## PROJECT MANUAL

## 2020 / 2021 ASBESTOS ABATEMENT FOR

STEVENSVILLE SCHOOLS IMPROVEMENTS PROJECT 300 PARK AVENUE STEVENSVILLE, MONTANA

#### PREPARED BY:

NORTHERN INDUSTRIAL HYGIENE, INC. 201 SOUTH  $30^{TH}$  STREET BILLINGS, MONTANA 59101 (406) 245-7766

February 9, 2020

NIH Project No. 999-4027B

Set No.

## **TABLE OF CONTENTS**

GENERAL REQUIREMENTS	
SECTION 00050 – INVITATION FOR BIDS	1-3
SECTION 00100 - INSTRUCTIONS TO BIDDERS	1-6
SECTION 00300 – FORM OF PROPOSAL	1-3
SECTION 00500 - CONTRACT	1-7
SECTION 00600 – GENERAL CONDITIONS OF THE CONTRACT	1-10
SECTION 00700 – SUPPLEMENTARY CONDITIONS OF THE CONTRACT	1-2
DIVISION ONE	
SECTION 01010 – STATEMENT OF WORK	1-5
DIVISION TWO	
SECTION 02080 – ASBESTOS ABATEMENT	1-23
DIVISION THREE THRU SIXTEEN NOT USED	
EVIUDITO	

## **EXHIBITS**

A – RULES OF ON-SITE CONDUCT

## **FIGURES**

H101	PHASE I ACM LOCATION PLAN - HIGH SCHOOL
H102	PHASE 2 ACM LOCATION PLAN - HIGH SCHOOL
H103	PHASE 3 ACM LOCATION PLAN - HIGH SCHOOL
H104	PHASE 4 ACM LOCATION PLAN - HIGH SCHOOL GYM
H105	PHASE 5 ACM LOCATION PLAN - HIGH SCHOOL
H106	PHASE 6 ACM LOCATION PLAN - HIGH SCHOOL
H107	PHASE 6 ACM LOCATION PLAN - FLEMENTARY SCHOOL

#### **SECTION 00050 - INVITATION FOR BIDS**

PROJECT: 2020 / 2021 Asbestos Abatement

Stevensville Schools Improvements High School and Elementary School

300 Park Avenue Stevensville, Montana

OWNER: Stevensville Public Schools

300 Park Avenue

Stevensville, MT 59870 Contact: Dr. Robert Moore Phone: (406) 777-5481

E-mail: MooreB@stevensville.k12.mt.us

ENGINEER: Northern Industrial Hygiene, Inc.

201 S. 30<sup>th</sup> Street Billings, MT 59101 Contact: Bob Brownell Phone: (406) 245-7766

E-mail: rbrownell@northernih.com

Sealed bids will be received until 4:00 PM, Thursday March 5, 2020, by the Owner, Stevensville Public Schools, in the Office of the Superintendent, located at 300 Park Avenue, Stevensville, MT 59870 for 2020 / 2021 ASBESTOS ABATEMENT-STEVENSVILLE SCHOOLS IMPROVEMENTS, STEVENSVILLE, MONTANA.

In general, the work consists of the following:

High School - Removal and disposal as asbestos: cement asbestos board (Transite) soffits and fascia, Transite window infill panels, window frame caulking, insulating mud/cement on boiler segment seams, boiler gaskets, mudded fittings, a vault door and floor tile and associated black mastic in multiple areas of the school building. It also includes the removal and disposal of non-asbestos carpet in select areas where floor tile and mastic work are scheduled.

High School Gymnasium – Removal and disposal as asbestos: floor tile and associated mastic from two restrooms.

Elementary School - Removal and disposal as asbestos: cement asbestos board (Transite) soffits, and floor tile and associated black mastic in select areas of the school building.

The High School was originally constructed in 1960. Additions to the building were constructed in 1971 and 1979. The building is approximately 42,160 square feet in size.

The High School Gymnasium was originally constructed in 1973 and was renovated in 2010. The building is approximately 17,500 square feet in size.

The Elementary School was originally constructed in 1980. A building renovation along with an addition occurred 1989. The building is approximately 21,600 square feet in size.

The asbestos abatement will be conducted in six phases. Phase 1 is scheduled for March 30 – April 10, 2020 and consists of the removal and proper disposal of cement asbestos board soffits and fascia along with window caulk from select areas of the High School and cement asbestos board soffits from select areas of the Elementary School.

Phase 2 is scheduled for June 10 – June 26, 2020 and consists of the removal and proper disposal of floor tile and associated black mastic in two multiple room containments along with the window frame caulking from three High School rooms.

Phase 3 is scheduled for November 2 – November 13, 2020 and consists of the removal and proper disposal of floor tile and mastic under non-ACM carpet in one containment consisting of multiple rooms.

Phase 4 is scheduled for March 1 – March 10, 2021 and consists of the removal and proper disposal of floor tile and associated black mastic from two restrooms located in the High School Gymnasium.

Phase 5 is scheduled for April 5 – April 21 and May 2021 and consists of the removal and proper disposal of cement asbestos window infill panels, floor tile and mastic under non-ACM carpet from one multiple room containment, floor tile and mastic from another multiple room containment, and mudded pipe fittings, insulative boiler mud and gaskets from the boiler room. The exact date of the work scheduled for May is dependent upon when the boiler can be shut down. The Abatement Contractor shall have 5 working days to complete the work and must mobilize to the site within 7 calendar days from notice to proceed.

Phase 6 is scheduled for June 7 – June 25, 2021 and consists of the removal and proper disposal of: floor tile and mastic from two multiple room containments in the High School, and floor tile and mastic from one multiple room containment in the Elementary School.

The bidder is required to familiarize himself with site conditions and verify the quantities of materials to be removed. A mandatory pre-bid walkthrough of the project will be conducted at 3:30 PM on Monday, February 24, 2020. All interested contractors shall meet at the main entrance to the High School building.

Bids shall be submitted on forms provided with the Contract Documents. Bids will be accepted for ONE GENERAL CONTRACT.

Bidders must submit a bid bond in the amount of 10% of the project bid price with the bid documentation.

Contractors may obtain the Project Manual from the Engineer.

Successful bidders will be required to provide a Performance Bond, Labor and Material Payment Bond in the amount of 100% of the Contract.

The Contractor shall comply with all fair labor practices and Montana statutes.

Each bidder must and subcontractor must have a valid Montana Public Contractors' License in the proper classification.

No bidder may withdraw his bid for at least 10 days after the scheduled time for receipt of

bids except as noted in the Instruction to Bidders.

The Owner reserves the right to reject any and all bids and to waive any informalities or irregularities in any bid received.

The Owner will withhold the 1% Montana Gross Receipts Tax from payments made for the work conducted on this project.

Dr. Robert Moore, Superintendent Stevensville Public Schools

End of Section 00050 - Invitation for Bids

#### **SECTION 00100 - INSTRUCTIONS TO BIDDERS**

#### **GENERAL**

#### 1.1 Work Description

The work will include the removal and proper disposal of asbestos-containing materials as described in Section 01010 and Section 02080 and shown on the drawings.

#### 1.2 Bid

A. Sealed bid forms for 2020 / 2021 Asbestos Abatement – Stevensville Schools Improvements, Stevensville, Montana will be accepted until:

#### 4:00 p.m. (local time) March 5, 2020

For the work included in this Project Manual.

The envelope containing the bid shall be labeled in the bottom left hand corner with the following information:

Name of Project: Sealed Bid-Do Not Open Until 4:00 PM

2020 / 2021 Asbestos Abatement Stevensville Schools Improvements

Stevensville, Montana

Name of Contractor:	
Contractor's Address:	
Montana Public Contractor's License #:	
Acknowledge Receipt of Addendum No.:,,,	

B. The bid form(s) are included in this project manual.

The Bidder is requested to complete the forms in accordance with the instructions stated below. Two copies of the bid shall be sealed in an opaque envelope marked on the outside with "BID ENCLOSED" and delivered to Stevensville Public Schools, Office of the Superintendent, 300 Park Avenue, Stevensville, Montana.

#### 1.3 Bid Form

- A. All Bidders shall submit their bids on the form provided by the Engineer. All such forms are contained herein.
- B. All blanks are to be filled in on the bid form and shall be completed in ink (printed legibly) or by typewriter or word processor.
- C. Where so indicated by the makeup of the bid form(s), sums shall be expressed in both words and figures.
- D. In the case of discrepancy between the two, the amount expressed in words shall govern.

- E. Any interlineations, alteration, or erasure must be initialed by the signer of the bid.
- F. All requested alternates shall be bid and the Bidders shall make no additional stipulations on the bid forms nor qualify his bid in any other manner.
- G. Each copy of a bid shall include the legal name of Bidder and a statement whether the Bidder is a sole proprietor, a partnership, a corporation, or any other legal entity.
  - 1. Each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract.
  - 2. A bid by a corporation shall further give the state of incorporation and have the corporate seal affixed.
  - 3. A bid submitted by an agent shall have a current Power of Attorney attached certifying agent's authority to bind Bidder.
- H. Bids shall include the Montana Public Contractor's license number of the Bidder.

