PURCHASING DIVISION CITY OF WORCESTER MASSACHUSETTS 01608-1895 ROOM 201 - CITY HALL, 455 MAIN ST. PHONE (508) 799-1220

BID INVITATION (Supplies, Material, Equipment, Services)

AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER

BID NO. 84	169-W6
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**DATE:** June 18, 2025

CITY OF WORCESTER Christopher J. Gagliastro, MCPPO Purchasing Agent

**BUYER:** Christopher Gagliastro

## NOTICE TO BIDDERS TERMS AND CONDITIONS

All bids are subject to the terms and conditions and specificity herein set forth except where specifically deleted by the City of Worcester in Section No. 6 below.

	OMPLETE ORIGINAL COPY (including ALL required pages) OF THIS BID MUST BE SUBMITTED IN A ALED ENVELOPE:					
DA	TIME: 4:00 P.M.					
PL.	ACE: Purchasing Division, Room 201, City Hall, Worcester, Massachusetts					
	ARK ENVELOPE "Bid No. 8469-W6, Hazardous Materials Abatement Monitoring Services – ADA Upgrades, rious WPS / DPF"					
	e name and address of the bidder must appear in the upper left hand corner of the envelope. The City of Worcester is not ponsible for bids not properly marked.					
GF	<u>ENERAL</u>					
1.	1. This Bid Invitation covers: provide professional hazardous materials abatement monitoring services for the duration of the ADA Upgrades at 4 Worcester Public Schools project in accordance with the attached requirements and specifications of the City of Worcester Public Schools.					
2.	A certified check or bid bond made payable to the "City Treasurer, City of Worcester" in the Amount of \$must accompany this bid.					
3.	NO BID WILL BE ACCEPTED AFTER TIME AND DATE SPECIFIED					
4.	A performance bond in the amount of \$N/A of the total dollar award is required.					
5.	A payment bond in the amount of \$_N/A of the total dollar award is required.					
6.	All terms and conditions are applicable to this proposal except the following section numbers which are hereby deleted from this invitation: _all apply					
7.	Questions pertaining to this bid must be directed to: Christopher J. Gagliastro in writing via e-mail at: <a href="mailto:gagliastroc@worcesterma.gov">gagliastroc@worcesterma.gov</a>					

Email copies of this bid are acceptable. Please email bids to <a href="mailto:gagliastroc@worcesterma.gov">gagliastroc@worcesterma.gov</a>

- 8. The following meanings are attached to the defined words when used in this bid form.
  - (a) The word "City" means The City of Worcester, Massachusetts.
  - (b) The word "Bidder" means the person, firm or corporation submitting a bid on these specifications or any part thereof.
  - (c) The word "Contractor" means the person, firm or corporation with whom the contract is made by carrying out the provisions of these specifications and the contract.
  - (d) The words "Firm Price" shall mean a guarantee against price increases during the life of the contract.
- 9. Any prospective bidder requesting a change in or interpretation of existing specifications of terms and conditions must do so within five (5) days (Saturdays, Sundays and Holidays excluded) BEFORE scheduled bid opening date. All requests are to be in writing to the Purchasing Division (or e-mailed at <a href="mailed at gagliastroc@worcesterma.gov">gagliastroc@worcesterma.gov</a>). No changes will be considered or any interpretation issued unless request is in our hands within five (5) days (Saturdays, Sundays and Holidays excluded) BEFORE scheduled bid opening date.
- 10. The contractor will be required to indemnify and save harmless the City of Worcester, for all damages to life and property that may occur due to his or her negligence or that of his or her employees, subcontractors, etc., during this contract.
- 11. The Contract Agreement will be in the form customarily employed by the City of Worcester for this purpose and is on file in the Purchasing Division at City Hall.
- 12. Bids which are incomplete, not properly endorsed, or signed, or otherwise contrary to these instructions will be rejected as informal by the Purchasing Agent. Conditional Bids Will Not Be Accepted.
- 13. The Bidder must certify that no official or employee of the City of Worcester, Massachusetts is pecuniarily interested in this proposal or in the contract which the bidder offers to execute or in expected profits to arise therefrom, unless there has been compliance with provisions of G.L.C.43 Sec. 27, and that this bid is made in good faith without fraud or collusion or connection with any other person submitting a proposal.
- 14. As the City of Worcester is exempt from the payment of Federal Excise Taxes, and Massachusetts Sales Tax, prices quoted herein are not to include these taxes.
- 15. All prices are to be firm F.O.B. Destination, City of Worcester, Massachusetts, unless otherwise indicated by the City. Time reserved for award is ninety days.
- 16. In case of error in the extension prices quoted herein, the unit price will govern.
- 17. It is understood and agreed that should any price reductions occur between the opening of this bid and delivery of any order, the benefit of all such reductions will be extended to the City.
- 18. The City of Worcester reserves the right to reject any and all bids, wholly or in part, and to make awards in a manner deemed in the best interest of the City.
- 19. Awards will be made to the bidder quoting the lowest net price in accordance with specifications.
- 20. The supplier will be bound by all applicable statutory provisions of law of the Federal Government, the Commonwealth of Massachusetts, the City of Worcester, and The Department of Public Safety of the Commonwealth of Massachusetts.
- 21. Any bid withdrawn after time and date specified, the bidder shall forfeit deposit on bid as liquidated damages.
- 22. The contractor will not be permitted to either or underlet the contractor, not assign either legally or equitably any monies hereunder, or its claim thereto without the previous written consent of the City Treasurer and of the Purchasing Agent of the City.

- 23. If this bid shall be accepted by the City, and the bidder shall fail to contract as aforesaid and to give a bond in the amount as specified in Section 4, within ten (10) days, (not including Sunday or a Legal Holiday) from the date of the mailing of a notice from the City to him, according to the address given herewith, that the contract is ready for signature, the City may by option determine that the bidder has abandoned the contract and thereupon the proposal and acceptance shall be null and void and the bid security accompanying this proposal shall become the property of the City as liquidated damages.
- 24. When quoting, the bidder shall submit a signed copy of this bid form, and if bid is accepted by the City shall constitute part of the contract of purchase. Do not detach any part of this form when submitting a bid. Bidder must sign and return complete forms.
- 25. If in the judgment of the Purchasing Agent any property is needlessly damaged by an act or omission of the contractor or his/her employees, servants, or agent, the amount of such damages shall be determined by the Purchasing Agent of the City of Worcester and such amount shall be deducted from any money due the contractor or may be recovered from said contractor in actions at law.
- 26. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents and Acts of God.

## **INSURANCE AND WORKER'S COMPENSATION**

- 27. <u>COMMERCIAL GENERAL LIABILITY INSURANCE</u> Contractor to supply the City of Worcester with certificates of insurance evidencing general liability coverage of not less than \$1,000,000.00 per occurrence / \$2,000,000.00 aggregate.
- 28. <u>AUTOMOBILE LIABILITY INSURANCE</u> Contractor to supply the City of Worcester with certificates of insurance evidencing automobile liability coverage, bodily injury and property damage combined single limits, of \$ 1,000,000.00 (all owned, hired and non-owned autos).
- 29. <u>COMPENSATION INSURANCE</u> Contractor shall furnish the City of Worcester with certificates showing that all of his or her employees who shall be connected with this work are protected under Massachusetts' statutory worker's compensation insurance policies.
- 30. The Contractor shall carry public liability insurance with an insurance company satisfactory to the City so as to save the City harmless from any and all claims for damages arising out of bodily injury to or death of any person or persons, and for all claims for damages arising out of injury to or destruction of property caused by accident resulting from the use of implements, equipment or labor used in the performance of the contractor or from any neglect, default or omission, or want of proper care, or misconduct on the part of the Contractor or for any one of his employ during the execution of the contract.
- 31. Prior to starting on this contract, the Contractor shall deposit with the contracting officer certificates from the insurer to the effect that the insurance policies required in the above paragraph have been issued to the Contractor. The certificates must be on a form satisfactory to the Purchasing Agent.
- 32. Except as may be otherwise stated herein, the Contractor shall also carry bodily injury and property damage insurance in amount not less than those set forth above covering the operation of all motor powered vehicles owned or operated by the Contractor and engage in this contract.

## **DISCOUNT**

- 33. Prompt pay discounts will be considered when determining the low bid except when discounts are for a period of less than 30 days. In this event discounts will not be taken into consideration when determining low bid.
- 34. Time, in connection with discount offered, will be computed from date of completion and/or delivery and acceptance at destination, or from date correct bill or voucher properly certified by the contractor is received if the latter date is later than the date of completion and acceptance and/or delivery and acceptance.

### **GUARANTEE**

35. The bidder to who a contract is awarded guarantees to the City of Worcester all equipment, materials and/or workmanship for a period of one (1) year after final inspection and acceptance and shall replace promptly any defective equipment, materials and/or workmanship required without additional cost to the City.

## **DELIVERIES AND COMPLETION**

- 36. It is understood and agreed that in the event of failure on the part of the bidder to indicate date of delivery and/or completion, delivery and/or completion will be made within twelve (12) days from date of notification. Should the successful bidder fail to make delivery or complete contract within time specified, the City reserves the right to make the purchase on such orders at the open market and charge any excess over contract price to the account of the successful bidder, who shall pay the same.
- 37. The contractor shall familiarize himself with the location and facilities for storage.
- 38. The City, through its Purchasing Division, reserves the right to divert delivery from one location to another, and to allow for any change in operating conditions or for any other cause not now foreseen and to proportion deliveries according to available storage facilities.

## **SAMPLING AND ANALYSIS**

- 39. Each bidder must state the commercial name of the product quoted, name, and address of operator or agent from whom the product will be purchased and in addition shall furnish an analysis of the product, date of analysis, by whom made and their address.
- 40. Samples of the product to be delivered may be taken by a representative of the City, either prior to delivery or while it is being delivered in the storage facilities at destination, or will be taken from the storage facilities to which the product has been delivered as determined from time to time by the Purchasing Agent. Bidder agrees to furnish the necessary manual labor, without additional cost required to assemble the physical samples, which is to be performed under the direction of the City representative.
- 41. The representative of the City taking the samples, shall be given the opportunity, while sampling, to affix his signature to the delivery slip each item represented in his sample.
- 42. Any product after the sampling and analysis, not found meeting the requirements of the contract shall be sufficient cause for the cancellation of the contract at the option of the Purchasing Agent.
- 43. If any product is found that does not meet the analysis submitted by the bidder in his proposal, the Purchasing Agent may at his option exercise his right to reject the product and require that all or any part thereof shall be removed promptly by and at the expense of the contractor and replace it forthwith with a product satisfactory to the Purchasing Agent, or to retain the product and compensate the contractor in an amount as determined by the Purchasing Agent and the City Manager.
- 44. It is understood and agreed that it shall be a material breach of any contract resulting from this bid for the Contractor to engage in any practice which shall violate any provisions of Massachusetts General Laws, Chapter 151B, relative to discrimination in hiring, discharge, compensation, or terms, conditions or privileges of employment because of race, color, religious creed, national origin, sex, age or ancestry.
- 45. The undersigned as bidder, declares that the only parties interested in this proposal as principals are named herein; that this proposal is made without collusion with any other person, firm or corporation; that no officer or agent of the City is directly or indirectly interested in this bid; and he proposes and agrees that if this proposal is accepted he will contract with the City in accordance with the specifications, also the terms and conditions as spelled out in this bid form.
- 46. No Person, including but not limited to corporations, partnerships, limited partnerships or limited liability corporations, shall be eligible to receive a contract under this invitation to bid and/or request for proposal if that person has been convicted of any felony offense involving the distribution of controlled substances as that term is defined under Chapter 94C of the General Laws and, for contracts to be performed for on-site services to the Worcester Public Schools, if that person or any person to be employed by that person in the performance of such on-site services has been convicted of a "sex offense" or a "sex offense involving a child" or a "sexually violent offense" or would meet the definition of "sexually

violent predator" as those terms are defined in Chapter 6, Section 178C of the General Laws and who must register with the sex offender registry board.

