

ADDENDUM NO. #1 ASBESTOS ABATEMENT SPECIFICATIONS

Asbestos Abatement Prior to Demolition
@
Morris Adler Elementary School

Owner:

Southfield Public Schools

24661 Lahser Road Southfield, Michigan 48033

Building(s):

Morris Adler Elementary School

19100 Filmore Road Southfield, Michigan 48075

AEG Project #: AE230880

Issue Date: Saturday, October 21. 2023

Bids Due: 10:00 A.M., Friday, October 27, 2023

The following changes have been made to the asbestos abatement specification for asbestos abatement activities at Morris Adler Elementary School and should be incorporated into the Scope-of-Work.

- 1. Bid No. 23.01 Asbestos Abatement Prior to Renovations at Morris Adler Elementary School

 Adler Elementary School, Project Group AE-1 "Area A Abatement" (Pages 21-25)

 Due to changes in materials to be abated, this entire project has been corrected to include additional asbestos floor tile, non-asbestos floor tile mastic and tagged fire doors materials. A copy of the corrected project scope of work and requirements for "Adler Elementary School Project Group AE-1 "Area B Abatement"" is located in Attachment #1. Please refer to the corrected "Adler Elementary School Project Group AE-1 "Area B Abatement"" included in this addendum only. Do not refer to the "Adler Elementary School Project Group AE-1 "Area B Abatement"" issued in the specification documents.
- 1. Bid No. 23.01 Asbestos Abatement Prior to Renovations at Morris Adler Elementary School

 Adler Elementary School, Project Group AE-3 "Exterior Window System Abatement" (Pages 31-33)

 Due to changes in materials to be abated, this entire project has been corrected to include additional exterior window system with asbestos glazing materials. A copy of the corrected project scope of work and requirements for "Adler Elementary School Project Group AE-3 "Exterior Window System Abatement"" is located in Attachment #2. Please refer to the corrected "Adler Elementary School Project Group AE-3 "Exterior Window System Abatement" included in this addendum only. Do not refer to the "Adler Elementary School Project Group AE-3 "Exterior Window System Abatement" issued in the specification documents.

Southfield Public Schools Bid No. 23.01 Addendum No. #1 Attachment #1

Project Group AE-1 - "Area B Abatement"

Project Summary:

The first project for abatement at Morris Adler Elementary School includes the removal and disposal of all asbestos flooring materials, including all asbestos floor tile, all non-asbestos floor tile mastic, all non-asbestos carpet, all basketball backboards with asbestos coating, all interior door frames with asbestos caulk, all sinks with asbestos undercoating and all tagged fire doors identified throughout renovation areas. This project will include, but is not limited to, Area B renovation areas. These projects at Morris Adler Elementary School will involve multiple negative pressure enclosures and regulated areas to remove the asbestos materials using Class II removal procedures. The project will begin on Monday, November 6, 2023, and will be complete with all abatement activities, including tear down activities, by the end of the work day on Friday, November 10, 2023. The project schedule allows for a total of five (5) work days (Monday-Friday) to complete the project.

Abatement Activities:

- 1. Remove and dispose of all asbestos floor tile from the identified areas at Morris Adler Elementary School.
- 2. Remove and dispose of all non-asbestos floor tile mastic from the identified areas at Morris Adler Elementary School.
- 3. Remove and dispose of all non-asbestos carpet from the identified areas at Morris Adler Elementary School.
- 4. Remove and dispose of all basketball backboards with asbestos coating material from the identified areas at Morris Adler Elementary School.
- 5. Remove and dispose of all interior door frames with asbestos caulk from the identified areas at Morris Adler Elementary School.
- 6. Remove and dispose of all sinks with asbestos undercoating from the identified areas at Morris Adler Elementary School.
- 7. Remove and dispose of all tagged fire doors from the identified areas at Morris Adler Elementary School.