#### 1.4 Submission of Bids

- A. All copies of the bid and other documents required to be submitted with the bid shall be enclosed in a sealed opaque envelope.
- B. If the bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "BID ENCLOSED" on the face.
- C. Bids should be delivered or mailed to:

Stevensville Public Schools Office of the Superintendent 300 Park Avenue Stevensville, Montana 59870 Attn: Dr. Robert Moore

- D. The envelope containing the bid forms shall be labeled in accordance with Article 1.2.A above.
- E. Bids shall be deposited at the designated location prior to the time and date for receipt of bids indicated in Article 1.2.A above, or any extension thereof made by Addendum.
  - 1. Bidder shall assume full responsibility for timely delivery at location designated for receipt of bids.
  - 2. Bids received after the time and date for receipt of bids will not be accepted and will be returned to Bidder or destroyed.
- F. Oral, telephonic or telegraphic bids are invalid and will not receive consideration.

#### 1.5 Modification or Withdrawal of Bid

- A. A bid may not be modified, withdrawn or canceled by the Bidder within 10 days following the time and date designated for the bid opening, and Bidder so agrees in submitting his bid.
- B. Prior to the date designated for bid opening, bids submitted early may be modified or withdrawn.
- C. To withdraw a bid the Bidder must notify the party receiving bids prior to the date designated for opening of bids.
  - Such notice, to withdraw a bid, shall be in writing over the signature of the Bidder or by telephone, telegram, e-mail or Facsimile (FAX); if by telephone or telegram, written confirmation over the signature of the Bidder must have been mailed or postmarked on or before the date and time set for the opening of bids. If the bid is withdrawn by e-mail, the e-mail must be received at: <a href="MooreB@stevensville.k12.mt.us">MooreB@stevensville.k12.mt.us</a> by the date and time set for the opening of the bids.
  - 2. It shall be worded as not to reveal the amount of the original bid.
- D. To modify a bid, an entirely new bid form must be submitted.
  - 1. This form is to be accompanied by all the necessary supporting documents.
  - Bid security shall be in an amount sufficient for the bid as modified or resubmitted.
  - 3. The envelope containing the new bid form(s) shall carry the notation "MODIFICATION OF BID".
- E. As all envelopes containing bids shall be dated, if more than one bid (or, more than one modified bid) is received from one Bidder the most recently dated bid will be used.
- F. All modified bids must be received prior to the time and date set for receipt of bids.

#### 1.6 Consideration of Bids

A. The bids will be opened at 4:00 p.m. (local time) March 5, 2020, at the Stevensville Public Schools, Office of the Superintendent, 300 Park Avenue located in Stevensville, Montana

The bid opening WILL be public.

The bids will be evaluated by the Owner and Northern Industrial Hygiene and a recommendation for award will be made.

B. An abstract of the amounts of the base bid may be made available to Bidders from the Engineer, at the discretion of the Owner, upon request and within a reasonable amount of time.

- C. The Owner shall have the right to reject any or all bids and to reject a bid not accompanied by any data required by the bidding documents or a bid in any way incomplete or irregular.
- D. The Owner shall have the right to waive any informality or irregularity in any bid received.

#### 1.7 Bidding Documents

- A. Copies of the necessary bidding documents are on file and may be obtained at the office of the Engineer.
- B. The bid forms will be furnished by and may be secured at:

Northern Industrial Hygiene, Inc. 201 South 30<sup>th</sup> Street Billings, MT 59101

- C. The Owner or Engineer, in making copies of the bidding documents available on the above terms, do so only for the purpose of obtaining bids on the work, and do not confer a license or grant for any other use.
- D. Incomplete sets of bidding documents shall not be used in preparing bids; neither the Owner nor the Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of bidding documents.

#### 1.8 Bidder's Representation

- A. Each Bidder, by making his bid, represents that:
  - 1. They have read and understand the bidding documents and the bid is made in accordance therewith.
  - 2. They have visited the construction site, attended the pre-bid walk through, and have familiarized themselves with the local conditions under which the Work is to be performed, and have satisfied themselves of the quantities involved in the project for which they are submitting a bid.
  - 3. They have conversed with the Engineer in general and specifically about any problems or concerns they have in the methods or scope of the project, or the quantities involved.
  - 4. Their bid is based upon the materials, systems, and equipment described in the bidding documents; all substitutions being made known to the Engineer and given approval.
  - 5. They are a Qualified Bidder in accordance with the terms of these bidding documents.

#### 1.9 Interpretation or Corrections of Bidding Documents

- A. Bidders shall promptly notify the Engineer of any ambiguity, inconsistency or error, which they may discover upon examination of the bidding, documents, the building and site or local conditions.
- B. Bidders requiring clarification or interpretation of the bidding documents shall make such a request to the Engineer prior to the bid opening.
- C. Any interpretation, correction, or change of the bidding documents will be made by addendum. Interpretations, corrections, or changes of the bidding documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections or changes.

#### 1.10 Addendum

- A. Addenda will be mailed, delivered, e-mailed or "Faxed" to all who are known by the Engineer to have received a complete set of bidding documents. Copies of Addenda will be made available for inspection wherever bidding documents are on file for this purpose and on the School Districts web site.
- B. Each bidder shall ascertain prior to submitting his bid that he has received all Addenda issued, and he shall acknowledge their receipt in his bid.

#### 1.11 Bid Security

A. A Bid Security in the amount of 10% of the contract value is required for this project.

#### 1.12 Qualification of Contractor

- A. Bidders to whom award of a contract is under consideration shall submit to the Owner or Engineer a properly executed Contractor's Qualification Statement containing the following information, as a minimum.
  - Reliability in performance of general contracting activities relating to asbestos removal through the submission of a name and location of at least two asbestos abatement projects, similar in scope and magnitude to this project, involving significant risks of fiber release with the name and telephone number of purchasers of abatement services.
  - Ability and proof of the contractor and his employees to perform asbestos abatement activities by submitting evidence of the successful completion of training courses covering asbestos removal as set forth by the appropriate Federal and State Codes and Regulations pertinent to asbestos abatement, and the accreditation required by AHERA in 40 CFR, Part 763, Subpart E. Proof that workers and supervisors are certified to work in the State of Montana as required by the Administrative Rules of Montana.
  - 3. Proof that the contractor and the contractor's employees have had instruction on the hazards of asbestos exposure, respirator use, decontamination and relevant OSHA regulations.

#### 1.13 Existing Conditions

- A. The Bidder shall verify all existing conditions, dimensions, and quantities of materials that relate to his portion of the Work.
- B. The Bidder shall contact the Engineer and converse on any projected problems and/or difficulties with the existing conditions, Drawings and Specification, and/or the connections between existing conditions and the Work to be performed.

#### 1.14 Specifications

- A. Grouping of data in the Specifications portion of the Project Manual is for the convenience of the Bidder and conforms roughly to customary trade practice.
- B. Asbestos Abatement Drawings are included as an attachment to the Project Manual for the convenience of the Bidder. In the event of a discrepancy or inconsistency between the Drawings and the Specifications, the written Specifications shall govern.
- C. Manufactured articles, materials, and equipment shall be installed, applied, connected, erected, used, cleaned, and conditioned as directed by the manufacturer, unless herein specified to the contrary.

**PART 2 PRODUCTS (Not Applicable)** 

**PART 3 EXECUTION (Not Applicable)** 

End of Section 00100 - Instructions to Bidders

#### **SECTION 00300 - FORM OF PROPOSAL**

Stevensville Public Schools 300 Park Avenue Stevensville, MT 59870 Attention: Dr. Robert Moore

The undersigned, having familiarized myself with the conditions of the Work, having examined the Contract Documents titled:

### 2020 / 2021 Asbestos Abatement Stevensville Schools Improvements 300 Park Avenue Stevensville, Montana

as well as the site of the proposed work, and being familiar with all of the conditions affecting the proposed project, hereby proposes to provide all labor, supervision, materials, tools, equipment, apparatus and appliances required to conduct asbestos abatement and perform all work associated with the abatement as required by, and in strict accordance with, the Contract Documents and all applicable regulatory requirements, at the prices stated below.

#### 1.01 ASBESTOS ABATEMENT

#### Base Bid:

Base Bid	Estimated			Unit	
Item No.	Quantity	Unit	Description	Price	Total Price
item No.	Quantity	Offic		FIICE	TOTAL FILE
		1	Phase 1		
1	4,610	SF	Removal and proper disposal of cement asbestos board soffits and fascia from the High School	Lump Sum	
2	2	EA	Removal and proper disposal of window caulk from window openings at the High School	Lump Sum	
3	1,750	SF	Removal and proper disposal of cement asbestos board soffits and fascia from the Elementary School	Lump Sum	
			Phase 2		
4	4,350	SF	Removal and proper disposal of floor tile and mastic from the High School	Lump Sum	
5	3	EA	Removal and proper disposal of window caulk from window openings at the High School	Lump Sum	
			Phase 3		
6	1,520	SF	Removal and proper disposal of floor tile and mastic from the High School	Lump Sum	
7	1,470	SF	Removal and proper disposal of non-ACM carpet overlying ACM floor tile and mastic from the High School	Lump Sum	
8	1	EA	Removal and proper disposal of vault door from the High School	Lump Sum	
	Phase 4				
9	400	SF	Removal and proper disposal of floor tile and mastic from the High School Gym	Lump Sum	
	Phase 5				
10	2,690	SF	Removal and proper disposal of floor tile and mastic from the High School	Lump Sum	

Base Bid	Estimated			Unit	
Item No.	Quantity	Unit	Description	Price	Total Price
11	1,490	SF	Removal and proper disposal of non-ACM carpet overlying ACM floor tile and mastic from the High School	Lump Sum	
12	166	EA	Removal and proper disposal of mudded joints/fittings from the High School boiler room	Lump Sum	
13	1	EA	Removal and proper disposal of insulative mud and gaskets on segmented boiler in the High School boiler room	Lump Sum	
14	8	SF	Removal and proper disposal of cement asbestos board window infill panel	Lump Sum	
Phase 6					
15	6,150	SF	Removal and proper disposal of floor tile and mastic from the High School	Lump Sum	
16	2	EA	Removal and proper disposal of window caulk from window openings at the High School	Lump Sum	
17	530	SF	Removal and proper disposal of floor tile and mastic from the Elementary School	Lump Sum	
Base Bid Total					

SF = Square Feet LF = Linear Feet EA = Each

Base Bid Total:		
_	(Total Price in Word	s)

which sum is hereby designated the Bid. (Amount must be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

#### 1.02 CONTRACT

If the undersigned is notified of the acceptance of this proposal within thirty (30) days of the time set for the opening of bids, the undersigned agrees to execute a contract for the above work, for a compensation computed from the above sums, in the attached Contract Documents as modified by Owner.

