Roof – North (Roof Composite #5)	Rubber Membrane	No Asbestos Detected
Middle Roof – North (Roof Composite #5)	Roofing Felt	No Asbestos Detected
Middle Roof – North (Roof Composite #5)	Gypsum Board	No Asbestos Detected
Middle Roof on Air Vent Curbs	Membrane	No Asbestos Detected
Middle Roof on Air Vent Curbs	Mastic Under Membrane	No Asbestos Detected
Middle Roof on Air Vent Curbs	Roofing Felt	No Asbestos Detected
High Roof on Air Vent Curbs	Membrane	No Asbestos Detected
High Roof on Air Vent Curbs	Mastic Under Membrane	No Asbestos Detected
High Roof Center (Roof Composite #6)	Foam	No Asbestos Detected
High Roof Center (Roof Composite #6)	Roofing Tar	No Asbestos Detected
High Roof Center (Roof Composite #6)	Roofing Felt	No Asbestos Detected
High Roof Center (Roof Composite #6)	Rubber Membrane	No Asbestos Detected
High Roof Center (Roof Composite #6)	Gypsum Board	No Asbestos Detected
High Roof Perimeter (Roof Composite #7)	Foam	No Asbestos Detected
High Roof Perimeter (Roof Composite #7)	Rubber Membrane	No Asbestos Detected
High Roof Perimeter (Roof Composite #7)	Roofing Felt/Glue	No Asbestos Detected
High Roof Perimeter (Roof Composite #7)	Gypsum Board	No Asbestos Detected
High Roof – 24” Round Air Vent	White Caulking	No Asbestos Detected
Middle Roof – Black Roof Patch	Membrane/Mastic	No Asbestos Detected
Middle Roof – Black Roof Patch	Flashing	No Asbestos Detected
Middle Roof – Black Roof Patch	Rubber Membrane/Mastic	No Asbestos Detected

LOCATION	MATERIAL	RESULT
Canopy Roof	Roof Paper	No Asbestos Detected
Canopy Roof	Tar Under Roof Paper	No Asbestos Detected
Canopy Roof – Perimeter	**Roof Paper Under Metal Flashing**	**5% Asbestos**

Note that the asbestos-containing roofing materials (i.e. built-up roofing and roof paper under metal flashing) are considered "asphaltic based material" that can be removed by non-asbestos licensed personnel as long as the work complies with the Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 Regulations, Massachusetts Department of Environmental Protection (MADEP) 310 CMR 7.15 (10) and Massachusetts Department of Labor Standards (MADLS) 454 CMR 28.12 Regulations regarding "Removal of Asbestos-Containing Asphaltic Roofing and Siding Materials".

If you have any questions regarding this report, please give Derrick Wissman a call directly at (413) 664-6687.

ATLAS TECHNICAL CONSULTANTS, LLC

Derrick Wissman
Senior Project Manager
Direct Line 413-664-6687
derrick.wissman@oneatlas.com

Brian Williams
Area Manager
Direct Line 413-504-1653
brian.williams@oneatlas.com

Limitations *- This survey was limited to accessible areas and no destructive investigation techniques were used to access hidden materials or locations. Because ATLAS could not access these areas during the survey, hazardous materials may exist at inaccessible areas of the roof or building. Additionally, the passage of time may result in a change in the environmental characteristics at this site. This report does not warrant against future operations or conditions that could affect the conclusions made in this report. The results, findings and conclusions expressed in this report are based only on conditions that were observed during ATLAS's site visit. ATLAS provided these services consistent with a level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. This statement is in lieu of other statements either expressed or implied. This report is intended for the sole use of Nault Architects Inc. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or re-use of this document, the findings, conclusions, or recommendations is at the risk of said user.*

ATTACHMENT A

PLM BULK ASBESTOS LABORATORY REPORT

EMSL Analytical, Inc.
10-39 45th Road Long Island City, NY 11101
Tel/Fax: (212) 290-0051 / (212) 290-0058
http://www.EMSL.com / manhattanlab@emsl.com

EMSL Order: 032304138
Customer ID: ATC62
Customer PO: 11-81-0030
Project ID:

Attention: Derrick Wissman
Atlas Technical
73 William Franks Drive
West Springfield, MA 01089

Phone: (413) 781-0070
Fax: (413) 781-3734
Received Date: 04/20/2023 10:17 AM
Analysis Date: 04/20/2023 - 04/21/2023
Collected Date: 04/19/2023