- 47. The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ for work or services relating to this contract any unfit person or anyone not skilled in the task assigned to him. In light of the fact that the performance of this contract requires the Contractor and its employees to have significant interaction with the public, the Contractor shall require all employees who may perform services under this contract to conduct themselves in a courteous, professional manner. If the Contractor is notified by the Contract Officer that any person engaged upon the work is incompetent, unfaithful, disorderly, discourteous, or otherwise unsatisfactory, then such person shall be discharged from providing services or work pursuant to this contract. Without limiting the generality of the foregoing, intimidation, threats and/or violent conduct of any kind or nature directed to members of the public are absolutely prohibited. Failure to comply with this requirement shall be grounds for termination of the contract.
- 48. The Contractor's performance may be evaluated on an ongoing basis including but not limited to consideration of complaints received from members of the public. In order to facilitate this evaluation, the Contractor shall provide the City with documents and records upon request. The Contractor shall further obtain from its employees authorization that appropriate City personnel may obtain all available criminal offender information ("CORI") from the Criminal History Systems Board. A high number of unresolved complaints, any number of complaints that are particularly severe, or employment of individuals who have been convicted or assault or other violent crimes shall be grounds for the early termination or non-renewal of the contract by the City.
- 49. The procurement officer shall award the contract to the lowest responsible and responsive bidder. The term "responsible bidder" means "a person who has the capability to perform fully the contract requirements, and the integrity and reliability which assures good faith performance." Consistent with its duty to maintain public order and promote public safety, the City has determined that this contract is of a type and nature so as to be particularly sensitive due, at least in part, to the contractor's inherent access and dealings with the members of the general public. Therefore, the City has concluded that additional scrutiny is justified as it determines whether a particular bidder is responsible, having the integrity and reliability to properly perform the requested services. This may entail consideration of the contractor's system of oversight, training and supervision of its employees, including but not limited to its requirement of a high standard of customer service and courtesy in its dealings with the public. The bidder's care and diligence in hiring and assigning its employees will also be considered. In making its determination, the City reserves the right to examine any and all information at its disposal, including but not limited to prior City contracts, the experiences and information obtained from current and former customers (whether identified by the bidder as references or not), as well as other sources available to the City, including but not limited to court documents, newspapers, financial reports (such as DUNS), and certain police data and reports.
- 50. The Contractor, acting through its owner(s) or any of its employees, or its agents or sub-contractors and any of their employees, shall not engage in any behavior, whether during the course of its duties under this contract or at any other time, that is illegal, criminal or otherwise shocking or offensive to the general public. The determination whether any particular behavior is illegal, criminal or shocking to the general public shall rest in the sound judgment of the Contracting Officer or the City Manager. In making such determination, the Contracting Officer or the City Manager shall apply the general standards of the community. No criminal conviction or formal charges shall be required to make such determination. Such behavior need be something more than trivial and something which would cause the general public to have concerns either about the safety of individuals coming in contact with the Contractor or about the character and integrity of the individuals with which the City does business. Violation of this provision shall be grounds for immediate and unilateral termination of this contract by the City upon five days' notice as otherwise provided herein

# GIVE FULL NAMES AND RESIDENCES OF ALL PERSONS INTERESTED IN THE FOREGOING PROPOSAL. (NOTICE: Give first and last name in full; in case of corporations, give corporate name and names of President, Treasurer, and Manager; and in case of firms give names of the individual members) Name Address Zip Code

ND	DLY FURNISH THE FOLLO	WING INFORMATION REGARDING B	IDDER:		
	If a Proprietorship				
	Zip Code	Telephone No			
	Home Address		<del></del>		
	Zip Code	Telephone No			
	If a Partnership Full names and addresses of	all partners			
	Name	Address		Zip Code	
	Business Address		Zip Code		

(3)	If a Corporation				
	Full Legal Name				
	State of Incorporation	Qualified in	n Massachusetts?	Yes	No
	Principal Place of Business				
		Street		P.O. Box	
		City/Town	State	Zip	
	Telej	phone No			
	Place of Business in Massachusett	ts			
		Street		P.O. Box	
		City/Town	State	Zip	
		Telephone No			
GIVE	THE FOLLOWING INFORMATIO	N REGARDING SURE	TY COMPANY		
	Full Legal Name of Surety Compa	any			
	State of Incorporation	Admitted in Massach	nusetts? Yes		No
	Principal Place of Business	Street		D.O. D.	
				P.O. Box	
		City/Town	State	Zip	
	Place of Business in Massachusett	Street		P.O. Box	
			····		
		City/Town	State	Zip	
		Telephone No.			

## **NOTE**

\$1,000.00 or more.	micy General, Washington, D.C. require	as the following info	ormation on all bid proposals amounting to
F.I.D. Number of bidd	ler		
This number is regular Treasury Department	rly used by companies when filing their Form 941.	"EMPLOYER'S F	EDERAL TAX RETURN, U.S."
AUTHORIZED SIGN	IATURE OF BIDDERPI		TITLE
	PI	LEASE SIGN	
DATE	BID SECU	JRITY \$	
The name of Custome event of contract awar		ct Administrator re	sponsible for servicing this account in the
NAME (PLEASE PRI	NT) Customer Service Rep.		TEL. NO.
NAME (PLEASE PRI	INT) Contract Administrator		TEL. NO.
FAX NUMBER		FAX#	
E-MAIL (Contract A  UNDER MASSACHU MUST BE PROVIDE	JSETTS GENERAL LAWS, CHAPTE	R 30B: SECTION	0, THE FOLLOWING CERTIFICATION
MUST BE PROVIDE	ט:		
Section 10.	A person submitting a bid or a prope to any governmental body shall cert		ment or disposal of supplies, or services e bid or proposal, as follows:
without collusion or fr		his certification, the	s been made and submitted in good faith and word "person" shall mean any natural person, entity, or group of individuals."
(Please Print)			
	Name of Person Signing Bid		
	Signature of Person Signing Bid		
	Company		
	No award will be made withou	t vendor certific	eation of the above.

## **PROPOSAL PAGE**

		T KNOW WHAT HAS BEEN OFFERED.	ie, trade	e name	e, brand name and qua	uity next to
	antities shown the period of	n herein are estimated only and the Contractor will be requithe contract.	red to f	urnish	all quantities ordered	l by the City
YES :	XX NO					
Delive	ry to be made	to: Worcester, MA				
This B	id includes ad	denda numbered				
	NO PRICE A	ADJUSTMENTS ALLOWED. PRICES QUOTED ARE	FINA	L. CH	IECK BEFORE SIG	NING
			BIDD	ER T	O COMPLETE ITE	MS BELOW
Item No.	Estimated Contract Quantity	Description				Total Amount
		Provide professional hazardous materials abatement monitoring services for the full duration of the 4 ADA Upgrades Worcester Schools project per the attached requirements and specifications of the Worcester Public Schools.				See pricing page(s)
		Questions pertaining to this bid must be directed to: Christopher J. Gagliastro in writing via e-mail at: <a href="mailto:gagliastroc@worcesterma.gov">gagliastroc@worcesterma.gov</a>				

TERMS, PROMPT PAY DISCOUNT	% 30 DAYS, NET 45 DAYS.
DELIVERY AND/OR COMPLETION TO BE NOTIFICATION BY THE CITY.	MADE WITHIN ( <u>as required</u> ) DAYS FROM TIME OF
NAME OF BIDDER	

## Hazardous Material Abatement Monitoring Services – ADA Upgrades to 4 Worcester Public Schools / WPS Scope of Services / Requirements – Bid #: 8469-W6

## PROJECT OVERVIEW

The City of Worcester Public Schools 4 ADA is requesting quotes from qualified firms to provide monitoring services for its 4 ADA Upgrades at Worcester Public Schools. The vendor awarded this contract shall provide the services noted herein for the entire length of the project which is expected to span over more than one year.

## Remediation Oversight

Perform construction administration services of oversight and testing during remediation of asbestos-containing material for the ADA upgrades at the four WPS locations listed herein.

- Review and document abatement contractor's on-site paperwork and work activities.
- Perform visual inspections of each work area at the conclusion of abatement.
- Perform perimeter air monitoring and Final Air Clearance testing for each abatement work area.
- Review submittals, attend pre-construction meetings, prepare RFI responses and attend project meetings estimated at one per week during the abatement schedule.
- Provide WPS with copies of all on-site documentation (i.e. air sample results, chronological site logs and certificates of visual inspection for each containment area cleared.

## **Schedule**

Phase I construction will start in June 2025 and extend through August 2025. Phase II will be constructed June through August 2026. Additional work may be required during school vacation weeks. Unit pricing shall be maintained for school vacation weeks.

Phase I Construction

June 23 – August 27, 2025 (11 weeks)

Phase II Construction

June 22 – August 24, 2026 (11 weeks)

Project/ Bid Estimate for the following days, reports and meetings required:

Summer 2025 abatement (45 days + 1 report)

Summer 2025 Project management (6 meetings)

Summer 2026 abatement (45 days + 1 report)

Summer 2026 Project management (6 meetings)

## PRICING PAGE – 8469-W6

ITEM #:	DESCRIPTION:	UNIT PRICE	E:	TOTAL PRICE:	
1	Abatement Monitoring (per day) - Summer 2025	\$ Per day	x 45	= \$	
2	Project Management (per one hour meeting) – Summer 2025	\$Per meeting	x 6	= \$	
3	Abatement Monitoring (per day) – Summer 2026	\$Per day	x 45	= \$	_
4	Project Management (per one hour meeting) – Summer 2026	\$Per meeting	x 6	= \$	
5	Abatement Monitoring Reports – 2025/2026	\$ Per report	x 2	= \$	
	Total litems. Award to be made in the aggregate. are estimated for bidding purposes only.	all items:	=	\$	*
Bidder Name	»:				

Mount Vernon Group Architects, Inc.

#### **SECTION 02 28 20**

#### **ASBESTOS REMEDIATION**

#### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS

A. All the Contract Documents, including Drawings, General Conditions, Supplementary Conditions, and all Sections of Division 1 - General Requirements, apply to the Work of this Section.

#### 1.02 DESCRIPTION OF WORK

- A. The Work of this Section shall include, but not be limited to, furnishing and installation of the following:
  - 1. The General Contractor shall retain the services of a Massachusetts licensed asbestos abatement contractor to perform all related work.
  - 2. All labor, material, equipment, and services specified herein or reasonably necessary for and incidental to removal and legal disposal of Asbestos Containing Materials (ACM).
  - 3. The complete isolation of the Work area for the duration of the Work so as to prevent asbestos contaminated dust or debris from passing beyond the isolated areas, removal, and disposal of ACM.
  - 4. A lump sum bid for all required services included in Part 3. Unit prices included at the end of this Section shall be part of this bid subject to addition and deductions to the lump sum bid.

#### 1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. Carefully examine all the Contract Documents for requirements which effect the Work of this Section.
- B. Other Specification Sections which directly relate to the Work of this Section include, but are not limited to, the following:
  - 1. DIVISION 01 GENERAL REQUIREMENTS; including all Sections contained therein
  - 2. Section 02 41 16 Building Demolition

#### 1.04 POTENTIAL ASBESTOS HAZARDS

- A. The disturbance or dislocation of ACM may cause asbestos fibers to be released into the building's atmosphere, thereby creating a potential health hazard to Workers, and building occupants. Apprise all Workers, supervisory personnel, subcontractors, and consultants who will be at the job site of the seriousness of the hazard and of proper Work procedures, which must be followed.
- B. Where in the performance of the Work, Workers, supervisory personnel, subcontractors, or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified ACM, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to airborne asbestos. Such measures shall include

## WORCESTER PUBLIC SCHOOLS ADA UPGRADES FOR CHALLENGE & REACH, GERALD CREAMER, LINCOLN, AND THORNDYKE SCHOOLS

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- the procedures and methods described herein, and compliance with regulations of applicable federal, state, and local agencies.
- C. If the Contractor failed to comply with the requirements of the specifications, the Owner's Representative (Project Monitor) may present a written stop of Work order. The Contractor must immediately and automatically stop all Work until authorized in writing by the Project Monitor to commence Work. All costs related to delays shall be at the Contractor's expense.