#### 1.03 TIME OF COMPLETION

The undersigned agrees to apply for a State of Montana Asbestos Permit as soon as Notice to Proceed is provided and that all work shall be done in accordance with said Contract Documents.

The asbestos abatement will be conducted in six phases:

- Phase 1 scheduled for March 30 April 10, 2020
- Phase 2 scheduled for June 10 June 26, 2020
- Phase 3 scheduled for November 2 November 13, 2020
- Phase 4 scheduled for March 1 March 10, 2021
- Phase 5 scheduled for April 5 April 21 and May, 2021
- Phase 6 scheduled for Jun 7 June 25, 2021

#### 1.04 LIQUIDATED DAMAGES

The undersigned agrees to pay as fixed, agreed liquidated damages, the sum stipulated in the

above referenced Contract as Modified (\$250), for each consecutive calendar day after the date established for Substantial Completion of the Work <u>in each phase</u> remains uncompleted.

## 1.05 ADDENDA

The und	lersigned acknowledges t	e receipt of the following addenda:
1.06 (	CERTIFICATION	
	lersigned certifies that he contractors	s a duly and regularly licensed Contractor holding Montana
License		
	Number	Class
Bidder II	nformation:	
F	Firm Name:	
	Business Address:	
	Telephone Number:	
	Prepared by:	
	Title:	
[	Date:	
9	Signature:	

End of Section 00300 - Form of Proposal

#### **SECTION 00500 - CONTRACT**

#### Part 1 - General

#### **DESCRIPTION**

The Owner intends to execute an agreement with the Contractor for this construction project of limited scope where the Basis of Payment is a stipulated sum.

THIS AGREEMENT is dated as of the	day of	in the year
2020 by and between Stevensville Public	Schools, Stevensville, Montana,	(hereinafter
called OWNER) and	hereinafter calle	ď
CONTRACTOR).		

OWNER AND CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

#### **ARTICLE 1. WORK**

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: 2020 / 2021 Asbestos Abatement – Stevensville Schools Improvements, Stevensville, Montana and involves the removal and disposal of hazardous materials as follows:

High School - Removal and disposal as asbestos: cement asbestos board soffits and fascia, cement asbestos board window infill panels, window frame caulking, insulating mud/cement on boiler segment seams, boiler gaskets, mudded fittings, vault door, and floor tile and associated mastic in multiple areas of the school building. It also includes the removal and disposal of non-asbestos carpet in selects areas where floor tile and mastic work is scheduled.

Elementary School - Removal and disposal as asbestos: cement asbestos board soffits, and floor tile and associated black mastic in select areas of the school building.

#### ARTICLE 2. ENGINEER

The Project has been designed by: Northern Industrial Hygiene, Inc., 201 South 30<sup>th</sup> Street, Billings, MT 59101, who is hereinafter called ENGINEER and who is to act as Owner's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in Article 8 in connection with completion of the Work in accordance with the Contract Documents.

#### ARTICLE 3. CONTRACT TIME

After the Owner provides the Notice to Proceed the Abatement Contractor shall apply for the required State of Montana Asbestos Abatement Permit.

The asbestos abatement will be conducted in six phases:

- Phase 1 scheduled for March 30 April 10, 2020
- Phase 2 scheduled for June 10 June 26, 2020
- Phase 3 scheduled for November 2 November 13, 2020
- Phase 4 scheduled for March 1 March 10, 2021
- Phase 5 scheduled for April 5 April 21 and May, 2021
- Phase 6 scheduled for June 7 June 25, 2021

For work scheduled in May during Phase 5, the Abatement Contractor shall have 5 working

days to complete the work and must mobilize to the site within 7 calendar days from notice to proceed.

The work in each phase, including final air clearance monitoring and removal of the containment barriers will be substantially complete upon the specified date.

Contractor undersigned agrees to pay as fixed agreed liquidated damages; the sum of two hundred fifty dollars (\$250) for each consecutive calendar day after the date established for Substantial Completion of the specified Work in each phase remains uncompleted.

#### ARTICLE 4. CONTRACT PRICE

#### Asbestos Abatement

OWNER shall pay CONTRACTOR for completion of the asbestos accordance with the Contract Documents in current funds as follows:	
LUMP SUM AMOUNT OF	(or as on and acceptance of
the Work.	•

#### ARTICLE 5. PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment directly to the Owner Final Payment. Upon final completion and acceptance of the Work OWNER shall pay the full Lump Sum Contract Price as recommended by ENGINEER.

#### **ARTICLE 6. INTEREST**

All moneys not paid when due shall bear interest at the maximum rate allowed by law at the place of the Project.

#### ARTICLE 7. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, Work, site, quantities, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

CONTRACTOR has studied carefully the inspection report, and accepts the technical data contained in said report and drawings upon which CONTRACTOR is entitled to rely.

CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all abatement documents (in addition to or supplement to the inspection report referred to in the paragraph above) which pertain to the site conditions at or contiguous to the site or otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents.

CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time.

CONTRACTOR has correlated the results of all such inspection and abatement reports with the terms and conditions of the Contract Documents.

CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

CONTRACTOR represents that it is not presently suspended or debarred or proposed for suspension or debarment by any government agency or regulatory agency.

#### ARTICLE 8. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

Section 00050 - Invitation for Bids

Section 00100 - Instructions to Bidders

Section 00300 - Bid Form

Section 00500 - Contract

Section 00600 - General Conditions of the Contract

Section 00700 - Supplementary Conditions to the Contract

Section 01010 – Statement of Work

Section 02080 – Asbestos Abatement

Amendment A – Montana Prevailing Wage Rates 2020

Exhibit A – Rules of On-Site Conduct

Drawing Sheets H101, H102, H103, H014, H105, H106, H107

Addenda

#### **ARTICLE 9. MISCELLANEOUS**

No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound, and in the event of a proposed assignment by the CONTRACTOR, prior written consent to such must also be given to its Surety; and specifically but without limitation moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

This Agreement shall be governed by the laws of the State of Montana. The parties agree that any litigation concerning this Agreement will be brought in Ravalli County District Court.

## Α

ARTIC	LE 10. OTHER PROVISIONS
	See General Conditions of the Contract and Supplementary Conditions to the Contract.

## **SIGNATURE PAGE**

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR, and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR.

This agree	ement will be effective on	, 2020.
OWNER	Stevensville Public Schools	CONTRACTOR
Ву		By [CORPORATE SEAL]
	or giving notices	Attest
If C	CONTRACTOR is a corporation, a	attach evidence of authority to sign.

**PART 3 EXECUTION (Not Applicable)** 

PART 2 PRODUCTS (Not Applicable)

**End of Section 0500 - Contract** 

## **AMENDMENT A**

# MONTANA PREVAILING WAGE RATES FOR BUILDING CONSTRUCTION SERVICES 2020

**EFFECTIVE: JANUARY 02, 2020** 

#### A. Date of Publication January 2, 2020

#### **B.** Definition of Heavy Construction

The Administrative Rules of Montana (ARM), 24.17.501(4) - (4)(a), states "Heavy construction projects include, but are not limited to, those projects that are not properly classified as either 'building construction', or 'highway construction.'

Heavy construction projects include, but are not limited to, antenna towers, bridges (major bridges designed for commercial navigation), breakwaters, caissons (other than building or highway), canals, channels, channel cut-offs, chemical complexes or facilities (other than buildings), cofferdams, coke ovens, dams, demolition (not incidental to construction), dikes, docks, drainage projects, dredging projects, electrification projects (outdoor), fish hatcheries, flood control projects, industrial incinerators (other than building), irrigation projects, jetties, kilns, land drainage (not incidental to other construction), land leveling (not incidental to other construction), land reclamation, levees, locks and waterways, oil refineries (other than buildings), pipe lines, ponds, pumping stations (prefabricated drop-in units – not buildings), railroad construction, reservoirs, revetments, sewage collection and disposal lines, sewers (sanitary, storm, etc.), shoreline maintenance, ski tows, storage tanks, swimming pools (outdoor), subways (other than buildings), tipples, tunnels, unsheltered piers and wharves, viaducts (other than highway), water mains, waterway construction, water supply lines (not incidental to building), water and sewage treatment plants (other than buildings) and wells."

#### C. Definition of Public Works Contract

Section 18-2-401(11)(a), MCA defines "public works contract" as "...a contract for construction services let by the state, county, municipality, school district, or political subdivision or for nonconstruction services let by the state, county, municipality, or political subdivision in which the total cost of the contract is in excess of \$25,000...".

#### D. Prevailing Wage Schedule

This publication covers only Heavy Construction occupations and rates in the specific localities mentioned herein. These rates will remain in effect until superseded by a more current publication. Current prevailing wage rate schedules for Building Construction, Highway Construction and Nonconstruction Services occupations can be found on the internet at www.mtwagehourbopa.com or by contacting the department at (406) 444-6543.