Project: 183DW23052/ Worcester Senior Center / Nault Arch. - 128 Providence St., Worcester, 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**
128PS-01a-Membrane *032304138-0001*	Low Roof Center - Roof Composite #1	White/Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-01a-Membrane Mastic *032304138-0001A*	Low Roof Center - Roof Composite #1	Yellow Non-Fibrous Homogeneous	5% Cellulose 4% Synthetic	6% Quartz 85.0% Non-fibrous (Other)	**None Detected**
128PS-01a-Fibrous Membrane *032304138-0001B*	Low Roof Center - Roof Composite #1	Gray/White Fibrous Homogeneous	8% Glass	92.0% Non-fibrous (Other)	**None Detected**
128PS-01a-Membrane Tar *032304138-0001C*	Low Roof Center - Roof Composite #1	Tan/Black Non-Fibrous Homogeneous		18% Quartz 82.0% Non-fibrous (Other)	**None Detected**
128PS-01a-White Paper *032304138-0001D*	Low Roof Center - Roof Composite #1	White/Black Fibrous Homogeneous	50% Synthetic	50.0% Non-fibrous (Other)	**None Detected**
128PS-01a-Foam Insulation *032304138-0001E*	Low Roof Center - Roof Composite #1	Yellow Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-01a-Built Up Roofing *032304138-0001F*	Low Roof Center - Roof Composite #1	Black Non-Fibrous Homogeneous	20% Cellulose	80.0% Non-fibrous (Other)	**None Detected**
128PS-01a-Perlite Insulation *032304138-0001G*	Low Roof Center - Roof Composite #1	Brown Fibrous Homogeneous	15% Cellulose	35% Perlite 50.0% Non-fibrous (Other)	**None Detected**
128PS-02a-Foam *032304138-0002*	Low Roof Northeast Corner - Roof Composite #2	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**

