

ADDENDUM No. 2
July 25, 2007

ASBESTOS ABATEMENT SPECIFICATIONS

Abatement for 2007 "O-House" Renovations
@
Southfield High School

Owner

SOUTHFIELD PUBLIC SCHOOLS
John W. English Administrative Center
24661 Lahser Road
Southfield, Michigan 48033

Building(s)

SOUTHFIELD HIGH SCHOOL
24675 Lahser Road
Southfield, Michigan 48033

OWNER

Southfield Public Schools
John W. English Administration Building
24661 Lahser Road
Southfield, Michigan 48033

ASBESTOS CONSULTANT

healthAIR, inc.
23937 Research Drive
Farmington Hills, Michigan 48335
Phone: (248) 426-0165
Fax: (248) 427-0305

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

1. **Bid Advertisement**

Correction of Dates

Bid Advertisement (Pages 2-9): Due to significant changes to the project schedule, portions of the “Bid Advertisement” have been corrected to reflect these changes. A copy of the corrected portions of the “Bid Advertisement” is located in Attachment #1. Please refer to the corrected “Bid Advertisement” included in this addendum only. Do not refer to the “Bid Advertisement” issued in the specification documents.

2. **Bid Form for Bid No. 07.03A**

Corrections to Bid Form

Bid Form - Bid No. 07.03A (Page 18): Due to significant changes to the project scope of work, additional alternate bids have been included in the project, and the “Bid Form - Bid No. 07.03A” has been corrected to reflect these changes. A copy of the corrected “Bid Form - Bid No. 07.03A” is located in Attachment #2. Please submit the corrected “Bid Form - Bid No. 07.03A” included in this addendum only. Do not submit the “Bid Form - Bid No. 07.03A” issued in the specification documents.

3. **Project Scope of Work and Requirements**

Corrections and Adjustments to Project Scope of Work and Requirements

SECTION II: Project Scope of Work and Requirements (Pages 23-86): Due to significant changes to the project scope of work and schedule, the entire “SECTION II: Project Scope of Work and Requirements” has been corrected to reflect these changes. A copy of the corrected “SECTION II: Project Scope of Work and Requirements” is located in Attachment #3. Please refer to the corrected “SECTION II: Project Scope of Work and Requirements” included in this addendum only. Do not refer to the “SECTION II: Project Scope of Work and Requirements” issued in the specification documents.

Attachment #1

Corrected Portions of Bid Advertisement

BID ADVERTISEMENT

Southfield Public Schools will receive sealed **Request for Proposal (RFP) Packets** until 2:00 p.m. Local Time, Friday, August 3, 2007 for:

**Asbestos Abatement
at
Southfield High School
2007 "O-House" Renovations**

A General Pre-Bid Examination will be held to review and answer questions relating to the projects:

Time: 2:00 p.m. Local Time on Thursday, July 12, 2007

At: Southfield High School - Auditorium
24675 Lahser Road
Southfield, Michigan 48033

Directions: A map of the SPS building(s) discussed in this Bid Advertisement follows the Project Summary.

Schedule: The format of the Pre-Bid Examination will be an initial presentation on the bidding process and the scope of work. This activity will be conducted in the Auditorium in the "O-House" (wing facing Lahser Road) from approximately 2:00 p.m. to 3:00 p.m. Afterwards, healthAIR, inc. will provide a brief building tour of the building and host a question & answer session for interested bidders. The building specific review with healthAIR, inc. is not required, but is encouraged.

All Request For Quotation Packets must be mailed or delivered to the Main Lobby of Southfield Public Schools' Administration Building:

Mail To: Attn: Martha Ritchie
Southfield Public Schools
John W. English Administrative Center
24661 Lahser Road
Southfield, Michigan 48033

All Request for Proposal Packets shall be submitted in a sealed envelope and labeled as outlined below:

Format: SEALED PROPOSAL
Southfield High School
Asbestos Abatement
<Contractor Name>
<Contractor Address>
<Contractor Phone Number>

All Request for Proposal Packets must be received by the Southfield Public Schools' Purchasing Department no later than:

Time: 2:00 p.m. Local Time, Friday, August 3, 2007

At: Southfield Public Schools
John W. English Administrative Center
Main Lobby
24661 Lahser Road
Southfield, Michigan 48033

Format: All official hard copy Request for Proposal Packets must be received prior to the date and time specified in order to be accepted.

All Request for Proposal Packets will be publicly opened:

Time: 2:00 p.m. Local Time, Friday, August 3, 2007
At: Southfield Public Schools
John W. English Administrative Center
Main Lobby
24661 Lahser Road
Southfield, Michigan 48033
Format: Complete Bid Tabulations will be faxed or emailed to all plan holders by 12:00 p.m., Monday, August 6, 2007. The Owner and Owner's Representatives request that no Bidders call for bid results prior to 12:00 p.m., Monday, August 6, 2007.

Southfield Public Schools intends to formally award the projects no later than:

Time: Friday, August 24, 2007
Event: Southfield Public Schools' Board of Education Meeting
At: John W. English Administrative Center
24661 Lahser Road
Southfield, Michigan 48033
Note: healthAIR, inc. will issue a formal letter of intent to the low, qualified Bidder no later than Friday, August 24, 2007, to allow the recommended contractor the opportunity to prepare for the project, submit the project notification and accurately consider other bids. By submitting a bid, the Bidder agrees to submit the necessary project notifications by the end of the day Friday, August 24, 2007, upon receipt of the Letter of Intent. By submitting a bid, the Bidder has the right to withdraw the notification on Friday, August 3, 2007, if the project has not been formally awarded. For purposes of this bid, "formally awarded" includes, but is not limited to, a written notification from healthAIR, inc. that the Board of Education has awarded the contract and that a written purchase order and/or contract is pending.

Questions Regarding Project Specifications:

All questions regarding the Project Specifications should be addressed to:

Mr. Steven Roach, healthAIR, inc.
Office: (248) 426-0165
Mobile: (734) 576-3056
Email: slr@health-air.com

Mr. Kory Stevens, healthAIR, inc.
Office: (248) 426-0165
Mobile: (734) 576-1887
Email: kory@health-air.com

Mr. Roosevelt Austin, healthAIR, inc.
Office: (248) 426-0165
Mobile: (734) 576-0765
Email: rose@health-air.com

All official changes and interpretations to the Project Specifications will be made via addenda only. Bidders are encouraged to fax [(248) 427-0305] or email (to the email address(es) listed above) all questions regarding the specifications, bidding procedures, etc. to healthAIR, inc.

Building/Site Visits:

All Bidders are encouraged to visit the site on their own following the Pre-Bid Examination. All Bidders must check in with the building office or the custodial office/receiving as soon as they reach the building. The building is open and available during the Summer 2007 Vacation Period Monday - Friday from 7:00 a.m. - 5:30 p.m.. Due to building security, access may be limited to only certain entrances. It is recommended that all Bidders contact healthAIR, inc. to allow for notification to the building/SPS Administration.

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Southfield Public Schools
2007 "O-House" Renovations @ Southfield High School

Project Specification Documents:

Project Specification Documents will be available at available at www.health-air.com beginning on Monday, July 9, 2007. Project Specification Documents can also be picked up by visiting healthAIR, inc.'s office at 23937 Research Drive, Farmington Hills, Michigan, between 9:00 a.m. and 4:00 p.m. starting Tuesday, July 10, 2007. There will be a \$50.00 per set (non-refundable) charge for all hard copies of Project Specification Documents. Bidders must notify healthAIR, inc. twenty-four (24) hours in advance. healthAIR, inc. recommends calling the Farmington Hills office [(248) 426-0165] first to arrange for pick-up of the specifications. Project Specification Documents have not been provided by healthAIR, inc. to any advertising agencies. Specifications will **not** be mailed to Bidders unless pre-paid with postage.

Bidders desiring more than one (1) set of documents may obtain additional sets for \$50.00 per set (non-refundable), up to a maximum of three (3) sets. All checks should be made payable to "healthAIR, inc." Specifications will be mailed to Bidders upon receipt of pre-payment of the a non-refundable charge (\$30.00) for shipping and handling.

Bonding Requirements:

Southfield Public Schools requires that all Bidders submit a Bid Bond in accordance with the requirements summarized below and that all selected Contractors submit Performance and Labor and Materials Bonds in accordance with the requirements summarized below:

Bid Bond

Amount: 5%

Requirements: The Bidder shall submit the required Bid Security in the form of a Bid Bond by a Treasury approved surety licensed to do business in the State of Michigan, a Cashier's Check, or a Certified Check in the amount of 5% of the bid price. The Bid Security shall be submitted with the understanding that if the bid is accepted, the Bidder will enter into a formal contract with the Owner and that the required Performance and Labor and Material Payment Bonds (as listed below and fully detailed in the General Conditions section) will be provided by the Contractor. The Bid Security obligee is Southfield Public Schools. Bidders shall agree not to withdraw proposals for a period of thirty (30) days after the bid due date.

Performance Bond & Labor and Material Payment Bonds

Amount: 100%

Requirements: The accepted Contractor will be required to furnish, in the amount of 100% of the Contract Price, satisfactory Performance Bond and Labor and Material Payment Bond by a Treasury approved surety, as listed on the U.S. Department of Treasury Circular 570, licensed to do business in the State of Michigan. The U.S. Department of Treasury Circular 570 can be viewed at the following web site: <http://fms.treas.gov/c570.index.html>. The accepted Contractor will be required to furnish the bonds prior to the start of the project. Mobilization to the project site will not begin until acceptable bonds are furnished by the accepted Contractor.

Additional Information for Bidders:

All applicable insurance policies (including asbestos specific) will be required of each accepted Bidder. Bidders must submit copies of the Contractor's current State of Michigan Asbestos Abatement License. In accordance with MCL 380-1267 (Public Act 232 of 2005), Bidders must also submit a notarized Familial Relationship Disclosure Statement. This project is not tax exempt from State Sales Tax and/or Use Tax. All materials and supplies incorporated and used in construction and becoming a permanent part of this project will not be exempt from State Sales Tax and/or Use Tax. Prevailing wages are requested for this project.

ASBESTOS ABATEMENT

Southfield Public Schools
2007 "O-House" Renovations @ Southfield High School

Request for Proposal Packet - Submittal Requirements:

The RFP Packet (Pages 14-22) shall be submitted on the forms furnished in this specification. **The RFP Packet must be submitted in duplicate.** The RFP Packet and all additional information requested must be submitted as follows:

Item	Item Description	Page No.
1.	RFP Submittal Packet Cover Sheet	14
2.	Bidder's Agreement and Certification and Bidder Acknowledgment	15-16
3.	Bid No. 07.03 - Southfield High School - "O-House"	17
4.	Bid No. 07.03A - Southfield High School - "O-House" - Alternate Bids	18
5.	Familial Relationship Disclosure Statement	19
	[STATE REQUIREMENT - BID WILL NOT BE ACCEPTED WITHOUT THIS SIGNED AND NOTARIZED STATEMENT]	
6.	Bidder's Statement of Qualifications and Statement of Bid Preparation	20-22
7.	Bidder's Response to Statement of Qualifications and Statement of Bid Preparation	Submit
8.	Bid Security	Submit
9.	Contractor's Current State of Michigan Asbestos Abatement License	Submit
10.	Proof of Insurance	Submit
11.	Additional Information Submitted by Bidder	Submit

healthAIR, inc. and Southfield Public Schools request that the Bidder enter "NO BID" on the bid forms in lieu of omitting the page.

- Bid No. 07.03 -
Southfield High School - "O-House"
[Project Summary for Bid Advertisement]

This project summary provides a summary of the asbestos-containing materials and non-asbestos-containing materials which will be removed as part of the bid. The scope of work, project requirements and project schedule are provided in the specification documents. The Contractor is encouraged to review all aspects of the scope-of-work when preparing the bid and is instructed not to use this summary when preparing this bid.

[ABATEMENT]

- Project #1 - "Room 101C, 102, 102A, 104D - Ceiling and Flooring Abatement"
The first project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials and all asbestos floor tile materials from four connected rooms - Room 101C, 102, 102A and 104D (for purposes of this specification "Room" means functional space and corresponds to the space number indicated on the architectural drawings). This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will also include the demolition and disposal of all casework to expose additional quantities of asbestos flooring materials. The project will begin on Monday, September 10, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, September 14, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities.

- Project #2 - "Room 101A - Flooring Abatement"
The second project for abatement at Southfield High School includes the removal and disposal of all asbestos floor tile materials from Room 101A. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Saturday, September 14, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities.

- Project #3 - "Access Hatches - Ceiling Abatement"
The third project for abatement at Southfield High School includes the removal and disposal of between 4 square feet (2'x2') and 9 square feet (3'x3') of asbestos acoustical ceiling plaster material and approximately 10 lineal feet of asbestos thermal system insulation from each of up to six locations in the "O-House" to allow for mechanical access hatches. This project at Southfield High School will involve a separate negative pressure mini-enclosures to remove the asbestos acoustical ceiling plaster materials and asbestos thermal system insulation materials using Class I removal procedures. The project will begin on Monday, September 17, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day Wednesday, September 19, 2007. The project schedule allows for a total of three (3) work days to complete the project, with additional time allotted for tear down activities.

- Project #4 - "Room 323B - Flooring Abatement"
The fourth project for abatement at Southfield High School includes the removal and disposal of limited amounts of asbestos floor tile materials from Room 323B. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Wednesday, September 19, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities. An alternate bid is requested for the removal and disposal of all remaining asbestos floor tile from this project area.

- Project #5 - “Room 225 - Flooring Abatement”
The fifth project for abatement at Southfield High School includes the removal and disposal of all asbestos floor tile materials from Room 225. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Thursday, September 20, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities.
- Project #6 - “North End Classrooms, Second Floor - Ceiling Abatement”
The sixth project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials from Room 215, 216, 217, 218, 219, 220, 221, 222 and 226. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials using Class I removal procedures. The project will begin on Friday, September 21, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Saturday, September 29, 2007. The project schedule allows for a total of eight (8) work days to complete the project, with additional time allotted for tear down activities.
- Project #7 - “Room 223 & Room 323A - Ceiling and Flooring Abatement”
The seventh project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials, all non-asbestos carpet materials and all asbestos floor tile materials from Room 223 and all asbestos floor tile materials from the connected associated rooms Room 223A, 223B, 223C, and Room 323A. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will begin on Monday, October 1, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, October 5, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities.

[REINSULATION]

- There are no re-insulation activities associated with this bid.

[DEMOLITION]

- There are no notable demolition activities performed outside of an asbestos regulated area associated with this bid.

- Bid No. 07.03A -
Southfield High School - “O-House” - Alternate Bids
[Project Summary for Bid Advertisement]

This project summary provides a summary of the asbestos-containing materials and non-asbestos-containing materials which will be considered as alternate bids. The scope of work, project requirements and project schedule are provided in the specification documents. The Contractor is encouraged to review all aspects of the scope-of-work when preparing the bid and is instructed not to use this summary when preparing this bid.

[ABATEMENT]

- Alternate Bid #1 (07.03A #1) - “Add Floor Tile to Project #6 (North End Classrooms, Second Floor)”
The first alternate bid for consideration is the addition of the removal and disposal of all asbestos floor tile from Room 215, 216, 217, 218, 219, 220, 221, 222 and 226. The corresponding project, Project #6, involves the removal and disposal of all asbestos acoustical ceiling plaster from the project area. The addition of these abatement activities to the project will add one (1) additional work day to the abatement schedule.

- Alternate Bid #2 (07.03A #2) - “Add Floor Tile to Project #7 (Room 323A)”
The second alternate bid for consideration is the addition of the removal and disposal of all asbestos floor tile from Room 323A. The corresponding project, Project #7, involves the removal and disposal of all asbestos acoustical ceiling plaster from Room 223 and 323A, as well as all asbestos floor tile from Room 223. The addition of this abatement activity to the project will not affect the project schedule for Project #7.

- Alternate Bid #3 (07.03A #3) - “Add Project 8 (Room 115, 116, 117)”
The third alternate bid for consideration is the addition of a project including the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from Room 115, 116, and 117. the removal and disposal of all asbestos acoustical ceiling plaster materials and all asbestos floor tile materials from Room 115, 116 and 117. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will begin on Monday, September 10, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, September 14, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities. This project will be conducted concurrently with Project #1.

- Alternate Bid #4 (07.03A #4) - “Expand Ceiling Abatement in Project 8 (Room 118, 119, 120, 121A, 121B)”
The fourth alternate bid for consideration is the addition of the removal and disposal of all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A and 121B. The corresponding project, Project #8 (Alternate Bid #3), involves the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from a three classroom project area (Room 115, 116 and 117). The addition of these abatement activities to the project will add three (3) additional work days to the abatement schedule.

- Alternate Bid #5 (07.03A #5) - “Expand Flooring Abatement in Project 8 (Room 118, 119, 120, 121A, 121B)”
The fifth alternate bid for consideration is the addition of the removal and disposal of all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A and 121B. The corresponding project, Project #8 (Alternate Bid #3 and Alternate Bid #4), involves the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from a three classroom project area (Room 115, 116 and 117) and all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A, and 121B. The addition of these abatement activities to the project will add one (1) additional work day to the abatement schedule.

[REINSULATION]

- There are no reinsulation activities associated with these alternate bids.

[DEMOLITION]

- There are no notable demolition activities performed outside of an asbestos regulated area associated with these alternate bids.

ASBESTOS ABATEMENT

Southfield Public Schools
2007 “O-House” Renovations @ Southfield High School

Attachment #2

Corrected Bid Form - Bid No. 07.03A

**Bid No. 07.03A -
Southfield High School - "O-House" - Alternate Bids**

The Bidder hereby agrees and certifies to comply with all requirements described within this Project Specification and the listed and acknowledged Addenda and agrees to accept a payment of

Bid 07.03A #1 - Add Floor Tile to Project #6 (North End Classrooms, Second Floor):

_____ dollars (\$_____)

Bid 07.03A #2 - Add Floor Tile to Project #7 (Room 323A):

_____ dollars (\$_____)

Bid 07.03A #3 - Add Project 8 (Room 115, 116, 117):

_____ dollars (\$_____)

Bid 07.03A #4 - Expand Ceiling Abatement in Project 8 (Room 118, 119, 120, 121A, 121B):

_____ dollars (\$_____)

Bid 07.03A #5 - Expand Flooring Abatement in Project 8 (Room 118, 119, 120, 121A, 121B):

_____ dollars (\$_____)

for all work regarding these alternate bids as described in the "Project Scope of Work and Requirements," including the Project Summary, Abatement Activities, Abatement Requirements, Additional Requirements and Information, Project Diagrams and the Time Schedule.