#### E. Rates to Use for Projects

ARM, 24.17.127(1)(c), states "The wage rates applicable to a particular public works project are those in effect at the time the bid specifications are advertised."

#### F. Wage Rate Adjustments for Multiyear Contracts

Section 18-2-417, MCA states:

- "(1) Any public works contract that by the terms of the original contract calls for more than 30 months to fully perform must include a provision to adjust, as provided in subsection (2), the standard prevailing rate of wages to be paid to the workers performing the contract.
- (2) The standard prevailing rate of wages paid to workers under a contract subject to this section must be adjusted 12 months after the date of the award of the public works contract. The amount of the adjustment must be a 3% increase. The adjustment must be made and applied every 12 months for the term of the contract.
- (3) Any increase in the standard rate of prevailing wages for workers under this section is the sole responsibility of the contractor and any subcontractors and not the contracting agency."

#### **CONSTRUCTION LABORERS GROUP 2**

**Wage Benefit** \$25.90 10.94

All Districts
0-30 mi. free zone
>30-60 mi. base pay + \$3.05/hr.
>60 mi. base pay + \$4.85/hr.

Zone Pay:

#### This group includes but is not limited to:

General Labor; Asbestos Removal; Burning Bar; Bucket Man; Carpenter Tender; Caisson Worker; Cement Mason Tender; Cement Handler (dry); Chuck Tender; Choker Setter; Concrete Worker; Curb Machine-lay Down; Crusher and Batch Worker; Heater Tender; Fence Erector; Landscape Laborer; Landscaper; Lawn Sprinkler Installer; Pipe Wrapper; Pot Tender; Powderman Tender; Rail and Truck Loaders and Unloaders; Riprapper; Sign Erection; Guardrail and Jersey Rail; Spike Driver; Stake Jumper; Signalman; Tail Hoseman; Tool Checker and Houseman and Traffic Control Worker.

## **NOTICE OF AWARD**

То:		Date	
Project:	2020 / 2021 Asbestos Abateme Stevensville Schools Improvem 300 Park Avenue Stevensville, Montana		
	sidered the BID submitted by you	ou for the above-described WORK in on for Bidders.	
You are hereby notific amount shown:	ed that your BIDS have been acc	cepted for the following items in the	
Asbestos Aba	tement Base Bid:	\$	
You are required to re	eturn an acknowledged copy of t	his NOTICE OF AWARD to the OWN	IER.
Dated this day	of 2020.		
Owner/Owners Repre	esentative:		
Ву:			
Title:			
	ACCEPTANCE	OF NOTICE	
Receipt of Notice of A	Award is hereby acknowledged I	by:	n this
Ву:			
Title:			

## **NOTICE TO PROCEED**

То:	Date:
Project:	2020 / 2021 Asbestos Abatement Stevensville Schools Improvements
	300 Park Avenue Stevensville, Montana
You are hereby	notified to commence WORK in accordance with the Agreement dated
	2020. WORK shall commence April 22, 2020.
Stevensville Pu	<u>blic Schools</u> Owner
Ву	
Title	

#### SECTION 00600 - GENERAL CONDITIONS OF THE CONTRACT

#### **Article I - Contract Documents**

#### A. <u>Contract Documents</u>

The Contract Documents consist of the Invitation for Bids, Instructions to Bidders, Contract General Conditions, Supplementary General Conditions, Specifications for Work, Drawings, Proposal/Bid, all Addenda issued prior to bidding, and any Change Orders.

Should conflicts arise between or among the various sections of the Contract Documents including the interpretation of such, the following order of governing is established:

- 1. Agreement Between Contractor and Owner
- 2. Addendum
- Proposal
- 4. Supplementary General Conditions
- General Conditions
- 6. Specifications for Work
- Drawings
- 8. Instructions to Bidders
- 9. Invitation for Bids
- 10. Rules of On-Site Conduct

#### B. The Work

The Work comprises the completed construction required by the Contract Documents and includes all labor, material, equipment, and services necessary to complete the construction.

#### C. Intent

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complimentary and what is required by one shall be as binding as if required by all.

#### **Article II - Owner**

#### A. Definition

The Owner is: Stevensville Public Schools

300 Park Avenue

Stevensville, Montana 59870

#### B. Owners Right to Award Separate Contracts

The Owner reserves the right to award separate contracts in connection with other portions of the project or other work on the site under these or similar conditions of the contract.

#### C. Owner's Right to Stop Work

If the Contractor fails to carry out the work in accordance with the Contract Documents or fails to correct defective work, the Owner may, seven (7) days after written notice to the Contractor and his surety, order the Contractor to stop the work until such deficiencies are corrected or may terminate the Contractor's contract and take possession of all materials

and equipment and proceed to complete the work. All funds due the Contractor according to the contract shall be used to pay for completing the work. Funds remaining after completion of the work shall be paid to the Contractor. If additional funds are needed to complete the work, the Contractor shall pay the difference.

#### D. Owner's Right to Personnel

The Owner reserves the right to have the Contractor and/or subcontractors remove person(s) and/or personnel from any and all work on the project with cause but without cost to the Owner. Such requests from the Owner may be made verbally or in writing and may be done directly or indirectly through the Architect/Engineer or on-site representative. Cause may be, but not limited to, any of the following: incompetence, poor workmanship, poor scheduling abilities, poor coordination, disruption to the facility or others, poor management, action/inaction causing delay(s), disruption to the project, will not strictly adhere to facility procedures and project requirements either willfully or unknowingly, insubordination, drug/alcohol use, possession of contraband, belligerent acts or actions, etc. The Contractor shall provide replacement person(s) and/or personnel acceptable to the Owner at no cost to the Owner.

#### E. <u>Termination of Contract</u>

The Owner, without cause and for its convenience, may terminate all or a portion of the work under this Contract. The Owner shall provide written notice stating to the Contractor the effective time and date of the termination. Upon this notice the Contractor shall cease all work, itemize his expense to date including a reasonable profit on these expenses and submit his statement to the Owner for approval. This payment shall constitute final settlement of the terminated contract or portion of work terminated.

#### F. Access to Site

The Owner and his authorized representative will have access to the work at all times and the Contractor shall facilitate such access.

#### **Article III - Contractor**

#### A. Definition

The Contractor is the person, firm or corporation identified in the Contract between Contractor and Owner or his authorized representative.

#### B. Existing Conditions

By executing the Contract, the Contractor certifies that he has visited the site, familiarized himself with the local conditions under which the work is to be performed and correlated his observations with the requirements of the Contract Documents.

#### C. Supervision

The Contractor shall supervise and direct the work and shall be responsible for the acts, omissions and discipline of his employees, subcontractors and their employees and other persons performing any of the work under a contract, whether written or verbal, with the Contractor.

#### D. Taxes, Permits, Fees

The Contractor shall secure and pay for all permits and inspections, give all notices, pay all taxes and fees and comply with all laws, ordinances, rules, regulations and lawful orders bearing on the performance of the work.

#### E. <u>Limits of the Work</u>

The Contractor shall confine his operations to the immediate vicinity of the work and shall not extend any operations beyond the limits of the work without the Owner's permission. This shall include, but is not limited to, storage of materials, prefabrication of components, offices, employee break areas, loading and unloading areas.

#### F. Shop Drawings and Approvals

The Contractor shall review, approve, and submit to the Architect/Engineer ALL shop drawings, schedules, samples and approvals required by the Contract Documents within thirty (30) calendar days of being issued the Notice to Proceed unless extended by the Architect/Engineer. Approval of shop drawings, schedules and samples by the Architect/Engineer shall not relieve the Contractor of the responsibility of the requirements of the Contract Documents unless specifically approved in writing by the Architect/Engineer. No work requiring the submittal of shop drawings, schedules, samples or approvals shall be commenced until such submittals have been approved by the Architect/ Engineer.

### G. Substitution of Material

All material and equipment specified by manufacturer's name, brand or number is so identified for the purpose of establishing a standard. Any material or equipment that will perform the duties imposed by the Contract Documents that are of the same quality and standard will be considered. All such substitutions will be submitted to the Architect/Engineer with sufficient data for comparison and no substitutions shall be purchased or installed without written approval from the Architect/Engineer.

#### H. "Or Equal" Specifications

It shall be the responsibility of the Contractor to provide data or other proof that products substituted under the "or equal" provisions of the product specifications are, in fact, of equal quality, appearance, and function. Material or equipment with a "prior approved equal" status must be approved by the Architect/Engineer prior to the bid opening.

#### I. Time of Submittal

All substitutions requiring prior approval shall be submitted at least ten (I 0) days prior to bid opening. All other substitutions shall be submitted not more than ten (10) days after the date of the "Notice to Proceed".

#### J. Demolition and Debris

The Contractor shall at all times keep the premises free from the accumulation of rubbish and other waste material. Unless otherwise specified, all material and equipment removed during demolition and not specified to be reused or salvaged by the Owner, shall become property of the Contractor and shall be removed from the premises promptly.

#### **Article IV - Work**

#### A. <u>Labor and Materials</u>

Unless otherwise specified, the Contractor shall provide and pay for all labor, materials, equipment, tools, utilities, transportation, temporary construction and services for the proper execution and completion of the work.

#### B. <u>Material and Equipment</u>

Unless otherwise specified, all material and equipment provided by the Contract Documents shall be new and in good condition. All workmanship shall be of good quality and in keeping with the standard of the respective trades.