Initial report from: 04/21/2023 12:51:53

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
128PS-02a-Tar *032304138-0002A*	Low Roof Northeast Corner - Roof Composite #2	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-02a-Felt *032304138-0002B*	Low Roof Northeast Corner - Roof Composite #2	Black Fibrous Homogeneous	30% Glass	70.0% Non-fibrous (Other)	**None Detected**
128PS-02a-Membrane *032304138-0002C*	Low Roof Northeast Corner - Roof Composite #2	Gray/White/Black Non-Fibrous Homogeneous	3% Glass	15% Ca Carbonate 82.0% Non-fibrous (Other)	**None Detected**
128PS-02a-Tar 2 *032304138-0002D*	Low Roof Northeast Corner - Roof Composite #2	Black Non-Fibrous Homogeneous	3% Cellulose	3% Quartz 94.0% Non-fibrous (Other)	**None Detected**
128PS-02a-Tar Paper *032304138-0002E*	Low Roof Northeast Corner - Roof Composite #2	Black Fibrous Homogeneous	25% Cellulose	75.0% Non-fibrous (Other)	**None Detected**
128PS-03a-Membrane *032304138-0003*	Low Roof Perimeter - Membrane	Gray/White Non-Fibrous Homogeneous	4% Glass	6% Quartz 90.0% Non-fibrous (Other)	**None Detected**
		Result includes a small amount of inseparable attached material			
128PS-03a-Felt *032304138-0003A*	Low Roof Perimeter - Membrane	Black Fibrous Homogeneous	10% Glass	90.0% Non-fibrous (Other)	**None Detected**
128PS-03b-Membrane *032304138-0004*	Low Roof Perimeter - Membrane	Various Non-Fibrous Homogeneous		15% Ca Carbonate 85.0% Non-fibrous (Other)	**None Detected**
128PS-03b-Felt *032304138-0004A*	Low Roof Perimeter - Membrane	Black Fibrous Homogeneous	20% Glass	80.0% Non-fibrous (Other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
128PS-04a *032304138-0005*	Low Roof Perimeter - Mastic under Membrane	Yellow Non-Fibrous Homogeneous	3% Cellulose	5% Quartz 92.0% Non-fibrous (Other)	**None Detected**
128PS-04b *032304138-0006*	Low Roof Perimeter - Mastic under Membrane	Yellow Non-Fibrous Homogeneous		10% Ca Carbonate 90.0% Non-fibrous (Other)	**None Detected**
128PS-05a *032304138-0007*	Low Roof Perimeter - ISO Foam Roof Insulation	Black/Yellow Fibrous Homogeneous	8% Cellulose 2% Glass	90.0% Non-fibrous (Other)	**None Detected**
128PS-05b *032304138-0008*	Low Roof Perimeter - ISO Foam Roof Insulation	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-06a-Tar Felt *032304138-0009*	Low Roof West Brick Wall - Roof Composite #3	Black Fibrous Homogeneous	62% Cellulose 8% Glass	30.0% Non-fibrous (Other)	**None Detected**
128PS-06a-Tar Paper *032304138-0009A*	Low Roof West Brick Wall - Roof Composite #3	Black Fibrous Homogeneous	65% Cellulose	35.0% Non-fibrous (Other)	**None Detected**
128PS-06a-Membrane *032304138-0009B*	Low Roof West Brick Wall - Roof Composite #3	Gray/White Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-06a-Foam Insulation *032304138-0009C*	Low Roof West Brick Wall - Roof Composite #3	Yellow Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-06a-Mastic *032304138-0009D*	Low Roof West Brick Wall - Roof Composite #3	Yellow Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
128PS-06a-Felt *032304138-0009E*	Low Roof West Brick Wall - Roof Composite #3	Black Fibrous Homogeneous	78% Cellulose 7% Glass	15.0% Non-fibrous (Other)	**None Detected**
128PS-06a-Built Up Roofing *032304138-0009F*	Low Roof West Brick Wall - Roof Composite #3	Black Non-Fibrous Homogeneous	26% Cellulose	70.0% Non-fibrous (Other)	**4% Chrysotile**
128PS-06a-White Paper *032304138-0009G*	Low Roof West Brick Wall - Roof Composite #3	White Fibrous Homogeneous		10% Quartz 90.0% Non-fibrous (Other)	**None Detected**
128PS-07a *032304138-0010*	Low Roof West Brick Wall - Gray Caulk on Metal Flashing	Gray Non-Fibrous Homogeneous	2% Glass	3% Quartz 10% Ca Carbonate 85.0% Non-fibrous (Other)	**None Detected**
128PS-07b-Caulk *032304138-0011*	Low Roof West Brick Wall - Gray Caulk on Metal Flashing	Gray Non-Fibrous Homogeneous		15% Ca Carbonate 85.0% Non-fibrous (Other)	**None Detected**
128PS-07b-Brick *032304138-0011A*	Low Roof West Brick Wall - Gray Caulk on Metal Flashing	Red Non-Fibrous Homogeneous		5% Ca Carbonate 95.0% Non-fibrous (Other)	**None Detected**
128PS-08a *032304138-0012*	Low Roof - Black Caulk on Skylight	White/Black Non-Fibrous Homogeneous		5% Quartz 40% Ca Carbonate 55.0% Non-fibrous (Other)	**None Detected**
			Result includes a small amount of inseparable attached material		
128PS-08b *032304138-0013*	Low Roof - Black Caulk on Skylight	Black Non-Fibrous Homogeneous		20% Ca Carbonate 80.0% Non-fibrous (Other)	**None Detected**
128PS-09a-Tan Foam *032304138-0014*	Middle Roof Center - Roof Composite #4	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
128PS-09a-Yellow Foam *032304138-0014A*	Middle Roof Center - Roof Composite #4	Yellow Non-Fibrous Homogeneous	6% Glass	94.0% Non-fibrous (Other)	**None Detected**
128PS-09a-Tar *032304138-0014B*	Middle Roof Center - Roof Composite #4	Black Non-Fibrous Homogeneous	10% Cellulose	90.0% Non-fibrous (Other)	**None Detected**
128PS-09a-Gypsum Board *032304138-0014C*	Middle Roof Center - Roof Composite #4	Gray/White Non-Fibrous Homogeneous	15% Glass	60% Gypsum 25.0% Non-fibrous (Other)	**None Detected**
128PS-09a-Felt *032304138-0014D*	Middle Roof Center - Roof Composite #4	Black Fibrous Homogeneous	30% Glass	70.0% Non-fibrous (Other)	**None Detected**
128PS-10a-Foam *032304138-0015*	Middle Roof North Perimeter - Roof Composite #5	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-10a-Rubber Membrane *032304138-0015A*	Middle Roof North Perimeter - Roof Composite #5	Black Non-Fibrous Homogeneous		10% Ca Carbonate 90.0% Non-fibrous (Other)	**None Detected**
128PS-10a-Felt *032304138-0015B*	Middle Roof North Perimeter - Roof Composite #5	Brown Fibrous Homogeneous	10% Cellulose 10% Glass	80.0% Non-fibrous (Other)	**None Detected**
128PS-10a-Gypsum Board *032304138-0015C*	Middle Roof North Perimeter - Roof Composite #5	Gray/White Non-Fibrous Homogeneous	12% Glass	55% Gypsum 33.0% Non-fibrous (Other)	**None Detected**
128PS-11a *032304138-0016*	Middle Roof - Membrane on Air Vent Curbs	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**