The Undersigned, a Representative of the Bidder, acknowledges the agreements from the Base Bid 07.03 on the preceding page.

COMPANY NAME _____

PRINT NAME _____

TITLE _____

SIGNATURE _____

Bidder Noted Conditions/Restrictions on the Alternate Bids:

- None
- Listed Below:

Attachment #3

Corrected SECTION II: Project Scope of Work and Requirements

SECTION II

**PROJECT SCOPE of WORK and
REQUIREMENTS**

- Bid No. 07.03 -
Southfield High School - "O-House"
[Project Scope of Work and Requirements]

PROJECT SUMMARY -

Project Description: Bid No. 07.03 is for the necessary asbestos abatement projects at Southfield High School's - "O-House" prior to renovations of various classroom spaces. The projects, which will be conducted in August 2007, will include the removal and disposal of asbestos acoustical ceiling plaster material, asbestos floor tile material and asbestos thermal system insulation. The project includes selective interior demolition, including, but not limited to, the removal of casework to address covered asbestos floor tile.

Project Sequencing: There will be seven (7) project groups for the asbestos abatement activities at Southfield High School's - "O-House". The projects include:

Project #1 - "Room 101C, 102, 102A, 104D - Ceiling and Flooring Abatement"

The first project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials and all asbestos floor tile materials from four connected rooms - Room 101C, 102, 102A and 104D (for purposes of this specification "Room" means functional space and corresponds to the space number indicated on the architectural drawings). This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will also include the demolition and disposal of all casework to expose additional quantities of asbestos flooring materials. The project will begin on Monday, September 10, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, September 14, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities.

Project #2 - "Room 101A - Flooring Abatement"

The second project for abatement at Southfield High School includes the removal and disposal of all asbestos floor tile materials from Room 101A. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Saturday, September 14, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities.

Project #3 - "Access Hatches - Ceiling Abatement"

The third project for abatement at Southfield High School includes the removal and disposal of between 4 square feet (2'x2') and 9 square feet (3'x3') of asbestos acoustical ceiling plaster material and approximately 10 lineal feet of asbestos thermal system insulation from each of up to six locations in the "O-House" to allow for mechanical access hatches. This project at Southfield High School will involve a separate negative pressure mini-enclosures to remove the asbestos acoustical ceiling plaster materials and asbestos thermal system insulation materials using Class I removal procedures. The project will begin on Monday, September 17, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day Wednesday, September 19, 2007. The project schedule allows for a total of three (3) work days to complete the project, with additional time allotted for tear down activities.

Project #4 - "Room 323B - Flooring Abatement"

The fourth project for abatement at Southfield High School includes the removal and disposal of limited amounts of asbestos floor tile materials from Room 323B. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Wednesday, September 19, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities. An alternate bid is requested for the removal and disposal of all remaining asbestos floor tile from this project area.

Project #5 - "Room 225 - Flooring Abatement"

The fifth project for abatement at Southfield High School includes the removal and disposal of all asbestos floor tile materials from Room 225. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Thursday, September 20, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities.

Project #6 - "North End Classrooms, Second Floor - Ceiling Abatement"

The sixth project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials from Room 215, 216, 217, 218, 219, 220, 221, 222 and 226. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials using Class I removal procedures. The project will begin on Friday, September 21, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Saturday, September 29, 2007. The project schedule allows for a total of eight (8) work days to complete the project, with additional time allotted for tear down activities.

Project #7 - "Room 223 & Room 323A - Ceiling and Flooring Abatement"

The seventh project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials, all non-asbestos carpet materials and all asbestos floor tile materials from Room 223 and all asbestos floor tile materials from the connected associated rooms Room 223A, 223B, 223C, and Room 323A. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will begin on Monday, October 1, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, October 5, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities.

SCOPE OF WORK and REQUIREMENTS -

The "Abatement Activities", "Summary of Locations", "Abatement Requirements", "Final Clearance Sample Requirements", "Project Schedule" and "Project Diagrams" for the asbestos abatement projects are provided on the following pages. Information for each project is generally formatted in the following manner (by section):

- **Abatement Activities**
This section provides a summary of all asbestos materials and non-asbestos materials required to be removed and disposed of by the Contractor.
- **Summary of Locations**
For projects with more than one functional space (location), this section provides a tabular summary for all materials identified in the "Abatement Activities" section. When present, room entries and closets are included in the classroom area and are not listed individually.
- **Abatement Requirements**
This section provides a summary of all set-up, removal and cleaning requirements relating to the removal of the materials identified in the "Abatement Activities" section.
- **Final Clearance Sample Requirements**
This section provides a summary of the types of clearance samples scheduled to be collected, the number of samples to be collected and the clearance level.
- **Project Schedule**
This section provides a summary of the project schedule, including project start and end dates. For certain projects, additional milestone dates may be provided.
- **Project Diagrams**
This section provides a graphical representation of the limits of the regulated area, showing all functional spaces included in the project.

“General Information and Requirements” relating to the entire bid are located after the information for Southfield High School - “O-House” - Alternate Bid.

- **General Information and Requirements**

This section provides general project information and project requirements relating to all activities associated with the work at Southfield High School.

Project #1 - "Room 101C, 102, 102A, 104D - Ceiling and Flooring Abatement"

Project Summary:

The first project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials and all asbestos floor tile materials from four connected rooms - Room 101C, 102, 102A and 104D (for purposes of this specification "Room" means functional space and corresponds to the space number indicated on the architectural drawings). This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will also include the demolition and disposal of all casework to expose additional quantities of asbestos flooring materials. The project will begin on Monday, September 10, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, September 14, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities.

Abatement Activities:

1. Remove and dispose of all asbestos acoustical ceiling plaster materials and all associated suspension materials from four connected functional spaces at the south end of the First Floor of the "O-House".
2. Remove and dispose of all non-asbestos casework material from four connected functional spaces at the south end of the First Floor of the "O-House".
3. Remove and dispose of all asbestos floor tile material from four connected functional spaces at the south end of the First Floor of the "O-House".

Summary of Locations:

Room / Location	Materials ->	ACP	NAC	FT
Room 101C		x	x	x
Room 102		x	x	x
Room 102A		x		x
Room 104B		x	x	x

Key for Table

ACP	Asbestos Acoustical Ceiling Plaster
NAC	Non-Asbestos Casework
FT	Asbestos Floor Tile
x	Material present in the functional space

The scope of abatement for Project #1 includes all ceiling materials and all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and any other sized replacement tile (which may be located throughout or just in portions of the proposed abatement areas), including any currently inaccessible flooring materials exposed by the removal of casework.

Abatement Requirements:

The Contractor will be allowed to construct a single negative pressure enclosure for the complete removal of all of the materials detailed in the "Abatement Activities" for Project #1.

1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project area. The project area includes all portions of the functional spaces listed in the "Summary of Locations" table, including all above ceiling areas. When present in the classrooms, materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets are included when exposed by pre-abatement demolition activities. Additional descriptions for certain areas are listed below:

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- Above Ceilings: The Contractor will also be responsible for all asbestos thermal system insulation (including any and all non-asbestos pipe insulation with asbestos packed fitting insulation) located above the asbestos acoustical ceiling plaster. The Contractor will be compensated via change order for the additional removal and disposal of the asbestos thermal system insulation at a rate of \$8.00 per lineal foot.
 - Hallways: There will be no abatement activities in the hallway area. The only set-up activities necessary in the hallway are the set-up of the decontamination chamber and, if desired, a bag out chamber. All functional spaces to be abated are connected through interior doors.
2. The regulated area 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. The Contractor will not be responsible for any materials below cabinets, shelving units, counters, etc. left in place prior to the start of the project (except for materials exposed by the demolition of casework).
 3. One negative pressure enclosure will be set-up in accordance with the following guidelines prior to the start of any abatement activities:
 - A critical barrier will be placed over all doors between the project area and the hallway. The critical barriers will be constructed of a minimum of one (1) layer of six-mil polyethylene sheeting. Asbestos warning signs will be posted on the non-project side of each critical barrier prior to the commencement of abatement activities. 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, bookcases, lockers and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - Two (2) layers of six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project area where ceiling materials will be removed. The walls will be staggered so the outer wall can be removed following abatement of all acoustical ceiling plaster materials and the associated suspension systems. The set-up of impermeable dropcloths over the floors will be at the discretion of the Contractor.
 - A minimum of four (4) air filtration devices (AFDs) will be placed in the project area to provide 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 to the enclosure at one of the doors between the classroom and the hallway. A black polyethylene barrier will be placed across the hallway in front of the decontamination chamber to provide a visual barrier to the work area. The barrier will not be attached to the ceiling. If the Contractor attaches the barrier to the ceiling, the competent person will be removed from the site for the remainder of the project.
 - The construction of a bag-out chamber will be permitted at the door between the classroom and the hallway at the opposite end of the enclosure from the decontamination chamber. The exact set-up, position and construction of the bag-out chamber must be reviewed with healthAIR, inc.'s Project Coordinator. Bag out chambers set-up without the review and approval of healthAIR, inc. will be sealed and/or torn down at the discretion of healthAIR, inc.
 4. All casework materials will be removed using wet methods **after** establishment of the entire enclosure. Demolition notes:

- The Owner will be responsible for shutting off all utilities to the casework, including, but not limited to, gas, electric and water. The Contractor will be responsible for confirming the shut off prior to demolition.
 - The Contractor will carefully remove all casework attached to exterior walls to inspect for hidden asbestos-containing materials, including, but not limited to, transite panels, aircell board and packed fitting insulation on fiberglass lines. If any of these materials are discovered, the Contractor will cease with demolition of the effected area of casework. The effected areas will be removed and disposed of as asbestos waste and the Contractor will be compensated for the additional removal and disposal costs.
 - The Contractor may dispose of all of the casework as non-asbestos waste as long as no asbestos-containing materials have been disturbed inside of the enclosure and no additional asbestos-containing materials are found during demolition. healthAIR, inc. reserves the right to require wet-wiping and/or HEPA vacuuming of casework prior to removal from the enclosure when damaged floor tile is encountered below the casework.
5. All lights will be disconnected and decontaminated using wet methods **after** establishment of the entire enclosure. Lighting notes:
- The Contractor will be responsible for the disposal of the light fixtures. The light fixtures may be disposed of as non-asbestos waste if the fixtures are fully decontaminated using a combination of wet wiping and HEPA vacuuming before the fixtures are removed from the enclosure. Prior to disposal of the light fixtures, the Contractor will review the District's lighting needs with healthAIR, inc.'s Project Coordinator to confirm that the light fixtures are not needed in other buildings.
 - The Contractor will be responsible for removing all light ballasts and packaging the materials in Owner provided drums (ballasts). The Contractor will be responsible for removing all light tubes from the fixtures and packaging the materials in Owner provided boxes (light tubes). No lighting components will be removed prior to establishment of the negative pressure enclosure.
 - The Owner will be responsible for final disposal and associated transportation of any hazardous wastes from the site that are generated from the removal of the light fixtures.
6. All window blinds and associated tracking material attached to asbestos acoustical ceiling plaster (above the exterior windows) will be removed after establishment of the entire enclosure and will be disposed of as asbestos waste.
7. Prior to the start of gross removal, the Contractor will cut access holes/remove a small amount of material at the ends of the enclosure to identify locations of openings between the project area and non-project areas. Abatement will begin in the locations of these openings. The Contractor will then seal all cavities between the top of the ceiling and the roof deck that are exposed once abatement starts. All visible cavities leading to non-project areas must be sealed and reviewed by healthAIR, inc.'s Project Manager prior to the start of gross removal activities. Any other cavities found above the ceiling once the ceiling plaster is removed will be sealed with six-mil polyethylene sheeting and duct tape upon discovery.
8. All asbestos acoustical ceiling material 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.
9. All suspension materials associated with the acoustical ceiling plaster material will be removed and disposed of as asbestos waste. The suspension materials include, but are not limited to, wires, hangers, black iron and wire mesh. The Contractor will remove all black iron not needed to support electrical conduit. Where black iron enters the block walls, the Contractor will cut the black iron flush to the wall.

10. All speakers, fire alarms, exit signs and motion detectors connected to the ceiling may be removed and disposed of as asbestos waste with the ceiling materials. The Owner will salvage all items as necessary prior to the start of the project.
11. The Contractor may use friable means, including mechanical means, to remove the asbestos floor tile in the project area. The materials will be removed inside of an established negative pressure enclosure. The material will be disposed of as friable asbestos waste.
12. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping and HEPA vacuuming during the final cleaning portion of the project. When two layers of polyethylene sheeting are present, the Contractor will remove the top layer of polyethylene sheeting during the final cleaning portion of the project.
13. 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:

The negative pressure enclosure established for the removal of the materials in the Project #1 work area will be cleared using Transmission Electron Microscopy (TEM). Pursuant to the requirements of AHERA, thirteen (13) TEM samples will be collected from the enclosure - five inside the enclosure, five outside the enclosure and three sample blanks. All five inside samples must be analyzed below an average of $70.0 \text{ AS}/_{\text{mm}^2}$ to allow for tear down of the enclosure. All TEM air samples will be collected in accordance with the AHERA regulation and all EPA recommended guidelines.

Project Schedule:

The Contractor will start the project on Monday, September 10, 2007, and will be complete with all abatement activities, and be ready for TEM clearance sampling, by the end of the work shift on Friday, September 14, 2007. The building will be available each work day from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed five (5) work days (Monday - Friday) to complete the project, with additional time provided for tear down activities. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
1	Room 101C - 104B - Ceiling & Flooring Abatement	Monday, 9-10-07	Friday, 9-14-07 @ 2:30 a.m.	Monday, 9-17-07 @ 5:30 p.m.	5 + td

Schedule Restrictions - Set-up:

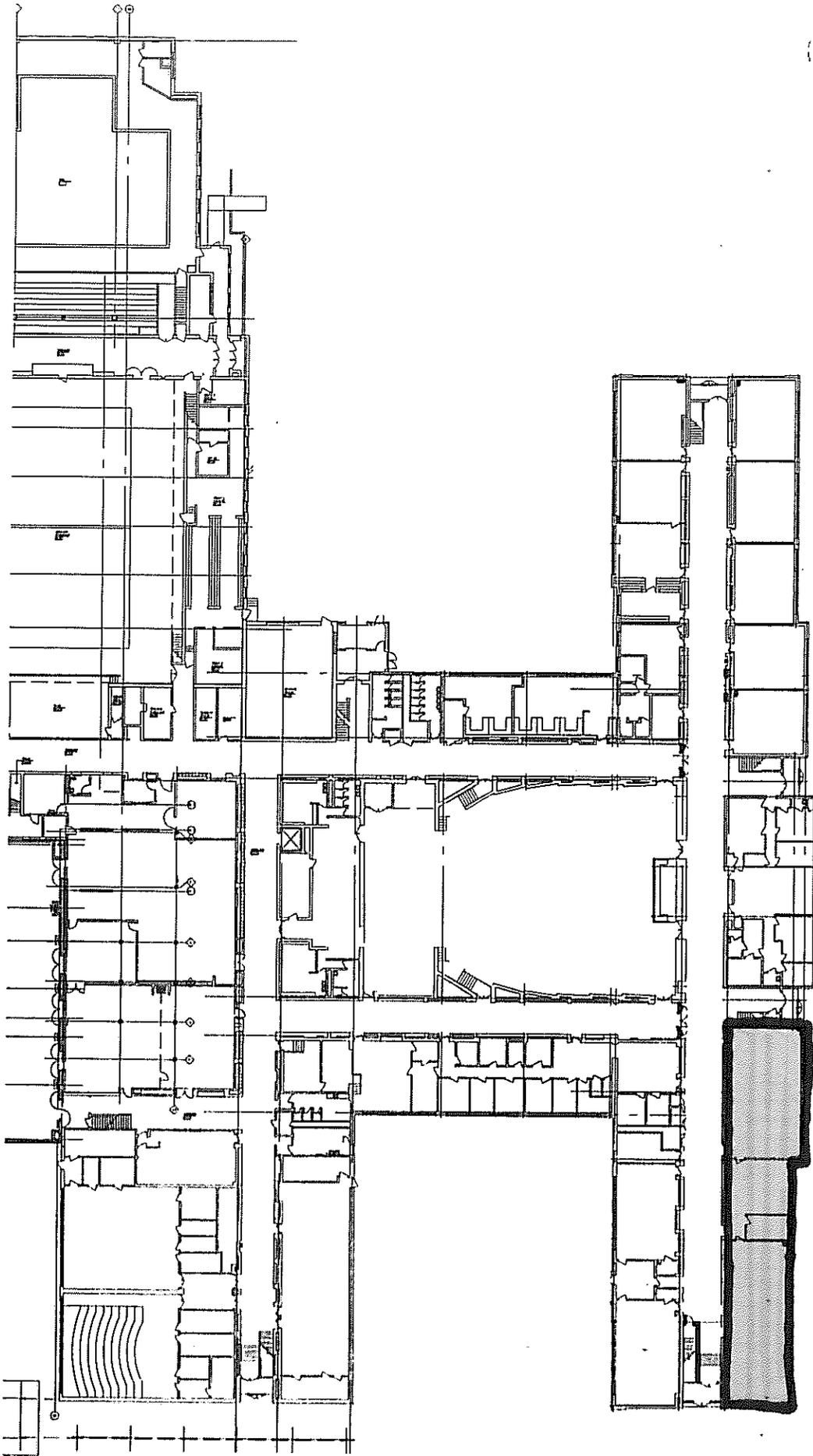
The Contractor will not be allowed to mobilize to the project site until Monday, September 10, 2007.