#### C. <u>Protection of Persons and Property</u>

- 1. Safety and Protection: The Contractor shall take all reasonable precautions to prevent injury or loss to the work, adjacent property, the public and all employees on the work or other persons affected thereby.
- 2. Barricades and Signs: The Contractor shall erect and maintain, warning signs, barricades and other reasonable safeguards for safety and protection as required by law and the conditions and progress of the work.
- 3. Emergencies: In the event of any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent any damage or loss; Any claim by the Contractor for additional compensation or extension of time shall be submitted to the Owner for consideration as provided by Article V.

#### D. Warranty

The warranty period shall be defined as commencing with Substantial Completion of the project and continuing for one (1) year after the date of Final Acceptance. If, during the period between Substantial Completion and Final Acceptance or within one (1) year after the date of Final Acceptance, any of the work is found to be defective or not in accordance with the Contract Documents, the Contractor shall, upon receiving written notice from the Architect/Engineer or Owner, correct any work beginning within seven (7) calendar days of said written notice. Should the Contractor fail to respond to the written notice within the designated time, the Owner may correct the work at the expense of the Contractor,

#### **Article V - Changes in Work**

#### A. Change Order

The Owner may order changes in the work with the contract sum and/or contract time being adjusted accordingly by a written Change Order. A Change Order will be on a form required and provided by the Owner and will be the only authorized adjustment to the contract sum and contract time allowed after the execution of the Owner-Contractor Agreement.

1. No changes to the work by the Contractor will be authorized until written approval of the Change Order has been received from the Owner.

- 2. Contractor shall provide a complete breakdown of all costs relating to each Change Order. The breakdown shall include hourly rates and unit costs as well as a complete description of all work involved.
- 3. The cost or credit to the Owner resulting from a change in the Work shall be determined as follows:

By actual cost as shown by the contractor's invoices, plus 5% allowance for overhead, plus 10% allowance for profit.

Cost shall be limited to the following: Cost of materials, including cost of delivery; Cost of labor, including social security, old age and unemployment insurance and fringe benefits under collective bargaining agreements; Workers' Compensation insurance; bond premiums; rental value of power tools and equipment. Equipment and tool costs shall be based upon actual invoices for rented equipment and actual historical cost for Contractor-owned equipment.

4. All Change Orders shall be signed by the Contractor before submittal to the Architect/Engineer. Approval by the Contractor's Surety and Surety's Licensed Agent is also required if the cumulative Change Orders exceed ten percent (10%) of the original contract sum.

#### B. Change Directive

A Change Directive is a written order prepared by the Architect/Engineer and signed by the Owner and Architect/ Engineer, directing a change in the Work. The Owner may, by Change Directive and without invalidating the Contract, order changes in the Work within the general scope of the Contract, consisting of additions, deletions or other revisions. The Contract Sum and/or Contract Time may be adjusted. If the Contractor believes that the change affects the Contract Sum or Time, he shall notify the Architect/Engineer within three (3) working days and shall separately record all labor, equipment and material costs in a separate account and shall submit daily records of the same as they are incorporated into the work deemed to be a change directive.

#### **Article VI - Payments and Completion**

#### A. Contract Sum

The Owner shall pay the Contractor the amount stated in the Agreement and the amount of all authorized and approved Change Orders for the performance of the work under the Contract Documents.

#### B. Initial Submittal

Prior to the first application for payment, the Contractor shall submit the following information on the appropriate forms:

1. Project/Progress Schedule: The Contractor shall prepare a progress schedule in a form that is acceptable to both the Architect/Engineer and the Owner. The Schedule shall show the estimated progress of the entire project through the individual time periods allowed for completion of each discipline/phase including, but not limited to, time for submittals, earthwork, foundations, structural, mechanical, electrical, insulation, interior finishes, etc. For Projects with construction costs at \$250,000 and greater, the Project Schedule shall be in the Critical Path Method (CPM).

#### C. Progress Payments

- 1. Periodic Estimates for Partial Payments shall be on a form provided by the Owner and submitted to the Architect/Engineer for payment by the Owner. Each partial payment request will be accompanied by a Conditional Lien Release. Payment shall be requested for the labor and material incorporated in the work to date and for materials suitably stored, less the aggregate of previous payments. The Owner will pay 95% of the amount due the Contractor on account of progress payments.
- 2. Each and every Periodic Estimate for Partial Payment shall be accompanied by a current Project Schedule showing the percent complete progress to date, project work and projected time to complete the work of all activities. The percent complete and minor schedule changes, including additions of activities, changes to sequences of activities and significant changes in activity demands must be shown by a revised Schedule. A written report shall provide details about the changes and what actions are anticipated to get the work completed in the contractual time period. If no Schedule (or revised Schedule) is provided, the Architect/Engineer and/or Owner may return the pay request, or hold it, and will not pay for any portion of the Work until the appropriate Schedule, indicating all changes, revisions and updates, is provided.
- 3. The Contractor, by submission of any partial pay request, certifies that every Claim for partial payment is correct, true and just in all respects, and that payment or credit had not previously been received. The Contractor further warrants and certifies, by submission of any partial pay request, that all previous work for which payment has been received is free and clear of all liens, claims, security interests or encumbrances in favor of the Contractor, subcontractors, material suppliers or other persons or entities and does not release the Owner from such.
- 4. Progress payments do not constitute official acceptance of any portion of the work.

#### D. Substantial Completion

- 1. When the Contractor considers the work complete, he shall notify the Architect/Engineer and request a substantial completion inspection.
- 2. Prior to the inspection, the Contractor shall complete the final clean-up of the project site which, unless otherwise stated in the Contract Documents, shall consist of:
  - Removal of all debris and waste.
  - b. Removal of all stains, smears, marks of any kind from all surfaces including existing surfaces if said damage is the result of the work.
  - c. Removal of all temporary structure and barricades.
- 3. If, during the inspection by the Architect/Engineer, any items are found to be incomplete, incorrect or in other ways not in compliance with the contract documents, the Contractor shall correct all such deficiencies within 30 days of the inspection date.

#### E. Final Completion and Payment

1. When the work is fully completed in accordance with the Contract Documents, the Contractor shall submit a final payment request, for 100% of the contract amount, including all approved contract Change Orders, on the appropriate form.

2. The making of final payment will not relieve the Contractor from claims arising from the failure of the Work to comply with the requirements of the Contract Documents. The warranty period shall commence with Substantial Completion and shall extend one (1) year from the date of Final Completion.

#### F. Liquidated Damages

The Contractor agrees to pay as fixed, agreed liquidated damages, the sum of Two Hundred and Fifty Dollars (\$250) for each consecutive calendar day after the date established for Substantial Completion the Work remains uncompleted.

#### **Article VII - Bonds and Insurance**

Performance, Payment and Other Bonds

- A. Contractor shall furnish Performance and Payment Bonds, each in the amount of at least equal to the contract Price as security for the faithful performance and payment of all Contractors' obligations under the Contract Documents. These Bonds shall remain in effect at least one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations, or by the Contract Documents. Contractor shall also furnish such other Bonds as are required by the Contract Documents.
- B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonded and as Acceptable Reinsuring companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- C. If the surety on any Bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located, Contractor shall within twenty (20) days thereafter substitute another bond and surety, both of which shall comply with paragraphs VII.A and VII.B.

#### Certificates of Insurance

- D. Contractor shall deliver to Owner, with copies to each additional insured identified, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain. Owner shall deliver to Contractor, with copies to each additional insured identified, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.
- E. Insurance, General: the Contractor shall maintain for the duration of the contract, at its cost and expense, insurance against claims for injuries to persons or damages to property, including contractual liability, which may arise from or in connection with the performance of the work by the Contractor, its agents, employees, representatives, assigns, or subcontractors.
- F. Hold Harmless and Indemnification: the Contractor agrees to protect, defend, and save the Owner, its elected and appointed officials, agents, and employees harmless from and against all claims, demands, causes of action of any kind or character, including the cost of

defense thereof, arising in favor of the Contractor, its agents, employees or any third parties on account of bodily or personal injuries, death, or damage to property arising out of services of work performed or omissions or work or in any way resulting from the acts, negligent or otherwise, or omissions of the Contractor, its agents, employees, assigns, and/or subcontractors under the Contract Documents.

- G. Contractor's Insurance: insurance required under all sections herein shall be in effect for the duration of the contract that extends through the warranty period. Insurance required herein shall be provided by insurance policies issued only by insurance companies currently authorized to do business in the state of Montana. No Contractor or Subcontractor shall commence work under this contract until all required insurance has been obtained. During the term of this contract, the Contractor shall, not less than thirty days prior to the expiration date of any policy for which a certificate of insurance is required, deliver to the Owner a certificate of insurance with respect to the renewal insurance policy. The Contractor shall furnish one copy of insurance certificates of insurance herein required, which shall specifically set forth evidence of all coverage required by these Contract Documents and which shall be signed by authorized representatives of the insurance company or companies evidencing that insurance as required herein is in force and will not be canceled, limited or restricted without thirty days' written notice by certified mail to the Contractor and the Owner. The Contractor shall furnish to the Owner copies of any endorsements that are subsequently issued amending coverage or limits.
- H. The Contractor shall carry **Workers' Compensation Insurance.** Such Workers' Compensation Insurance shall protect the Contractor from claims made by his own employees, the employees of any subcontractor, and also claims made by anyone directly or indirectly employed by the Contractor or subcontractor. The Contractor shall require each Subcontractor similarly to provide Workers' Compensation Insurance.
- Contractor shall carry occupant's coverage Commercial General Liability Insurance including coverage for premises; operations; independent contractor's protective; products and completed operations; broad form property damage and comprehensive automobile liability insurance.

