



PROJECT SPECIFICATIONS

ASBESTOS ABATEMENT CRAWLSPACE

*Worcester Public Schools
Dual Language Magnet School
525 Chandler Street, Worcester, MA*

DESIGNER:

**ATLAS Technical Consultants LLC
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070**

May 28, 2026

SECTION 020800

ASBESTOS ABATEMENT

PART I - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.
- B. The Owner shall not incur any additional costs due to negligence or regulatory requirements imposed upon this project due to the Asbestos Abatement Contractor failing to abide by the requirements of the specifications and applicable regulations.

1.2 SUMMARY

- A. Provide all labor, materials, and equipment necessary to complete work of this Section, including but not limited to the following:
 - 1. All Asbestos Abatement work referenced herein shall be performed by a Massachusetts licensed Asbestos Abatement Contractor in accordance with Massachusetts Department of Labor Standards 454 CMR 28.0 Regulations.
 - 2. Asbestos Abatement Contractor performing the abatement work of this section ("Asbestos Abatement Contractor") shall be an Asbestos Abatement Contractor licensed to perform asbestos operations in the State of Massachusetts. Asbestos Abatement Contractor shall submit license number and proof of licensure.
 - 3. The Asbestos Abatement Contractor shall also provide the project name, contact person and phone number of three (3) projects which were successfully completed of similar size and scope within the last two (2) years. Each project shall have been completed in good standing and the work performed by the Asbestos Abatement Contractor for each project resulted in no work violations/citations, contract delays, contract extensions/disputes or litigation. Failure to provide this information and/or meet the approval of these qualifications by the Owner may result in rejection of the Asbestos Abatement Contractor.
 - 4. The Owner shall also reserve the right to research and utilized other information received from any other projects completed by the Asbestos Abatement project not provided under 1.03 B (2) above, regardless of the date completed, location or circumstances resulting from the outcome of their work. The Owner shall reserve their right to reject the Asbestos Abatement Contractor based upon this review, for any reason, if found to be in the best interest of the Owner.
- B. Items to Be Installed Only: None
- C. Items to Be Furnished Only: None
- D. Related Sections: None

1.3 ALTERNATIVES

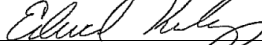
- A. Alternates: This bid does not include Alternate Bids

1.4 UNIT PRICES

- A. Unit Prices: None.

1.5 DEFINITIONS

- A. Site: Refers to the Dual Language Magnet School located at 525 Chandler Street in Worcester, Massachusetts as outlined by specification and drawing herein.
- B. Owner: Refers to the City of Worcester and their designated, authorized personnel.

- C. Consultant: Refers to ATLAS Technical Consultant, LLC (ATLAS), 73 William Franks Drive, West Springfield, Massachusetts and their designated, authorized personnel.
- D. Asbestos Abatement Contractor: Refers to the Contractor who has been awarded the Contract for performance of asbestos abatement work as outlined by this Section.
- E. Asbestos Project Designer: The MADLS certified Asbestos Project Designer for this project is Mr. Edward Kolodziej (#AD074321), ATLAS Technical Consultant, LLC. 

1.6 SUBMITTALS

- A. Refer to Division 1 Section Submittal Procedures for administrative and procedural requirements for submitting Shop Drawings, Product data, Samples, and other miscellaneous submittals.
- B. In addition to items required by other sections of the Project Manual, the following submittals are required for review and approval by the Owner on/or before the Pre-Construction Meeting:
 - 1. Copy of Massachusetts Asbestos Abatement Contractor's License
 - 2. Copies of notifications
 - 3. Chain-of-Command list of all personnel on-site and emergency contact person(s)
 - 4. Work plan which dictates all removal procedures to be implemented
- C. In addition to the items required by other sections of the Project Manual, the following submittals are required for final payment
 - 1. Contractor's Daily Log Notes
 - 2. Personal Monitoring Results
 - 3. Copy of Waste Shipment Records