Schedule Information - TEM Clearance Sampling:

This abatement schedule projects the collection of TEM clearance air samples on Saturday, September 15, 2007, with analysis completed the morning of Monday, September 17, 2007. TEM clearance air sample results collected per this type of schedule are typically available between 12:00 p.m. and 2:00 p.m.

Project Diagrams:

There is one (1) project diagram provided for Project #1. The attached diagram shows the approximate locations of asbestos ceiling and flooring materials to be removed and approximate boundaries of the regulated areas.



COMPOSITE FIRST FLOOR PLAN

PROJECT #1

Project #2 - "Room 101A - Flooring Abatement"

Project Summary:

The second project for abatement at Southfield High School includes the removal and disposal of all asbestos floor tile materials from Room 101A. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Saturday, September 15, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities.

Abatement Activities:

1. Remove and dispose of all asbestos floor tile material from Room 101A.

Summary of Locations:

Room / Location	Materials ->	FT
Room 101A		x

Key for Table

FT Asbestos Floor Tile
x Material present in the functional space

The scope of abatement for Project #2 includes all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and any other sized replacement tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct a single negative pressure enclosure for the complete removal of all of the materials detailed in the "Abatement Activities" for Project #2.

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.
2. The regulated area 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. The Contractor will not be responsible for any materials below fixed cabinets, shelving units, counters, etc. left in place prior to the start of the project.
3. One negative pressure enclosure will be set-up in accordance with the following 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 doors to non-project areas, such as adjoining rooms. Asbestos warning signs will be placed on the non-project side of the door when necessary to prohibit entrance.
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, will be placed over all ceiling return vents, bookcases, lockers and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - One (1) layer of six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project areas.

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- A minimum of one (1) air filtration device (AFDs) will be required. 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 and will be set-up at the classroom door. A black polyethylene barrier will be placed across the hallway in front of the decontamination chamber to provide an additional visual barrier to the work area.
 - The construction of a bag-out chamber will not be permitted for these projects. All waste will pass through the decontamination chamber.
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. 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.
 6. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping 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.
 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:

The regulated area established for the removal of the materials described in Project #2 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. healthAIR, inc. reserves the right to reduce the number of clearance air samples to one (1) for floor tile removal projects.

Project Schedule:

The Contractor will start the project on Saturday, September 15, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work shift on Saturday, September 15, 2007. The building will be available from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed a single work day (Saturday) to complete the project, including tear down activities. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
2	Room 101A - Flooring Abatement	Saturday, 9-15-07	Saturday, 9-15-07 @ 11:00 p.m.	Saturday, 9-15-07 @ 2:30 a.m.	1 w/td

Schedule Restrictions - Abatement:

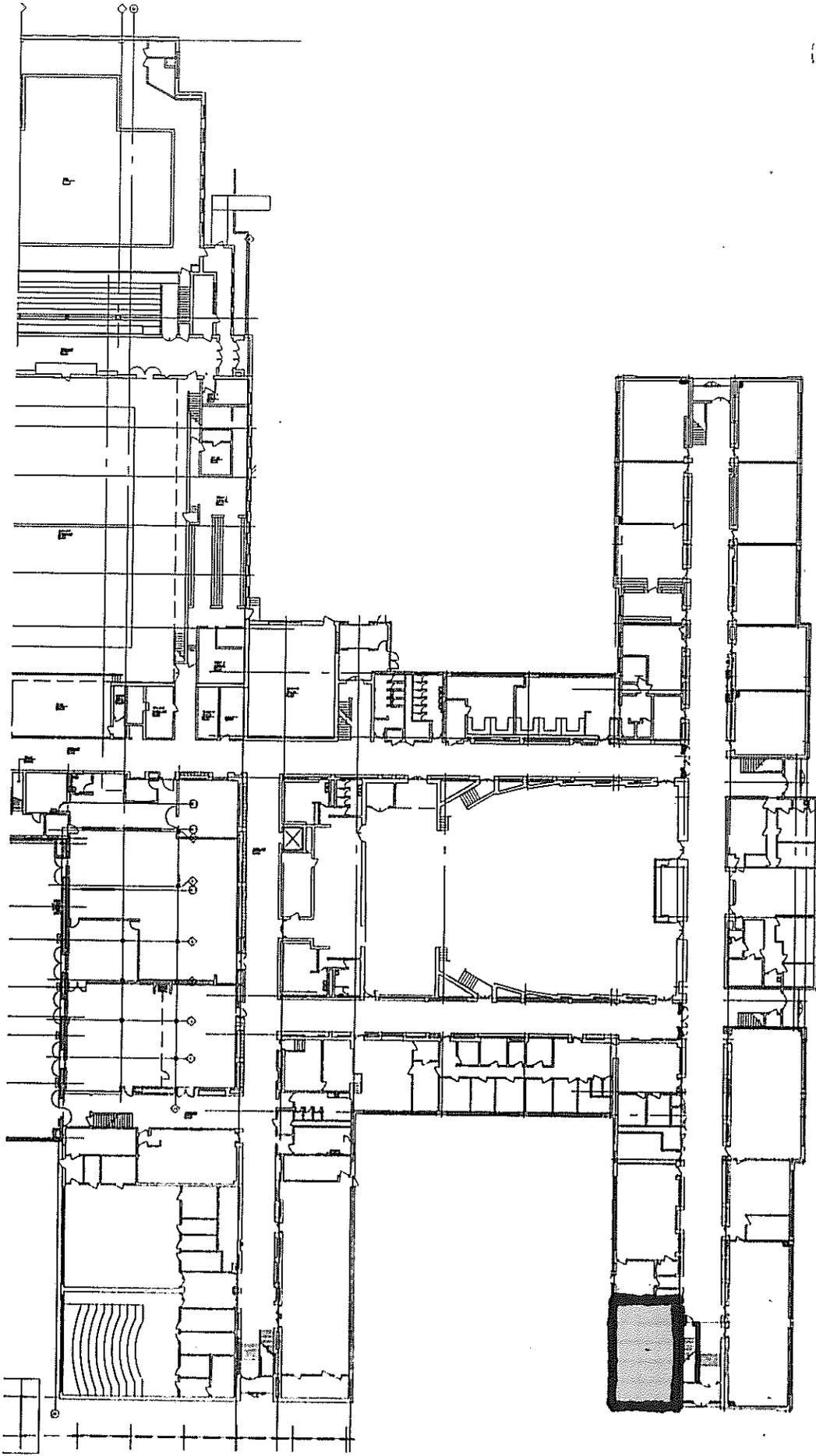
The Contractor will not be allowed to begin work, including set-up activities, in Project #2 until the enclosure for Project #1 has been approved for TEM clearance sampling.

Schedule Restrictions - Saturday Work Hours:

The Contractor may be allowed to change the work shift for all Saturday work to begin as early as 12:00 p.m. with prior approval from healthAIR, inc. and Southfield Public Schools. The duration of the work shift (maximum of 10.5 hours) will not change.

Project Diagrams:

There is one (1) project diagram provided for Project #2. The attached diagram shows the approximate locations of asbestos flooring materials to be removed and approximate boundaries of the regulated area.



COMPOSITE FIRST FLOOR PLAN

PROJECT #2

Project #3 - "Access Hatches - Ceiling Abatement"

Project Summary:

The third project for abatement at Southfield High School includes the removal and disposal of between 4 square feet (2'x2') and 9 square feet (3'x3') of asbestos acoustical ceiling plaster material and approximately 10 lineal feet of asbestos thermal system insulation from each of up to six locations in the "O-House" to allow for mechanical access hatches. This project at Southfield High School will involve a separate negative pressure mini-enclosures to remove the asbestos acoustical ceiling plaster materials and asbestos thermal system insulation materials using Class I removal procedures. The project will begin on Monday, September 17, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day Wednesday, September 19, 2007. The project schedule allows for a total of three (3) work days to complete the project, with additional time allotted for tear down activities.

Abatement Activities:

1. Remove and dispose of all asbestos acoustical ceiling plaster material from six locations throughout the "O-House".

Summary of Locations:

Room / Location	Materials ->	ACP	TSI
Room 101A		x	x
Room 101B		x	x
Room 205		x	x
Room 211		x	x
Room 213		x	x
Room 214		x	x

Key for Table

ACP	Asbestos Acoustical Ceiling Plaster
TSI	Asbestos Thermal System Insulation
x	Material present in the functional space

The scope of abatement for Project #3 includes only those ceiling materials and thermal system insulation materials located within the new "pipe chases" in the identified areas. The exact location of each access hatch will be field marked prior to the start of the project.

Abatement Requirements:

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

1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project area. The project area includes all portions of the functional spaces listed in the "Summary of Locations" table, including all above ceiling areas. When present in the classrooms, materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets are included when exposed by pre-abatement demolition activities. Additional descriptions for certain areas are listed below:
 - Above Ceilings: The Contractor will also be responsible for all asbestos thermal system insulation (including any and all non-asbestos pipe insulation with asbestos packed fitting insulation) located above the access hatches made in the asbestos acoustical ceiling plaster. The Contractor will be compensated via change order for the additional removal and disposal of the asbestos thermal system insulation at a rate of \$8.00 per lineal foot.

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2. The regulated area 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. The Contractor will not be responsible for any materials below cabinets, shelving units, counters, etc. left in place prior to the start of the project.
3. Each negative pressure mini-enclosure will be set-up in accordance with the following guidelines prior to the start of any abatement activities:
 - Asbestos warning signs (without respirator and coverall restrictions) and banner tape at all entrances into the work area. The posting will be made in such a manner to keep all non-project personnel 15-20' from the work area.
 - A "moveable" mini-enclosure will be constructed around a rolling scaffolding or similar piece of equipment. The sides of the scaffolding should have collapsible supports to facilitate moving through doors. The size of the mini-enclosure will be sufficient to safely relocate the materials and work without damaging the polyethylene sheeting (including the "flooring" of the scaffold).
 - Two (2) layers of six-mil polyethylene sheeting will be placed over all sides of the scaffolding and should extend to within 3" of the ceiling, but will not be attached to the asbestos ceiling material. A flapped "air-lock" will be constructed on one side of the scaffolding for access. Two (2) layers of six-mil polyethylene sheeting will also be placed over the bottom level of the scaffolding to act as a "floor".
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, will be placed over all ceiling return vents and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - One (1) mini-air filtration devices will be placed in the mini-enclosure and exhausted outside the building during removal activities.
 - The set-up of a three stage decontamination chamber will be not required, since the material removed will be less than 25 linear feet and 10 square feet of asbestos materials. A small decontamination area, approximately 6'x6', will be set-up on the floor near the access flap where all workers will decontaminate using HEPA vacuums remove disposable coveralls.
 - In order to ensure that the schedule for this project will be met, the Contractor will be required to construct two (2) separate "moveable" mini-enclosures which may be used simultaneously.
4. All asbestos acoustical ceiling material 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.
5. All suspension materials associated with the acoustical ceiling plaster material will be removed and disposed of asbestos waste. The suspension materials include, but are not limited to, wires, hangers, black iron and wire mesh. The Contractor will remove all black iron not needed to support electrical conduit. The Contractor will cut the all suspension materials flush to the edge of the access hatch.
6. All speakers, fire alarms, exit signs and motion detectors connected to the ceiling may be removed and disposed of asbestos waste with the ceiling materials. The Owner will salvage all items as necessary prior to the start of the project.
7. The Contractor will scrape the asbestos acoustical ceiling plaster from the rough plaster substrate from an additional 6" around the outer edge of the access hatch. The remaining edge of the asbestos acoustical ceiling plaster and the entire surface area of the exposed rough plaster will be neatly sealed using an acrylic-based bridging encapsulant to prevent further fiber release from these surfaces.

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8. All asbestos thermal system insulation and asbestos light heat shield material abatement activities will be completed in accordance with the listed "Class I Glovebag Abatement Procedures" ("General Procedures for Asbestos Abatement, Item 11.4") and with all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) - "Methods of Compliance").
9. All surfaces inside the mini-enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping and HEPA vacuuming during the final cleaning portion of the project. When two layers of polyethylene sheeting are present, the Contractor will remove the top layer of polyethylene sheeting during the final cleaning portion of the project.
10. 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").
11. Following successful clearance sampling, the Contractor will tear-down the decontamination area and move the mini-enclosure to the next project area.

Final Clearance Sample Requirements:

Each negative pressure regulated mini-enclosure established for the removal of the materials described in Project #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:

The Contractor will start the project on Monday, September 17, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work shift on Wednesday, September 19, 2007. The building will be available from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed three (3) work days (Monday - Wednesday) to complete the project, including tear down activities. Additional project dates include:

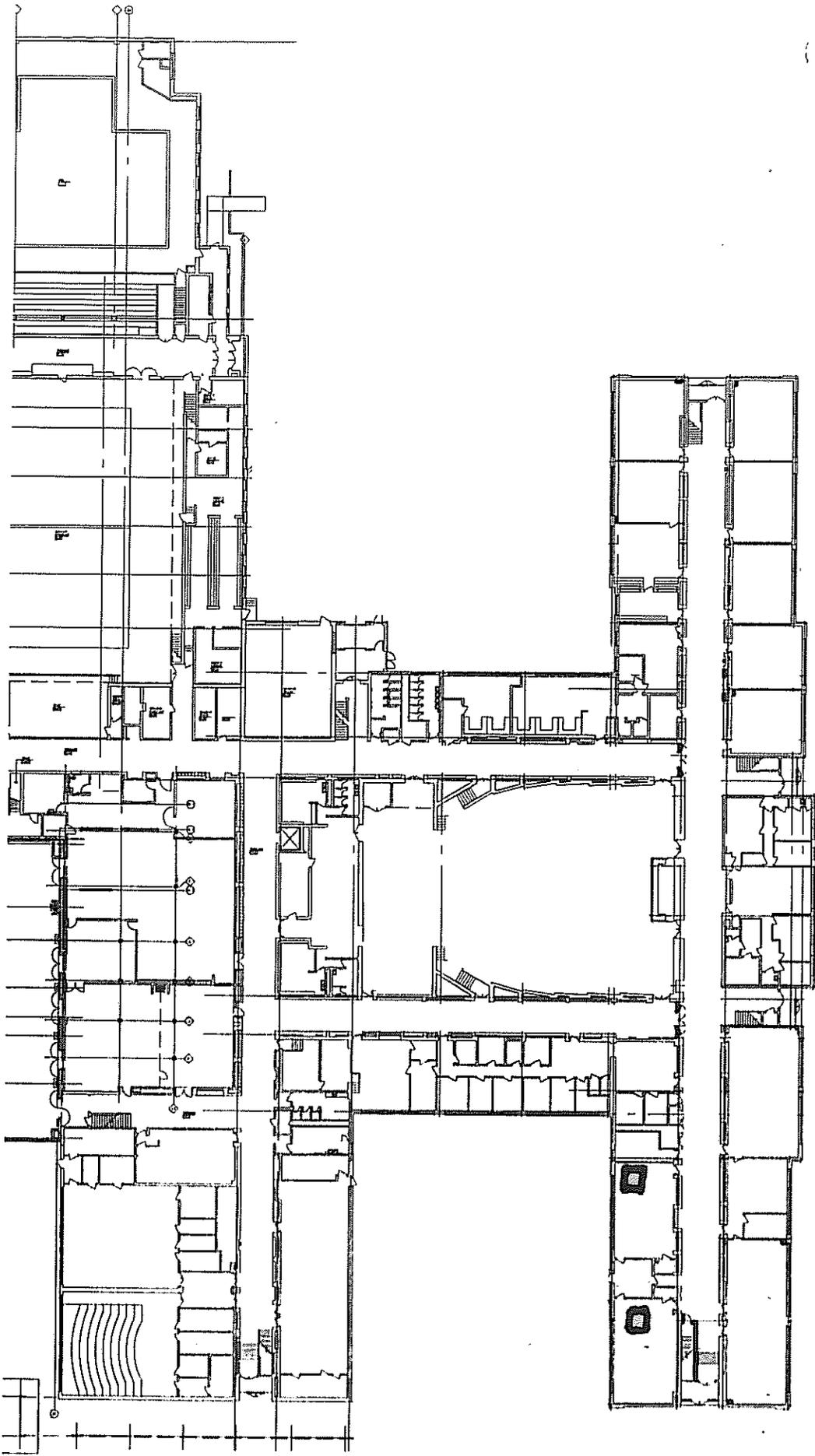
#	Location	Start	Ready for PAs	End	# Days
3	Access Hatches - Ceiling Abatement	Monday, 9-17-07	Wednesday, 9-19-07 @ 11:00 p.m.	Wednesday, 9-19-07 @ 2:30 a.m.	3 w/td

Schedule Restrictions - Abatement:

The Contractor will not be allowed to begin work in Project #3, including set-up, until the enclosure for Project #2 has been torn down.