Summary of Locations:

Room / Location Materials ->	FT	Non-ACM FTM	Carpet	Backboard	Door Frame	Sink	Fire Door
Boiler Room							1
Library	1,440	1,440	1,440				
Main Office (General Office)	660	660	660				
Main Office - Storage	180	180	180				
Main Office – Work Room	225	225	225				2
Main Office – Work Room Office	140	140	140				2
Multipurpose Room – Marked Areas	120	120		4			
Room 20					1	1	
Room 21					1	1	
Room 22					1		
Custodial Closet Near Planetarium							1

Room / Location Materials ->	FT	Non-ACM FTM	Carpet	Backboard	Door Frame	Sink	Fire Door
Custodial Closet Outside Boiler Room							1

Key for Table

FT Asbestos Floor Tile

Non-ACM FTM Non-Asbestos Floor Tile Mastic

Carpet Non-Asbestos Carpet

Backboard Basketball Backboard with Asbestos Coating
Door Frame Interior Door Frame with Asbestos Caulk

Sink Sink with Asbestos Undercoating

Fire Door Tagged Fire Door

The scope of abatement for Project Group AE-1 includes all asbestos floor tile, non-asbestos floor tile mastic, non-asbestos carpet, basketball backboards with asbestos coating, interior door frame with asbestos caulk, sink with asbestos undercoating and tagged fire door materials.

Abatement Requirements:

The Contractor will be allowed to construct multiple negative pressure enclosures for the complete removal of all of the materials detailed in the "Abatement Activities" for Project Group AE-1.

- 1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project areas. The project areas include all portions of the functional spaces listed in the "Summary of Locations" table. When present in, connected to or adjacent to the room, materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets, flooring materials are included when exposed by pre-abatement demolition activities. Additional descriptions for certain areas are listed below:
 - Material Below Sink Cabinets/Casework: The Contractor will remove all asbestos flooring material
 and non-asbestos floor tile matic material up to the sink cabinets/casework. Any material which
 extends below the sink cabinets/casework and cannot be pulled out will remain in place and will
 be sealed in place.
- 2. The regulated areas will be emptied of all furniture, furnishings, and moveable objects prior to the start of the project. This activity will be completed by the Owner.
- 3. The exact routing of projects and configuration of the number of regulated areas/combination of functional spaces will be coordinated on-site. When possible, adjoining functional spaces will be combined into a single regulated area. All negative pressure enclosures established for the removal of asbestos thermal system insulation, not utilizing glovebags, will be set-up in accordance with the following *minimum* guidelines prior to the start of any abatement activities:
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, will
 be set-up over all access points to non-project areas, such as doors to adjoining rooms/hallways
 and exterior doors/windows. Asbestos warning signs will be placed on the non-project side of the
 critical barrier when necessary to prohibit entrance. No access will be made from these locations
 into the project area at any time (except through the decontamination chamber).
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, will
 be placed over all ceiling return vents, electrical equipment, and all items which cannot be
 decontaminated inside of the project area. Critical barriers, constructed of a minimum of two (2)
 layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.