1.7 DESCRIPTION OF WORK

- A. Work: This section details all areas where asbestos abatement work is to be performed and lists areas requiring special protection during the abatement work. The Asbestos Abatement Contractor shall furnish all labor, materials, services, training, insurance, and equipment as needed to complete removal of asbestos-containing and asbestos-contaminated materials located as indicated below. The Asbestos Abatement Contractor shall follow all Federal, State and local ordinances, regulations and rules pertaining to asbestos, including its abatement, storage, transportation and disposal.
- B. The Asbestos Abatement Contractor shall be responsible for verifying all quantity estimates in preparation of their bids, including the location and conditions of all asbestos-containing materials to be abated under this contract. No additional compensation and/or contract time shall be granted to the Asbestos Abatement Contractor for failure to perform this requirement and no compensation shall be granted for variations in the quantities presented herein.
- C. The Asbestos Abatement Contractor shall begin the work at a mutually scheduled time with the City of Worcester. Contractor shall work in harmony with all other trades performing separate contract work in the building.
- D. The following Scope of Work and Requirements shall be applicable for asbestos abatement work at the Dual Language Magnet School. If a specific note for an abatement procedure or requirement is not mentioned herein, the Asbestos Abatement Contractor shall perform the removal of such material in accordance with local, state and federal regulations. The Asbestos Abatement Contractor shall also coordinate all work with the General Contractor, as applicable.
 - 1. All Asbestos Abatement work shall take place in accordance with the provisions outlined herein as well as current local, state and federal regulations. No additional compensation shall be granted to the Asbestos Abatement Contractor for compliance with applicable laws when performing the abatement work at the site. This shall include any regulatory requirements that mandate additional or more restrictive containment and abatement procedures than what has been presented herein. It shall be the Asbestos Abatement Contractor's responsibility to comply with such regulations as well as any other additional requirements outlined by this Section.

2. It shall be the Asbestos Abatement Contractors responsibility to determine the requirements for confined space entry at all locations and comply with all aspects of OSHA's Confined Space Regulations. A copy of the Asbestos Abatement Contractor's Confined Space Program, training certificates and site-specific monitoring/permitting protocol shall be provided to the Consultant for review and approval prior to commencement of the work.
3. The Asbestos Abatement Contractor shall be responsible for all demolition work required to access all asbestos materials for abatement. All demolition debris shall be disposed of as asbestos (unless otherwise directed by the Consultant).
4. Coordination shall exist between the abatement under this Section and the disconnection of existing electrical, plumbing or fire suppression equipment within the building by the Owner.
5. All removal procedures shall take place under full containment and a three-stage decontamination unit under negative pressure (unless otherwise approved by the Consultant).
6. With regards to the variance from requirements on polyethylene sheeting on "impervious wall" surfaces, the Asbestos Abatement Contractor shall be required to adhere to all requirements outlined by MA DLS and MassDEP regulations governing work area set-up for asbestos abatement. The Asbestos Abatement Contractor shall take full responsibility including all costs associated with approval and/or denial of such actions (i.e. non use of polyethylene) if determined to be non-compliant by the Consultant and/or a state or federal agency. If the variance is denied or discontinued by said parties; the Asbestos Abatement Contractor shall proceed with installation of polyethylene sheeting on such surfaces at no additional cost to the Owner.
7. Non-movable objects remaining in the work areas that the Asbestos Abatement Contractor shall be responsible for cleaning and covering with 1 layer of 6-mil polyethylene sheeting. Any damaged caused to such items shall be the responsibility of the Asbestos Abatement Contractor to repair or replace and no charge to the Owner.
8. The following requirements shall be applicable for asbestos abatement activities at the site:
 - a. Perform abatement of asbestos containing materials using negative air filtration techniques attached 3-stage decontamination chambers and critical barriers and the encapsulation of post removal surfaces unless otherwise specified in this Section.
 - b. Establish a 3-stage decontamination unit in accordance with applicable regulations.
 - c. Workers shall wear disposable protective suits and respiratory protection for abatement or disturbance of asbestos-containing materials.
 - d. Consistently and thoroughly wet asbestos with a fine spray of amended water. Carefully remove and immediately place asbestos in approved and properly labeled 6-mil polyethylene disposal bags. Diligently scrape or brush asbestos residual materials from surfaces. After brushing and scraping, surfaces shall be free of visible debris and fibers and surfaces shall be HEPA vacuumed clean.
 - e. Items in the designated crawlspace area to repair the water leak are to be decontaminated or disposed of as asbestos contaminated waste. The crawlspace contaminated soil in the designated areas shall be cleaned to a depth of three inches (3 inches) or to when there is no visible contamination or debris. The Abatement Contractor shall not be compensated for removing soil at a depth greater than three inches (3 inches) in order to pass visual inspection criteria. The abatement contractor shall seal areas as designated in the attached drawing with hard barriers to isolate the work area from other areas of the crawlspace where asbestos insulation and contamination exist. Hard barriers and materials used to seal penetrations shall be fire retardant.
9. Any damage caused to the floors, walls, doors and any other items as a result of the abatement work shall be repaired by the Abatement Contractor or compensate City of Worcester.
10. Comply with requirements for final clearance and release of a work area as described in this Section and as required by applicable regulations prior to tear down of polyethylene and area clean up. Perform Final Clearance Visual Inspections in accordance with the testing requirements outlined in Section 3.3.
11. Refer to Attachment A (Table 1.0) for a summary of materials that require abatement at the site. In addition, refer to the Drawings for locations rooms identified by Table 1.0.