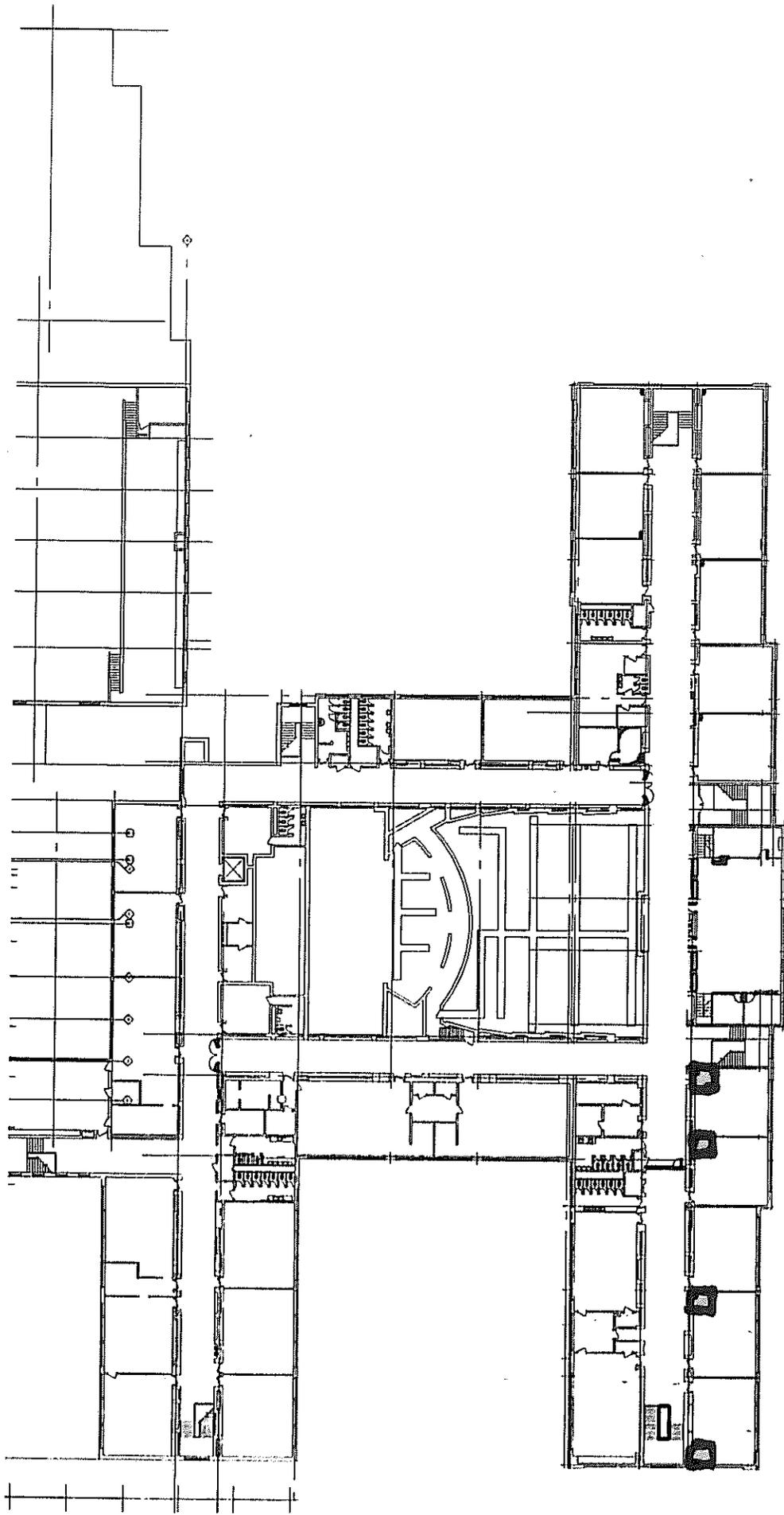
Project Diagrams:

There are two (2) project diagrams provided for Project #3. The attached diagrams shows the approximate locations of asbestos ceiling materials to be removed and approximate boundaries of the regulated areas.



COMPOSITE FIRST FLOOR PLAN

PROJECT #3



**PARTIAL COMPOSITE
SECOND FLOOR PLAN**

PROJECT #3

Project #4 - "Room 323B - Flooring Abatement"

Project Summary:

The fourth project for abatement at Southfield High School includes the removal and disposal of limited amounts of asbestos floor tile materials from Room 325B. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Wednesday, September 19, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities.

Abatement Activities:

1. Remove and dispose of asbestos floor tile material from Room 323B.

Summary of Locations:

Room / Location	Materials ->	FT
Room 323B		x

Key for Table

FT Asbestos Floor Tile
x Material present in the functional space

The scope of abatement for Project #2 includes all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and any other sized replacement tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct a single negative pressure enclosure for the complete removal of all of the materials detailed in the "Abatement Activities" for Project #4.

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.
2. The regulated area 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. The Contractor will not be responsible for any materials below fixed cabinets, shelving units, counters, etc. left in place prior to the start of the project.
3. One negative pressure enclosure will be set-up in accordance with the following guidelines prior to the start of any abatement activities:
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, and asbestos warning signs will be placed over all exterior building entrances falling within the limits of the regulated area.
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, will be placed over all ceiling return vents, bookcases, lockers and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - One (1) layer of six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project areas.

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- A minimum of one (1) air filtration device (AFDs) will be required. 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 and will be set-up at the classroom door. A black polyethylene barrier will be placed across the hallway in front of the decontamination chamber to provide an additional visual barrier to the work area.
 - The construction of a bag-out chamber will not be permitted for these projects. All waste will pass through the decontamination chamber.
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. 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.
 6. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping 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.
 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:

The regulated area established for the removal of the materials described in Project #4 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. healthAIR, inc. reserves the right to reduce the number of clearance air samples to one (1) for floor tile removal projects.

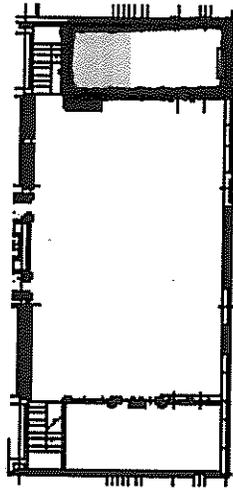
Project Schedule:

The Contractor will start the project on Wednesday, September 19, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work shift on Wednesday, September 19, 2007. The building will be available from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed a single work day (Wednesday) to complete the project, including tear down activities. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
4	Room 323B - Flooring Abatement	Wednesday, 9-19-07	Wednesday, 9-19-07 @ 11:00 p.m.	Wednesday, 9-19-07 @ 2:30 a.m.	1 w/td

Project Diagrams:

There is one (1) project diagram provided for Project #4. The attached diagram shows the approximate locations of asbestos flooring materials to be removed and approximate boundaries of the regulated area.



**PARTIAL COMPOSITE
MEZZANINE FLOOR PLAN**

PROJECT #4

Project #5 - "Room 225 - Flooring Abatement"

Project Summary:

The fifth project for abatement at Southfield High School includes the removal and disposal of all asbestos floor tile materials from Room 225. This project at Southfield High School will involve a single negative pressure regulated area to remove the asbestos floor tile materials using Class II non-friable removal procedures. The project will begin on Thursday, September 20, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work day. The project schedule allows for a single work day to complete the project, including tear down activities.

Abatement Activities:

1. Remove and dispose of all asbestos floor tile material from Room 225.

Summary of Locations:

Room / Location	Materials ->	FT
Room 225		x

Key for Table

FT Asbestos Floor Tile
x Material present in the functional space

The scope of abatement for Project #5 includes all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and any other sized replacement tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct a single negative pressure enclosure for the complete removal of all of the materials detailed in the "Abatement Activities" for Project #5.

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.
2. The regulated area 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. The Contractor will not be responsible for any materials below fixed cabinets, shelving units, counters, etc. left in place prior to the start of the project.
3. One negative pressure enclosure will be set-up in accordance with the following guidelines prior to the start of any abatement activities:
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, and asbestos warning signs will be placed over all exterior building entrances falling within the limits of the regulated area.
 - Critical barriers, constructed of a minimum of one (1) layer of six-mil polyethylene sheeting, will be placed over all ceiling return vents, bookcases, lockers and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - One (1) layer of six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project areas.

- A minimum of one (1) air filtration device (AFDs) will be required. 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 and will be set-up at the classroom door. A black polyethylene barrier will be placed across the hallway in front of the decontamination chamber to provide an additional visual barrier to the work area.
 - The construction of a bag-out chamber will not be permitted for these projects. All waste will pass through the decontamination chamber.
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. 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.
 6. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping 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.
 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:

The regulated area established for the removal of the materials described in Project #5 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. healthAIR, inc. reserves the right to reduce the number of clearance air samples to one (1) for floor tile removal projects.

Project Schedule:

The Contractor will start the project on Thursday, September 20, 2007, and will be complete with all abatement activities, including tear down activities, by the end of the work shift on Thursday, September 20, 2007. The building will be available from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed a single work day (Thursday) to complete the project, including tear down activities. Additional project dates include:

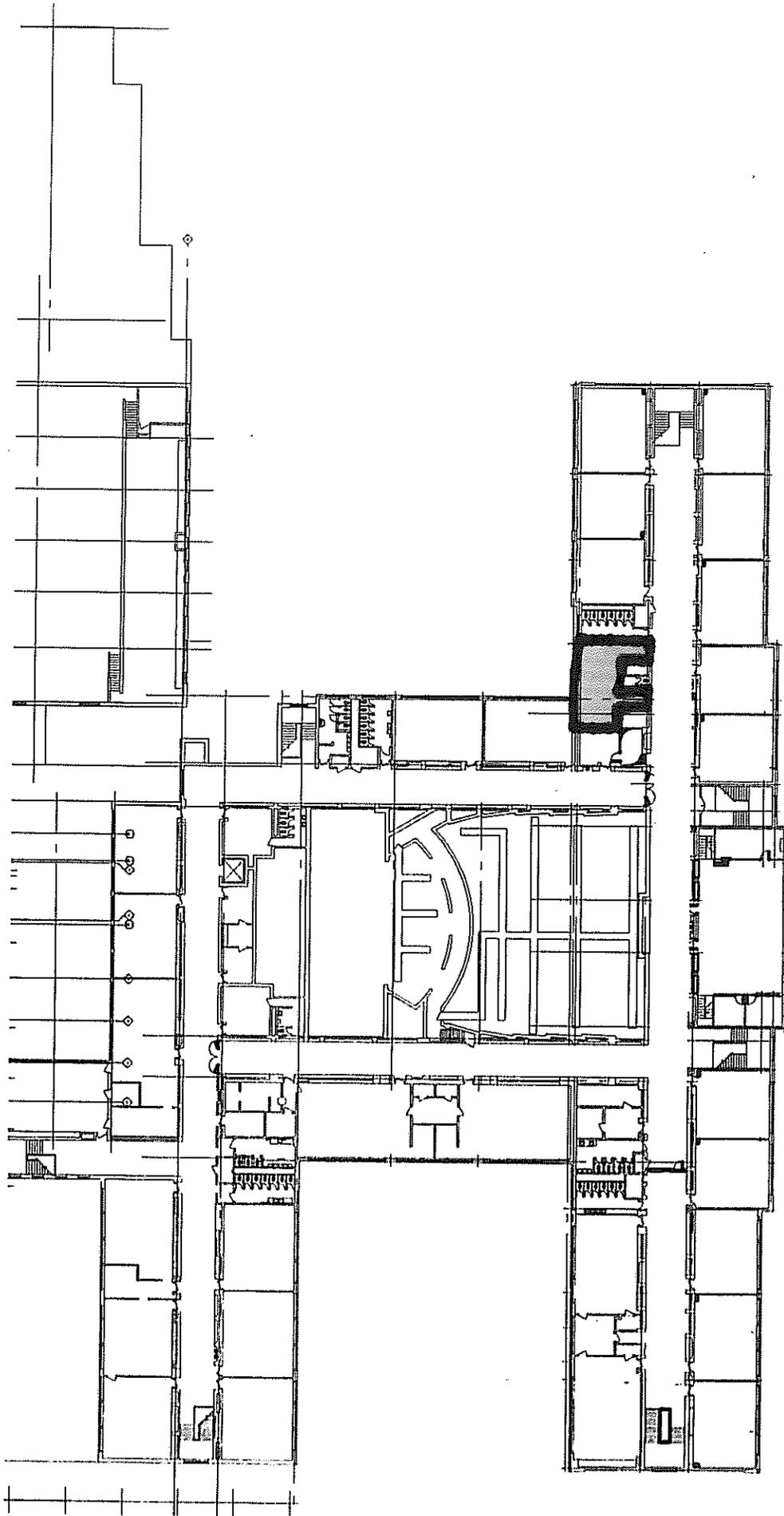
#	Location	Start	Ready for PAs	End	# Days
5	Room 225 - Flooring Abatement	Thursday, 9-20-07	Thursday, 9-20-07 @ 11:00 p.m.	Thursday, 9-20-07 @ 2:30 a.m.	1 w/td

Schedule Restrictions - Abatement:

The Contractor will not be allowed to begin work in Project #5, including set-up, until the enclosure for Project #4 has been torn down.

Project Diagrams:

There is one (1) project diagram provided for Project #5. The attached diagram shows the approximate locations of asbestos flooring materials to be removed and approximate boundaries of the regulated area.



**PARTIAL COMPOSITE
SECOND FLOOR PLAN**

PROJECT #5

Project #6 - "North End Classrooms, Second Floor - Ceiling Abatement"

Project Summary:

The sixth project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials from Room 215, 216, 217, 218, 219, 220, 221, 222 and 226. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials using Class I removal procedures. The project will begin on Friday, September 21, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Saturday, September 29, 2007. The project schedule allows for a total of eight (8) work days to complete the project, with additional time allotted for tear down activities.

Abatement Activities:

1. Remove and dispose of all asbestos acoustical ceiling plaster materials and all associated suspension materials from nine (9) functional spaces at the north end of the Second Floor of the "O-House".

Summary of Locations:

Room / Location	Materials ->	ACP
Room 215		x
Room 216		x
Room 217		x
Room 218		x
Room 219		x
Room 220		x
Room 221		x
Room 222		x
Room 226		x

Key for Table

ACP Asbestos Acoustical Ceiling Plaster
x Material present in the functional space

The scope of abatement for Project #6 includes all ceiling materials located in the identified areas.

Abatement Requirements:

The Contractor will be allowed to construct a single negative pressure enclosure for the complete removal of all of the materials detailed in the "Abatement Activities" for Project #6.

1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project area. The project area includes all portions of the functional spaces listed in the "Summary of Locations" table, including all above ceiling areas. When present in the classrooms, materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets are included when exposed by pre-abatement demolition activities. Additional descriptions for certain areas are listed below:
 - Above Ceilings: The Contractor will also be responsible for all asbestos thermal system insulation (including any and all non-asbestos pipe insulation with asbestos packed fitting insulation) located above the asbestos acoustical ceiling plaster. The Contractor will be compensated via change order for the additional removal and disposal of the asbestos thermal system insulation at a rate of \$8.00 per lineal foot.

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- Hallways: There will be no removal activities in the hallway area. The set-up activities necessary in the hallway are the set-up of the temporary 6-mil polyethylene walls at both ends of the enclosure area (south of Room 226 and at the north end), installation of a 4-mil polyethylene ceiling to cover the asbestos acoustical ceiling plaster material and one (1) layer of 6-mil on all of the walls inside of the enclosure. Two (2) layers of six-mil polyethylene sheeting will be placed over all floor. The Contractor will be responsible for all damage to the floors as a result of abatement related activities.
2. The regulated area 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. The Contractor will not be responsible for any materials below cabinets, shelving units, counters, etc. left in place prior to the start of the project.
 3. One negative pressure enclosure will be set-up in accordance with the following guidelines prior to the start of any abatement activities:
 - Critical barrier will be placed at both ends of the hallway, at approximately the south end of Room 226 and at the north end (stairs). The critical barriers will be constructed of a minimum of one (1) layer of six-mil polyethylene sheeting. The barriers will not be attached to the asbestos acoustical ceiling plaster material. Asbestos warning signs will be posted on the non-project side of each critical barrier prior to the commencement of abatement activities. 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, bookcases, lockers and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - Two (2) layers of six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project area where ceiling materials will be removed. The walls will be staggered so the outer wall can be removed following abatement of all acoustical plaster materials and the associated suspension systems. Two (2) layers of six-mil polyethylene sheeting will be placed over all floor. The Contractor will be responsible for all damage to the floors as a result of abatement related activities.
 - A minimum of eleven (11) air filtration devices (AFDs) will be placed in the project area to provide 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 to the enclosure at the end of the hallway by Room 226. A black polyethylene barrier will be placed across the hallway in front of the decontamination chamber to provide a visual barrier to the work area. The barrier will not be attached to the ceiling. If the Contractor attaches the barrier to the ceiling, the competent person will be removed from the site for the remainder of the project.
 - The construction of a bag-out chamber will be permitted at either end of the hallway. The exact set-up, position and construction of the bag-out chamber must be reviewed with healthAIR, inc.'s Project Coordinator. Bag out chambers set-up without the review and approval of healthAIR, inc. will be sealed and/or torn down at the discretion of healthAIR, inc.
 4. All lights will be disconnected and decontaminated using wet methods **after** establishment of the entire enclosure. Lighting notes:

- The Contractor will be responsible for the disposal of the light fixtures. The light fixtures may be disposed of as non-asbestos waste if the fixtures are fully decontaminated using a combination of wet wiping and HEPA vacuuming before the fixtures are removed from the enclosure. Prior to disposal of the light fixtures, the Contractor will review the District's lighting needs with healthAIR, inc.'s Project Coordinator to confirm that the light fixtures are not needed in other buildings.
 - The Contractor will be responsible for removing all light ballasts and packaging the materials in Owner provided drums (ballasts). The Contractor will be responsible for removing all light tubes from the fixtures and packaging the materials in Owner provided boxes (light tubes). No lighting components will be removed prior to establishment of the negative pressure enclosure.
 - The Owner will be responsible for final disposal and associated transportation of any hazardous wastes from the site that are generated from the removal of the light fixtures.
5. All window blinds and associated tracking material attached to asbestos acoustical ceiling plaster (above the exterior windows) will be removed after establishment of the entire enclosure and will be disposed of as asbestos waste.
 6. Prior to the start of gross removal, the Contractor will cut access holes/remove a small amount of material at the ends of the enclosure to identify locations of openings between the project area and non-project areas. Abatement will begin in the locations of these openings. The Contractor will then seal all cavities between the top of the ceiling and the roof deck that are exposed once abatement starts. All visible cavities leading to non-project areas must be sealed and reviewed by healthAIR, inc.'s Project Manager prior to the start of gross removal activities. Any other cavities found above the ceiling once the ceiling plaster is removed will be sealed with six-mil polyethylene sheeting and duct tape upon discovery.
 7. All asbestos acoustical ceiling material 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.
 8. All suspension materials associated with the acoustical ceiling plaster material will be removed and disposed of as asbestos waste. The suspension materials include, but are not limited to, wires, hangers, black iron and wire mesh. The Contractor will remove all black iron not needed to support electrical conduit. Where black iron enters the block walls, the Contractor will cut the black iron flush to the wall.
 9. All speakers, fire alarms, exit signs and motion detectors connected to the ceiling may be removed and disposed of as asbestos waste with the ceiling materials. The Owner will salvage all items as necessary prior to the start of the project.
 10. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping and HEPA vacuuming during the final cleaning portion of the project. When two layers of polyethylene sheeting are present, the Contractor will remove the top layer of polyethylene sheeting during the final cleaning portion of the project.
 11. 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:

The negative pressure enclosure established for the removal of the materials in the Project #6 work area will be cleared using Transmission Electron Microscopy (TEM). Pursuant to the requirements of AHERA, thirteen (13) TEM samples will be collected from the enclosure - five inside the enclosure, five outside the enclosure and three sample blanks. All five inside samples must be analyzed below an average of $70.0 \text{ AS}/_{\text{mm}^2}$ to allow for tear down of the enclosure. All TEM air samples will be collected in accordance with the AHERA regulation and all EPA recommended guidelines.