- A minimum of one (1) layer of six-mil polyethylene sheeting will be placed over all wall surfaces, all counters and other non-floor surfaces in the project areas.
- A minimum of two (2) layer of six-mil polyethylene sheeting will be placed over all non-asbestos
 flooring inside of or adjacent to the project areas (such as carpeting in the room, ceramic tile in
 the bathrooms, or other floor tile and carpeting in the hallways). THE CONTRACTOR WILL BE
 RESPONSOSIBLE FOR DAMAGE TO ADJACENT FLOORING.
- A minimum of one (1) air filtration devices (AFDs) will be required in each functional space in excess of 700 square feet. This minimum number of machines is desired to create a minimum negative pressure of 0.02 inches of water equivalent, sufficient air changes and appropriate air flow through the enclosure. The Contractor will be responsible for properly securing the exhaust tubes in any exterior windows and/or doors used for exhaust locations.
- A three stage decontamination chamber will be required for this project. The decontamination chamber will be connected at a location convenient to building access and waste out activities and will be coordinated on-site. A black polyethylene barrier will be placed in front of the decontamination chamber to provide an additional visual barrier to the work area.
- The construction of a bag-out chamber will be permitted. The exact location, set-up, position and construction of the bag-out chamber must be reviewed with Arch Environmental Group, Inc.'s Project Coordinator. Bag out chambers set-up without the review and approval of Arch Environmental Group, Inc. will be sealed and/or torn down at the discretion of Arch Environmental Group, Inc.
- Visual barriers, constructed of a minimum of one (1) layer of black polyethylene sheeting, will be set-up at various locations to provide an additional visual barrier to the work area. The exact number and locations will be determined on site, based on building occupancy and usage patterns.
- 4. All asbestos floor tile abatement activities will be completed in accordance with the listed "Class II Non-Friable Floor Tile Abatement Procedures" (General Procedures for Asbestos Abatement, Item 11.2") and with all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) "Methods of Compliance").
- 5. The Contractor will be required use friable means, including mechanical means, to remove the non-asbestos floor tile mastic in the project area. The materials will be removed inside of an established negative pressure enclosure.
- 6. The Contractor will be responsible for the removal and disposal of all carpet materials in locations identified to have asbestos flooring materials. All non-asbestos carpet removal activities will be completed in accordance with the listed "Non-Asbestos Carpet Material Removal Procedures" ("General Procedures for Asbestos Abatement, Item 11.1") and with all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) "Methods of Compliance") regarding disturbances to floor tile materials.
- 7. All regulated areas for the removal of interior door frames with asbestos caulk and basketball backboards with asbestos coating, will be set-up in accordance with the following minimum guidelines prior to the start of any abatement activities:
 - Asbestos banner tape and asbestos warning signs will be set-up extending a minimum of 8' in all
 directions from the door frames and basketball backboards.
 - A minimum of one (1) layer of six-mil polyethylene sheeting will be set-up on the floor in all directions from door frames and basketball backboards and will be secured to the floor below the door frames and basketball backboards. The polyethylene sheeting will be sufficient in length to catch all door caulk, frame debris and backboard coating material which may fall to the ground and to wrap the door frames and basketball backboards for disposal.

- AFDs and decontamination units will not be required, unless special conditions exist.
- All door frames and basketball backboards will be removed using intact removal methods. The
 Contractor will not be allowed to cut through any door caulk or backboard coating material using
 mechanical means. The competent person will be required to ensure that all door frames and
 basketball backboards are removed intact and that all procedures relating to the removal are
 strictly followed.
- 8. The Contractor will disconnect and wrap all sinks with asbestos undercoating materials in a minimum of one (1) layer of six-mil polyethylene sheeting, seal the polyethylene sheeting, label the waste and place the waste in the on-site dumpster. The Contractor will wet-wipe and HEPA vacuum the floor below the sink only if the sink is damaged.
- 9. The Contractor will wrap all fire doors in a minimum of one (1) layer of six-mil polyethylene sheeting, seal the polyethylene sheeting, label the waste and place the waste in the on-site dumpster. The Contractor will wet-wipe and HEPA vacuum the floor below the door only if the door is damaged and packing material is visible.
- 10. All asbestos-containing materials must be removed using wet methods and then bagged and sealed immediately. Bags will be randomly checked as they are transported from the enclosure and double bagged. All bags determined to not be adequately wet will be sent back into the enclosure. No bags may remain open inside the enclosure. The Contractor will be permitted to leave sealed bags inside the enclosure overnight. All bags must be removed from the enclosure prior to the start of the visual inspection.
- 11. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wetwiping and HEPA vacuuming during the final cleaning portion of the project. During final cleaning activities, the ceiling will be rinsed and then encapsulated during the lock down portion of the project.
- 12. At the conclusion of the final cleaning activities in the enclosure, a visual inspection will be completed in accordance with the listed "Visual Inspection Procedures" (Item #5, "General Requirements and Information").