#### 1.05 DEFINITIONS

- A. Abatement: Procedures to control fiber release from ACM. Includes encapsulation, enclosure, and removal.
- B. Air Monitoring: The process of measuring the fiber content of a specific volume of air in a stated period of time.
- C. Asbestos: The name given to a number of naturally occurring hydrated mineral silicates that possess a unique crystalline structure are incombustible and are separable into fibers. Asbestos includes Chrysotile, Crocidolite, Amosite, Anthophyllite, and Actinolite.
- D. ACM: Any material containing 1% or more by weight of asbestos of any type or mixture of types. State laws may vary in their definition of asbestos containing material.
- E. Authorized Visitor: The Owner, the Designer, or a representative of any regulatory or other agency having authority over the project.
- F. Designer: Commonwealth of Massachusetts licensed Designer Ammar Dieb, Universal Environmental Consultants (AD-900326).
- G. Enclosure: All herein specified procedures necessary to complete enclosure of all ACM behind airtight, impermeable, permanent barriers.
- H. Friable Asbestos Material: Material that contains more than one percent asbestos by weight and that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.
- I. Removal: All herein specified procedures necessary to strip all ACM from the designated areas and to dispose of these materials at an acceptable site.
- J. Visible Emissions: Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

## 1.06 CONTRACTOR USE OF PREMISES

A. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, obtain and pay for such storage off site.

## 1.07 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. Provide a full time Site Supervisor with all appropriate state licenses, experienced in administration and supervision of asbestos abatement projects including Work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Competent Person as required by 29CFR 1926 for the Contractor and is the Contractor's representative responsible for compliance with all applicable federal, state, and local regulations. This person must have completed a course at an EPA Training Center or equivalent certificate Asbestos Remediation

Mount Vernon Group Architects, Inc.

- course in asbestos abatement procedures, have had a minimum of two years on the job training and meet any additional requirements set forth in 29 CFR 1926 for a Competent Person. The Site Supervisor must be certified by the Commonwealth.
- B. Contractor shall provide proof of such certification to the Designer not less than 10 days (Document Submission Date) prior to commencing any Work. The accredited Supervisor must be at the Work site at all times while Work is in progress.

#### 1.08 SPECIAL REPORTS

- A. Except as otherwise indicated, submit special reports directly to the Project Monitor within one day of occurrence requiring special report, with copies to all others affected by the occurrence.
- B. When an event of unusual and significant nature occurs at the site (examples: failure of negative pressure system, rupture of temporary enclosures, unauthorized entry into work areas), prepare and submit a special report listing date and time of event, chain of events, response by Contractor's personnel, evaluation of results, and similar pertinent information. When such events are known or predictable in advance, advise the Project Monitor in advance at earliest possible date.
- C. Prepare and submit special reports of significant accidents, at the site and anywhere else work is in progress related to this project. Record and document data and actions; comply with industry standards. For this purpose, a significant accident is defined to include events where personal injury is sustained, or property loss of substance is sustained, or where the event posed a significant threat of loss.

## 1.09 PERMITS AND NOTIFICATIONS

- A. Secure all permits related to asbestos removal, hauling, and disposition and provide timely notification as may be required by federal, state, and local authorities including the Health department. Notify the Regional Office of the United States Environmental Protection Agency (USEPA) in accordance with 40 CFR 61.22 (d)(1) and provide copies of the notification to the Designer and the State Environmental Regulatory Agency 10 Working days prior to commencement of the Work.
- B. No later than the Document Submission Date, notify the local fire and police department, in writing, of proposed asbestos abatement Work. Advice the fire department of the nature of the asbestos abatement Work, and the necessity that all firefighting personnel who may enter the Work site in the case of fire wear self-contained breathing apparatus. Provide one copy of the notices to the Designer prior to commencing the project.
- C. Submit proof to the Designer that all required permits, site location, and arrangements for transport and disposal of ACM have been obtained.

#### 1.10 RESPIRATORY PROGRAM

A. Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1926.1101 (h), 1926.103, and 1910.134.

Mount Vernon Group Architects, Inc.

#### 1.11 CODES AND REGULATIONS

- A. Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.
- B. The Contractor shall assume full responsibility and liability for the compliance with all applicable federal, state, and local regulations pertaining to Work practices, hauling, disposal, and protection of Workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records or personnel as required by the applicable federal, state, and local regulations. The Contractor shall hold the Owner, Designer and, Owner's Representative harmless for failure to comply with any applicable Work, hauling, disposal, safety, health, or other regulation on the part of himself, his employees, or his subcontractors.

#### 1.12 REFERENCE STANDARDS

- A. Unless otherwise indicated, all referenced standards shall be the latest edition available at the time of bidding. Any requirements of these specifications shall in no way invalidate the minimum requirements of the referenced standards. Comply with the provisions of the following codes and standards, except as otherwise shown or specified. Where conflict exists, the more stringent requirements shall apply.
- B. U.S. Department of Labor, Occupational Safety and Health Administration, (OSHA) requirements, which govern asbestos abatement work or hauling and disposal of asbestos waste materials.
  SUBMITTALS
- C. Submit all required licenses and certification required under MGLC.149 S 44D and 453 CMR 6 00
- D. Submit a copy of the written respirator program.
- E. Submit manufacturer's certification that vacuums, ventilation equipment, and other equipment required to contain airborne asbestos fibers conform to ANSI Z9.2. Manufacturer's brochures without certifications are not acceptable.
- F. Submit a detailed plan of the Work procedures to be used in the removal of materials containing asbestos. Such plan shall include location of asbestos control areas, decontamination units, layout of decontamination units, location of access routes to asbestos control areas, interface of trades involved in the construction, sequencing of asbestos related Work, disposal plan, type of wetting agent and asbestos sealer to be used, air monitoring, and a detailed description of the method to be employed in order to control pollution.
- G. Submit a plan for emergency action.
- H. Submit the name, address, and telephone number of the testing laboratory selected for the personal air monitoring of airborne concentrations of asbestos fibers to meet Federal and State OSHA regulations, including Short Term Exposure Limit sampling (STEL). The laboratory must have satisfactorily completed the NIST Proficiency Analytical Testing (PAT) Program and be licensed by the appropriate state agency. Submit the certification that persons counting the samples have been judged proficient by successful completion of the NIOSH 582 course (or

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equivalent) or be listed in the AIHA Asbestos Analysts Registry (AAR). All OSHA required air monitoring should be done in accordance with the most current NIOSH 7400 method.

- I. Submit the design of the negative pressure system.
  - 1. Number of negative air machines required and the calculations necessary to determine the number of machines.
  - 2. Description of projected airflow within the Work area and methods required providing adequate airflow in all portions of the Work area.
  - 3. Manufacturers product data and certifications for the machines to be used.
  - 4. Location of machines in the Work area.
  - 5. Location of pressure differential measurement equipment.
  - 6. Manufacturers product data on equipment used to monitor pressure differential.
- J. Submit for approval the form of security and safety log, which will be maintained on the project.
- K. Submit written evidence that the landfill to be used for disposal of asbestos is approved for disposal of asbestos by the Department of Environmental Protection.
- L. Submit proof that training requirements as specified in 29CFR 1926.1101 (k) (3) and by appropriate state agencies has been complied with.
- M. Submit a description of the plans for construction of decontamination enclosure systems and for isolation of the Work areas in compliance with this specification and applicable regulations.
- N. Submit a schedule including Work dates, shift time, number of employees, dates of start and completion of all Work, asbestos abatement, inspection and clearance monitoring, each phase of refinishing, and final inspections). Schedule shall be updated with each partial payment request.
- O. Submit copies of all notifications.
- P. Submit copy of asbestos license.

## 1.13 REPORTING

- A. Maintain on site a daily log documenting the dates and time of the following items, as well as other significant events:
  - 1. Minutes of meetings: purpose, attendees, and brief discussion
  - 2. Visitations: authorized and unauthorized
  - 3. Personnel: by name, entering and leaving the Work area
  - 4. Special or unusual events
- B. Documentation with confirmation signature of Owner's on-site representative of the following:
  - 1. Inspection of Work area preparation prior to start of removal and daily thereafter.
  - 2. Removal of waste materials from Work area and transport and disposal at approved site.
- C. Provide two bound copies of this log to the Owner's Representative with the application for final payment.
- 15% of the Contract will be held until original copies of the Waste Shipment Records are submitted.

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#### 1.14 AIR MONITORING

- A. Throughout the entire removal and cleaning operations, air monitoring will be conducted to ensure that the Contractor is complying with the EPA and OSHA regulations and any applicable state and local government regulations. The Owner will provide a Project Monitor (Universal Environmental Consultants) to take air samples at the job site at no cost to the Contractor.
- B. The purpose of the Owner's air monitoring will be to detect faults in the Work area isolation such as:
  - 1. Contamination of the building outside of the Work area with airborne asbestos fibers,
  - 2. Failure of filtration or rupture in the negative pressure system,
  - 3. Contamination of the exterior of the building with airborne asbestos fibers.
  - 4. Should any of the above occur, the Contractor should immediately cease asbestos activities until the fault is corrected. Work shall not recommence until authorized by the Designer.

#### 1.15 AIRBORNE FIBER COUNTS

- A. If any air sample taken outside of the work area exceeds the base line established below, immediately and automatically stop all work. If this air sample was taken inside the building and outside of critical barriers around the work area, immediately erect new critical barriers to isolate the affected area from the balance of the building. Erect Critical Barriers at the next existing structural isolation of the involved space (e.g., wall, ceiling, and floor).
  - 1. Decontaminate the affected area in accordance with the procedures outlined in DECONTAMINATION OF WORK AREA.
  - 2. Respiratory protection shall be worn in affected area.
  - Leave critical barriers in place until completion of work and ensure that the operation of the
    negative pressure system in the work area results in a flow of air from the balance of the
    building into the affected area.
  - 4. After certification of visual inspection in the work area, remove critical barriers separating the work area from the affected area. Final air samples will be taken within the entire area as set forth in WORK AREA CLEARANCE.
  - 5. A final inspection after removal of poly shall be completed by the Contractor's Supervisor and the Project Monitor.
- B. The following procedure will be used to resolve any disputes regarding fiber types when a project has been stopped due to excessive airborne fiber counts. "Airborne Fibers" referred to above include all fibers regardless of composition as counted in the NIOSH 7400 Procedure. If work has stopped due to high airborne fiber counts, air samples will be secured in the same area by the Project Monitor for analysis by electron microscopy. "Airborne Fibers" counted in samples analyzed by Scanning or Transmission Electron microscopy shall be only asbestos fibers, but of any diameter and length. Subsequent to analysis by electron microscopy the number of "Airborne Fibers" shall be determined by multiplying the number of fibers, regardless of composition, counted by the NIOSH 7400 procedure by a number equal to asbestos fibers counted divided by all fibers counted in the electron microscopy analysis.
- C. If Electron microscopy is used to arrive at the basis for determining "Airborne Fiber" counts in accordance with the above paragraph, and if the average of airborne asbestos fibers in all samples taken outside the work area exceeds the base line, then the cost of such analysis will be borne by the Contractor, at no additional cost to the Owner.

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#### PART 2 - PRODUCTS

#### 2.01 MATERIALS

- A. Plastic Sheet: 9-mil minimum thickness, unless otherwise specified, in sizes to minimize the frequency of joints.
- B. ape: Capable of sealing joints of adjacent sheets of plastic and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under dry and wet conditions, including use of amended water. Provide tape, which minimizes damage to surface, finishes.
- C. Cleaning Materials: Use materials recommended by manufacturer of surface to be cleaned. Use cleaning materials only on surfaces recommended by the cleaning material manufacturer.
- D. Impermeable Containers: Suitable to receive and retain any asbestos containing or contaminated materials until disposal at an approved site. Containers must be both air and watertight.
- E. Provide metal or fiber drums with tightly fitting lids and double thickness 6 mil plastic bags capable of being sealed and sized to fit within the drums.