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Project Schedule:

The Contractor will start the project on Friday, September 21, 2007, and will be complete with all abatement activities, and be ready for TEM clearance sampling, by the end of the work shift on Saturday, September 29, 2007. The building will be available each work day from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed eight (8) work days (Friday - Saturday, Monday - Saturday) to complete the project, with additional time provided for tear down activities. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
6	North End Classrooms, 2 nd Floor - Ceiling Abatement	Friday, 9-21-07	Saturday, 9-29-07 @ 2:30 a.m.	Tuesday, 10-2-07 @ 2:30 a.m.	8 + td

Schedule Restrictions - Abatement:

The Contractor will not be allowed to begin work in Project #6, including set-up, until the enclosure for Project #5 has been torn down.

Schedule Information - TEM Clearance Sampling:

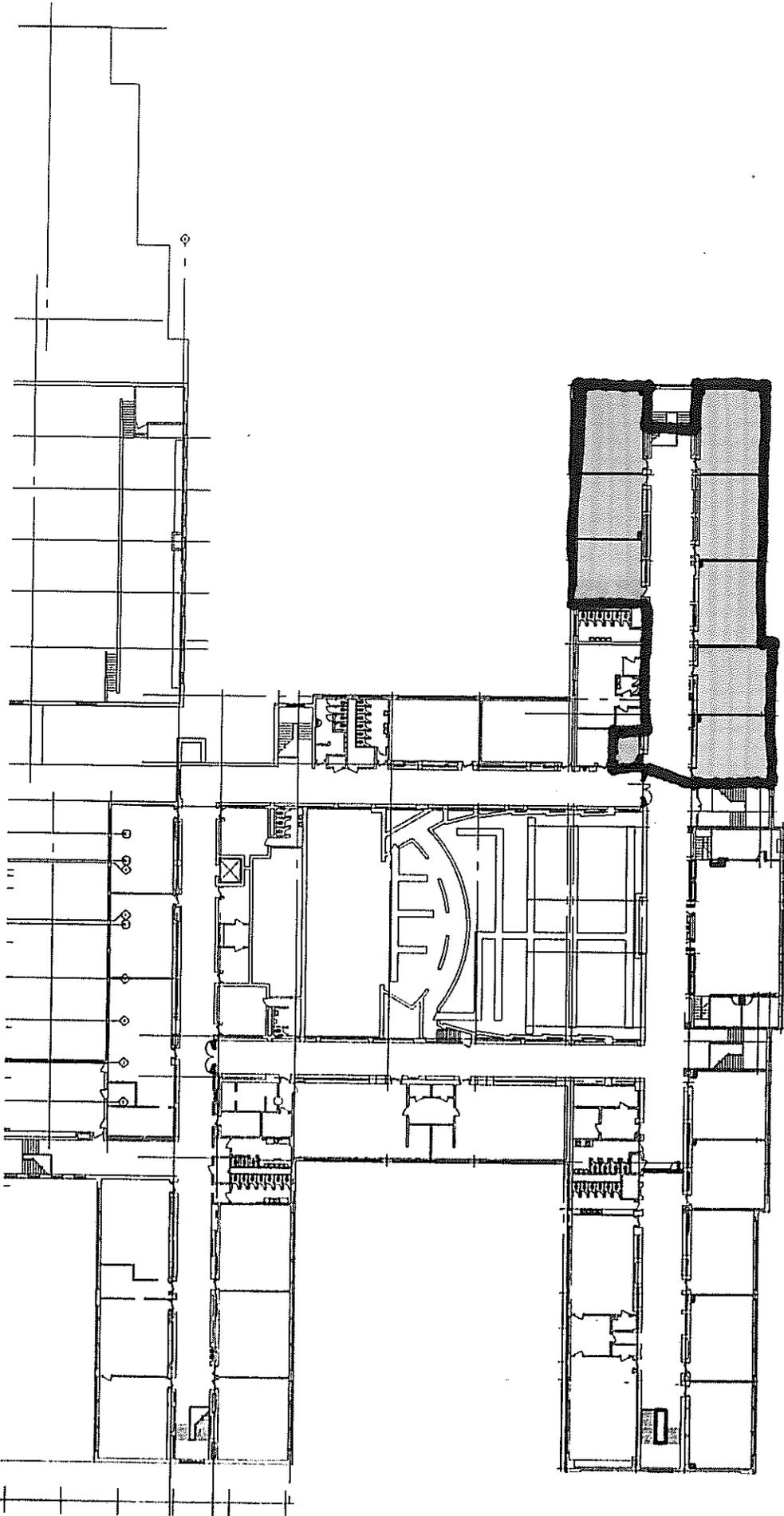
This abatement schedule projects the collection of TEM clearance air samples on Monday, October 1, 2007, with analysis completed the morning of Tuesday, October 2, 2007. TEM clearance air sample results collected per this type of schedule are typically available between 12:00 p.m. and 2:00 p.m.

Schedule Restrictions - Saturday Work Hours:

The Contractor may be allowed to change the work shift for all Saturday work to begin as early as 12:00 p.m. with prior approval from healthAIR, inc. and Southfield Public Schools. The duration of the work shift (maximum of 10.5 hours) will not change.

Project Diagrams:

There is one (1) project diagram provided for Project #6. The attached diagram shows the approximate locations of asbestos ceiling materials to be removed and approximate boundaries of the regulated areas.



**PARTIAL COMPOSITE
SECOND FLOOR PLAN**

PROJECT #6

Project #7 - "Room 223 & Room 323A - Ceiling and Flooring Abatement"

Project Summary:

The seventh project for abatement at Southfield High School includes the removal and disposal of all asbestos acoustical ceiling plaster materials, all non-asbestos carpet materials and all asbestos floor tile materials from Room 223 and all asbestos floor tile materials from the connected associated rooms Room 223A, 223B, 223C, and Room 323A. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will begin on Monday, October 1, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, October 5, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities.

Abatement Activities:

1. Remove and dispose of all asbestos acoustical ceiling plaster materials and all associated suspension materials from Room 223 and Room 323A.
2. Remove and dispose of all non-asbestos carpet materials from Room 223, Room 223A, Room 223B and Room 223C.
2. Remove and dispose of all asbestos floor tile material from Room 223, Room 223A, Room 223B and Room 223C.

Summary of Locations:

Room / Location	Materials ->	ACP	Carpet	FT
Room 223		x	x	x
Room 223A			x	x
Room 223B			x	x
Room 223C			x	x
Room 323A		x		

Key for Table

ACP	Asbestos Acoustical Ceiling Plaster
Carpet	Non-Asbestos Carpet Material
FT	Asbestos Floor Tile
x	Material present in the functional space

The scope of abatement for Project #7 includes all ceiling materials in Room 223 and Room 323A only and all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and any other sized replacement tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct a single negative pressure enclosure for the complete removal of all of the materials detailed in the "Abatement Activities" for Project #7.

1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project area. The project area includes all portions of the functional spaces listed in the "Summary of Locations" table, including all above ceiling areas. When present in the classrooms, materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets are included when exposed by pre-abatement demolition activities. Additional descriptions for certain areas are listed below:

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- Above Ceilings: The Contractor will also be responsible for all asbestos thermal system insulation (including any and all non-asbestos pipe insulation with asbestos packed fitting insulation) located above the asbestos acoustical ceiling plaster. The Contractor will be compensated via change order for the additional removal and disposal of the asbestos thermal system insulation at a rate of \$8.00 per foot.
2. The regulated area 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. The Contractor will not be responsible for any materials below cabinets, shelving units, counters, etc. left in place prior to the start of the project.
 3. One negative pressure enclosure will be set-up in accordance with the following guidelines prior to the start of any abatement activities:
 - Critical barrier will be placed at doors between Room 223 and the hallway. The critical barriers will be constructed of a minimum of one (1) layer of six-mil polyethylene sheeting. Asbestos warning signs will be posted on the non-project side of each critical barrier prior to the commencement of abatement activities. 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, bookcases, lockers and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - Two (2) layers of six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project area where ceiling materials will be removed. The walls will be staggered so the outer wall can be removed following abatement of all acoustical plaster materials and the associated suspension systems. Two (2) layers of six-mil polyethylene sheeting will be placed over the floor in Room 323A. The Contractor will be responsible for all damage to the floors as a result of abatement related activities. The set-up of impermeable dropcloths over the floors in Room 223 will be at the discretion of the Contractor.
 - A minimum of four (4) air filtration devices (AFDs) will be placed in the project area to provide 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 to the enclosure at the door between the classroom and the hallway. A black polyethylene barrier will be placed across the hallway in front of the decontamination chamber to provide a visual barrier to the work area. The barrier will not be attached to the ceiling. If the Contractor attaches the barrier to the ceiling, the competent person will be removed from the site for the remainder of the project.
 - The construction of a bag-out chamber will not be permitted for this project. All waste will pass through the decontamination chamber.
 4. All lights will be disconnected and decontaminated using wet methods **after** establishment of the entire enclosure. Lighting notes:
 - The Contractor will be responsible for the disposal of the light fixtures. The light fixtures may be disposed of as non-asbestos waste if the fixtures are fully decontaminated using a combination of wet wiping and HEPA vacuuming before the fixtures are removed from the enclosure. Prior to disposal of the light fixtures, the Contractor will review the District's lighting needs with healthAIR, inc.'s Project Coordinator to confirm that the light fixtures are not needed in other buildings.

- The Contractor will be responsible for removing all light ballasts and packaging the materials in Owner provided drums (ballasts). The Contractor will be responsible for removing all light tubes from the fixtures and packaging the materials in Owner provided boxes (light tubes). No lighting components will be removed prior to establishment of the negative pressure enclosure.
 - The Owner will be responsible for final disposal and associated transportation of any hazardous wastes from the site that are generated from the removal of the light fixtures.
5. 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.
 6. All window blinds and associated tracking material attached to asbestos acoustical ceiling plaster (above the exterior windows) will be removed after establishment of the entire enclosure and will be disposed of as asbestos waste.
 7. Prior to the start of gross removal, the Contractor will cut access holes/remove a small amount of material at the ends of the enclosure to identify locations of openings between the project area and non-project areas. Abatement will begin in the locations of these openings. The Contractor will then seal all cavities between the top of the ceiling and the roof deck that are exposed once abatement starts. All visible cavities leading to non-project areas must be sealed and reviewed by healthAIR, inc.’s Project Manager prior to the start of gross removal activities. Any other cavities found above the ceiling once the ceiling plaster is removed will be sealed with six-mil polyethylene sheeting and duct tape upon discovery.
 8. All asbestos acoustical ceiling material 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.
 9. All suspension materials associated with the acoustical ceiling plaster material will be removed and disposed of as asbestos waste. The suspension materials include, but are not limited to, wires, hangers, black iron and wire mesh. The Contractor will remove all black iron not needed to support electrical conduit. Where black iron enters the block walls, the Contractor will cut the black iron flush to the wall.
 10. All speakers, fire alarms, exit signs and motion detectors connected to the ceiling may be removed and disposed of as asbestos waste with the ceiling materials. The Owner will salvage all items as necessary prior to the start of the project.
 11. The Contractor may use friable means, including mechanical means, to remove the asbestos floor tile in the project area. The materials will be removed inside of an established negative pressure enclosure. The material will be disposed of as friable asbestos waste.
 12. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping and HEPA vacuuming during the final cleaning portion of the project. When two layers of polyethylene sheeting are present, the Contractor will remove the top layer of polyethylene sheeting during the final cleaning portion of the project.
 13. 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:

The negative pressure enclosure established for the removal of the materials in the Project #7 work area will be cleared using Transmission Electron Microscopy (TEM). Pursuant to the requirements of AHERA, thirteen (13) TEM samples will be collected from the enclosure - five inside the enclosure, five outside the enclosure and three sample blanks. All five inside samples must be analyzed below an average of $70.0 \text{ AS}/_{\text{mm}^2}$ to allow for tear down of the enclosure. All TEM air samples will be collected in accordance with the AHERA regulation and all EPA recommended guidelines.

Project Schedule:

The Contractor will start the project on Monday, October 1, 2007, and will be complete with all abatement activities, and be ready for TEM clearance sampling, by the end of the work shift on Friday, October 5, 2007. The building will be available each work day from 4:00 p.m. - 2:30 1.m. The Contractor will be allowed five (5) work days (Tuesday - Friday) to complete the project, with additional time provided for tear down activities. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
7	Room 223 & Room 323A - Ceiling & Flooring Abatement	Monday, 10-1-07	Friday, 10-5-07 @ 2:30 a.m.	Monday, 10-8-07 @ 2:30 a.m.	5 + td

Schedule Restrictions - Abatement:

The Contractor will not be allowed to begin work, including set-up activities, in Project #7 until the enclosure for Project #6 has been approved for TEM clearance sampling.

Schedule Information - TEM Clearance Sampling:

This abatement schedule projects the collection of TEM clearance air samples on Saturday, October 6, 2007, with analysis completed the morning of Monday, October 8, 2007. TEM clearance air sample results collected per this type of schedule are typically available between 12:00 p.m. and 2:00 p.m.

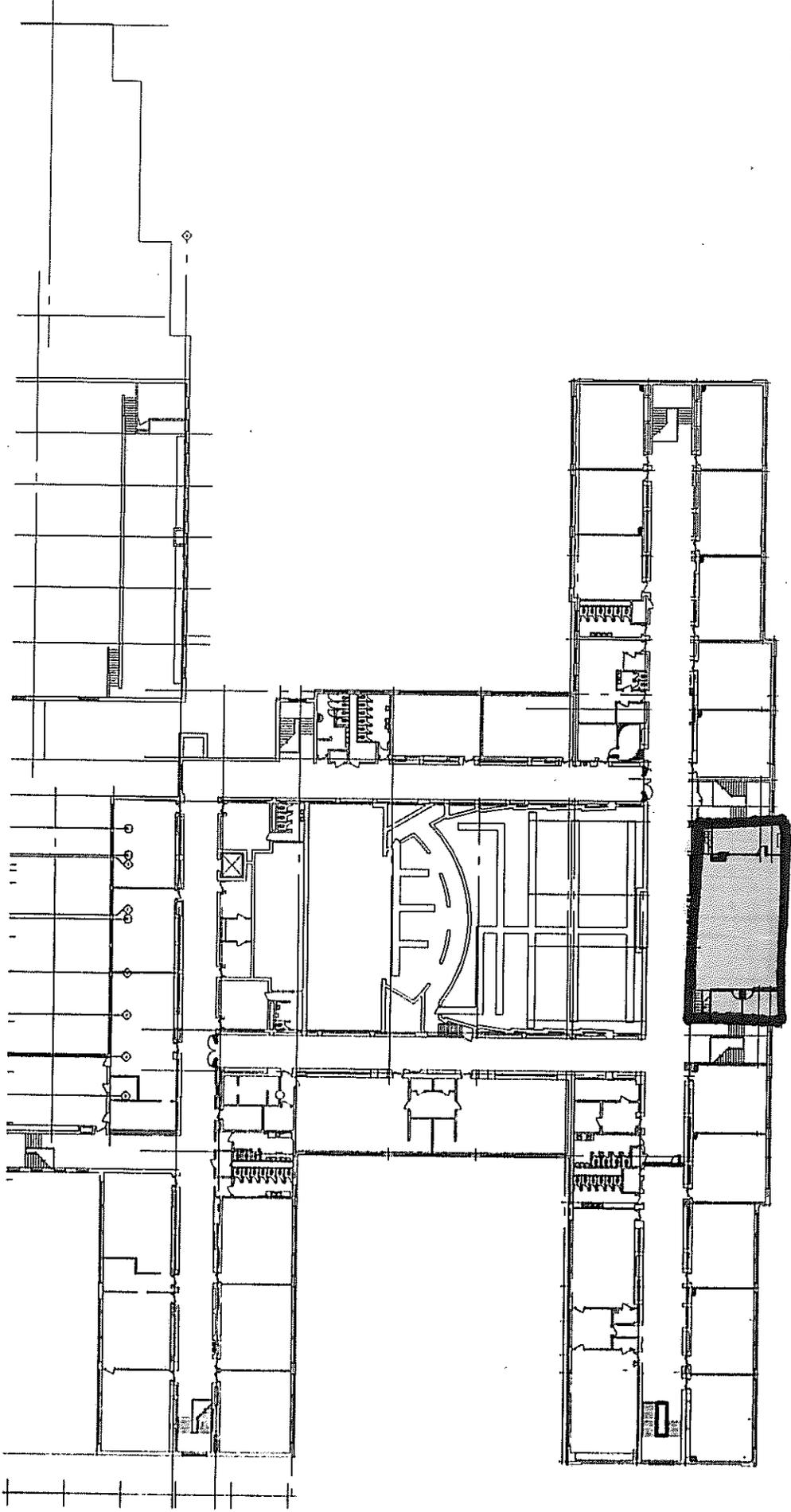
Project Diagrams:

There are two (2) project diagrams provided for Project #7. The attached diagrams shows the approximate locations of asbestos ceiling and flooring materials to be removed and approximate boundaries of the regulated areas.