1.8 CODES AND STANDARDS

- A. All work shall conform to the standards set by applicable Federal, State and local laws, regulations, ordinances, and guidelines in such a form in which they exist at the time of the work on the contract, and as may be required by subsequent regulations. In addition to any detailed requirements of the Specification, the Asbestos Abatement Contractor shall at his own cost and expense comply with all laws, ordinances, rules and regulations of Federal, State, Regional and Local Authorities regarding handling and storing of asbestos waste material. This includes all applicable OSHA regulations.
- B. All regulations and other governing agencies in their most current version are applicable throughout this project. Where there is a conflict between this Specification and the cited State, Federal, or local regulations, the more restrictive or stringent requirements shall prevail. This Section refers to many requirements found in these references, but in no way is it intended to cite or reiterate all provisions therein or elsewhere. It is the Asbestos Abatement Contractor's responsibility to know, understand, and abide by all such regulations and common practices.

1.9 FEES, PERMITS & LICENSES

- A. The Asbestos Abatement Contractor shall pay all licensing fees, royalties, and other costs necessary for the use of any copyrighted or patented product, design, invention, or process in the performance of the work specified in this section. The Asbestos Abatement Contractor shall be solely responsible for costs, damages, or losses resulting from any infringement of these patent rights or copyrights. The Asbestos Abatement Contractor shall hold the Owner and Consultant harmless from any costs, damages, and losses resulting from any infringement of these patent rights or copyrights. If the Contract Specification requests the use of any product, design, invention, or process that requires a licensing, patent or royalty fee for use in the performance of the job, the Asbestos Abatement Contractor shall be responsible for the fee or royalty fee and shall disclose the existence of such rights.
- B. Asbestos Abatement Contractor shall be responsible for costs for all licensing requirements, where applicable and notification requirements and all other fees related to the Asbestos Abatement Contractors' ability to perform the work in this Section.
- C. Secure all necessary permits for work under this Section, including hauling, removal, and disposal, fire, and materials usage, or any other permits required to perform the specified work.

1.10 CLEANING

- A. Comply with all requirements for final clearance and release of a work area as described in this Section and required by the Massachusetts Regulations prior to take down of polyethylene and area clean-up.

1.11 COORDINATION

- A. Extend full cooperation to Owner in all matters involving the use of Owner's facilities. At no time shall the Asbestos Abatement Contractor cause or allow conditions to be caused, which may cause risk or hazard to the general public, or conditions that might impair safe use of the facility.
- B. Complete Asbestos activities in the phases of the final schedule agreed upon by Owner.
- C. The Asbestos Abatement Contractor shall be made aware that separate contracts will be engaged by the Owner for other work to be performed within the site building. The Asbestos Abatement Contractor shall be made aware that those Contracts will be on-going during the same time as the asbestos abatement work outlined herein. The work of this Contract shall proceed in "harmony" with the work of those projects, which will be subject to coordination by the Owner. No additional compensation or contract time shall be granted for failure to recognize and comply with this requirement.

1.12 SUBSTITUTION OF MATERIALS OR METHODS

- A. Owner and Consultant approval is required for all modifications to methods, procedures, and design, which may be proposed by the Asbestos Abatement Contractor. It is the intent of these documents to allow the Asbestos Abatement Contractor to present alternative methods to the abatement processes herein, for review by Owner and Consultant. Any such modifications or substitutions to methods, procedures, or design shall comply with applicable regulations. Asbestos Abatement Contractor shall submit the proposed modification or substitution in accordance with the requirements of the General Conditions, and no later than fifteen (15) working days prior to planned commencement of proposed modification, for review and approval.

- B. Unless requests for modification or substitution are made in accordance with the above instructions and the instruction of the General Conditions, supported by sufficient proof of equality, Asbestos Abatement Contractor shall be required to furnish the specifically named or designed items, methods or procedures designated in this Section.
- C. If the modification or substitution necessitates changes or additional work, same shall be provided and the Asbestos Abatement Contractor shall assume the cost and the entire responsibility thereto unless performed under the approved Change Order Process.
- D. The Owner and Consultant's permission to make such substitution shall not relieve the asbestos Abatement Contractor from full responsibility for the work.