## 2.02 EQUIPMENT

- A. Supply the required number of asbestos air filtration units to the site in accordance with these specifications. Each unit shall include the following:
  - Cabinet: Constructed of steel or other durable materials able to withstand damage from rough handling and transportation. Cabinet shall be factory sealed to prevent asbestos containing dust from being released during use, transport, or maintenance. Access to and replacement of all air filters shall be from intake end. Unit shall be mounted on casters or wheels.
  - 2. Fans: Rate capacity of fan according to usable air moving capacity under actual operating conditions. Use centrifugal type fan.
  - 3. HEPA Filters: The final filter shall be the HEPA type. The filter media (folded into closely pleated panels) must be completely sealed on all edges with a structurally rigid frame. A continuous rubber gasket shall be located between the filter and the filter housing to form a tight seal.
  - 4. Each filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 um dioctylphthalate (DOP) particles. Testing shall be in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Each filter shall bear a UL 586 label to indicate ability to perform under specified conditions. Each filter shall be marked with the name of the manufacturer, serial number, airflow rating, efficiency, and resistance.
  - 5. Prefilters: Prefilters, which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of prefiltration are required. The first stage prefilter shall be a low efficiency type (e.g., for particles 10 um and larger). The second stage (or intermediate) filter shall have a medium efficiency (e.g., effective for particles down to 5 um). Prefilters and intermediate filters shall be installed either on or in the intake grid of the unit and held in place with special housings or clamps.

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- 6. Instrumentation: Each unit shall be equipped with a Magnehelic gauge or manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed. A table indicating the useable air handling capacity for various static pressure readings on the Magnahelic gauge shall be affixed near the gauge for reference, or the Magnahelic reading indicating at what point the filters should be changed, noting Cubic Feet per Minute (CFM) air delivery at that point. Provide units equipped with an elapsed time meter to show the total accumulated hours of operation.
- 7. Safety and Warning Devices: The unit shall have an electrical (or mechanical) lockout to prevent fan from operating without an HEPA filter. Units shall be equipped with automatic shutdown systems to stop fan in the event of a major rupture in the HEPA filter or blocked air discharge. Indicator lights are required to indicate normal operation, too high a pressure drop across the filters (i.e., filter overloading), and too low of a pressure drop (i.e., major rupture in HEPA filter or obstructed discharge).
- 8. Electrical Components: Provide electrical components, which are approved by the National Electrical Manufacturers Association (NEMA), and Underwriter's Laboratories (UL). Each unit shall be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet shall be grounded.
- B. Provide and display danger signs at each location where airborne concentrations of asbestos fibers may be in excess of 0.01 fibers/cc. Post signs at such a distance from such a location so that an employee may read the signs and take necessary protective steps before entering the area marked by the signs. Post signs at all approaches to Work areas or areas containing excessive concentrations of airborne asbestos fibers.
- C. The sign shall also contain a pictorial representation of possible danger or hazard, such as a skull and cross bone, or other suitable warning as approved by the Designer. Sign shall meet the requirements of 29CFR 1926.200.
- D. A sample of the signs to be used shall be submitted to the Designer for approval prior to beginning Work area preparation.

#### 2.03 PERSONNEL DECONTAMINATION UNIT

- A. Prior to any asbestos abatement work, including placement of plastic on walls that will contact or disturb asbestos containing surfaces, or removal of light fixtures or any items on asbestos containing surfaces, construct a Personnel Decontamination Unit consisting of a serial arrangement of connected rooms or spaces, Changing Room, Shower Room, and Equipment Room. Require all persons without exception to pass through this decontamination unit for entry into and exiting from the work area for any purpose. Do not remove equipment or materials through Personnel Decontamination Unit. Provide temporary lighting within decontamination units.
- B. Build suitable framing or use existing rooms, with the Project Monitor's written approval, connected with framed in tunnels if necessary; line with 6 mil plastic; seal with tape at all lap joints in the plastic for all enclosures and decontamination enclosure system rooms. Decontamination units and access tunnels constructed outside must be constructed with tops made of 5/8" plywood or approved equal. In all cases, access between contaminated and uncontaminated rooms or areas shall be through an airlock. In all cases, access between any two rooms within the decontamination enclosure systems shall be through a curtained doorway.

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- C. Provide a changing (clean) room for the purpose of changing into protective clothing. Construct using polyethylene sheeting, at least 6-mil in thickness, to provide an airtight seal between the Clean Room and the rest of the building. Locate so that access to work area from Clean Room is through Shower Room. Separate Clean Room from the building by a sheet polyethylene flapped doorway.
- D. Require workers to remove all street clothes in this room, dress in clean disposable coveralls, and don respiratory protection equipment. Do not allow asbestos contaminated items to enter this room. Require workers to enter this room either from outside the structure dressed in street clothes, or naked from the showers.
- E. An existing room may be utilized as the changing room if it is suitably located and of a configuration whereby workmen may enter the Clean Room directly from the Shower Room. Protect all surfaces of room with sheet plastic. Authorization for this must be obtained from the Project Monitor in writing prior to start of construction.
  - 1. Maintain floor of changing room dry and clean at all times. Do not allow overflow water from shower to wet floor in Changing Room.
  - 2. Damp-wipe all surfaces twice after each shift change with a disinfectant solution.
  - 3. Provide a continuously adequate supply of disposable bath towels.
  - 4. Provide posted information for all emergency phone numbers and procedures.
  - 5. Provide one storage locker per employee.
  - 6. Provide all other components indicated on the contract drawings.
- F. Provide a completely water tight operational shower to be used for transit by cleanly dressed workers heading for the work area from the changing room, or for showering by workers headed out of the Work Area after undressing in the Equipment Room.
- G. Construct room by providing a shower pan and 2 shower walls in a configuration that will cause water running down walls to drip into pan. Install a freely draining wooden floor in shower pan at elevation of top of pan.
  - 1. Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
  - Separate this room from the Clean and Equipment Rooms with airtight walls fabricated of 6mil polyethylene.
  - 3. Provide showerhead and controls.
  - 4. Provide temporary extensions of existing hot and cold water and drainage, as necessary for a complete and operable shower.
  - 5. Provide a soap dish and a continuously adequate supply of soap and maintain in sanitary condition.
  - 6. Arrange so that water from showering does not splash into the Clean or Equipment Rooms.
  - 7. Arrange water shut off and drain pump operation controls so that a single individual can shower without assistance from either inside or outside of the work area.
  - 8. Provide flexible hose shower head Pump wastewater to drain and provide 20 micron and 5-micron wastewater filters in line to drain or waste water storage. Locate filter hose inside shower unit so that water lost during filter changes is caught by shower pan and pumped to exterior filtering system.
- H. Provide equipment room for contaminated area; work equipment; footwear and additional Asbestos Remediation

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contaminated work clothing are to be left here. This is a change and transit area for workers. Separate this room from the work area by a 6-mil polyethylene flap doorway.

- 1. Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
- 2. Separate this room from the Shower Room and work area with airtight walls fabricated of 6-mil polyethylene.
- I. Separate work area from the Equipment Room by polyethylene barriers. If the airborne asbestos level in the work area is expected to be high, add an intermediate cleaning space between the Equipment room and the work area. Damp-wipe clean all surfaces after each shift change.

## 2.04 EQUIPMENT DECONTAMINATION UNITS

- A. In areas with only one access, it may be impossible to utilize a separate Equipment Decontaminate Unit. In this case, all equipment and waste materials will exit through the Personnel Decontamination Chambers.
- B. When two accesses to the work area are available, provide an Equipment Decontamination Unit consisting of a serial arrangement of rooms, Clean Room, Holding Room, Wash Room for removal of equipment and material from work area. Do not allow personnel to enter or exit work area through Equipment Decontamination Unit.
- C. Provide an enclosed shower unit located in work area just outside Wash Room as an equipment, bag, and container cleaning station.
- D. Provide Wash Room for cleaning of bagged or contained asbestos containing waste materials passed from the work area. Construct Wash Room of 2 by 4-inch (minimum) wood framing and polyethylene sheeting, at least 6-mil in thickness and located so that packaged materials, after being wiped clean can be passed to the Holding Room. Separate this room from the work area by flaps of 6 mil polyethylene sheeting, or rigid self-closing doors.
- E. Provide Holding Room as a drop location for bagged ACM passed from the Wash Room.

  Construct Holding Room of 2 by 4-inch (minimum) wood framing and polyethylene sheeting, at least 6-mil in thickness and located so that bagged materials cannot be passed from the Wash Room through the Holding Room to the Clean Room.
- F. Provide Clean Room to isolate the Holding Room from the building exterior. Construct Clean Room of 2 by 4-inch (minimum) wood framing and polyethylene sheeting, at least 6-mil in thickness and locate to provide access to the Holding Room from the building exterior. Separate this room from the exterior by flaps of 6 mil polyethylene sheeting, or rigid self-closing doors.

## 2.05 PERESONNEL PROTECTION

- A. Prior to commencement of work, the workers shall be instructed in, and shall be knowledgeable of, the hazards of asbestos exposure; use and fitting of respirators; protective dress; use of showers; entry and exit from work areas, and all aspects of work procedures and protective measures.
- B. It is the responsibility of the Contractor to assure that all personnel entering the work area wear approved respirator and protective clothing
- C. All asbestos abatement workers shall receive training and shall be accredited as required by 40 CFR 763.90(g). Training and accreditation shall be in accordance with 40 CFR 763, Appendix C to Subpart E. Training shall also be provided to meet the requirements of OSHA Regulations
  Asbestos Remediation

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- contained in 29 CFR 1926.
- D. Prior to the start of work, the Contractor shall provide medical examinations for all employees in accordance with 29CFR 1926.1101 (m). All employees hired by the Contractor after start of work shall have medical examinations in accordance with this paragraph before being put to work.
- E. Maintain complete and accurate records of employee's medical examinations, during employment, for a period of 30 years after termination of employment and make records of the
  - required medical examinations available for inspection and copying to: The Assistant Secretary of Labor for Occupational Safety and Health, the Director of The National Institute for Occupation Safety and Health (NIOSH), authorized representatives of either of them, and an employee's physician upon the request of the employee or former employee.
- F. Provide personnel exposed to airborne concentrations of asbestos fibers with fire retardant disposable protective whole-body clothing, head covering, gloves, and foot coverings. Provide gloves to protect hands. Make sleeves secure at the wrists and make foot coverings secure at the ankles by the use of tape. Contractor shall require and monitor the use of complete protective clothing. A competent person designated by the contractor in accordance with 29CFR 1926.1101 shall periodically examine protective clothing worn by employees in the work area for rips or tears. When rips or tears are detected, they shall be immediately mended or replaced.
- G. Provide goggles to personnel engaged in asbestos operations when the use of a full-face respirator is not required.
- H. Provide authorized visitors with suitable protective clothing, headgear, eye protection and footwear, whenever they are required to enter the work area, to a maximum of 3 changes for 3 visitors per day. One of the sets of protective clothing must be available for full-time use by the Project Monitors.
- Provide all persons with personally issued and marked respiratory equipment approved by NIOSH and OSHA. The appropriate respiratory protection will be selected according to the most recent Massachusetts regulations.
- J. Once all visible asbestos material has been removed during decontamination, cartridge type respirators will be allowed during the final cleanup, provided the measured airborne concentrations do not exceed 0.1 fibers per cubic centimeter. Where respirators with disposable filters are employed, provide sufficient filters for replacement as required by the worker or applicable regulation.
- K. If the permissible respirators fail to provide sufficient protection against volatility emitted by any sealant used, the services of a qualified Project Monitor will be procured, at the Contractor's expense, to determine proper respiratory protection. The Owner will not be liable for the cost of increased respiratory protection.
- L. Select respirators from those approved by the Mine Safety and Health Administration (MSHA), Department of Labor, or the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. All personnel wearing negative pressure respirators shall have respirator fit tests within the last six months and signed statements shall be available.

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#### **PART 3 – EXECUTION**

## 3.01 SCOPE OF WORK

- A. The project monitor(s) will record daily all quantities removed. The asbestos contractor will be required to sign UEC logs. At the completion of the total Project, should actual quantities removed (listed in UEC logs) be determined to be more, or less, than as listed below, a Change Order increase, or decrease (credit) will be issued based on Unit Prices included at the end of this Section.
- B. The scope of work is limited abatement only related to elevators and sprinkler system projects.