ASBESTOS ABATEMENT

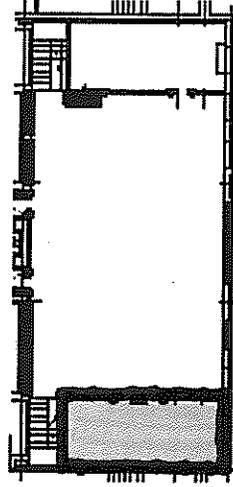
Southfield Public Schools

2007 "O-House" Renovations @ Southfield High School



**PARTIAL COMPOSITE
SECOND FLOOR PLAN**

PROJECT #7



**PARTIAL COMPOSITE
MEZZANINE FLOOR PLAN**

PROJECT #7

- Bid No. 07.03A -
Southfield High School - "O-House" - Alternate Bids
[Project Scope of Work and Requirements]

PROJECT SUMMARY -

Project Description: Bid No. 07.03A is for five alternate bids under consideration by the Owner.

Project Sequencing: There are five (5) projects being considered for additional work for the asbestos abatement activities at Southfield High School's - "O-House". The projects include:

Alternate Bid #1 (07.03A #1) - "Add Floor Tile to Project #6 (North End Classrooms, Second Floor)"

The first alternate bid for consideration is the addition of the removal and disposal of all asbestos floor tile from Room 215, 216, 217, 218, 219, 220, 221, 222 and 226. The corresponding project, Project #6, involves the removal and disposal of all asbestos acoustical ceiling plaster from the project area. The addition of these abatement activities to the project will add one (1) additional work day to the abatement schedule.

Alternate Bid #2 (07.03A #2) - "Add Floor Tile to Project #7 (Room 323A)"

The second alternate bid for consideration is the addition of the removal and disposal of all asbestos floor tile from Room 323A. The corresponding project, Project #7, involves the removal and disposal of all asbestos acoustical ceiling plaster from Room 223 and 323A, as well as all asbestos floor tile from Room 223. The addition of this abatement activity to the project will not affect the project schedule for Project #7.

Alternate Bid #3 (07.03A #3) - "Add Project 8 (Room 115, 116, 117)"

The third alternate bid for consideration is the addition of a project including the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from Room 115, 116, and 117. the removal and disposal of all asbestos acoustical ceiling plaster materials and all asbestos floor tile materials from Room 115, 116 and 117. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will begin on Monday, September 10, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, September 14, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities. This project will be conducted concurrently with Project #1.

Alternate Bid #4 (07.03A #4) - "Expand Ceiling Abatement in Project 8 (Room 118, 119, 120, 121A, 121B)"

The fourth alternate bid for consideration is the addition of the removal and disposal of all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A and 121B. The corresponding project, Project #8 (Alternate Bid #3), involves the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from a three classroom project area (Room 115, 116 and 117). The addition of these abatement activities to the project will add three (3) additional work days to the abatement schedule.

Alternate Bid #5 (07.03A #5) - "Expand Flooring Abatement in Project 8 (Room 118, 119, 120, 121A, 121B)"

The fifth alternate bid for consideration is the addition of the removal and disposal of all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A and 121B. The corresponding project, Project #8 (Alternate Bid #3 and Alternate Bid #4), involves the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from a three classroom project area (Room 115, 116 and 117) and all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A, and 121B. The addition of these abatement activities to the project will add one (1) additional work day to the abatement schedule.

SCOPE OF WORK and REQUIREMENTS -

The "Abatement Activities", "Summary of Locations", "Abatement Requirements", "Final Clearance Sample Requirements", "Project Schedule" and "Project Diagrams" for the asbestos abatement projects are provided on the following pages. Information for each project is generally formatted in the following manner (by section):

- **Abatement Activities**
This section provides a summary of all asbestos materials and non-asbestos materials required to be removed and disposed of by the Contractor.
- **Summary of Locations**
For projects with more than one functional space (location), this section provides a tabular summary for all materials identified in the “Abatement Activities” section. When present, room entries and closets are included in the classroom area and are not listed individually.
- **Abatement Requirements**
This section provides a summary of all set-up, removal and cleaning requirements relating to the removal of the materials identified in the “Abatement Activities” section.
- **Final Clearance Sample Requirements**
This section provides a summary of the types of clearance samples scheduled to be collected, the number of samples to be collected and the clearance level.
- **Project Schedule**
This section provides a summary of the project schedule, including project start and end dates. For certain projects, additional milestone dates may be provided.
- **Project Diagrams**
This section provides a graphical representation of the limits of the regulated area, showing all functional spaces included in the project.

“General Information and Requirements” relating to the entire bid are located after the information for Southfield High School - “O-House” - Alternate Bid.

- **General Information and Requirements**
This section provides general project information and project requirements relating to all activities associated with the work at Southfield High School.

Alternate Bid #1 (07.03A #1) - "Add Floor Tile to Project #6 (North End Classrooms, Second Floor)"

Project Summary:

The first alternate bid for consideration is the addition of the removal and disposal of all asbestos floor tile from Room 215, 216, 217, 218, 219, 220, 221, 222 and 226. The corresponding project, Project #6, involves the removal and disposal of all asbestos acoustical ceiling plaster from the project area. The addition of these abatement activities to the project will add one (1) additional work day to the abatement schedule.

Additional Abatement Activities:

1. Remove and dispose of all asbestos floor tile materials from nine (9) functional spaces at the north end of the Second Floor of the "O-House".

Summary of Locations:

Room / Location	Materials ->	FT
Room 215		x
Room 216		x
Room 217		x
Room 218		x
Room 219		x
Room 220		x
Room 221		x
Room 222		x
Room 226		x

Key for Table

FT Asbestos Floor Tile
x Material present in the functional space

The scope of abatement for Alternate Bid #1 includes all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and any other sized replacement tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct one negative pressure enclosures for the complete removal of all of the materials detailed in the "Abatement Activities" for Alternate Bid #1.

1. The requirements of Project #6 will be altered as follows:
 - The Contractor will not be required to protect the floors in the classrooms with polyethylene sheeting. However, the Contractor will still be required to protect the floors in the hallway.
 - The Contractor may remove all flooring materials using friable removal means. The abatement will be completed inside of a full, negative pressure enclosure in conjunction with more than 160 square feet of friable material.

Final Clearance Sample Requirements:

If this alternate bid is accepted and approved by the Owner, there will not be any changes to the final clearance sample requirements established for Project #6. The project will be cleared using TEM analysis.

Project Schedule:

If this alternate bid is accepted and approved by the Owner, the project schedule established for Project #6 will be extended by one (1) work day. The Contractor will start the project on Friday, September 21, 2007, and will be complete with all abatement activities, and be ready for TEM clearance sampling, by the end of the work shift on Monday, October 1, 2007. The building will be available each work day from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed nine (9) work days (Friday - Saturday, Monday - Saturday, Monday) to complete the project, with additional time provided for tear down activities. The schedule for Project #7 will be adjusted one (1) day to accommodate this extended schedule. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
6	North End Classrooms, 2 nd Floor - Ceiling and Flooring Abatement	Friday, 9-21-07	Monday, 10-1-07 @ 2:30 a.m.	Wednesday, 10-3-07 @ 2:30 a.m.	9 + td

Schedule Restrictions - Abatement:

The Contractor will not be allowed to begin work in Project #6, including set-up, until the enclosure for Project #5 has been torn down.

Schedule Information - TEM Clearance Sampling:

This abatement schedule projects the collection of TEM clearance air samples on Tuesday, October 2, 2007, with analysis completed the morning of Wednesday, October 3, 2007. TEM clearance air sample results collected per this type of schedule are typically available between 12:00 p.m. and 2:00 p.m.

Schedule Restrictions - Saturday Work Hours:

The Contractor may be allowed to change the work shift for all Saturday work to begin as early as 12:00 p.m. with prior approval from healthAIR, inc. and Southfield Public Schools. The duration of the work shift (maximum of 10.5 hours) will not change.

Project Diagrams:

There are no additional project diagrams provided for Alternate Bid #1.

Alternate Bid #2 (07.03A #2) - "Add Floor Tile to Project #7 (Room 323A)"

Project Summary:

The second alternate bid for consideration is the addition of the removal and disposal of all asbestos floor tile from Room 323A. The corresponding project, Project #7, involves the removal and disposal of all asbestos acoustical ceiling plaster from Room 223 and 323A, as well as all asbestos floor tile from Room 223. The addition of this abatement activity to the project will not affect the project schedule for Project #7.

Additional Abatement Activities:

1. Remove and dispose of all asbestos floor tile materials from Room 323A.
-

Summary of Locations:

Room / Location	Materials ->	FT
Room 323A		x

Key for Table

FT Asbestos Floor Tile
x Material present in the functional space

The scope of abatement for Alternate Bid #2 includes all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and/or other sized replacement floor tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct one negative pressure enclosures for the complete removal of all of the materials detailed in the "Abatement Activities" for Alternate Bid #2.

1. The requirements of Project #7 will be altered as follows:
 - The Contractor will not be required to protect the floor in Room 323A with polyethylene sheeting.
-

Final Clearance Sample Requirements:

If this alternate bid is accepted and approved by the Owner, there will not be any changes to the final clearance sample requirements established for Project #7. The project will be cleared using TEM analysis.

Project Schedule:

If this alternate bid is accepted and approved by the Owner, there will not be any changes to the project schedule established for Project #7.

Project Diagrams:

There are no additional project diagrams provided for Alternate Bid #2.

Alternate Bid #3 (07.03A #3) - "Add Project 8 (Room 115, 116, 117)"

Project Summary:

The third alternate bid for consideration is the addition of a project including the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from Room 115, 116, and 117. the removal and disposal of all asbestos acoustical ceiling plaster materials and all asbestos floor tile materials from Room 115, 116 and 117. This project at Southfield High School will involve a single negative pressure enclosure to remove the asbestos acoustical ceiling plaster materials and asbestos floor tile materials using Class I removal procedures. The project will begin on Monday, September 10, 2007, and will be complete with all abatement activities and be ready for TEM clearance sampling by the end of the work day Friday, September 14, 2007. The project schedule allows for a total of five (5) work days to complete the project, with additional time allotted for tear down activities. This project will be conducted concurrently with Project #1.

Abatement Activities:

1. Remove and dispose of all asbestos acoustical ceiling plaster materials and all associated suspension materials from Room 115, 116 and 117.
2. Remove and dispose of all asbestos floor tile materials from Room 115, 116 and 117.

Summary of Locations:

Room / Location	Materials ->	ACP	FT
Room 115		x	x
Room 116		x	x
Room 117		x	x

Key for Table

ACP Asbestos Acoustical Ceiling Plaster
FT Asbestos Floor Tile
x Material present in the functional space

The scope of abatement for Project #8 (Alternate Bid #3) includes all ceiling materials and all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and any other sized replacement tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct a single negative pressure enclosure for the complete removal of all of the materials detailed in the "Abatement Activities" for Project #8 (Alternate Bid #3).

1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project area. The project area includes all portions of the functional spaces listed in the "Summary of Locations" table, including all above ceiling areas. When present in the classrooms, materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets are included when exposed by pre-abatement demolition activities. Additional descriptions for certain areas are listed below:
 - Above Ceilings: The Contractor will also be responsible for all asbestos thermal system insulation (including any and all non-asbestos pipe insulation with asbestos packed fitting insulation) located above the asbestos acoustical ceiling plaster. The Contractor will be compensated via change order for the additional removal and disposal of the asbestos thermal system insulation at a rate of \$8.00 per lineal foot.

- Hallway: There will be no removal activities in the hallway area. The set-up activities necessary in the hallway are the set-up of the temporary 6-mil polyethylene walls at both ends of the enclosure area (south of Room 115 and north of Room 117), installation of a 4-mil polyethylene ceiling to cover the asbestos acoustical ceiling plaster material and one (1) layer of 6-mil on all of the walls inside of the enclosure. The Contractor will be required to protect the non-asbestos 12"x12" floor tile in the hallway area. It will be at the discretion of the Contractor as to the sufficient amount of protection from contamination, water damage, physical damage, etc.
2. The regulated area 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. The Contractor will not be responsible for any materials below cabinets, shelving units, counters, etc. left in place prior to the start of the project.
 3. One negative pressure enclosure will be set-up in accordance with the following guidelines prior to the start of any abatement activities:
 - Critical barrier will be placed at both ends of the hallway, at approximately the south end of Room 115 and the north end of Room 117. The critical barriers will be constructed of a minimum of one (1) layer of six-mil polyethylene sheeting. The barriers will not be attached to the asbestos acoustical ceiling plaster material. The position of the barriers will be such as to provide adequate workspace and access to all three rooms. The set-up of the hallway does not necessarily mean the entire hallway must be enclosed between those two points. Asbestos warning signs will be posted on the non-project side of each critical barrier prior to the commencement of abatement activities. 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, bookcases, lockers and all items which cannot be decontaminated in each of the project area spaces. Critical barriers, constructed of a minimum of two (2) layers of six-mil polyethylene sheeting, will be placed over all in ceiling vents.
 - Two (2) layers of six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project area where ceiling materials will be removed. The walls will be staggered so the outer wall can be removed following abatement of all acoustical plaster materials and the associated suspension systems. The set-up of impermeable dropcloths over the floors will be at the discretion of the Contractor.
 - A minimum of four (4) air filtration devices (AFDs) will be placed in the project area to provide 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 to the enclosure at the temporary wall by Room 115. A black polyethylene barrier will be placed across the hallway in front of the decontamination chamber to provide a visual barrier to the work area. The barrier will not be attached to the ceiling. If the Contractor attaches the barrier to the ceiling, the competent person will be removed from the site for the remainder of the project.
 - The construction of a bag-out chamber will not be permitted for this project. All waste will pass through the decontamination chamber.
 4. All lights will be disconnected and decontaminated using wet methods **after** establishment of the entire enclosure. Lighting notes:

- The Contractor will be responsible for the disposal of the light fixtures. The light fixtures may be disposed of as non-asbestos waste if the fixtures are fully decontaminated using a combination of wet wiping and HEPA vacuuming before the fixtures are removed from the enclosure. Prior to disposal of the light fixtures, the Contractor will review the District's lighting needs with healthAIR, inc.'s Project Coordinator to confirm that the light fixtures are not needed in other buildings.
 - The Contractor will be responsible for removing all light ballasts and packaging the materials in Owner provided drums (ballasts). The Contractor will be responsible for removing all light tubes from the fixtures and packaging the materials in Owner provided boxes (light tubes). No lighting components will be removed prior to establishment of the negative pressure enclosure.
 - The Owner will be responsible for final disposal and associated transportation of any hazardous wastes from the site that are generated from the removal of the light fixtures.
5. All window blinds and associated tracking material attached to asbestos acoustical ceiling plaster (above the exterior windows) will be removed after establishment of the entire enclosure and will be disposed of as asbestos waste.
 6. Prior to the start of gross removal, the Contractor will cut access holes/remove a small amount of material at the ends of the enclosure to identify locations of openings between the project area and non-project areas. Abatement will begin in the locations of these openings. The Contractor will then seal all cavities between the top of the ceiling and the roof deck that are exposed once abatement starts. All visible cavities leading to non-project areas must be sealed and reviewed by healthAIR, inc.'s Project Manager prior to the start of gross removal activities. Any other cavities found above the ceiling once the ceiling plaster is removed will be sealed with six-mil polyethylene sheeting and duct tape upon discovery.
 7. All asbestos acoustical ceiling material 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.
 8. All suspension materials associated with the acoustical ceiling plaster material will be removed and disposed of as asbestos waste. The suspension materials include, but are not limited to, wires, hangers, black iron and wire mesh. The Contractor will remove all black iron not needed to support electrical conduit. Where black iron enters the block walls, the Contractor will cut the black iron flush to the wall.
 9. All speakers, fire alarms, exit signs and motion detectors connected to the ceiling may be removed and disposed of as asbestos waste with the ceiling materials. The Owner will salvage all items as necessary prior to the start of the project.
 10. The Contractor may use friable means, including mechanical means, to remove the asbestos floor tile in the project area. The materials will be removed inside of an established negative pressure enclosure. The material will be disposed of as friable asbestos waste.
 11. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet-wiping and HEPA vacuuming during the final cleaning portion of the project. When two layers of polyethylene sheeting are present, the Contractor will remove the top layer of polyethylene sheeting during the final cleaning 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 #4, "General Requirements and Information").

Final Clearance Sample Requirements:

The negative pressure enclosure established for the removal of the materials in the Project #8 (Alternate Bid #3) work area will be cleared using Transmission Electron Microscopy (TEM). Pursuant to the requirements of AHERA, thirteen (13) TEM samples will be collected from the enclosure - five inside the enclosure, five outside the enclosure and three sample blanks. All five inside samples must be analyzed below an average of $70.0 \text{ AS}/\text{mm}^2$ to allow for tear down of the enclosure. All TEM air samples will be collected in accordance with the AHERA regulation and all EPA recommended guidelines.

Project Schedule:

The Contractor will start the project on Monday, September 10, 2007, and will be complete with all abatement activities, and be ready for TEM clearance sampling, by the end of the work shift on Friday, September 14, 2007. The building will be available each work day from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed five (5) work days (Monday - Friday) to complete the project, with additional time provided for tear down activities. This project will be conducted concurrently with Project #1. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
8	Room 115 - 117 - Ceiling & Flooring Abatement	Monday, 9-10-07	Friday, 9-14-07 @ 2:30 a.m.	Monday, 9-17-07 @ 2:30 a.m.	5 + td

Schedule Restrictions - Set-up:

The Contractor will not be allowed to mobilize to the project site until Monday, September 10, 2007.