The **Commercial General and Automobile Liability Insurance** shall provide coverage for both bodily injury, including accidental death and property damage which may arise out of the work under this contract, or operations incidental thereto, whether such work and operations be by the Contractor or by any subcontractor or by anyone directly or indirectly employed by the Contractor or by subcontractor, or by anyone for whose acts any of them may be liable. The Contractor shall maintain completed operations liability insurance required herein for a period of not less than one year after final payment or anytime the Contractor goes on to the location of the project.

- 1. Property damage liability insurance shall be written without any exclusion for injury to or destruction of any building, structure, wires, conduits, pipes, or other property above or below the surface of the ground arising out of the blasting, explosion, pile driving, excavation, filling, grading or from the moving, shoring, underpinning, raising, or demolition of any building or structure or structural support thereof.
- 2. The Contractor's insurance coverage shall be PRIMARY insurance as respects the Owner, its officers, elected and appointed officials, employees and volunteers. Any insurance or self-insurance maintained by the Owner, its officers, elected and appointed officials, employees and volunteers shall be excess of the Contractor's insurance and shall not contribute to it.

#### **Article VIII- Miscellaneous Provisions**

#### A. <u>Construction Contractor Registration</u>

The Contractor is required to be registered with the Department of Labor & Industry under 39-9-201 and 39-9-204 MCA <u>PRIOR</u> to the Contract being executed. A bidder must demonstrate that it has registered or promises that it will register immediately upon notice of award. If the prevailing bidder cannot or does not register in time for the Owner to execute the Contract within the fifteen (15) day time period of the notice of award the State may award to next lowest responsible bidder who meets this requirement. The Owner cannot execute a contract for construction nor issue a Notice to Proceed to a Contractor who is not registered (3 9-9-401 (a) MCA).

#### B. <u>Equal Employment Opportunity</u>

All hiring and other employment practices shall be non-discriminatory, based on merit and qualifications without regard to race, color, religion, creed, political ideas, sex, age, marital status, physical or mental handicap, or national origin.

#### C. Assignment

- 1. As per Article 9 of 00500 Contract.
- 2. The Contractor and all subcontractors hereby assign to the Owner any and all claims or causes of action for any antitrust law violations or damages arising therefrom as to goods, materials and services purchased under the terms of this agreement, and any change order that may result from this agreement. This assignment is made on behalf of the Contractor and all subcontractors that may be hired or contracted with by the Contractor to furnish goods, materials or services required under the terms of this agreement.

#### D. Schedule of Work

The Contractor shall coordinate his operation in order that the Owner will have use of the existing facilities at all times during the normal working hours and interfere minimally with the Owner's operation.

#### **Article IX - Mediation**

- A. For any Claim subject to, but not resolved by mediation, the method of binding dispute resolution shall be Litigation in the Ravalli County District Court of the State of Montana.
- B. The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Contract. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period of the parties or court order.
- C. The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Work is located, unless another location is mutually agreed

upon. Agreements reached in mediation shall be enforceable as settlement agreements I any court having jurisdiction thereof.

#### **Article X - Architect/Engineer**

#### A. Definition

The Architect/Engineer is: Northern Industrial Hygiene, Inc.

201 South 30<sup>th</sup> Street Billings, Montana 59101 Phone: 406/245-7766 Facsimile: 406/254-1428

#### B. Responsibilities

The Architect/Engineer will be the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder. All interpretations and judgment will be consistent with the intent of the Contract Documents and will not show partiality to either the Owner or the Contractor.

#### C. Access to Site

The Engineer is the authorized representative of the Owner and will have access to the Work at all times.

### **Article XI - Record Keeping**

Payrolls and basic records pertaining to the project shall be kept on a generally recognized accounting basis and shall be available to the Owner or his authorized representative at mutually convenient times. Accounting records shall be kept by the contractor for a period of three years after completion and acceptance of the project by the Owner.

End of Section 00600 - General Conditions of the Contract

#### SECTION 00700 - SUPPLEMENTARY CONDITIONS TO THE CONTRACT

#### **Contractor's Liability Insurance**

Add the following new paragraphs under Article VII of the General Conditions of the Contract.

Add a new paragraph under Article VII.G of the General Conditions of the Contract as follows:

The Contractor's insurance coverage shall name the Owner as an additional insured under Commercial General Liability, Automobile Liability, Excess or Umbrella policies.

Add the following new paragraphs under Article VII of the General Conditions of the Contract:

- J. The limits of liability for the insurance required by Article VII, Paragraphs H through J of the General Conditions shall provide coverage not less than the following amounts or greater where required by Law of Regulations:
  - Worker's Compensation, etc. under Article VII.D of the General Conditions.

a. State Statutory
b. Applicable Federal (e.g. longshoreman's) Statutory
c. Employer's Liability \$1,000,000 Each Accident \$1,000,000 Disease-Policy Limit \$1,000,000 Disease-Each Employee

2. Contractor's Liability Insurance under Article VII.I through VII.J of the General Conditions which shall also include completed operations and product operations and product liability coverage.

a. General Aggregate \$2,000,000

b. Products-Completed

Operations Aggregate \$2,000,000

c. Personal and Advertising

Injury \$1,000,000

d. Each occurrence

(Bodily Injury and

Property Damage) \$1,000,000

- e. Coverage will include:
  - 1. Premises Operations
  - 2. Operations of Independent Contractor
  - 3. Contractual Liability
  - 4. Personal Injury
  - 5. Products and completed Operations

#### SECTION 01010 - STATEMENT OF WORK

#### PART 1 - GENERAL

#### 1.1 TITLE OF DRAWINGS AND SPECIFICATIONS

2020 / 2021 Asbestos Abatement Stevensville Schools Improvements 300 Park Avenue Stevensville, Montana

#### 1.2 OWNER AND CONSULTANT DEFINED

#### A. Owner:

Stevensville Public Schools 300 Park Avenue Stevensville, MT 59870 Telephone: (406) 777-5481 Contact: Dr. Robert Moore

#### B. Consultant

A.

Northern Industrial Hygiene, Inc. 201 South 30<sup>th</sup> Street Billings, MT 59101 Telephone: (406) 245-7766 Contact: Mr. Robert Brownell

1.3 GENERAL DESCRIPTION OF THE PROJECT

In general, the work consists of the following:

High School - Removal and disposal as asbestos: cement asbestos board soffits and fascia, cement asbestos board window infill panels, window frame caulking, a vault door, insulating mud/cement on boiler segment seams, boiler gaskets, mudded fittings, and floor tile and associated black mastic in multiple areas of the school building. It also includes the removal and disposal of non-asbestos carpet in

High School Gymnasium – Removal and disposal as asbestos: floor tile and associated mastic from two restrooms.

selects areas where floor tile and mastic work is scheduled.

Elementary School - Removal and disposal as asbestos: cement asbestos board soffits, and floor tile and associated black mastic in select areas of the school building.

The asbestos abatement will be conducted in six phases as presented in Tables 1-6 of this section.

B. The specific scope of this abatement project, including estimated quantity of ACM to be removed, is described below. The abatement work will consist of all work indicated

# **SECTION 01010 - STATEMENT OF WORK**

#### PART 1 - GENERAL

#### 1.1 TITLE OF DRAWINGS AND SPECIFICATIONS

2020 / 2021 Asbestos Abatement Stevensville Schools Improvements 300 Park Avenue Stevensville, Montana

# 1.2 OWNER AND CONSULTANT DEFINED

#### A. Owner:

Stevensville Public Schools 300 Park Avenue Stevensville, MT 59870 Telephone: (406) 777-5481 Contact: Dr. Robert Moore

#### B. Consultant

Northern Industrial Hygiene, Inc. 201 South 30<sup>th</sup> Street Billings, MT 59101 Telephone: (406) 245-7766

Contact: Mr. Robert Brownell

# 1.3 GENERAL DESCRIPTION OF THE PROJECT

A. In general, the work consists of the following:

High School - Removal and disposal as asbestos: cement asbestos board soffits and fascia, cement asbestos board window infill panels, window frame caulking, a vault door, insulating mud/cement on boiler segment seams, boiler gaskets, mudded fittings, and floor tile and associated black mastic in multiple areas of the school building. It also includes the removal and disposal of non-asbestos carpet in selects areas where floor tile and mastic work is scheduled.

High School Gymnasium – Removal and disposal as asbestos: floor tile and associated mastic from two restrooms.

Elementary School - Removal and disposal as asbestos: cement asbestos board soffits, and floor tile and associated black mastic in select areas of the school building.

The asbestos abatement will be conducted in six phases as presented in Tables 1-6 of this section.

B. The specific scope of this abatement project, including estimated quantity of ACM to be removed, is described below. The abatement work will consist of all work indicated

in the Statement of Work and all work specified in the specifications. Briefly the work consists of the following:

- 1. Site Preparation: Includes construction of negative pressure containments, demarcation and isolation of the work areas, demolition as required to access materials to be abated, decontamination facility set-up, and other requirements as described in Section 02080.
- 2. Air Monitoring: Conduct personnel air monitoring on the Contractor's employees throughout the removal process as outlined under Section 02080.
- Asbestos Removal and Disposal: Asbestos Abatement of the materials in Tables 1 through 6 and in accordance with the requirements of Section 02080 -Asbestos Abatement.
- 4. Proper decontamination of all asbestos abatement work areas and application of encapsulant.

Tables 1 – 6 indicate approximate quantities of asbestos-containing materials to be abated from the three school buildings as well as the phasing of the asbestos removal. The removal and disposal of fixtures, furniture, etc. required for access to the asbestos-containing materials scheduled for removal will be conducted by others unless noted otherwise on the drawings.