Final Clearance Sample Requirements:

PCM Clearance Air Samples

Each of the regulated areas established for the removal of the materials described in Project Group AE-1 will be cleared using Phase Contrast Microscopy (PCM). Pursuant to the requirements of AHERA, five (5) PCM samples will be collected from each regulated area. All five samples must be analyzed below 0.01 fibers per cubic centimeter allow for tear down of the enclosure. All PCM air samples will be collected in accordance with the AHERA regulation and all EPA recommended guidelines. Arch Environmental Group, Inc. reserves the right to reduce the number of clearance samples to one (1) for regulated areas involving only the removal of non-friable asbestos flooring materials.

Project Schedule:

The Contractor will start the project on Monday, November 6, 2023, and will be complete with all abatement activities, including tear down activities, by the end of the work day on Friday, November 10, 2023. The project schedule allows for a total of five (5) work days (Monday-Friday) to complete the project. Additional project dates include:

#	Location	Start	Ready for Pas	End	# Days
AE-1	Area B	Monday, 11-6-23	Friday, 11-10-23 @ 5:30 p.m.	Friday, 11-10-23 @ 5:30 p.m.	5

Southfield Public Schools Bid No. 23.01 Addendum No. #1 Attachment #2

Project Group AE-3 - "Exterior Window System Abatement"

Project Summary:

The third and final project for abatement at Morris Adler Elementary School includes the removal and disposal of all exterior window systems with interior asbestos glazing and exterior asbestos glazing materials. The project will include, but is not limited to, all exterior window systems at the project site. These projects at Morris Adler Elementary School will involve multiple regulated areas to remove the asbestos materials using Class II intact removal procedures. The project will begin on Monday, January 15, 2024, and will be complete with all abatement activities, including tear down activities, by the end of the work day on Saturday, February 10, 2024. The project schedule allows for a total of twenty-four (24) work days (Monday-Saturday, Monday-Saturday, Monday-Saturday) to complete the project.

Abatement Activities:

1. Remove and dispose of all exterior window systems with interior asbestos glazing and exterior asbestos glazing from the identified areas at Morris Adler Elementary School.

Summary of Locations:

Room / Location	Materials ->	Interior/Exterior Window Glazing
Room 3		40 lf
Room 4		40 lf
Room 5		40 lf
Room 6		40 lf
Room 7		40 lf
Room 8		40 lf
Room 9		40 lf
Room 10		40 lf
Room 11		80 lf
Room 12		80 lf
Room 13		80 lf
Room 14		40 lf
Room 15		40 lf
Room 16		40 lf
Room 17		40 lf
Room 18		40 lf
Room 19		40 lf
Room 20		40 lf
Room 21		40 lf
Room 22		40 lf
Conference Room		20 lf
Library		30 fl
Main Entrance Lobb	y/Hallway	20 lf
Main Entrance Syste	em	140 lf
Speech Therapy Offi	ice	30 lf

Key for Table

WC Exterior Asbestos Window Caulk
WG Exterior Asbestos Window Glaze
TP Exterior Asbestos Transite Panels
x Material present in the functional space

The scope of abatement for Project Group AE-3 includes all identified window systems with exterior asbestos glazing and interior asbestos glazing materials located throughout building.

Abatement Requirements:

The Contractor will be allowed to construct multiple negative pressure enclosures for the complete removal of all of the materials detailed in the "Abatement Activities" for Project Group AE-3.