1.13 SITE SECURITY

- A. The Asbestos Abatement Contractor is responsible for performing all work under this contract without contaminating the building or environment with asbestos fibers. This includes interior areas, outside containment locations, machinery and equipment and any other release into unregulated spaces. The Asbestos Abatement Contractor is responsible for making right and clean-up of any such contamination if found to be present.
- B. The Asbestos Abatement Contractor will be responsible for the security of the abatement area, allowing only authorized personnel into the area, and securing assigned entrances and exits at the end of the workday. Signs will be posted prior to asbestos removal as required in 29 CFR 1926.1101.

1.14 PROJECT MONITOR

- A. The Owner has retained ATLAS, as their Consultant for the technical advisement and project management during the Project. In addition, ATLAS will perform project monitoring services during abatement activities. The Asbestos Abatement Contractor shall regard ATLAS's direction, as authoritative and binding as provided herein, in matters outlined by this Section.
- B. ATLAS's licensed Project Monitor, acting as the Owner's Representative, will perform monitoring of the Asbestos Abatement Contractor's work practices and performance, inspection of the worksites, and air sampling and analysis for each phase of the asbestos removal project. Quality control and testing criteria has been established in these specifications, and will be strictly enforced. ATLAS's Project Monitor will review matters relating to safety, interpretation of the specifications, and scheduling of work, and will make decisions upon consultation with the Owner.

1.15 TEMPORARY FACILITIES

- A. The Asbestos Abatement Contractor shall coordinate the Owner as to the use of the existing power and water within the building.
- B. All temporary hook-ups to the existing power and water within the building shall be the responsibility of the Asbestos Abatement Contractor.
- C. The Asbestos Abatement Contractor shall also be responsible for providing all temporary toilets required for workers to use during the construction project.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All materials and equipment proposed to be used on this project shall be subject to the acceptance of the Owner and Consultant. The Asbestos Abatement Contractor shall comply with local, state and federal regulations pertaining to the selection and use of materials and equipment on this project. The Asbestos Abatement Contractor shall provide a submittal on all materials and equipment to be used for review and approval by the Consultant prior to commencement of the work.

PART 3 - EXECUTION

3.1 WORK PROCEDURES

- A. All asbestos abatement work shall take place in accordance with the provisions outlined herein as well as local, state and federal regulations. In particular, Massachusetts DLS and DEP regulations regarding asbestos removal and disposal shall be adhered to.
- B. Visual Inspections: Work areas shall pass a visual inspection conducted by the Site Supervisor responsible for the project and the Owner's Project Monitor (i.e. Consultant). The criterion for this inspection will be the absence of visible debris in accordance with ASTM standard E1368-90. A certificate of visual inspection will be signed by the Project Monitor and the Site Supervisor after final inspection clearance. The Contractor will be responsible for the costs of visual inspection and testing required for any work which fails clearance air quality criteria.

3.2 DISPOSAL

- A. Packaging: Prior to post-abatement inspection, asbestos- containing waste shall be packaged in sealed double containers and removed from the work area to a specified transportation vehicle or a designated holding area approved by the Owner. At the end of each workday the Asbestos Abatement Contractor shall remove the debris accumulated during that day's work activities using procedures outlined in the Specifications. The Asbestos Abatement Contractor shall provide a daily tally of all bags removed.
- B. Temporary Storage of Waste: An area for temporary storage of asbestos waste must be approved by the Owner. Asbestos waste may only be stored in an **enclosed container** which is posted and secured whenever not in use. Asbestos waste material shall be loaded into a waste transportation vehicle/dumpster and hauled away as soon as there is a sufficient quantity available for direct transportation to the approved disposal site.
- C. OSHA/EPA labeling: Asbestos warning labels having permanent adhesive and waterproof print, or being permanently printed on the container, shall be affixed to the outside of all asbestos containers, and each inside bag, except that nonfriable asbestos-containing waste that has not been and does not have a high probability of becoming, crumbled, pulverized, or reduced to powder need not be labeled. Labels will be conspicuous and legible and shall contain the following warning:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

The Asbestos Abatement Contractor is directed to properly label each waste bag in accordance with the latest NESHAP standard, Section 61.150, with the following information:

SITE OWNER'S NAME
SITE NAME

- D. DOT labeling and marking: A DOT "class 9" shipping label and DOT mark shall be applied to or be printed on each packaging of asbestos-containing materials; except for nonfriable asbestos-containing materials that did not become crumbled, pulverized, or reduced to powder; or a limited quantity of asbestos-containing material which is not being transported by air.
- E. EPA vehicle marking: Each vehicle transporting asbestos-containing waste shall be marked with asbestos danger signs during loading and unloading of the waste, in accordance with the NESHAP, 40 CFR 61.150.
- F. Asbestos waste shipment records: The Asbestos Abatement Contractor shall prepare the waste shipment records. Completed waste shipment record(s) signed by the Asbestos Abatement Contractor, all transporter(s), transferor(s), disposal and/or conversion facility(s), shall be provided to the Owner within 30 days of the time at which the asbestos-containing wastes are received at the disposal and/or conversion facility (ies), which shall be no longer than 40 days after the waste was accepted by the initial transporter. The Waste Shipment Record shall specify the designated number of bags or cubic yard(s) of asbestos waste.

- G. Depositing: Asbestos waste shall be deposited as soon as practical at a regulated waste disposal site, except for EPA "Category I" nonfriable ACM that has not become friable, nor will be or has been sanded, ground, cut, or abraded. Waste disposal sites for asbestos materials will be in accordance with 40 CFR 61.25, Waste Disposal Sites. The Contractor shall provide written evidence that the site is approved for asbestos disposal by the EPA, State and local regulatory agencies.

3.3 QUALITY CONTROL AND TESTING

- A. The Asbestos Abatement Contractor shall be responsible for achieving acceptable visual and final air clearance testing for ALL abatement areas as follows:
1. Clearance inspection: ATLAS's Project Monitor shall inspect the work area and surrounding areas for clearance using visual and physical methods, prior to clearing the project for air monitoring clearance procedures.
 2. Based upon the quantity of material to be abated, Transmission Electron Microscopy (TEM) clearance testing will be performed to confirm the completion of removal. All clearance testing shall be performed in accordance with the state of Massachusetts and EPA "Asbestos Hazard Emergency Response Act" (AHERA) Regulations. The work areas shall be considered complete if the following criteria are met:
 - a. Containment's cleared and samples analyzed by Transmission Electron Microscopy (TEM): The concentration of asbestos on each of the five inside containment samples are below the level of 70 structures per square millimeter (70 s/mm^2).
 - b. TEM air clearance analysis shall be at 24-hour turnaround time upon laboratory receipt of the samples.
- B. Should results indicate a fiber concentration greater than the clearance criteria stated above or if the visual inspection fails, the Asbestos Abatement Contractor shall reclean the entire work at no additional cost to Owner, utilizing the methods specified in this section. The Asbestos Abatement Contractor shall pay for all additional testing and inspections until the clearance level is achieved as per this Section. The cost of additional testing and inspection shall be paid by the Asbestos Abatement Contractor by subtracting the cost for analysis and inspector's time from the Contract total. This shall also include resampling of any areas where air cassettes became overloaded due to construction activities.

ATTACHMENT A

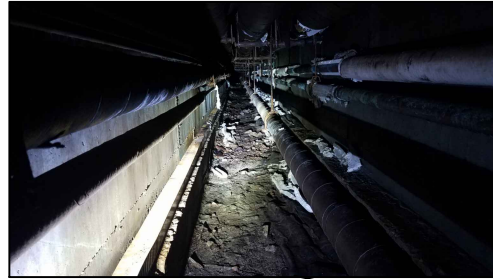
TABLE 1.0

SUMMARY OF ACM TO BE ABATED

Table 1.0
Asbestos Abatement
Dual Language Magnet School - Crawlspace

LOCATION	MATERIAL	AMOUNT
Crawlspace	Pipe Insulation	1,250 LF
Crawlspace	Contaminated Soil	1,500 SF

Approx. half
the length
of Rm. 115



Floor Hatch
Rm. 117
NAFU

Electrical
Panel

LEGEND



Seal with Hard Barrier



Removal & Clean-up of
Pipe & Fitting Insulation,
Soil and Contaminated
Items as ACM



Hatch
DECON

Custodian
Room

PROJECT NUMBER:	DRN BY: EK	CRD BY: EK	APVD BY: EK	SKD DATE: 05/28/2026
DRAWING NUMBER: 1				
DATE: 05/28/2026				
SCALE: NOT-TO-SCALE				