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			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
128PS-11b *032304138-0017*	Middle Roof - Membrane on Air Vent Curbs	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-11c *032304138-0018*	High Roof - Membrane on Air Vent Curbs	Black Non-Fibrous Homogeneous		20% Ca Carbonate 80.0% Non-fibrous (Other)	**None Detected**
128PS-12a-Mastic *032304138-0019*	Middle Roof - Mastic under Membrane on Air Vent Curbs	Brown Non-Fibrous Homogeneous	5% Cellulose	95.0% Non-fibrous (Other)	**None Detected**
128PS-12a-Felt *032304138-0019A*	Middle Roof - Mastic under Membrane on Air Vent Curbs	Brown Fibrous Homogeneous	72% Cellulose 8% Glass	20.0% Non-fibrous (Other)	**None Detected**
128PS-12b-Mastic *032304138-0020*	Middle Roof - Mastic under Membrane on Air Vent Curbs	Brown Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-12b-Felt *032304138-0020A*	Middle Roof - Mastic under Membrane on Air Vent Curbs	Brown Fibrous Homogeneous	72% Cellulose 8% Glass	20.0% Non-fibrous (Other)	**None Detected**
128PS-12c *032304138-0021*	High Roof - Mastic under Membrane on Air Vent Curbs	Brown/Yellow Non-Fibrous Homogeneous		10% Ca Carbonate 90.0% Non-fibrous (Other)	**None Detected**
128PS-13a-Foam *032304138-0022*	High Roof Center - Roof Composite #6	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-13a-Tar *032304138-0022A*	High Roof Center - Roof Composite #6	Black Non-Fibrous Homogeneous	6% Cellulose	94.0% Non-fibrous (Other)	**None Detected**

Initial report from: 04/21/2023 12:51:53

EMSL Analytical, Inc.
10-39 45th Road Long Island City, NY 11101
Tel/Fax: (212) 290-0051 / (212) 290-0058
http://www.EMSL.com / manhattanlab@emsl.com

EMSL Order: 032304138
Customer ID: ATC62
Customer PO: 11-81-0030
Project ID:

Attention: Derrick Wissman
Atlas Technical
73 William Franks Drive
West Springfield, MA 01089

Phone: (413) 781-0070
Fax: (413) 781-3734
Received Date: 04/20/2023 10:17 AM
Analysis Date: 04/20/2023 - 04/21/2023
Collected Date: 04/19/2023

Project: 183DW23052/ Worcester Senior Center / Nault Arch. - 128 Providence St., Worcester, 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**
128PS-13a-Felt *032304138-0022B*	High Roof Center - Roof Composite #6	Black Non-Fibrous Homogeneous	20% Cellulose 10% Glass	70.0% Non-fibrous (Other)	**None Detected**
128PS-13a-Rubber Membrane *032304138-0022C*	High Roof Center - Roof Composite #6	White/Black Non-Fibrous Homogeneous		15% Ca Carbonate 85.0% Non-fibrous (Other)	**None Detected**
128PS-13a-Gypsum Board *032304138-0022D*	High Roof Center - Roof Composite #6	Gray Non-Fibrous Homogeneous	3% Glass	60% Gypsum 37.0% Non-fibrous (Other)	**None Detected**
128PS-14a-Foam *032304138-0023*	High Roof Perimeter - Roof Composite #7	Tan Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-14a-Rubber Membrane *032304138-0023A*	High Roof Perimeter - Roof Composite #7	Black Non-Fibrous Homogeneous		15% Ca Carbonate 85.0% Non-fibrous (Other)	**None Detected**
128PS-14a-Felt *032304138-0023B*	High Roof Perimeter - Roof Composite #7	Black Fibrous Homogeneous	20% Cellulose 15% Glass	65.0% Non-fibrous (Other)	**None Detected**
128PS-14a-Glue *032304138-0023C*	High Roof Perimeter - Roof Composite #7	Black/Yellow Non-Fibrous Homogeneous		10% Ca Carbonate 90.0% Non-fibrous (Other)	**None Detected**
128PS-14a-Gypsum Board *032304138-0023D*	High Roof Perimeter - Roof Composite #7	Gray Non-Fibrous Homogeneous	5% Glass	60% Gypsum 35.0% Non-fibrous (Other)	**None Detected**
128PS-15a *032304138-0024*	High Roof - White Caulk on 24" Round Air Vent	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75.0% Non-fibrous (Other)	**None Detected**