- 1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project areas. The project areas include all portions of the functional spaces listed in the "Summary of Locations" table. When present in, connected to or adjacent to the room, materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets. Additional description for certain areas are listed below:
 - <u>Boarding Up of Window Openings</u>: The Contractor will include in submitted base bid, cost associated with suppling labor and materials to secure, board up and weatherproof all window openings created with removal and disposal of exterior window systems. All window openings will be sealed with plywood and 2' x 4' supports to provide security and protection from weather, which is expected to remain in place for up to three (3) weeks.
- 2. The building (including project areas) will not be entirely emptied of all furniture, furnishings and moveable objects prior to the start of the project. Where necessary, this activity will be completed by the Contractor and must be included in the submitted base bid (inclusive of all costs labor, supplies, disposal, etc.).
- 3. The regulated area constructed to address asbestos abatement in this project will be set-up in accordance with the following minimum guidelines prior to the start of any abatement activities:
 - Asbestos banner tape and asbestos warning signs will be set-up on the exterior of the work areas
 extending a minimum of 8' from the window system, and inside of the room extending a minimum
 of 8' from the window system.
 - A minimum of one (1) layer of six-mil polyethylene sheeting will be set-up on the floors/ground in
 all work areas and will be secured to the floor below window systems. The polyethylene sheeting
 will be sufficient in length to catch all window system glazing glazing which may fall to the ground
 and to wrap the window systems for disposal.
 - Where cranes, lifts, scaffolding, or other equipment are used to access the exterior windows, the Contractor will be required to carefully lower removed windows to the ground and will not be allowed to drop any windows frames to the ground.
- 4. All window systems will be removed using intact removal methods. The Contractor will not be allowed to cut through caulk materials using mechanical means. The competent person will be required to ensure that all window systems are removed intact and that all procedures relating to the removal are strictly followed. THE CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGE TO THE ADJACENT WALLS.
- 5. All asbestos-containing materials must be removed using wet methods and then immediately wrapped in a minimum of one layer of six-mil polyethylene sheeting. Waste will be randomly checked as they are transported from the regulated area. All waste determined to not be adequately wet will be sent back into the regulated area. No waste may remain open inside the regulated area. All waste must be removed from the regulated area prior to the start of the visual inspection.

- 6. Final cleaning activities will include combination of wire brushing, rinsing, wet-wiping and HEPA vacuuming of all window openings and all vertical and horizontal surfaces inside of the building between the exterior wall and the interior banner tape. Final cleaning will also include a review outside of the building to ensure that all debris has been cleaned up from the grass.
- 7. At the conclusion of the final cleaning activities in the enclosure, a visual inspection will be completed in accordance with the listed "Visual Inspection Procedures" (Item #4, "General Requirements and Information").

Final Clearance Sample Requirements:

Each of the regulated areas established for the removal of the materials described in Project Group AE-3 will be cleared using Phase Contrast Microscopy (PCM). Pursuant to the requirements of AHERA, five (5) PCM samples will be collected from each regulated area. All five samples must be analyzed below 0.01 fibers per cubic centimeter allow for tear down of the enclosure. All PCM air samples will be collected in accordance with the AHERA regulation and all EPA recommended guidelines.

Project Schedule:

This project will begin on Monday, January 15, 2024, and will be complete with all abatement activities, including tear down activities, by the end of the work day on Saturday, February 10, 2024. The project schedule allows for a total of twenty-four (24) work days (Monday-Saturday, Monday-Saturday, Monday-Saturday, Monday-Saturday, Monday-Saturday) to complete the project. Additional project dates include:

#	Location	Start	Ready for Pas	End	# Days
AE-3	Exterior - Window Systems	Monday, 1-15-24	Saturday, 2-10-24 @ 5:30 p.m.	Saturday, 2-10-24 @ 5:30 p.m.	24

Schedule Restrictions - Set-up:

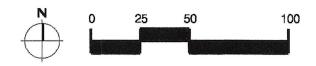
The Contractor will not be allowed to mobilize to the project site until 7:00 a.m. on Monday, January 15, 2024.

Project Diagrams:

There is one (1) project diagram provided.







END OF ADDENDUM