Location	Type of Material	<b>Estimated Quantity</b>
Challenge and Reach Ac	ademy:	
_	Pipe and Hard Joint Insulation	150 LF
	Interior Doors	4 Total
	Exterior Doors	4 Total
Gerald Creamer Center:		
	Interior Doors	10 Total
	Pipe and Hard Joint Insulation	100 LF
	12" x 12" Vinyl Floor Tile	100 SF
Lincoln School:		
	9" x 9" Vinyl Floor Tile	250 SF
	Pipe Insulation	250 LF
	Paper under Hardwood Flooring	100 SF

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### Thorndyke Road School:

Interior Doors	10 Total
9" x 9" Vinyl Floor Tile/Mastic	500 SF
Pipe Insulation	250 LF
Transite Wall Panels	450 SF
Exterior Windows	Refer to Drawings

## M. Specific Notes:

- 1. It is the Asbestos Contractor's responsibility to inspect the site and confirm condition and quantities prior to the submission of his/her bid package. It is also the Asbestos Contractor's responsibility to review the demolition drawings, notes, and phasing configurations. The contractor must include in his/her bid the entire scope of work listed above. The Contractor must agree and accept all unit prices listed at the end of this section. Means and methods of removal will be at the discretion of the contractor with prior approval. Perform all work at no additional cost to the owner.
- 2. In all areas where ACM pipe and hard joint insulation must be removed, ACM debris is included in the scope of work and has to be removed and disposed of as ACM at no extra cost to the Owner.
- 3. Remove and dispose as ACM of ACM pipe and hard joint insulation found in the building and ACM that might be found in concealed and hidden locations including all ACM debris that might be found.
- 4. Remove and dispose as ACM of flooring materials needed to perform the work. Refer to drawings.
- 5. Remove and properly dispose of interior doors. Caulking (framing/glazing) was found to contain asbestos and assumed to contain >1ppm of PCB's.
- 6. The Contractor shall make spot demolition in all ceilings including but not limited to ceiling tiles, grids, plaster, and other related structures to access ACM found above ceilings. ACM debris was found on top of the ceiling. No add or deduct for this line item.
- 7. The Contractor shall make spot demolition in walls to uncover hidden ACM that may be found prior to the GC demolition activities. The asbestos contractor shall perform needed demolition to remove all ACM. No add or deduct for this line item.
- 8. Remove and dispose of ACM transite panels.
- 9. Remove and properly dispose of window wall system. Caulking was found to contain asbestos and assumed to contain >1ppm of PCB's.

### 3.02 JOB CONDITIONS

- A. Do not commence asbestos abatement Work until:
  - 1. Arrangements have been made for disposal of waste at an acceptable site. Submittal must be made no later than the Document Submission Date.
  - 2. Arrangements have been made for containing and disposal of wastewater resulting from wet stripping or filtering through a 5-micron filter.
  - 3. Work areas and decontamination enclosure systems and parts of the building required to remain in use are effectively segregated.

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- 4. Tools, equipment, and material waste receptors are on hand.
- 5. Arrangements have been made for building security.
- All other preparatory steps have been taken and applicable notices posted, and permits obtained.
- 7. Pre-clean all areas prior to abatement.
- 8. Clean all routs used to transport ACM.
- B. The contractor is required to set up and test the emergency generator in the presence of the Project Monitor.
- C. All materials resulting from demolition Work, except as specified otherwise, shall become the property of the Contractor, and shall be disposed of as specified herein.

#### 3.03 INSPECTION AND PREPARATION

- A. Examine the areas and conditions under which asbestos will be abated and notify the Designer in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Before any Work commences, post danger signs in and around the Work Area to comply with 29-CFR 1926.1101 (k)(l) as required by federal and state regulations, and as specified herein.
- C. Pre-clean each area prior to setting up containment and remove all visible ACBM debris.
- D. Clean all routes used to transport the ACM bags from the abated areas.
- E. Asbestos abatement activities shall be performed using the glovebag method, mini-containment or full containment depending on each scope of work. Type of enclosures will be determined by the contractor and the on-site project monitor at no additional cost to the owner.

#### 3.04 WORK PROCEDURE

- A. Perform asbestos related Work in accordance with 29CFR 1926.1101 and as specified herein. Use wet removal procedures. Personnel shall wear and utilize protective clothing and equipment as specified herein. Eating, smoking, or drinking shall not be permitted in the asbestos control area. Removal of lights and other objects in contact with asbestos containing materials is considered as asbestos abatement activities. Thus, individuals involved in such activities must meet all requirements of federal and state regulations for asbestos abatement Workers, including training and medical examinations. Provide and post, in the Equipment Room and the Clean Room, the decontamination and Work procedures to be followed by Workers, as described hereinafter.
- B. Each Worker and authorized visitor shall, upon entering the job site, remove street clothes in the Clean Change Room and put on a respirator and clean protective clothing before entering the equipment room or the Work area. All Workers shall remove gross contamination before leaving the Work area. All clothing (coveralls, head covers, boots, etc.) shall be removed and properly disposed of before leaving equipment room. Naked, with the exception of their respirators, the Workers shall proceed to the Shower Room. Under the shower, respirators will be removed and cleaned. Cleaned respirators will be placed in suitable clean plastic bags and carried by employees to Clean Room. Soap, towels, etc., shall be furnished by the Contractor. The Contractor shall maintain proper sanitary conditions. The contractor's designated competent person shall insure that these practices are being adhered to.

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- C. Following showering and drying off, each Worker and authorized visitor shall dispose of towels as contaminated waste and proceed directly to the Clean Change Room and dress in clean clothes at the end of each day's Work, or before eating, smoking, or drinking. Before re-entering the Work area from the Clean Change Room, each Worker and authorized visitor shall put on the applicable respirator and shall dress in clean protective clothing. Contaminated Work footwear shall be stored in the equipment room when not in use in the Work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste.
- D. Contaminated Work footwear shall be stored in the equipment room when not in use in the Work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste or double bag for use at next site.
- E. Workers removing waste containers from the Equipment Decontamination Enclosure shall enter the holding area from outside wearing a respirator and dressed in clean coveralls. No Worker shall use this system as a means to leave or enter the washroom or the Work area.
- F. Workers shall not eat, drink, smoke, or chew gum or tobacco in asbestos abatement Work areas.
- G. Workers shall be fully protected with respirators and protective clothing immediately prior to the first disturbance of asbestos containing or contaminated materials and until final cleanup is completed. This includes the removal of any equipment in contact with ACM such as lights, HVAC grills, etc.

#### 3.05 PREPARATIONN OF THE WORK AREA

- A. Seal off the Work area by sealing large openings such as open doors, elevator doors, and passageways with a critical barrier. The critical barrier shall constitute the outermost boundary of the asbestos abatement project Work area. Plastic sheeting on open framing is not a suitable critical barrier. Critical barriers may be erected of a suitable solid construction material such as plywood, sheetrock, gypsum board, or other related materials.
- B. Prior to any asbestos abatement clean the areas using HEPA filtered vacuum equipment and wet cleaning methods as appropriate. Methods that raise dust, such as dry seeping or vacuuming with equipment not equipped with HEPA filters will not be permitted. Dispose of all cloths which are used for cleaning as contaminated waste.
- C. Shut down electric power. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements. Provide 24volt safety lighting and provide ground-fault interrupter circuits as power source for lights and electrical equipment.
- D. Seal off all openings, including but not limited to corridors, doorways, windows, skylights, ducts, grills, diffusers, and any other penetrations of the Work areas, with 6-mil plastic sheeting and sealed with tape.
- E. Maintain emergency and fire exits from the Work areas, or establish alternative exits satisfactory to the local fire officials. Coordinate project with local fire and police departments, and Owner's Representative.
- F. Pre-clean non-removable furniture, book shelving, equipment, heat fans, fire alarms, pipes, ductwork, wires and conduits, lockers, skylights, speakers, and other fixed objects within the proposed Work areas, using HEPA filtered vacuum equipment and wet cleaning methods as appropriate prior to abatement activities, and enclose with minimum 6 mil plastic sheeting sealed with tape.

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#### 3.06 MAINTENANCE OF ENCLOSURE SYSTEMS

- A. Ensure that barriers and plastic linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery. Visually inspect enclosures at the beginning of each Work period.
- B. Use smoke methods to test effectiveness of barriers when directed by the Project Monitor.

#### 3.07 CONTROL ACCESS

- A. Permit access to the work area only through the Decontamination Unit. All other means of access shall be closed off and sealed and warning signs displayed on the clean side of the sealed access.
- B. Large openings such as open doorways and passageways shall be sealed as a critical barrier. The critical barrier shall constitute the outmost boundary of the asbestos abatement project work area.
- C. Where the area adjacent to the work area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct barrier with nominal 2 by 4-inch (minimum) wood or metal studs 16 inches on centers, securely anchored to prevent movement, covered with minimum l/4-inch-thick hardboard, l/2-inch gypsum wall board, or l/2-inch plywood.
- D. Plastic sheeting on open framing is not a suitable critical barrier. All cracks, seams, and openings in critical barriers shall be caulked or otherwise sealed, so as to prevent the movement of asbestos fibers out of the work area.

#### 3.08 ISOLATION OF WORK AREA

- A. Completely separate the work area from other portions of the building, and the outside by sheet plastic barriers at least 6 mil in thickness, or by sealing with duct tape.
- B. Individually seal all ventilation openings (supply and exhaust), lighting fixtures, clocks, doorways, windows, convectors and speakers, and other openings into the work area with duct tape alone or with polyethylene sheeting at least 6-mil in thickness, taped securely in place with duct tape. Maintain seal until all work including work area decontamination is completed. All lighting fixtures shall have had power shut off.

#### 3.09 NEGATIVE PRESSURE

- A. Establish negative pressure in the work area by installation of High Efficiency Particulate Air (HEPA) filter air-purifying devices. Comply with ANSI Z9.2, Local Exhaust Ventilation Requirements. Maintain system in operation 24 hours per day until decontamination of the work area is completed and area has been certified clean by air monitoring tests and visual inspections. Discharge of asbestos fibers to the outside of the building will not be permitted.
- B. Size negative air pressure system(s) to provide a minimum of one air change every 15 minutes for the area under negative pressure. Locate the exhaust unit(s) so that makeup air enters the work area primarily through the decontamination unit and traverses the work area as much as possible. The intent is to provide the air change specified in each work area (room), not just the specified negative pressure. Place the end of the unit or its exhaust duct through an opening in the plastic barrier or wall covering. Seal the plastic around the unit or duct with tape. Wherever possible, the units shall exhaust to the outside of the building. Whenever it is impossible to duct outside, the HEPA units will be run in tandem.

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#### 3.10 REMOVAL OF ASBESTOS CONTAINING MATERIALS

- A. Thoroughly wet ACM to be removed prior to stripping and/or tooling to reduce fiber dispersal into the air. Accomplish wetting by a fine spray (mist) of amended water or removal Encapsulant. Saturate material sufficiently to wet to the substrate without causing excess dripping. Allow time for water or removal Encapsulant to penetrate material thoroughly. If a removal Encapsulant is used, apply in strict accordance with manufacturer's written instructions.
- B. Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels.
- C. Remove saturated ACM in small sections from all areas. Do not allow material to dry out. As it is removed, simultaneously pack material while still wet into disposal bags. Twist neck of bags bend over and seal with minimum three wraps of duct tape. Clean outside and move to wash down station adjacent to material decontamination unit.
- D. For the removal of thermal insulation such as pipe, hard joints, duct insulation, the density of ACM thermal insulation seldom allows the material to be removed in a completely wet state. However, every attempt should be made to keep the insulation material as wet as possible to prevent release of asbestos fibers.
- E. Cut the cloth covering on the insulation along the top seam to allow wetting of the insulation. Do not allow the insulation to fall to the ground or adjacent surfaces. Wet the insulation material and immediately place in a double 6 mil, minimum thickness labeled plastic bag.
- F. In certain areas, asbestos pipe insulation will be removed with glove-bags (with prior approval by the project monitor).
  - 1. Seal all critical barriers.
  - 2. Pre-clean if necessary and place one layer of polyethylene under the pipe to be removed.
  - 3. Negative air machines with HEPA filtration will be used in the area.
  - 4. Glove bags will be smoke tested.
  - 5. Place necessary tools into pouch located inside glove-bag. This will usually include bone saw, utility knife, rags, scrub brush, wire cutters, tin snips, and pre-wetted cloth.
  - 6. Place one strip of duct tape along the edge of the open top slit of glove-bag for reinforcement.
  - 7. Place the glove bag around section of pipe to be worked on and staple top together through reinforcing duct tape. Next, duct tape the ends of glove-bag to pipe itself, where previously covered with plastic or duct tape.
  - 8. Place additional layers of tape along the top of the glove-bag to seal the staple holes and to securely support the bag on the pipe.
  - 9. Fill each bag with 2 inches of water to thoroughly wet the removed insulation.
  - 10. Attach vacuum hose through port in bag and tape tightly to prevent leakage.
  - 11. Insert spray nozzle into bag and tape tightly to prevent leakage.
  - 12. One person places his hands into the long-sleeved gloves while the second person directs garden sprayer at the work.
  - 13. Use bone saw, if required, to cut insulation at each end of the section to be removed. A bone saw is a serrated heavy gauge wire with ring-type handles at each end. Throughout this process, spray amended water or removal Encapsulant on the cutting area to keep dust to a minimum.