The Contractor is informed that the stated bid quantities of the work are assumed to vary plus or minus 10% from actual field conditions. Change orders will not be considered within this stated variance.

# 1.4 ORDER OF PROCEDURE

- A. The Owner's schedule for the hazardous materials abatement is presented below.
  - Upon receiving Notice to Proceed, Contractor shall apply for State of Montana Asbestos Abatement Permit. Work on this project is scheduled to begin March 30, 2020. All work, including final clearance visual and air testing in areas where asbestos abatement work is performed is to be completed by the date presented for each phase.
- B. Scheduling Plan: Submit a detailed sequencing/scheduling plan of the work proposed in complying with this specification. The Owner and/or Owner's Representative must approve the plan prior to commencement of work.
- C. Work Activity Sequence: Proceed with all work according to the sequences established under 02080 Part 3 Execution. Asbestos removal and clearance visual and air testing shall be limited to the approved time period and shall be conducted in accordance with the project schedule submitted and approved by the Consultant and the Owner.
- D. Liquidated Damages: Contractor shall pay to the Owner the sum of \$250 per day for each and every calendar days' delay in finishing the asbestos-related work under this contract beyond the stipulated contract times presented for each phase of the work.

#### 1.5 SCHEDULE OF DRAWINGS

A. Hazardous Material Abatement drawings indexed below are the drawings referred to in these specifications and the same are hereby made a part of the Contract.

H101	Phase I ACM Location Plan High School
H102	Phase 2 ACM Location Plan High School
H103	Phase 3 ACM Location Plan High School
H104	Phase 4 ACM Location Plan High School Gym
H105	Phase 5 ACM Location Plan High School
H106	Phase 6 ACM Location Plan High School
H107	Phase 6 ACM Location Plan Flementary School

# 1.6 TABLES OF QUANTITIES / PHASING

TABLE 1 - AC	TABLE 1 - ACBMs		
MATERIAL DESCRIPTION	QUANTITY	UNIT	
Phase 1, March 30 - A	pril 10, 2020		
Cement Asbestos Board Soffits and/or Fascia High School & Elementary School	6,342	SF	
Window Frame Caulking	2	EA	

ry <u>unit</u>				
Phase 2, June 10-June 26, 2020				
SF				
EA				
3				

	TABLE 3 - ACBMs	
MATERIAL DESCRIPTION	QUANTITY	UNIT
Phase 3, I	November 2 - November	13, 2020
Floor Tile & Mastic	1,520	SF
Non-ACM Carpet	1,470	SF
Vault Door	1	EA

# **TABLE 4- ACBMs**

MATERIAL DESCRIPTION	QUANTITY	UNIT
	QUANTILL	CIVII

Phase 4, March 1 - March 10, 2021

Floor Tile & Mastic 400 SF

7	TABLE 5- ACBMs	
MATERIAL DESCRIPTION	QUANTITY	UNIT
Phase 5, April 5	5 - April 21, 2021 AN	ND May, 2021
April Work		
Floor Tile & Mastic	2,690	SF
Non-ACM Carpet	1,490	EA
Cement Asbestos Board Window Infill Panel	8	SF
May Work		
Insulative Mud and Gaskets On Segmented Boiler	1	EA
Mudded Joints/Fittings	166	EA

	TABLE 6- ACBMs	
MATERIAL DESCRIPTIO	N QUANTITY	UNIT
	Phase 6, June 7 - June 25, 20	)21
High School		
Floor Tile & Mastic	6,150	SF
Window Frame Caulking	2	EA
Elementary School		
Floor Tile & Mastic	530	SF

# **PART 2 - PRODUCTS - NOT USED**

# **PART 3 - EXECUTION - NOT USED**

End of Section 01010 - Statement of Work

#### **SECTION 02080 - ASBESTOS ABATEMENT**

#### 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and Asbestos Abatement Notes apply to this Section.
- B. The project work areas have been inspected by an independent consultant for the presence of asbestos-containing materials (ACM). The survey and test results are available for review.

# 1.2 DESCRIPTION OF THE WORK

A. This asbestos abatement project consists of the removal and proper disposal of the following asbestos-containing materials: cement asbestos board soffits and fascia, cement asbestos board window infill panels, window frame caulking, window glazing compound, insulating mud/cement on boiler segment seams, boiler gaskets, mudded fittings, vault door, floor tile and associated black mastic in select areas of three school buildings. It also includes the removal and disposal of non-asbestos carpet in select areas where floor tile and mastic work are scheduled.

Total estimated quantities of the various materials to be removed are presented in Tables 1-6 of Section 01010. For additional information concerning the locations of the materials to be removed, refer to the drawings.

The abatement of flooring materials, thermal system insulation and associated contaminated debris is to be performed inside negative pressure containments as indicated on the drawings. Containments must be constructed to meet requirements to perform Class I and Class II abatement work as described in OSHA 29 CFR 1926.1101.

The abatement of cement asbestos board and window frame caulking is to be performed inside a regulated area meeting the requirements to conduct Class II abatement work as described in OSHA 29CFR1926.1101.

The work will be conducted in six phases as presented in Section 01010, 1.3, A.

- B. The abatement work to be performed in this project is described in this specification section and on the drawings.
- C. The work shall be executed as follows:
  - The work included in this project is described in this specification and the accompanying drawing and notes. Contractors must site verify material quantities and site conditions that will affect the bid prices. The Owner is responsible for removing all furniture and equipment necessary to complete the work.
  - OSHA Class I and II asbestos removal of flooring materials, thermal system insulation, and associated contaminated debris must be accomplished using a negative-pressure enclosure as specified herein utilizing standard removal methods.
    - Employ sufficient HEPA filtered local exhaust ventilation machinery to maintain a negative pressure gradient of minimum 0.02 inches' water column vs. the outside of the containment and effect a minimum of four air exchanges per hour. The enclosed area must have critical barriers and containment liners as necessary, waste-water filtration devices and other temporary installations to comply with regulations for proper asbestos removal. Install make-up air vents with HEPA filters in temporary barrier wall(s) as necessary to ensure adequate air movement.
  - 3. Each Class I work area must be equipped with a minimum three-stage decontamination unit including clean room, shower and equipment room. Shower wash water must be filtered down to 5-micron particle size prior to discharge. Equip points of entry/exit and barriers to occupied spaces with proper warning signs.
  - 4. Each Class II work area utilizing a negative pressure containment must be equipped with a

- minimum two-stage decontamination unit including a clean room and an equipment room. Equip points of entry/exit and barriers to occupied spaces with proper warning signs.
- Decontamination units located in exterior or interior locations accessible to the public must be constructed of solid sheeting, lockable doors and materials sufficient to provide off hours site security.
- 6. Employ bag-out units where feasible with respect to space, bag-outs must be minimum two stage.
- Each Class II work are not utilizing a negative pressure enclosure will be signed and delineated in accordance with 40 CFR 1926.1101 with drop cloths place beneath work areas.
- 8. Remove the asbestos materials in accordance with standard industry methods, wet removal techniques must be used.
- 9. Bag or containerize all RACM, Category 1 and Category 2 asbestos waste in approved bags or containers.
- Asbestos material must not be allowed to accumulate in the work area but collected and contained on a continuous basis. Ensure the material is adequately wet at time of containerization.
- 11. Glove bag removal, if employed, must be performed from within a negative pressure enclosure following all Class I requirements.
- 12. Non-ACM carpet over asbestos-containing floor tile and mastic may be disposed as general demolition waste (assuming it is not contaminated), however is shall be removed from within a negative pressure containment.

#### D. Air Monitoring - General

#### 1. Contractor's Required Air Monitoring

The asbestos-abatement contractor shall perform, throughout abatement work, monitoring of contractor personnel's exposure, review and testing inside the work area in accordance with OSHA requirements and these specifications. The contractor's accredited supervisor ("competent person") shall personally review conditions inside the work area to ensure compliance with these specifications. In addition, the Competent Person shall personally manage air sample collection, analysis and evaluation for personnel samples and work area samples to satisfy OSHA requirements. Additional inspection and testing requirements are specified in other parts of this section.

The Competent Person is responsible for managing all personnel monitoring, inspection and testing required by these specifications, the OSHA regulation 29 CFR 1926.1101, and for continuous monitoring of all sub-systems and procedures affecting the safety of the contractor's employees. Safety of the contractor's employees and providing safe conditions inside the work area for all persons entering is the exclusive responsibility of the contractor. The person performing the personnel and exterior perimeter monitoring of the work area (OSHA "Competent Person") shall be an accredited asbestos contractor/supervisor who shall be trained and shall have field experience in air sampling. Keep a daily log of personnel and area samples taken and analyzed and make such log available to the building owner. The log shall contain information on the persons breathing zone sampled, activities being performed, the date of sample collection, the time of sample start and finish, flow rate, sample volume and fibers/cc. The log shall also contain information on area samples showing location of sample, date sample was taken, activities being performed, start and finish times for sample, flow rate, volume and fibers/cc. Take and analyze personnel samples for at least one of the workers in each shift. In addition to the continuous monitoring required, the contractor's Competent Person will perform review and testing at the final stages of abatement for each work area or building as specified elsewhere in this section.