Schedule Information - TEM Clearance Sampling:

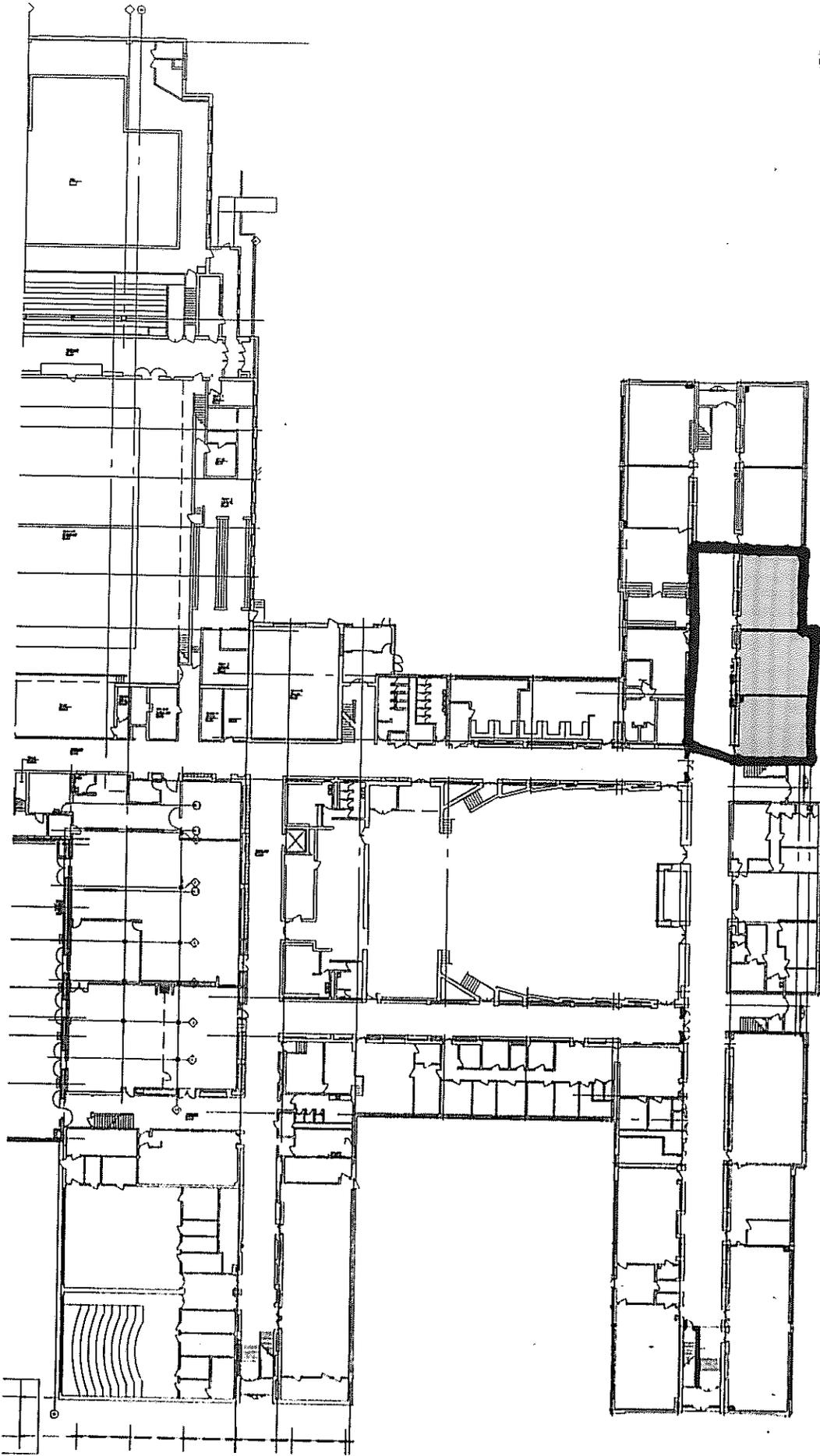
This abatement schedule projects the collection of TEM clearance air samples on Saturday, September 15, 2007, with analysis completed the morning of Monday, September 17, 2007. TEM clearance air sample results collected per this type of schedule are typically available between 12:00 p.m. and 2:00 p.m.

Schedule Restrictions - Man-Power:

The Contractor will be required maintain separate, independent work crews to complete Project #1 and Project #8 (Alternate Bid #3), including separate competent persons.

Project Diagrams:

There is one (1) project diagram provided for Project #8 (Alternate Bid #3). The attached diagram shows the approximate locations of asbestos ceiling and flooring materials to be removed and approximate boundaries of the regulated areas.



COMPOSITE FIRST FLOOR PLAN

PROJECT #8 (ALT. BID #3)

Alternate Bid #4 (07.03A #4) - "Expand Ceiling Abatement in Project 8 (Room 118, 119, 120, 121A, 121B)"

Project Summary:

The fourth alternate bid for consideration is the addition of the removal and disposal of all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A and 121B. The corresponding project, Project #8 (Alternate Bid #3), involves the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from a three classroom project area (Room 115, 116 and 117). The addition of these abatement activities to the project will add three (3) additional work days to the abatement schedule.

Additional Abatement Activities:

1. Remove and dispose of all asbestos acoustical ceiling plaster materials from the remaining five (5) functional spaces at the north end of the First Floor of the "O-House".

Summary of Locations:

Room / Location	Materials ->	ACP
Room 118		x
Room 119		x
Room 120		x
Room 121A		x
Room 121B		x

Key for Table

ACP Asbestos Acoustical Ceiling Plaster
x Material present in the functional space

The scope of abatement for Alternate Bid #4 includes all ceiling materials located in the identified areas.

Abatement Requirements:

The Contractor will be allowed to construct one negative pressure enclosures for the complete removal of all of the materials detailed in the "Abatement Activities" for Alternate Bid #4.

1. The requirements of Project #8 (Alternate Bid #3) will be altered as follows:
 - The Contractor will change the position of the barriers in the hallway to cover the hallway from Room 115 to the stairs.
 - Set-up of the enclosure will be expanded to include all rooms listed in the "Summary of Locations".
 - Two (2) layers of six-mil polyethylene sheeting will be placed over the floors in Room 118, 119, 120, 121A and 121B. The Contractor will be responsible for all damage to the floors as a result of abatement related activities.

Final Clearance Sample Requirements:

If this alternate bid is accepted and approved by the Owner, there will not be any changes to the final clearance sample requirements established for Project #8 (Alternate Bid #3). The project will be cleared using TEM analysis.

Project Schedule:

If this alternate bid is accepted and approved by the Owner, the project will be extended by three (3) work days. The Contractor will start the project on Monday, September 10, 2007, and will be complete with all abatement activities, and be ready for TEM clearance sampling, by the end of the work shift on Tuesday, September 18, 2007. The building will be available each work day from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed eight (8) work days (Monday - Saturday, Monday - Tuesday) to complete the project, with additional time provided for tear down activities. This project will be conducted concurrently with Project #1. Additional project dates include:

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#	Location	Start	Ready for PAs	End	# Days
8	Room 115 - 117 - Ceiling & Flooring + Additional Ceilings	Monday, 9-10-07	Tuesday, 9-18-07 @ 2:30 a.m.	Thursday, 9-20-07 @ 2:30 a.m.	8 + td

Schedule Restrictions - Set-up:

The Contractor will not be allowed to mobilize to the project site until Monday, September 10, 2007.

Schedule Information - TEM Clearance Sampling:

This abatement schedule projects the collection of TEM clearance air samples on Wednesday, September 19, 2007, with analysis completed the morning of Thursday, September 20, 2007. TEM clearance air sample results collected per this type of schedule are typically available between 12:00 p.m. and 2:00 p.m.

Schedule Restrictions - Saturday Work Hours:

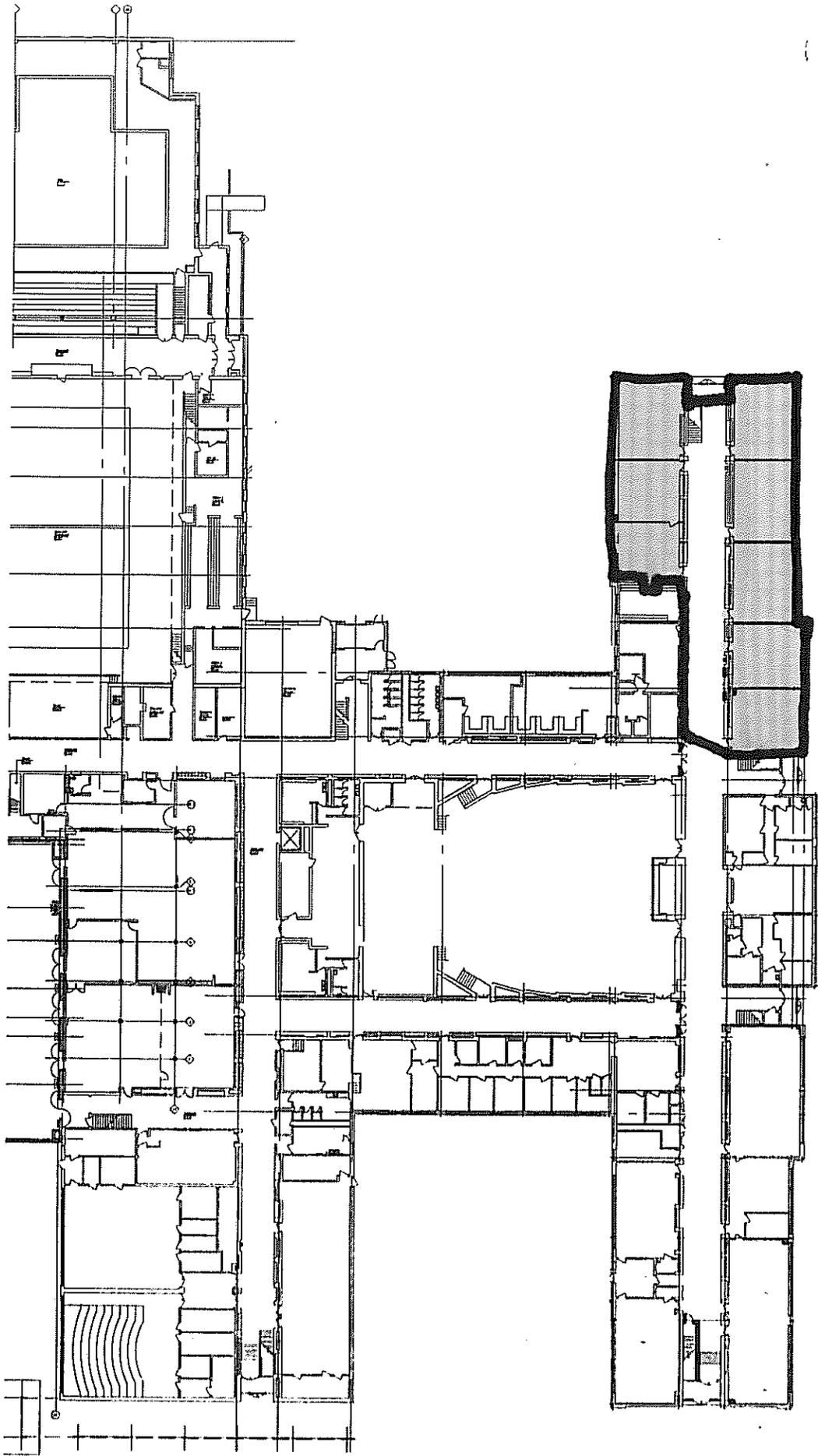
The Contractor may be allowed to change the work shift for all Saturday work to begin as early as 12:00 p.m. with prior approval from healthAIR, inc. and Southfield Public Schools. The duration of the work shift (maximum of 10.5 hours) will not change.

Schedule Restrictions - Man-Power:

The Contractor will be required maintain separate, independent work crews to complete Project #1 and Project #8 (Alternate Bid #3 and Alternate Bid #4), including separate competent persons.

Project Diagrams:

There is one (1) project diagram provided for Project #8 (Alternate Bid #3 and Alternate Bid #4). The attached diagram shows the approximate locations of asbestos ceiling and flooring materials to be removed and approximate boundaries of the regulated areas.



COMPOSITE FIRST FLOOR PLAN

PROJECT #8 (ALT. BID #3 AND ALT. BID #4)

Alternate Bid #5 (07.03A #5) - "Expand Flooring Abatement in Project 8 (Room 118, 119, 120, 121A, 121B)"

Project Summary:

The fifth alternate bid for consideration is the addition of the removal and disposal of all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A and 121B. The corresponding project, Project #8 (Alternate Bid #3 and Alternate Bid #4), involves the removal and disposal of all asbestos acoustical ceiling plaster and asbestos floor tile from a three classroom project area (Room 115, 116 and 117) and all asbestos acoustical ceiling plaster from Room 118, 119, 120, 121A, and 121B. The addition of these abatement activities to the project will add one (1) additional work day to the abatement schedule.

Additional Abatement Activities:

1. Remove and dispose of all asbestos floor tile materials from the remaining five (5) functional spaces at the north end of the First Floor of the "O-House".

Summary of Locations:

Room / Location	Materials ->	FT
Room 118		x
Room 119		x
Room 120		x
Room 121A		x
Room 121B		x

Key for Table

FT Asbestos Floor Tile
x Material present in the functional space

The scope of abatement for Alternate Bid #5 includes all flooring materials located in the identified areas, including 9"x9" floor tile, 12"x12" floor tile and/or other sized replacement floor tile (which may be located throughout or just in portions of the proposed abatement areas).

Abatement Requirements:

The Contractor will be allowed to construct one negative pressure enclosures for the complete removal of all of the materials detailed in the "Abatement Activities" for Alternate Bid #5.

1. The requirements of Project #8 (Alternate Bid #3 and Alternate Bid #4) will be altered as follows:
 - The Contractor will not be required to protect the floors in Room 118, 119, 120, 121A and 121B with polyethylene sheeting.

Final Clearance Sample Requirements:

If this alternate bid is accepted and approved by the Owner, there will not be any changes to the final clearance sample requirements established for Project #8 (Alternate Bid #3 and Alternate Bid #4). The project will be cleared using TEM analysis.

Project Schedule:

If this alternate bid is accepted and approved by the Owner, the project will be extended by one (1) work day. The Contractor will start the project on Monday, September 10, 2007, and will be complete with all abatement activities, and be ready for TEM clearance sampling, by the end of the work shift on Wednesday, September 19, 2007. The building will be available each work day from 4:00 p.m. - 2:30 a.m. The Contractor will be allowed nine (9) work days (Monday - Saturday, Monday - Wednesday) to complete the project, with additional time provided for tear down activities. This project will be conducted concurrently with Project #1. Additional project dates include:

#	Location	Start	Ready for PAs	End	# Days
8	Room 115 - 121B - Ceiling & Flooring	Monday, 9-10-07	Wednesday, 9-19-07 @ 2:30 a.m.	Friday, 9-21-07 @ 2:30 a.m.	9 + td

Schedule Restrictions - Set-up:

The Contractor will not be allowed to mobilize to the project site until Monday, September 10, 2007.

Schedule Information - TEM Clearance Sampling:

This abatement schedule projects the collection of TEM clearance air samples on Thursday, September 20, 2007, with analysis completed the morning of Friday, September 21, 2007. TEM clearance air sample results collected per this type of schedule are typically available between 12:00 p.m. and 2:00 p.m.

Schedule Restrictions - Saturday Work Hours:

The Contractor may be allowed to change the work shift for all Saturday work to begin as early as 12:00 p.m. with prior approval from healthAIR, inc. and Southfield Public Schools. The duration of the work shift (maximum of 10.5 hours) will not change.

Schedule Restrictions - Man-Power:

The Contractor will be required maintain separate, independent work crews to complete Project #1 and Project #8 (Alternate Bid #3 - Alternate Bid #5), including separate competent persons.

Project Diagrams:

There are no additional project diagrams provided for Alternate Bid #5.

GENERAL REQUIREMENTS and INFORMATION:

The following general project requirements and information pertain to all of the asbestos abatement projects at Southfield High School - "O-House".

1. The Contractor will be responsible for providing a manometer to provide a reading of the negative pressure in all negative pressure enclosures and will also be responsible for providing smoke testing of the negative pressure enclosures and glovebags, as required by OSHA. Abatement will not begin inside of a negative pressure enclosure unless a manometer is installed and indicates the proper negative pressure. All air filtration devices must be ducted outside the building. The Contractor will be responsible for properly securing the exhaust tubes in the exterior windows and/or doorways to prevent unauthorized access to the building during after work hours. All of the exterior window frames are scheduled to be remain and the Contractor will not be allowed to screw/nail into the frames. Any and all damage to the windows/frames is the responsibility of the Contractor.
2. Dumpsters may be placed at the site for these project activities. All dumpsters must be closed top dumpsters and must be locked when not being loaded. Open top dumpsters will not be allowed under any circumstances. All dumpsters must be placed on plywood to prevent damage to the paved parking areas. Dumpsters may not be delivered prior to the start of the project. All dumpsters must be placed on plywood to prevent damage to the paved parking areas. All dumpsters must be removed from the site within forty-eight (48) hours of the completion of tear down activities. All dumpsters on-site after the forty-eight (48) hour period will be removed from the site by healthAIR, inc. and all associated costs charged to the Contractor.
3. The Contractor is strongly encouraged to document all existing conditions prior to the start of the project in order to support pre-project damage. In all situations where damages are listed on work lists or punch lists by the Owner or Construction Manager, the Contractor will be provided two weeks (fourteen - 14 - calendar days) to complete corrective measures. After the fourteen day period, the Owner, Construction Manager or healthAIR, inc. will complete the corrective measures at the Contractor's expense. The Contractor will be required to dedicate two laborers for general clean-up activities throughout the building (as directed by the Owner or healthAIR, inc.) for two days for each individual project to address "punch list" type items such as pieces of tape/poly or tape/glue residue. The dates will be coordinated at the completion of all abatement activities.
4. Visual Inspection Procedures:
At the conclusion of final cleaning activities for each individual regulated area, a visual inspection will be completed in accordance with the following procedures:
 - Prior to each visual inspection in a negative pressure enclosure, the Contractor will replace the pre-filters on all of the air filtration devices with new clean filters. healthAIR, inc.'s Project Manager and the Contractor's competent person will conduct a thorough visual inspection of the project area to ensure that all materials have been completely removed and all surfaces have been properly cleaned. The visual inspection will not be conducted until all areas have been final cleaned and all non-essential equipment and supplies have been removed from the enclosure.
 - Prior to each visual inspection in a negative pressure enclosure, the Contractor will remove all excess equipment, including all ladders, scaffolds, hoses, bags, tools, etc. from the enclosure. The Contractor will also clean the exterior of all air filtration devices. Minimal ladders and scaffolds will be left in the enclosure to allow for the visual inspection.
 - healthAIR, inc.'s on-site Project Manager and the Contractor's competent person will conduct a thorough visual inspection of each regulated area to ensure that all materials have been completely removed and all surfaces have been properly cleaned.
 - The Contractor will not be allowed to conduct the lock down activities until after completion of the visual inspection. All polyethylene sheeting/barriers must be re-checked prior to lock down to minimize the potential of leaks behind the barriers. The Contractor will only be allowed to use a clear drying encapsulant for lock down.
5. The Owner reserves the right to re-order projects following award of contract. The initial schedule provided in this specification was developed during a meeting with healthAIR, inc. and the Owner. Should the order of any projects change, all durations, including scheduled Saturday work days, will remain the same.