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- 14. Remove insulation using putty knives or other tools. Place pieces in bottom of bag without dropping.
- 15. Using nylon scrub brush, rags, and water scrub and wipe down the exposed pipe.
- 16. Wipe down the inside of the bag with the rags. Remove the water nozzle and tape shut.
- 17. Encapsulate the exposed ends and cover any exposed ends of pipe insulation with the rewettable cloth. This shall be done prior to removing the bag.
- 18. Place the cleaning tools either into the next glove bag or put them into the glove and pull them out. Twist the glove, tape at least twice and cut through the tape. The tools can be dropped into a bucket of water to clean them.
- 19. Twist the bag several times and turn on HEPA vacuum to remove the air. Tape the twist several times.
- 20. Slip a 6-mil disposal bag under the glove-bag and while running the vacuum sufficiently to collapse the bag, cut the glove-bag off.
- 21. Encapsulate all exposed pipes and elbows to lock down any remaining fibers.
- 22. Remove disposable suits and place these into bag with waste.
- 23. Collapse the disposal bag with a HEPA vacuum, twist top of bag, seal with at least 3 wraps of duct tape, bend over and seal again with at least 3 wraps of duct tape.

## 3.11 DECONTAMINATION OF WORK AREA

- A. Maintain premises and public properties free from accumulation of waste, debris, and rubbish, caused by operations. Remove visible accumulations of asbestos material and debris. Wet cleans all surfaces within the Work area.
- B. Remove the plastic sheets from walls and floors only. Take proper care in folding up plastic sheeting to minimize dispersal of residual asbestos containing debris.
- C. Leave the windows, doors, and HVAC vents sealed. Maintain HEPA filtered negative air pressure systems, air filtration and decontamination enclosure systems in service.
- D. Remove all debris from floor of Work area. This includes all trash, scraps of lumber, pipes, etc. and all visible asbestos debris. The asbestos debris is primarily deteriorated pipe insulation that has fallen to the ground. Dispose of all debris removed as asbestos contaminated waste. HEPA vacuum the entire floor.
- E. In areas that have dirty floors, remove at least one inch of dirt or until visually clean.
- F. Clean all surfaces in the Work area and any other contaminated areas with water and with HEPA filtered vacuum equipment. After cleaning the Work area, wait 24 hours to allow for settlement of dust, and again wet clean and clean with HEPA filtered vacuum equipment all surfaces in the Work area. After completion of the second cleaning operation, perform a complete visual inspection of the Work area to ensure that the Work area is free of visible asbestos debris. The negative pressure system may be shut down only after clean air has been achieved.
- G. Include sealed drums and all equipment used in the Work area in the cleanup and remove from Work areas, via the equipment decontamination enclosure system, at an appropriate time in the clean sequence.
- H. Conduct cleaning and disposal operations to comply with applicable ordinances and antipollution laws. Do not burn or bury rubbish and waste materials on job site. Do not dispose of volatile waste in storms or sanitary drains. Do not dispose of waste into streams or waterways.

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- Store volatile waste in covered metal containers during Work hours and remove from premises at end of Workday. Prevent accumulation of waste, which create hazardous conditions. Provide adequate ventilation during use of volatile or noxious substances.
- J. If the Project Monitor, within 24 hours after the second cleaning, finds visible accumulations of asbestos debris in the Work area, repeat the wet cleaning until the Work area is in compliance, at no additional expense to the Owner.
- K. Remove the first layer of plastic sheet from walls and floors only. Take proper care in folding up plastic sheeting to minimize dispersal of residual asbestos containing debris.
- L. Leave the windows, doors, and HVAC vents sealed. Maintain HEPA filtered negative air pressure systems, air filtration and decontamination enclosure systems in service.
- M. Following the final visual inspection by the Project Monitor, after the removal of ACM and decontamination of Work areas, and while space enclosures systems remain in place, seal all surfaces from which ACM has been removed to assure immobilization of any remaining fibers. Use a colored sealant so that complete coverage may be ensured by a visible inspection by the Project Monitor to verify that asbestos-containing material has been adequately removed. Apply sealer in accordance with manufacturer's recommendations using airless spray equipment.
- N. Clearance air test samples will be taken by Project Monitor 24 hours after the encapsulation. Aggressive air sampling will be conducted using 20" rotating fans, leaf blowers, or other devices as selected by the Project Monitor. If the Work area is found visually clean and encapsulated, clearance air samples will be made to determine fiber concentrations. Analysis will be made using Phase Contrast Microscopy.

### 3.12 WORK AREA CLEARANCE

- A. The Work is complete when the Work area is visually clean and airborne fiber levels have been reduced to the level specified below. When this has occurred, the Asbestos Contractor will notify the Project Monitor that the area is ready for clearance.
- B. The number and volume of air samples taken, and analytical methods used by the Project Monitor will be in accordance with the schedule given below. Sample volumes given may vary depending upon the analytical instruments used.
- C. Phase Contrast Microscopy (PCM) will be used for all testing.
- D. Costs for the initial testing required for clearance will be paid by the Owner. Should the initial testing fail, the Asbestos Contractor will reimburse the Designer for the cost of all additional testing based on \$90.00 per hour for project monitor and \$30.00 per PCM sample and \$150.00 per TEM air sample.

## 3.13 DISPOSAL OF ASBESTOS CONTAINING MATERIAL AND ASBESTOS CONTAMINATED WASTE

- A. As the Work progresses, and to prevent exceeding available storage capacity on site, remove sealed and labeled containers of asbestos waste and dispose of such containers at an authorized disposal site in accordance with the requirements of disposal authority.
- B. Comply with 29 CFR 1926.1101.
- C. Seal all asbestos and asbestos contaminated waste material in rigid fiber or metal drums lined with double thickness 6mil, sealable plastic bags. Label the drums and the plastic bags; transport

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- and dispose of all in accordance with the applicable OSHA and EPA regulations. At the conclusion of the job, place all polyethylene material, tape, cleaning material and clothing in the plastic lined drum. Seal, correctly label and dispose of asbestos waste material.
- D. Transport the sealed drums to the approved waste disposal site. The sealed plastic bags may be removed from the drums and placed into the burial site unless the bags have been broken or damaged. Leave damaged bags in the drums and bury the entire contaminated drum. Uncontaminated drums may be recycled. The sealed bags or drums must be covered the day of disposal. Contractor shall obtain trip tickets at the landfill to document disposal of asbestos containing materials.
- E. If a rental vehicle is used to transport asbestos waste, Contractor shall provide to the vehicle's owner a written statement as to the intended use of the vehicle. A copy of such notice, signed by the vehicle owner, shall be provided to the Designer prior to transporting materials in the vehicle. Two layers of 6-mil plastic sheet shall be placed on the floor and walls of the rental vehicle prior to loading any containers of asbestos waste.

#### 3.14 DISPOSAL OF NON-CONTAMINATED WASTE

A. Remove from the site all non-contaminated debris and rubbish resulting from abatement operations. Transport materials removed from demolished areas and disposed of offsite in a legal manner.

#### 3.15 FINAL CLEAN UP

A. Employ experienced workers or professional cleaners for final cleaning. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials, from exposed to view interior and exterior finished surfaces. Polish surfaces so designated.

#### 3.16 UNIT PRICES

- A. All quantities listed in 3.01 are approximate. It is the Asbestos Contractor's responsibility to inspect the site and confirm condition and quantities prior to the submission of his/her bid package. It is also the Asbestos Contractor's responsibility to review the demolition drawings, notes, and phasing configurations.
- B. The contractor must include in his/her bid the entire scope of work listed in 3.01. The Contractor must agree and accept all unit prices listed below. Means and methods of removal will be at the discretion of the contractor with prior approval by the on-site monitor and designer.
- C. Units prices listed below are inclusive of all related costs.

	Addition	Deduction	
1. Various Types of Flooring	\$ 7.00 per SF	\$ 6.00 per SF	
2. Hard Joint Insulation	\$ 40.00 Each	\$ 35.00 Each	
3. Pipe Insulation	\$ 40.00 per LF	\$ 35.00 per LF	
4. Doors	\$ 150.00 Each	\$ 130.00 Each	
5. Windows	\$ 350.00 Each	\$ 300.00 Each	
6. Transite Panels	\$ 15.00 per SF	\$ 12.00 per SF	

END OF SECTION

**SEPTEMBER 18, 2024** 

Mount Vernon Group Architects, Inc.

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Ammar Dieb Universal Environmental Consultants 12 Brewster Road

## **Asbestos Identification Laboratory.**

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com



Batch: 122645

**Project Information** 

Method: BULK PLM ANALYSIS, FPA/600/R-93/116

Challenge + Reach Academy, Worcester. MA

Dear Ammar Dieb,

Framingham, MA 01702

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Information provided by the customer can affect the validity of results. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. All customer information will be maintained in confidentiality. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Thaming

Michael Manning Owner/Director

Ammar Dieb Universal Environmental Consultants 12 Brewster Road Framingham, MA 01702 **Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Challenge + Reach Academy, Worcester, MA

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
1	Pipe Insulation	Basement Boys Bath	multi		Detected Chrysotile 60
1358377					
2	Pipe Insulation	Basement Boys Bath	multi		5 Detected 25 Chrysotile 60
1358378					
3	Plaster	2nd Fl Hallway	gray	Non-Fibrous 10	00 None Detected
1358379					
4	Plaster	1st Fl Hallway	gray	Non-Fibrous 10	00 None Detected
1358380					
5	Plaster	Stairwell 1	white	Non-Fibrous 10	00 None Detected
1358381					
6	Plaster	Stairwell 2	white	Non-Fibrous 10	00 None Detected
1358382					
7	Plaster	Stairwell 3	white	Non-Fibrous 10	00 None Detected
1358383					

Sampled: August 28, 2024 Received: September 03, 2024 Analyzed: September 03, 2024

Batch:



122645 Page 2 of 2

# **CHAIN OF CUSTODY**

12 Bre Framin Tel: (50 adieb@	sal Environmental Consultants wster Road gham, MA 01702 08) 628-5486 - Fax: (508) 628-5488 Quec-env.com	PLM 24-hour TAT ng Name Challenge + Reach Academy	
Sample	Description of Material	Sample Location	LI SE
1	Pipe Insolution		
2		Bosenet Boys Both	
3	Plaster	220 51 11.11	
4		let El 14.11.	
2		2nd fl. Hallway  Ist fl. Hallway  Hairwell 1  Stairwell 2	
6		Chiriell )	_
7		Steel - well 3	
6			_
Reported Received	By: Jason Bewle Date  Date	8-28-24 Due Date: <b>24-Hours</b>	



Ammar Dieb Universal Environmental Consultants 12 Brewster Road

## **Asbestos Identification Laboratory.**

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com

Lab Code: 200919-0

Batch: 122619

**Project Information** 

Method: BULK PLM ANALYSIS, FPA/600/R-93/116

Gerald Creamer Center, Worcester.