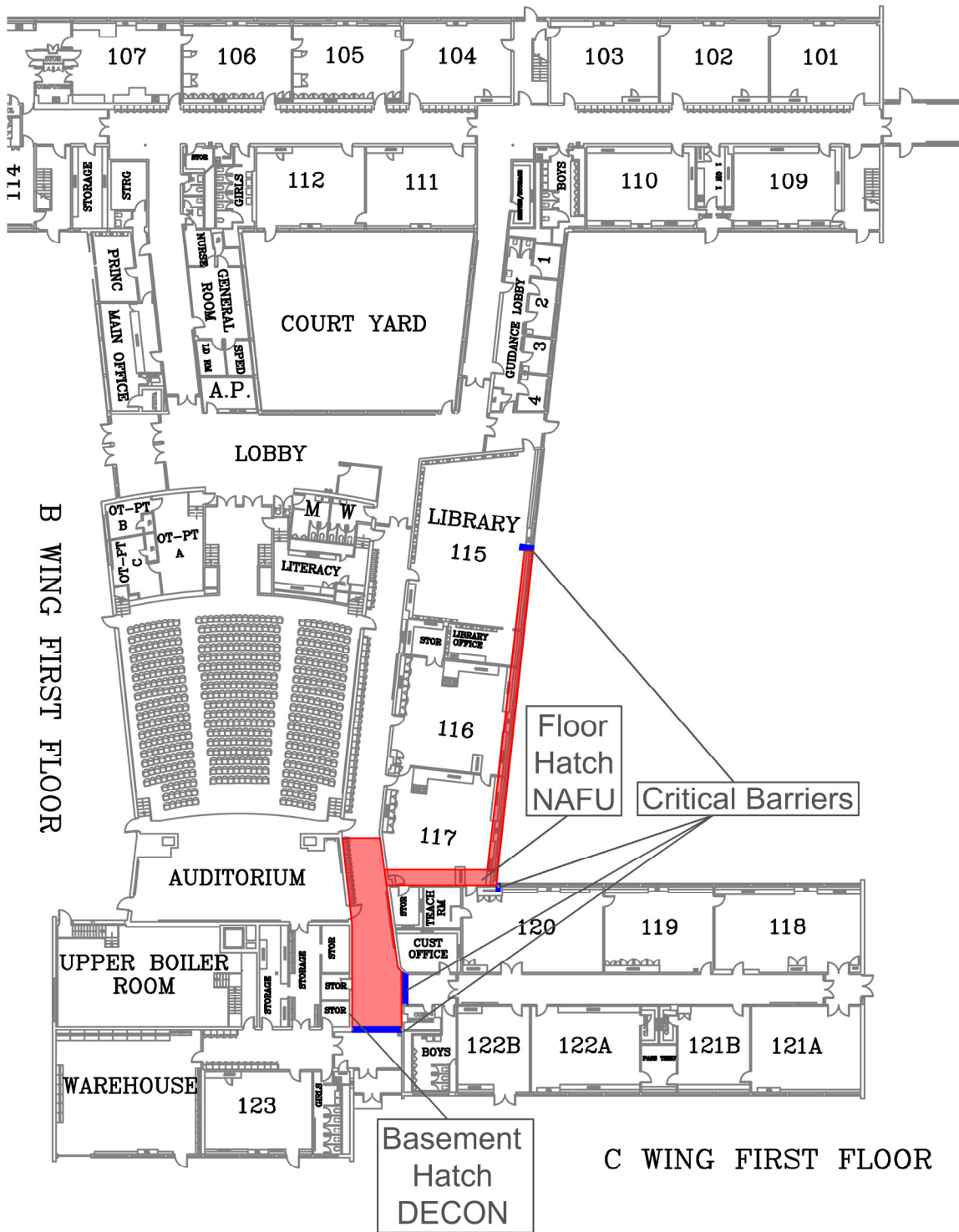
ASBESTOS ABATEMENT DIAGRAM - CRAWLSPACE

WORCESTER PUBLIC SCHOOLS
DUAL LANGUAGE SCHOOL
525 CHANDLER STREET
WORCESTER, MASSACHUSETTS



ATLAS TECHNICAL
CONSULTING SERVICES LLC
73 WILLIAM FRANKS DR.
W. SPRINGFIELD, MA 01089

FIGURE: 1



- Critical Barriers
- Crawlspace - Removal of ACM Pipe & Fitting Insulation, Contaminated Items & Soil

PROJECT NUMBER:	DRN. BY: EK
DRAWING NUMBER: 1	CKD. BY: EK
DATE: 05/28/2026	APP'D BY: EK
SCALE: NOT-TO-SCALE	CKD. DATE: 05/28/2026