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Project: 183DW23052/ Worcester Senior Center / Nault Arch. - 128 Providence St., Worcester, 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**
128PS-15b *032304138-0025*	High Roof - White Caulk on 24" Round Air Vent	Gray Non-Fibrous Homogeneous		25% Ca Carbonate 75.0% Non-fibrous (Other)	**None Detected**
128PS-16a-Membrane *032304138-0026*	Middle Roof - Black Roof Patch	Black Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-16a-Mastic *032304138-0026A*	Middle Roof - Black Roof Patch	Yellow Non-Fibrous Homogeneous		100.0% Non-fibrous (Other)	**None Detected**
128PS-16a-Flashing *032304138-0026B*	Middle Roof - Black Roof Patch	Black Non-Fibrous Homogeneous		5% Quartz 20% Ca Carbonate 75.0% Non-fibrous (Other)	**None Detected**
128PS-16b-Rubber Membrane *032304138-0027*	High Roof - Black Roof Patch	Black Non-Fibrous Homogeneous		20% Ca Carbonate 80.0% Non-fibrous (Other)	**None Detected**
128PS-16b-Mastic *032304138-0027A*	High Roof - Black Roof Patch	Black Non-Fibrous Homogeneous		10% Ca Carbonate 90.0% Non-fibrous (Other)	**None Detected**
128PS-16b-Flashing *032304138-0027B*	High Roof - Black Roof Patch	Black Non-Fibrous Homogeneous		25% Ca Carbonate 75.0% Non-fibrous (Other)	**None Detected**
128PS-17a *032304138-0028*	Canopy Roof - Roof Paper	Black Fibrous Homogeneous	60% Cellulose	40.0% Non-fibrous (Other)	**None Detected**
128PS-17b *032304138-0029*	Canopy Roof - Roof Paper	Black Fibrous Homogeneous	30% Cellulose	70.0% Non-fibrous (Other)	**None Detected**

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Project: 183DW23052/ Worcester Senior Center / Nault Arch. - 128 Providence St., Worcester, 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**
128PS-18a *032304138-0030*	Canopy Roof - Tar under Roof Paper	Black Non-Fibrous Homogeneous		25% Quartz 75.0% Non-fibrous (Other)	**None Detected**
128PS-18b *032304138-0031*	Canopy Roof - Tar under Roof Paper	Black Non-Fibrous Homogeneous	4% Cellulose	96.0% Non-fibrous (Other)	**None Detected**
128PS-19a *032304138-0032*	Canopy Roof Perimeter - Roof Paper under Metal Flashing	Black Non-Fibrous Homogeneous	35% Cellulose	5% Quartz 55.0% Non-fibrous (Other)	**5% Chrysotile**
128PS-19b *032304138-0033*	Canopy Roof Perimeter - Roof Paper under Metal Flashing				**Positive Stop (Not Analyzed)**

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Project: 183DW23052/ Worcester Senior Center / Nault Arch. - 128 Providence St., Worcester, MA

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date:	04/20/2023	Sample Receipt Time:	10:17 AM
Analysis Completed Date:	04/21/2023	Analysis Completed Time:	3:17 AM

Analyst(s):

Christopher Cernansky PLM (35)

Ghaly Hemaya PLM (40)

Samples Reviewed and approved by:

Charles Johnson, Asbestos Laboratory Manager
or other approved signatory

Initial report from: 04/21/2023 12:51:53

032304138 # 032309415

Relinquished by:		Date/Time:	04-19-2023
Received by:		Date/Time:	
Relinquished by:		Date/Time:	
Received by:		Date/Time:	
Relinquished by:		Date/Time:	
Received by:		Date/Time:	

Company Name:	Atlas Techniical
Company Address:	73 William Franks Rd
City: West Springfield	State: MA Zip: 01089

EMSL ANALYTICAL,INC
10-39 45th Road
Long Island City, NY 11101
(212)-290-0051

Phone: (413) 781-0070	Project Name: Worcester Senior Center /Nault Arch.	Analysis Type: PLM GH. EC
	Project Address: 128 Providence St Worceter, Ma	Positive Stop: Yes
Results to: Derrick.wissman@oneatlas.com	Project Manager: Derrick Wissman	Turnaround Time: 5-Days
Verbal Results: Yes No	Project Number: 183DW23052	Fax Copy by:
Cell or Pager 1-413-664-6687	Sampled by: Jim Lowell Date: 04-19-2023	Return Samples: Yes No
Site Fax:	Analysis All Roof Composite Layers	
Additional Fax:		