MA

Dear Ammar Dieb,

Framingham, MA 01702

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

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- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Thaming

Michael Manning Owner/Director

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Gerald Creamer Center, Worcester, MA

Fie	dID	Material	Location	Color	Non-Asbestos %	Asbestos %
1	LabID	Door Glass Glaze	Room 001		77 77 1	Detected
<u> </u>		— Door Glass Glaze	Room out	gray	Non-Fibrous 98	Chrysotile 2
	1358147					
2		Door Glass Glaze	1st Fl Men's Bathroom	gray	Non-Fibrous 98	Detected Chrysotile 2
	1358148					
3		Tan 12x12 VFT	Room 112 (6)	tan	Non-Fibrous 100	None Detected
	1358149					
4	1330117	Tan 12x12 VFT	Room 112 (6)	tan	Non-Fibrous 100	None Detected
	4050450					
5	1358150	Black Mastic	Room 112 (6)	black	Non-Fibrous 100	None Detected
			(6)			1.0110 2000000
6	1358151	Black Mastic	Doom 442 (C)	blook	N T-1 100	
<u> </u>			Room 112 (6)	black	Non-Fibrous 100	None Detected
	1358152					
7		Cream 12x12 VFT	Room 109 (4A)	tan	Non-Fibrous 98	Detected Chrysotile 2
	1358153					
8		Cream 12x12 VFT	Room 109 (4A)	tan	Non-Fibrous 98	Detected
	1358154					Chrysotile 2
9		Black Mastic	Room 109 (4A)	black	Non-Fibrous 100	None Detected
	1358155					
10	1336133	Black Mastic	Room 109 (4A)	black	Non-Fibrous 100	None Detected
		$\dashv$				
11	1358156	Plaster	Stairwell A	multi	Non-Fibrous 100	None Detected
H			Stall Well A	India	Non-Fibrous 100	None Detected
40	1358157		0			
12		Plaster —	Stairwell A	multi	Non-Fibrous 100	None Detected
	1358158					
13		Plaster	Stairwell B	multi	Non-Fibrous 100	None Detected
	1358159					
14		Plaster	Room 101 (2)	multi	Non-Fibrous 100	None Detected
	1358160					
15		Plaster	2nd Fl Hallway	multi	Non-Fibrous 100	None Detected
	12507.57	$\dashv$				
16	1358161	Plaster	Room 201 (8)	multi	Non-Fibrous 100	None Detected
H			1.00 20. (0)			
	1358162					

Received: September 03, 2024 Analyzed: September 03, 2024

Sampled: August 29, 2024
Tuesday 03 September Muhael Thum

Batch: 122619

**Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Gerald Creamer Center, Worcester, MA

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
17	Plaster	Room 202 (9)	multi	Non-Fibrous 100	None Detected
1358163					
18	Plaster	Room 213 (13)	multi	Non-Fibrous 100	None Detected
1358164					

Sampled: August 29, 2024 Received: September 03, 2024 Analyzed: September 03, 2024

Sampled: August Tuesday 03 September Michael Thum

Unive	sal Environmental Consultants
12 Bre	wster Road
Framin	gham, MA 01702
Tel: (50	)8) 628-5486 - Fax: (508) 628-5488
adieb@	Duec-env.com

PLM 24-hour TAT

Town/City: Worcester, MA Building Name Gerald (reuner Center

Sample	Description of Material	Sample Location
1	Door glass gloze	Rcom 001
2	1	1st Fl. Mens Bathroom
3	Tan 12x12 VFT	Roem 112 (6)
4	1	
5	Black mustic	
6	1	
7	Cream laxld VFT	Rown 109 (AA)
8		
9	Black mestic	
10	1	
11	Plaster	steirwell A
12		
13		stairwel B
14		Roon 101 (2)
15		2-d fl. Hallway
16		Ran 201 (8)
17		Rown 202 (9)
18		Ran 213 (13)

Reported By: Jason Bewitte	Date:	8-19-24	D D. 1. 2411
111	Date.		Due Date: 24-Hours
Received By:	Data	<b>@</b> 9304	



Ammar Dieb

Universal Environmental Consultants

### **Asbestos Identification Laboratory.**

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com



Batch: 122635

**Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Lincoln School, Worcester, MA

Dear Ammar Dieb,

Framingham, MA 01702

12 Brewster Road

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

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- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Thaming

Michael Manning Owner/Director

**Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Lincoln School, Worcester, MA

FieldID	Material	Location Color		Non-Asbestos %	Asbestos %	
LabID						
1	Blown-In Insulation	Attic	multi	Cellulose 95 Non-Fibrous 5	None Detected	
1358289 <b>2</b>	Blown-In Insulation	Attic	multi	Cellulose 95 Non-Fibrous 5	None Detected	
1358290	Door Glass Glaze	Room 206 (3)	multi	Non-Fibrous 100	None Detected	
1358291	Door Glass Glaze	Room 215 (8)	multi	Non-Fibrous 100	None Detected	
1358292 <b>5</b>	Plaster	Hallway By 215 (8)	multi	Non-Fibrous 100	None Detected	
1358293						
1358294	Plaster ——	Room 215 (8)	multi	Non-Fibrous 100	None Detected	
7	Plaster	Hallway by 207 (1)	multi	Non-Fibrous 100	None Detected	
1358295	Plaster	Main Hallway	multi	Non-Fibrous 100	None Detected	
1358296 9	Plaster	Room 203 (11)	multi	Non-Fibrous 100	None Detected	
1358297	Blue 12x12 VFT	Room 207 (1)	multi	Non-Fibrous 100	None Detected	
1358298	Blue 12x12 VFT	Room 207 (1)	multi	Non-Fibrous 100	None Detected	
1358299			man			
1358300	Mastic	Room 207 (1)	yellow	Non-Fibrous 100	None Detected	
13	Mastic	Room 207 (1)	yellow	Non-Fibrous 100	None Detected	
1358301	9x9 VFT	Room 207 (1)	multi	Non-Fibrous 100	None Detected	
1358302 <b>15</b>	9x9 VFT	Principal Office 212	multi	Non-Fibrous 100	None Detected	
1358303	9x9 VFT	Hallway by 207 (1)	multi	Non-Fibrous 97	Detected	
1358304					Chrysotile 3	

Sampled: September 03, 2024 Received: September 03, 2024 Analyzed: September 03, 2024

Tuesday 03 September

Analyzed by: Batch: 122635 Page 2 of 4

**Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Lincoln School, Worcester, MA

Fiel	dID	Material	Location	Color	Non-Asbestos %	Asbestos %
4-7	LabID	<b>14</b> 0	0 "44	142		
17		Mastic	On #14	multi	Non-Fibrous 100	None Detected
	1358305					
18		Mastic	On #15	yellow	Non-Fibrous 100	None Detected
	1358306					
19		Mastic	On #16	black	Non-Fibrous 100	None Detected
	1358307					
20		Paper Under Hardwood	Room 203 (11)	multi	Non-Fibrous 20	Detected Chrysotile 80
	1358308					
21		Paper Under Hardwood	Room 203 (1)	multi	Non-Fibrous 20	Detected Chrysotile 80
	1358309					
22		Tan 12x12 VFT	Room 003 (16)	tan	Non-Fibrous 100	None Detected
	1358310					
23		Tan 12x12 VFT	Lower Hallway at 003 (16)	tan	Non-Fibrous 100	None Detected
	1358311					
24		Yellow Mastic	On #23	yellow	Non-Fibrous 100	None Detected
	1358312					
25		Yellow Mastic	On #24	yellow	Non-Fibrous 100	None Detected
	1358313					
26		Cream 12x12 VFT	Room 002 (15)	white	Non-Fibrous 100	None Detected
	1358314					
27		Cream 12x12 VFT	Lower Hallway at 002 (15)	white	Non-Fibrous 100	None Detected
	1358315					
28		Yellow Mastic	On #26	yellow	Non-Fibrous 100	None Detected
	1358316					
29		Yellow Mastic	On #27	yellow	Non-Fibrous 100	None Detected
	1358317					
30		Beige 12x12 VFT	Room 114 (13)	tan	Non-Fibrous 100	None Detected
	1358318					
31		Beige 12x12 VFT	Room 114 (13)	tan	Non-Fibrous 100	None Detected
	1358319					
32		Black Mastic	Room 114 (13)	black	Non-Fibrous 100	None Detected
	1358320					

Sampled: September 03, 2024 Received: September 03, 2024 Analyzed: September 03, 2024

Tuesday 03 September

Analyzed by: Camaria Batch: 122635 Page 3 of 4

**Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Lincoln School, Worcester, MA

FieldID	Material	Location	Color	Non-Asbestos	%	Asbestos %
Labin						
LabID	Di LAA C	D 444 (40)	<u> </u>			<u> </u>
33	Black Mastic	Room 114 (13)	black	Non-Fibrous	100	None Detected
1358321						
34	Gray Sink Coating	Kitchen	gray	Non-Fibrous	100	None Detected
1358322	0.01.0.0	len i				_
35	Gray Sink Coating	Kitchen	gray	Non-Fibrous	100	None Detected
1358323						
36	2x2 SAT Type 1	Room 003 (16)	gray	Fiberglass Cellulose	40 40	None Detected
1358324				Non-Fibrous	20	
37	2x2 SAT Type 1	Room 003 (16)	gray	Fiberglass		None Detected
1358325				Cellulose Non-Fibrous	40 20	
38	2x2 SAT Type 2	Room 002 (15)	gray	Fiberglass	40	None Detected
				Cellulose	40	
1358326 <b>39</b>	2x2 SAT Type 2	Room 002 (15)	arov	Non-Fibrous	20	None Detected
	ZXZ SAT Type Z	K00111 002 (15)	gray	Fiberglass Cellulose	40	None Detected
1358327				Non-Fibrous	20	
40	Joint Compound	Lower Hallway	white	Non-Fibrous	100	None Detected
1358328						
41	Joint Compound	Room 002 (15)	white	Non-Fibrous	100	None Detected
1358329						
42	Pipe Insulation	Lower Hallway	white	Non-Fibrous	70	Detected Chrysotile 30
1358330						Chrysocile 30
43	Pipe Insulation	Intermediate Hallway	white	Non-Fibrous	70	Detected Chrysotile 30
1358331						chrysocile 30
44	Sheetrock Board	Modular Room 217 (18)	gray	Cellulose		None Detected
1358332				Non-Fibrous	90	
45	Sheetrock Board	Modular Hallway	gray	Cellulose	10	None Detected
1358333				Non-Fibrous	90	
46	2x2 SAT Type 3	Modular Room 217 (18)	multi	Fiberglass	40	None Detected
				Cellulose	40	
1358334				Non-Fibrous	20	
47	2x2 SAT Type 3	Modular Hallway	multi	Fiberglass Cellulose	40 40	None Detected
1358335				Non-Fibrous	20	

Sampled: September 03, 2024 Received: September 03, 2024 Analyzed: September 03, 2024

Tuesday 03 September

Analyzed by: Cai March Batch: 122635 Page 4 of 4

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM 24-hour TAT

Town/City: Worcester, MA Building Name Lincoln School

Sample	Description of Material	Sample Location
)	Blown-In Insulation	Attic
2	l	1 (
3	Deorglass gloze	Acom 206 (3)
	1	Room 215 (8)
5	Plaster	Hallway by 215 (8)
6		Raum 215 (8)
7		(tall way by 207 (1)
8		main Hallway
9		Room 203 (11)
10	Blue 12x12 VFT	Room 207 (1)
u	1	
12	mastic	
13	1 (	
14	9x9 VFT	Principal office 212
15		Hallway by 207 (1)
16		Hallway by Nurse 204 (A)
17	Mustic	on # 14
18		01#15
19		on # 16
20	Paper under Hardwood	Room 203 (11)

Reported By:	Jason	Becotte	Date:	8-28-24	
. toportod by.	h	/	Date.		Due Date: 24-Hours
Received By:	40	1	Date:	9324	