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6. All procedures specific to the removal of non-asbestos carpet material and non-friable asbestos floor tile can be found in the "General Procedures of Asbestos Abatement" located at the end of this specification.
7. The Contractor will be required to protect all televisions and/or television support systems suspended from the joists above the ceilings. At a minimum, all televisions will be covered in a layer of six-mil polyethylene sheeting, cardboard and a second layer of six-mil polyethylene sheeting. Any and all damage to the televisions and/or television support systems is the responsibility of the Contractor.
8. The Contractor will be required to fully decontaminate and turn over all metal access panels and associated framing encountered when removing the asbestos acoustical ceiling plaster. All panels and framing will be decontaminated with hand methods and HEPA vacuuming and stored in a central location as directed by healthAIR, inc.
9. As part of the base bid, the Contractor will include the removal and disposal of any and all insulation, including all fiberglass insulation, on piping systems located below the ceiling. Risers are located in various rooms throughout the work area.
10. When present (typically in second floor classrooms), the Contractor will be required to remove all wall mounted acoustical tiles that are within 12" of asbestos acoustical ceiling plaster scheduled for abatement. These materials may include 12"x12" tiles, 2'x4' tiles, and any other sized tiles, as well as associated adhesive "glue pods" (when present). All of these materials must be removed and disposed of as asbestos-containing. The Contractor will be responsible for the protection of any and all wall mounted acoustical tiles that are not within 12" of asbestos acoustical ceiling plaster scheduled for abatement.
11. The Owner reserves the right to use the Contractor's submitted alternate bids to determine an appropriate unit price for additional abatement of flooring materials.

PROJECT SCHEDULE INFORMATION

[For All Projects]

The awarded Contractor will be held to all provisions of this Project Schedule. The Project Schedule detailed below covers project time lines for all bids and expands on the Project Schedule listed within the individual bids. The schedule will be made part of the Contract Documents and will be strictly enforced by the Owner and healthAIR, inc. Any and all variances to this schedule must be cleared by Southfield Public Schools and healthAIR, inc. prior to the commencement of the projects. If the projects are not completed within the time period outlined below, Southfield Public Schools may impose project penalties.

The following information is provided in the “Project Schedule Information”:

- *Asbestos Project Notification*
Due dates for project notifications for projects at Southfield High School - “O-House”.
- *Project Dates*
Table of project dates for each individual project area at Southfield High School - “O-House”.
- *Site Availability*
Summary of all building hours for project activities at Southfield High School - “O-House”.
- *Asbestos Clearance Testing*
Summary of all types of clearances samples for the projects at Southfield High School - “O-House”.
- *Project Penalties*
Summary of project penalties that the contractor will incur by not submitting the proper notifications, not meeting project dates or by failing clearance sampling

ASBESTOS PROJECT NOTIFICATIONS

All regulatory agencies including, but not limited to, the Environmental Protection Agency, the Michigan Department of Labor & Economic Growth, the Michigan Department of Environmental Quality (Department of Natural Resources) and/or all other applicable Federal, State, County or City municipalities should be notified within the proper notification period in order to start on the first start date listed below. The Contractor shall also be solely responsible for payment of all applicable fees and charges. Failure to notify in a timely manner will not excuse a Contractor from project penalties or from any citations for performing abatement activities without a proper notification. The Contractor(s) shall be responsible for submitting a notification which adequately covers all projects at the schools. By submitting a bid, the Contractor agrees to be fully responsible for the notification process.

The Contractor will be responsible for submitting all necessary notifications to the appropriate federal, state and local agencies. The Contractor will be responsible for submitting a NESHAPs notification for all projects involving the removal of greater than 160 square feet/260 linear feet of friable asbestos material (including the removal of more than 160 square feet of transite, a Category II non-friable material that may become crumbled during removal) and a Michigan Department of Labor & Economic Growth notification for all projects involving the removal of greater than 10 lineal/15 square feet.

The Contractor must submit a copy of the notification to healthAIR, inc. prior to commencement of the project and in sufficient time to make corrections, if necessary. Copies of all revised notifications should also be provided to healthAIR, inc. in a timely manner. The Contractor will be required to submit a copy of each notification to healthAIR, inc. for review prior to being submitted to the appropriate agencies.

The Contractor will submit the notification no later than the dates listed below. The Contractor will have the option to cancel the notification if contractual arrangements between the Contractor and Southfield Public Schools are not to the satisfaction of the Contractor. The notice of cancellation should be made in writing to either healthAIR, inc. or Southfield Public Schools forty-eight (48) hours prior to the start of the project. Failure to notify in a timely manner will not excuse a Contractor from project penalties listed in the upcoming section of the specification.

Notification Dates

The project notifications are due for the projects as follows (to allow for sufficient time including holidays):

Southfield High School - "O-House"

<u>MDLEG</u>	<u>NESHAPs</u>
Friday, August 31, 2007	Thursday, August 23, 2007

Notification Information

Information required for the MDLEG and NESHAPs notifications is provided below:

Southfield High School

Building:	Southfield High School
Address:	24675 Lahser Road, Southfield, Michigan 48033
Phone:	(248) 746-8600
Owner:	Southfield Public Schools
Address:	John W. English Administrative Center, 24661 Lahser Road, Southfield, Michigan 48033
Contact:	Jon Barth, Manager of Maintenance, Grounds and Security
Contact Phone:	(248) 746-8533
Building Size:	394,000 square feet
# Floors:	2
Project Floors:	1, 2
Building Age:	Original construction in 1949/1950 with additions in the 1950's and 1960's
Building Use:	Educational
Cross Streets:	Southwest corner of 10 Mile Road and Lahser Road
Inspector:	Phillip E. Schaffer (Kemron Environmental Services)
Accreditation #:	B1913

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All data on the project schedule and materials is located in earlier sections of the specification. All data on the abatement contractor, material quantities, disposal site and waste transporter will be provided by the Owner.

For projects involving negative pressure enclosures and requiring MDLEG notification, the Contractor should fax a notification to Mr. Steve Roach, healthAIR, inc. at (248) 427-0305 for proper signatures.

PROJECT DATES

All projects outlined in this specification will be completed by the Contractor according to the following project calendar:

Bid No. 07.03 Southfield High School - "O-House"				
<i>Project #</i>	<i>Start Date</i>	<i>Ready for PAs</i>	<i>Completion Date</i>	<i># Work Days</i>
Abatement Project #1	Monday, 9-10-07	Friday, 9-14-07 @ 2:30 a.m.	Monday, 9-17-07 @ 5:30 p.m.	5 + td [M - F + M]
Abatement Project #2	Saturday, 9-15-07	Saturday, 9-15-07 @ 11:00 p.m.	Saturday, 9-15-07 @ 2:30 a.m.	1 w/td [Sa]
Abatement Project #3	Monday, 9-17-07	Wednesday, 9-19-07 @ 11:00 p.m.	Wednesday, 9-19-07 @ 2:30 a.m.	3 w/td [M - W]
Abatement Project #4	Wednesday, 9-19-07	Wednesday, 9-19-07 @ 11:00 p.m.	Wednesday, 9-19-07 @ 2:30 a.m.	1 w/td [W]
Abatement Project #5	Thursday, 9-20-07	Thursday, 9-20-07 @ 11:00 p.m.	Thursday, 9-20-07 @ 2:30 a.m.	1 w/td [Th]
Abatement Project #6	Friday, 9-21-07	Saturday, 9-29-07 @ 2:30 a.m.	Tuesday, 10-2-07 @ 2:30 a.m.	8 + td [F - Sa, M - Sa + Tu]
Abatement Project #7	Monday, 10-1-07	Friday, 10-5-07 @ 2:30 a.m.	Monday, 10-8-07 @ 2:30 a.m.	5 + td [M - F + M]

Bid No. 07.03A				
Southfield High School - "O-House" - Alternate Bids				
<i>Project #</i>	<i>Start Date</i>	<i>Ready for PAs</i>	<i>Completion Date</i>	<i># Work Days</i>
Alternate Bid #1 <Addition to Project #6> <i>Schedule for Project #6 Changed</i>	Friday, 9-21-07	Monday, 10-1-07 @ 2:30 a.m.	Wednesday, 10-3-07 @ 2:30 a.m.	9 + td [F - Sa, M - Sa, M + W]
Alternate Bid #2 <Addition to Project #7>	No change to Project #7 schedule			
Alternate Bid #3 <Addition of Project #8>	Monday, 9-10-07	Friday, 9-14-07 @ 2:30 a.m.	Monday, 9-17-07 @ 2:30 a.m.	5 + td [M - F +M]
Alternate Bid #4 <Addition to Project #8> <i>Schedule for Project #8 Changed</i>	Monday, 9-10-07	Tuesday, 9-18-07 @ 2:30 a.m.	Thursday, 9-20-07 @ 2:30 a.m.	8 + td [M - Sa, M - Tu + Th]
Alternate Bid #5 <Addition to Project #8> <i>Schedule for Project #8 Changed</i>	Monday, 9-10-07	Wednesday, 9-19-07 @ 2:30 a.m.	Friday, 9-21-07 @ 2:30 a.m.	9 + td [M - Sa, M - W + F]

Notes on Project Dates

- Note 1:** In the event of conflicting dates between the information provided in this section and dates listed in other parts of the specification, the dates listed with the scope of work will take precedence.
- Note 2:** "Ready for PAs" means that the Contractor has completed all final cleaning activities, passed the visual inspection and completed lock down activities in the final project area.
- Note 3:** All project durations will remain the same should an individual project be completed early. The end date will be moved forward should the project be completed at an early date.
- Note 4:** The Owner reserves the right to re-order projects following award of contract. The initial schedule provided in this specification was developed during a meeting with healthAIR, inc. and the Owner. Should the order of projects be changed, all durations will remain the same, including the number of Saturday work days.

SITE AVAILABILITY

All on-site work for each of the projects outlined in this specification will be completed by the Contractor according to the following site availability:

Southfield High School - "O-House"

Monday - Saturday starting Monday, September 10, 2007

4:00 p.m. - 2:30 a.m.

Sundays

No scheduled work days

** Note: The Contractor may be allowed to change the work shift for all Saturday work to begin as early as 12:00 p.m. with prior approval from healthAIR, inc. and Southfield Public Schools. The duration of the work shift (maximum of 10.5 hours) will not change.

Approval of Additional On-Site Hours

The Contractor will be allowed to work additional hours and work days at these buildings with only with prior approval from healthAIR, inc. and Southfield Public Schools. The Contractor may also be required to cover additional custodial overtime in excess of 30 minutes before and 30 minutes after the Contractor's state start and finish time.

Additional Details to Project Schedules

More specific abatement project schedules are listed in the individual bids. As detailed above, the Contractor will be responsible for fulfilling all notification requirements (including breakdowns for all projects). All projects will be considered complete for schedule purposes when the project site has passed required clearance testing, the Contractor has completed the removal of all supplies and equipment from the project area and the Contractor has returned the building to Southfield Public Schools in a condition that satisfies Southfield Public Schools and healthAIR, inc.

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ASBESTOS CLEARANCE AIR TESTING

PCM (Phase Contrast Microscopy)

PCM Clearance Air Samples will be collected, analyzed and results verbally expressed to Southfield Public Schools and to the Contractor within twenty-four (24) hours, with the time period beginning at the completion of the lock down activities. Delays in clearance testing, after the accepted final visual inspection and lock down, will be cause for a proportional extension of the project completion date.

It will be in the judgement of healthAIR, inc. as to when PCM Air Clearance Samples will be collected. All PCM Clearance Air Samples will be analyzed on-site. Every effort will be made to collect the samples in the same work shift as the final visual inspection and lock down. "Drying time" will depend on factors such as project size, types of materials, negative pressure and air flow inside the enclosure and results of personal air samples collected during abatement and final cleaning. "Drying time" will range from thirty (30) minutes to twelve (12) hours.

The following projects have PCM Clearance (project listed as "Project Group" have multiple sets of PCM clearance samples):

<u>School</u>	<u>Project #</u>
Southfield High School - "O-House"	Project #2
	Project #3
	Project #4
	Project #5

TEM (Transmission Electron Microscopy)

TEM Clearance Air Samples will be collected, analyzed and results verbally expressed to Southfield Public Schools and to the Contractor within forty-eight (48) hours, with the time period beginning at the completion of the lock down activities. Delays in clearance testing, after the accepted final visual inspection and lock down, will be cause for a proportional extension of the project completion date.

It will be in the judgement of healthAIR, inc. as to when TEM Clearance Air Samples will be collected. healthAIR, inc. anticipates using APEX Research, Inc., Whitmore Lake, Michigan, for analysis of all TEM Clearance Air Samples. However, all TEM Clearance Air Samples will be analyzed at a NVLAP accredited laboratory of the Owner's or Owner's Representative's choosing. Southfield Public Schools will not authorize any turn-around time of less than twenty-four (24) hours. The Contractor may request turn-around times of less than twenty-four hours and will be responsible for any additional costs. Samples collected on Saturdays may not be available until 12:00 p.m. on Monday.

The Contractor may use another NVLAP accredited laboratory of their own choosing under the following stipulations:

- The laboratory must be NVLAP accredited.
- The laboratory must provide a fax copy of the clearance sample results to healthAIR, inc. prior to tear down.
- The laboratory must provide a final hard copy of the report to healthAIR, inc. prior to release of contract retainage.
- The Contractor will be responsible for the full cost of sample analysis.
- The Contractor will be responsible for proper chain of custody procedures/forms (including sample delivery) once the samples are sealed and relinquished by healthAIR, inc.

The following projects have option for TEM Clearance:

<u>School</u>	<u>Project#</u>
Southfield High School - "O-House"	Project #1
	Project #6
	Project #7
	Project #8 (Alternate Bid #3 - Alternate Bid #5)

PROJECT PENALTIES

By submitting a bid for this project, the Contractor understands that the District will charge the Contractor a monetary penalty if any individual project is not completed by the required completion date or if the clearance air samples do not pass the required levels set by the Environmental Protection Agency's AHERA Regulation, any other applicable government agency, or by the specifications. In addition, the Contractor understands that the District will charge the Contractor a monetary penalty if the project does not start due to failure to submit a notification.

Failure to Submit Proper Notifications

If the Contractor does not start the project per the established schedule due to a failure to submit proper notifications, the Contractor will be assessed a monetary penalty in the amount of **1,500 dollars**. This penalty will be assessed on a daily basis, including weekends and holidays, until the project begins.

At a minimum, said penalties will be withheld ("retained") by Southfield Public Schools until the reinstallation projects are completed. Southfield Public Schools will be responsible for all final decisions regarding the assessment of all penalties due to failure to submit proper notifications. Southfield Public Schools may impose project penalties even if no project delays were incurred to other trades. Southfield Public Schools may withhold the penalties and cancel the penalties at a later date if the Contractor regains the overall project schedule to the satisfaction of the Owner. healthAIR, inc. will have no decision or recommendation in the assessment of penalties.

Late Projects

If the Contractor does not complete the project detailed in the Scope-of-Work within the specified time allotment, the Contractor will be assessed a monetary penalty in the amount of **1,500 dollars plus additional healthAIR, inc. costs**. This penalty will be assessed on a daily basis if the project is one or more days late. healthAIR, inc. costs include, but are not limited to, on-site project management/air monitoring costs, air sample analysis costs and if necessary, management time for meetings and on-site project reviews by the Project Coordinator and/or Project Administrator. "Additional healthAIR, inc. costs" will be determined based on the total number of allowed work days (per the schedule in the specification documents) vs. the total number of days worked by the Contractor. healthAIR, inc. costs will be a minimum of \$654.00 per day. While the Owner may impose a penalty for completing a project two days late, there may not be any additional healthAIR, inc. costs if the Contractor was late because project days (such as two consecutive Saturdays) were skipped.

At a minimum, said penalties will be withheld ("retained") by Southfield Public Schools until the reinstallation projects are completed. Southfield Public Schools will be responsible for all final decisions regarding the assessment of all penalties due to late projects. Southfield Public Schools may impose project penalties even if no project delays were incurred to other trades. Southfield Public Schools may withhold the penalties and cancel the penalties at a later date if the Contractor regains the overall project schedule to the satisfaction of the Owner. healthAIR, inc. will have no decision or recommendation in the assessment of penalties.

Failed Clearance Air Samples

If any individual project does not pass the clearance air sampling tests as required by AHERA, or by the State of Michigan Public Act No. 147 (as amended) if the clearance air sample is not required by AHERA, by any other applicable governmental agency, or by the specifications, the Contractor will be responsible for **all additional healthAIR, inc. costs** for each day needed to perform additional cleaning. healthAIR, inc. costs include, but are not limited to, on-site project management/air monitoring costs, air sample analysis costs and if necessary, management time for meetings and on-site project reviews by the Project Coordinator and/or Project Administrator. It should be noted that the Contractor is responsible for these additional costs even *if the project completion date has not been surpassed*. The Contractor shall also be solely responsible for payment of all costs incurred by Southfield Public Schools due to the delay, including but not limited to additional charges for the healthAIR, inc., any and all additional sampling costs incurred due to the failure of the project enclosure/regulated area to meet the clearance requirements (including any and all air samples collected during the additional cleaning) and any and all overtime charges required for custodial personnel. The Contractor will be involved in decisions regarding turn-around time of additional clearance air samples. These additional costs shall be cumulative and shall occur each and every time the Contractor fails the clearance air sampling tests, as defined by federal and state regulations and this specification. Said additional charges will be deducted from the contract price immediately (via purchase order change request/change order) upon the occurrence of such charges. Southfield Public Schools may withhold the penalties and cancel the penalty at a later date if the Contractor regains the overall project schedule to the satisfaction of the Owner. healthAIR, inc. will have no decision or recommendation in the assessment of penalties.

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