Lab ID	Field ID	Location	Sample Description	Homogenous Area #
	128PS-01a	Low Roof Center	Roof Composite #1	1
	128PS-02a	Low Roof Northeast Corner	Roof Composite #2	2
	128PS-03a	Low Roof Perimeter	Membrane	3
	128PS-03b	Low Roof Perimeter	Membrane	3
	128PS-04a	Low Roof Perimeter	Mastic Under Membrane	4
	128PS-04b	Low Roof Perimeter	Mastic Under Membrane	4
	128PS-05a	Low Roof Perimeter	ISO Foam Roof Insulation	5
	128PS-05b	Low Roof Perimeter	ISO Foam Roof Insulation	5
	128PS-06a	Low Roof West Brick Wall	Roof Composite #3	6
	128PS-07a	Low Roof West Brick Wall	Gray Caulk On Metal Flashing	7
	128PS-07b	Low Roof West Brick Wall	Gray Caulk On Metal Flashing	7
	128PS-08a	Low Roof	Black Caulk On Skyligh	8
	128PS-08b	Low Roof	Black Caulk On Skyligh	8
	128PS-09a	Middle Roof Center	Roof Composite #4	9
	128PS-10a	Middle Roof North Perimeter	Roof Composite #5	10
	128PS-11a	Middle Roof	Membrane On Air Vent Curbs	11
	128PS-11b	Middle Roof	Membrane On Air Vent Curbs	11
	128PS-11c	High Roof	Membrane On Air Vent Curbs	11

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20 APR 23 AM 10:17

OrderID: 032304138

Received by: Ariel Rodriguez 4/20/23 10:17 Am

Page 1 Of 2

4/21/23

0323041138 DT 0323094115

OrderID: 032304138

Relinquished by:	Jim Lowell	Date/Time:	04-19-2023
Received by:		Date/Time:	
Relinquished by:		Date/Time:	
Received by:		Date/Time:	
Relinquished by:		Date/Time:	
Received by:		Date/Time:	

Company Name:	Atlas Techniical
Company Address:	73 William Franks Rd
City: West Springfield	State: MA Zip: 01089
Phone: (413) 781-0070	
Results to: Derrick.wissman@oneatlas.com	
Verbal Results: Yes No	
Cell or Pager 1-413-664-6687	
Site Fax:	
Additional Fax:	

EMSL ANALYTICAL,INC
10-39 45th Road
Long Island City, NY 11101
(212)-290-0051

Project Name: Worcester Senior Center /Nault Arch.		Analysis Type: PLM
Project Address: 128 Providence St Worceter, Ma		Positive Stop: Yes
Project Manager: Derrick Wissman		Turnaround Time: 5-Days
Project Number: 183DW23052		Fax Copy by:
Sampled by: Jim Lowell	Date: 04-19-2023	Return Samples: Yes No
Analysis All Roof Composite Layers		

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Lab ID	Field ID	Location	Sample Description	Homogenous Area #
	128PS-12a	Middle Roof	Mastic Under Membrane On Air Vent Curbs	12
	128PS-12b	Middle Roof	Mastic Under Membrane On Air Vent Curbs	12
	128PS-12c	High Roof	Mastic Under Membrane On Air Vent Curbs	12
	128PS-13a	High Roof Center	Roof Composite #6	13
	128PS-14a	High Roof & Perimeter	Roof Composite #7	14
	128PS-15a	High Roof	White Caulk On 24" Round Air Vent	15
	128PS-15b	High Roof	White Caulk On 24" Round Air Vent	15
	128PS-16a	Middle Roof	Black Roof Patch	16
	128PS-16b	High Roof	Black Roof Patch	16
	128PS-17a	Canopy Roof	Roof Paper	17
	128PS-17b	Canopy Roof	Roof Paper	17
	128PS-18a	Canopy Roof	Tar Under Roof Paper	18
	128PS-18b	Canopy Roof	Tar Under Roof Paper	18
	128PS-19a	Canopy Roof Perimeter	Roof Paper Under Metal Flashing	19
	128PS-19b	Canopy Roof Perimeter	Roof Paper Under Metal Flashing	19

Received by AM 4/20/23 10:17