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

PLM

Town/City: Worcester Building Name Lincoln School

Sample	Description of Material	Sample Location
21	Paper under Hardwood	Room 203 (1)
22	Tan 12x12 VFT	Room 003 (16)
23	1	Lower hallway at co3(16)
24	Yellow mostic	on #23
25	1 (	01 #24
26	Creem 12x12 VFT	Roum 002 (15)
27	1	Lover hellway at 002 (15)
78	yellow mastic	On# 76
79	1	67 井 27
30	Beige 12x12 VFT	Room 114 (13)
31	1 1	
31	Black mustic	
33	1 (	
34	Gray sink coeting	Kit chen
35	î j	
36	2×2 SAT Type 1	Room 003 (16)
37	1	1 /
38	2×2 SAT Type 2	Room 002 (15)
39	L	1 1
40	Joint compound	Lover Hallway

Reported By: -	Jason	Becotte	Date:	8-28-19	Due Date: <b>24-Hours</b>
Received By: -			Date:		

Universal Environmental Consultants				
12 Brewster Road				
Framingham, MA 01702	_			
Tel: (508) 628-5486 - Fax: (508) 628-5488				
adieb@uec-env.com	_			

ALM

Taxas (0:4	worcester, MA	_	1 newla	School	
Town/City: -	workester, MA	Building Name -	Line	70.001	

Sample	Description of Material	Sample Location
41	Joint Compand	Room 002 (15)
42	Pipe Insolution	Lover Hallway
43	1	Lover Hallway  Intermediate hallway
49	sheetrock Board	modular Donn 217 (18)
45	1	modular hallway
46	2×2 SAT Type 3	modular Rovan 297 (13)
47	1	modular hallway  modular Reven 217 (13)  modular Hallway
		ð

Reported By: Joseph Becute	Date: 8-18-14	Due Date: <b>24-Hours</b>
Received By:	Date:	



Ammar Dieb
Universal Environmental Consultants
12 Brewster Road

### **Asbestos Identification Laboratory.**

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com



Batch: 122633

**Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Thorndyke Road School, Worcester, MA

Dear Ammar Dieb,

Framingham, MA 01702

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The Analysis Method is BULK PLM ANALYSIS, EPA/600/R-93/116The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Information provided by the customer can affect the validity of results. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. All customer information will be maintained in confidentiality. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Thaming

Michael Manning Owner/Director

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Thorndyke Road School, Worcester, MA

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
rieidiD	ivialeriai	Location	Coloi	NOII-ASDESIOS //	ASDESIOS //
LabID					
1	Plaster	East Stairwell	gray	Non-Fibrous 100	None Detected
1250020					
1358238	Plaster	Room 213 (3)	white	Non-Fibrous 100	None Detected
		1100111 210 (0)	, into	11011 1121045 100	None Beeceda
1358239					
3	Plaster	West Stairwell	white	Non-Fibrous 100	None Detected
1358240					
4	Plaster	Room 102C Nurse	white	Non-Fibrous 100	None Detected
1250041					
1358241 <b>5</b>	Plaster	Gym	gray	Non-Fibrous 100	None Detected
		Joy	gray	11011 1121045 100	None Beeceda
1358242					
6	Rough Plaster	Attic	gray	Non-Fibrous 100	None Detected
1358243					
7	Rough Plaster	Attic	gray	Non-Fibrous 100	None Detected
1358244 8	Rough Plaster	Attic	gray	Non-Fibrous 100	None Detected
		Attio	gray	Non Fibrous 100	None Detected
1358245					
9	Door Glass Glaze	1st Fl Hallway	gray	Non-Fibrous 98	Detected Chrysotile 2
1358246					cm ysociie 2
10	Door Glass Glaze	Room 213 (3)	gray	Non-Fibrous 98	Detected
					Chrysotile 2
1358247 <b>11</b>	Tan 12x12 VFT	Gym	gray	Non-Fibrous 100	None Detected
11		Gyiii	gray	Non-Fibrous 100	None Detected
1358248					
12	Tan 12x12 VFT	Gym	gray	Non-Fibrous 100	None Detected
1358249					
13	Black Mastic	Gym	black	Non-Fibrous 100	None Detected
1358250 <b>14</b>	Black Mastic	Gym	black	Non-Fibrous 100	None Detected
14	Diack Mastic	Gym	Diack	Non-Fibrous 100	None Detected
1358251					
15	9x9 VFT	Room 102C Nurse	gray	Non-Fibrous 98	Detected
1358252					Chrysotile 2
16	9x9 VFT	Cafeteria	gray	Non-Fibrous 98	Detected
					Chrysotile 2
1358253					

Received: September 03, 2024 Analyzed: September 03, 2024

Sampled: August 29, 2024
Tuesday 03 September
Analyzed by:

Batch: 122633

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Thorndyke Road School, Worcester, MA

Field	lID	Material	Location	Color	Non-Asbestos %	Asbestos %
	LabID					
17	LabID	9x9 VFT	Room 208 (1)	gray	Non-Fibrous 98	Detected Chrysotile 2
18	1358254	9x9 VFT	Room 216 (4)	gray	Non-Fibrous 98	Detected Chrysotile 2
	1358255					-
19		Black Mastic	On #15	black	Non-Fibrous 100	None Detected
20	1358256	Black Mastic	On #16	black	Non-Fibrous 100	None Detected
	1358257					
21	1358258	Black Mastic	On #17	black		Detected Chrysotile 2
22	1358258	Black Mastic	On #18	black	Non-Fibrous 100	None Detected
23	1358259	2x4 SAT	Room 213 (3)	gray	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
24	1358260	2x4 SAT	Room 213 (3)	gray	Mineral Wool 30 Cellulose 60	None Detected
25	1358261	Pipe Insulation	Gym	white	Non-Fibrous 10 Non-Fibrous 50	Detected Chrysotile 50
26	1358262	Pipe Insulation	Gym	white	Non-Fibrous 50	Detected Chrysotile 50
27	1358263	Transite Wall Panel	Room 102C Nurse	gray	Non-Fibrous 80	Detected Chrysotile 20
28	1358264	Transite Wall Panel	Room 102C Nurse	gray	Non-Fibrous 80	Detected Chrysotile 20
29	1358265	Exterior Door Frame Caulk	Cafeteria	brown	Non-Fibrous 100	None Detected
30	1358266	Exterior Door Frame Caulk	Cafeteria	white	Non-Fibrous 100	None Detected
31	1358267	Spline 1x1 AT Ceiling	Addition Hallway	brown	Cellulose 95 Non-Fibrous 5	None Detected
32	1358268	Spline 1x1 AT Ceiling	Addition Hallway	gray	Mineral Wool 30 Cellulose 60	None Detected
	1358269				Non-Fibrous 10	

Received: September 03, 2024 Analyzed: September 03, 2024

Sampled: August 29, 2024
Tuesday 03 September
Analyzed by: Page 3 of 5 Batch: 122633

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Thorndyke Road School, Worcester, MA

Fiel	dID	Material	Location	Color	Non-Asbestos %	Asbestos %
	LabID					
33		Spline 1x1 AT Ceiling	Addition Room 227 (15)	brown	Cellulose 95 Non-Fibrous 5	None Detected
34	1358270	Spline 1x1 AT Ceiling	Addition Room 228 (10)	gray	Mineral Wool 30 Cellulose 60 Non-Fibrous 10	None Detected
35		Pipe Insulation	Addition Above Ceiling	white	Non-Fibrous 50	Detected Chrysotile 50
36	1358272	Pipe Insulation	Addition Above Ceiling	gray		Detected Chrysotile 40
37	1358273	Ceramic Wall Tile Glue	Addition Boys Bathroom	yellow	Non-Fibrous 100	None Detected
38	1358274	Ceramic Wall Tile Glue	Addition Boys Bathroom	yellow	Non-Fibrous 100	None Detected
39	1358275	Door Glass Glaze	Addition Hallway	gray	Non-Fibrous 98	Detected Chrysotile 2
40	1358276	Door Glass Glaze	Addition Hallway	gray	Non-Fibrous 98	Detected Chrysotile 2
41	1358277	Tan 12x12 VFT	Addition Room 227 (15)	tan	Non-Fibrous 100	None Detected
42	1358278	Tan 12x12 VFT	Addition Room 236 (14)	gray	Non-Fibrous 100	None Detected
43	1358279	Mastic	On #41	tan	Non-Fibrous 100	None Detected
44	1358280	Mastic	On #42	black	Cellulose 2 Non-Fibrous 98	None Detected
45	1358281	9x9 VFT	Addition Room 228 (10)	gray	Non-Fibrous 98	Detected Chrysotile 2
46	1358282	9x9 VFT	Addition Room 235 (13)	gray	Non-Fibrous 98	Detected Chrysotile 2
47	1358283	Black Mastic	On #45	black	Non-Fibrous 100	None Detected
48	1358284	Black Mastic	On #46	black	Non-Fibrous 100	None Detected
	1358285					

Received: September 03, 2024 Analyzed: September 03, 2024

Sampled: August 29, 2024
Tuesday 03 September
Analyzed by:

Batch: 122633

**Project Information** 

Method: BULK PLM ANALYSIS, EPA/600/R-93/116

Thorndyke Road School, Worcester, MA

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %
LabID					
49	Plaster	Addition Boys Bathroom	gray	Non-Fibrous 10	None Detected
1358286					
50	Plaster	Addition Boys Bathroom	gray	Non-Fibrous 10	None Detected
1358287					
51	Plaster	Addition Girls Bathroom	gray	Non-Fibrous 10	None Detected
1358288					

Received: September 03, 2024 Analyzed: September 03, 2024

Sampled: August 29, 2024
Tuesday 03 September
Analyzed by: Page 5 of 5 Batch: 122633

# CHAIN OF CUSTODY Some Day Per

Universal Environmental Consultants
12 Brewster Road
Framingham, MA 01702
Tel: (508) 628-5486 - Fax: (508) 628-5488
adieb@uec-env.com

Town/City: Worcester, MA Building Name Thorn dyke Road School

Sample	Description of Material	Sample Location
1	Plaster	East Steirmell
2		Revn 213 (3)
3		west stairwell
4		Room 1020 norse
5		Gym
6	Rough Plaster	Attic
T		
8		
9	Door glass Glaze	1st fl. Hallway
10	1	Poom 213 (3)
11	Tan 12x12 VFT	Gym
12	t 1	
13	Block mustic	
14	1	
15	9×9 VFT	Room 102C Norse
16		Cafeteria
17		- Roon 208 (1)
18		Room 216 (A)
19	Black mustic	on # 15
20	2 1	01 #16

Reported By: Jason Becotte	- Date:	Due Date: <b>24-Hours</b>
(11.	60.04	Due Date. <b>24-nours</b>
Received By:	- Date:	

Universal Environmental Consultan	ts
12 Brewster Road	
Framingham, MA 01702	
Tel: (508) 628-5486 - Fax: (508) 628-5	488
adieb@uec-env.com	

PLM

Town/City: Worcester, MA Building Name Thorndyke Road School

Sample	Description of Material	Sample Location
21	Block mustic	00#17
22	1	On#18
23	2×4 SAT	Roum 213 (3)
24	l	
25	Pipe Insolution	Gym
26		2 (
27	Transite wall panel	Roum 1020 Norse
28		
29	Exterior Door France Caulk	Cafeteria
30	1	1 (
31	spline Ixl AT ceiling	Addition Hallway
32		
33		Addition Room 227 (15)
34		Addition Room 728 (10)
35	Pipe Insclution	Addition above cailing
36	1	
37	Ceranic wall tile glue	Addition Boys Bathreon
38		1
39	Door glass glore	Addition Hallway
40	(	1 1

Reported By: Bewite	Date: -8-29-24	Due Date: 24-Hours
Received By:	Date:	

Universal Environmental	Consultants
12 Brewster Road	
Framingham, MA 01702	
Tel: (508) 628-5486 - Fax:	(508) 628-5488
adieb@uec-env.com	

PLM

Town/City: Worcester, MA Building Name Thorndyke Road School

Sample	Description of Material	Sample Location
41	Tan 12x12 VFT	Addition Room 227 (15)
42	1	Addition Rown 236 (14)
43	mastic	on #41
44	1 1	on#42
45	9x9 VFT	Addition Room 728 (10)
46	1 (	Addition Room 235 (13)
47	Block mustic	on # 4s
48		on # 46
49	Plaster	Addition Boys Bathroom
50		
91		Add ition Girls Bathroom

Reported By: Becotte	Date:	Due Date: 24-Hours
Received By:	Date:	