#### E. Air Monitoring - Clearance

1. Final clearance visual inspections and air testing will be conducted in all interior areas

- where asbestos is removed. Clearance air samples will be analyzed using TEM or PCM methods in accordance with current AHERA requirements.
- 2. Exterior abatement areas will be cleared by visual inspection only.
- 3. The abatement will be determined to be complete, and the area cleared, when the abatement area has been cleaned, a visual inspection has been performed and passed, and the results of the TEM clearance air samples indicate that less than 70 asbestos structures are present on average for the 5 clearance air samples. or the results of the PCM clearance air samples is 0.01 fibers per cubic centimeter for each of the 5 clearance air samples.
- 4. The Owner will pay for the first clearance inspection and set of air sample analyses. If release criteria are not met, the contractor shall repeat final cleaning and continue the decontamination procedure from that point. Additional costs associated with inspection and testing, including analytical and shipping costs, will be at the expense of the Abatement Contractor until release criteria are met.

# F. Sequencing/Scheduling

Scheduling and sequencing of the asbestos-containing materials being removed during this
project will be in accordance with Section 01010, 1.3, A, unless changes in
scheduling/sequencing are authorized in writing by the Owner or Engineer.

#### 1.3 CONTRACTOR USE OF PREMISES

- A. Abatement contractor shall have full use of the premises to conduct the work indicated on the drawings.
- B. Maintain building in a safe condition throughout the abatement period.
- C. Keep common areas that are not inside a negative pressure containment such as hallways and stairs, free from accumulation of waste, rubbish, or construction debris.
- D. Smoking or open fires will not be permitted within the building enclosure or on the premises.
- E. Keep emergency access and egress routes open at all times during work. Containments are to be constructed so as to avoid blocking aisles, stairs, corridors, doors, etc.

# 1.4 WORKING HOURS

A. Submit work schedule to Owner. Work schedule shall be based on the Owner's requirements and shall be coordinated with the General Contractor.

#### 1.5 APPLICABLE PUBLICATIONS

This section sets forth governmental regulations and industry standards that are included and incorporated herein by reference and made a part of the specifications. This section also sets forth those notices and permits that are known to the Owner and that either must be applied for and received, or which must be given to governmental agencies before start of work.

General Applicability of Codes, Regulations, and Standards: Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith. Publications shall be the current edition in effect.

Contractor Responsibility: The Contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations. The Contractor shall hold the Owner and Owner's representative harmless for failure to

comply with any applicable work, hauling, disposal, safety, health or other regulation on the part of himself, his employee, or his subcontractors.

Codes, Standards and Regulations: which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

A. Code of Federal Regulations (CFR) Publications:

#### **OSHA**

29 CFR 1926.1101	Construction Industry Standard (1994)
29 CFR 1926.500	Guardrails, Handrails, and Covers
20 CED 1010 124	Pospiratory Protection

29 CFR 1910.134 Respiratory Protection

29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags

#### **EPA**

40 CFR 61 Subpart A	General Provisions
40 CFR 61 Subpart M	National Emission Standard for Hazardous Air Pollutants
40 CFR 763.120, 121	Asbestos Abatement Projects

40 CFR 763 Subpart E AHERA, Asbestos-containing Materials in Schools

B. American National Standard Institute (ANSI) Publications:

Z9.2-1979 Fundamentals Governing the Design and Operations of Local

Exhaust Systems

Z88.2-1980 Practices for Respiratory Protection National Institute for

Occupational Safety and Health (NIOSH) Revised

Recommended Asbestos Standard

C. Environmental Protection Agency (EPA):

560/5-85-024 Guidance for Controlling Friable Asbestos-Containing

Materials in Buildings

D. State Requirements:

Chapter 74 Administrative Rules of Montana

#### 1.6 AUTHORITIES OF THE INDUSTRIAL HYGIENE CONSULTANT

- A. The purpose of the work of the IHC is to: observe the contractor's work and performance of final review and testing to determine whether a space, containment, or a building has been adequately decontaminated.
  - 1. Task 1: Provide support to the Owner such as evaluation of submittals from the Abatement Contractor, resolution of unforeseen developments in abatement work, etc.
  - 2. Task 2: Perform final review of a decontaminated area at the conclusion of the abatement and clean-up work.
  - Task 3: Collect TEM clearance air samples in areas that will be re-occupied following the asbestos abatement.
- B. Make available all data, review results and testing results generated by the IHC to the contractor for information and consideration. Contractor shall provide cooperation and support to the IHC for efficient and smooth performance of their work.
- C. Monitoring and review results of the IHC will be used by the owner to issue any stop removal orders to the contractor during abatement work and to accept or reject areas as decontaminated. The IHC will, upon request, make available to the contractor the plan for sample collection and analysis for monitoring outside the work areas and the plan of final review for each space prior to executing each plan. Plan will include location of samples, name

and qualification of person taking samples, whether on site analysis and/or lab analysis will be utilized, methodology of analysis, lab information and qualifications of on-site analyst.

D. Stop the abatement work at any time the it is determined that conditions are not within the specifications and applicable regulations. The stoppage of work shall continue until conditions have been corrected and corrective steps have been taken to the satisfaction of the IHC. Standby time required to resolve violations shall be at the Contractor's expense.

#### 1.7 CONTRACTOR ACCREDITATION AND EXPERIENCE

Proof of experience of the proposed Asbestos Abatement Contractor is required and will be based upon submission by Contractor of the following:

#### A. Experience:

Ability and proof of the contractor and his employees to perform asbestos abatement activities by submitting evidence of the successful completion of training courses covering asbestos removal as set forth by the appropriate Federal and State Codes and Regulations pertinent to asbestos abatement. Name and location of at least two asbestos abatement projects involving significant risks of fiber release with the name and telephone number of purchasers of abatement services.

#### B. Personnel:

#### 1. General Superintendent

General Superintendent: Provide a full-time General Superintendent who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to asbestos-containing materials.

Experience and Training: The General Superintendent must have completed a course at an EPA-Approved Training Center or equivalent certificate course in asbestos abatement procedures and have had a minimum of two (2) years on-the-job training in asbestos abatement procedures and hold a State of Montana card in the proper discipline.

Accreditation: The General Superintendent is to be accredited as a competent person as required by OSHA, NESHAP and State of Montana regulations.

#### 2. Workers

Accreditation: Submit copies of certificates of accreditation as required by OSHA, EPA AHERA and the State of Montana.

#### 1.8 REMOVAL AND DISPOSAL GENERAL REQUIREMENTS

#### A. Description of Work:

The work covered by this section includes the removal and handling of all friable and all non-friable materials which may become friable by the actions of the removal work, and the incidental procedures and equipment required to protect workers and occupants of the area, or both, from contact with airborne asbestos fibers. The work also includes the disposal of the removed asbestos-containing materials. The material removal procedures and work locations are explained in this project manual.

#### B. Definitions Relative to Asbestos Abatement

- 1. Aerosol: A system consisting of particles, solid or liquid, suspended in air.
- 2. ACGIH: American conference of Governmental Industrial Hygienists

- Air Cell: Insulation normally used on pipes and duct work that is comprised of corrugated cardboard which is frequently comprised of asbestos combined with cellulose or refractory binders.
- 4. Airlock: A system for permitting ingress or egress without permitting air movement between a contaminated area and a non-contaminated area, typically consisting of two curtained doorways at least 6 feet (2 meters) apart.
- 5. Air Monitoring: The process of measuring the fiber content of a specific volume of air.
- 6. Amended Water: Water to which a wetting agent or surfactant has been added.
- 7. Area Monitoring: Sampling of fiber concentrations within the asbestos removal area which is representative of the airborne concentrations of asbestos fibers which may reach the breathing zone.
- 8. Asbestos: The asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite grunerite, anthophyllite, amosite and actinolite-tremolite. For purposes of determining respiratory and worker protection, both the asbestiform and non-asbestiform varieties of the above minerals and any of these materials that have been chemically treated and/or altered shall be considered as asbestos.
- 9. Asbestos Fibers: This expression refers to all fibers having an aspect ratio of 3:1 and longer than 5 micrometers.
- Asbestos-Containing Waste Material: Any material which is or is suspected of being or any material contaminated with an asbestos-containing material which is to be removed from a work area for disposal.
- 11. Authorized Visitor: The Owner, the Owner's Representative, testing lab personnel, the Engineer, Industrial Hygiene Consultant, or representative of any Federal, State, and local regulatory or other agency having authority over the project.
- 12. Barrier: Any surface that seals off the work area to inhibit the movement of fibers.
- 13. Breathing Zone: A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches.
- 14. Bridging Encapsulant: A liquid material which can be applied to asbestos-containing materials which controls the possible release of asbestos fibers by creating a membrane over the surface.
- 15. Ceiling Concentration: The concentration of an airborne substance that shall not be exceeded at any time during an 8-hour shift.
- 16. Certified Industrial Hygienist (CIH): An industrial hygienist certified in the comprehensive practice of industrial hygiene by the American Board of Industrial Hygiene.
- 17. Class I Removal: Class I asbestos work means activities involving the removal of TSI and surfacing ACM and PACM.
- 18. Class II Removal: Class II asbestos work means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes but is not limited to the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
- Class III Removal: Class III asbestos work means repair and maintenance operations, where ACM including thermal system insulation and surfacing material is likely to be disturbed.
- 20. Clean Room: An uncontaminated area or room which is part of the worker decontamination enclosure system, with provisions for storage of workers' street clothes and PPE.
- 21. Curtained Doorway: A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two overlapping sheets of plastic sheet over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway. Two curtained doorways spaced a minimum of 6 feet (2 meters) apart form an airlock.
- 22. Decontamination Enclosure System: A series of connected rooms with curtained doorways between any two adjacent rooms for the decontamination of workers or of materials and equipment. A decontamination enclosure system always contains at least one airlock.
- 23. Demolition: The wrecking or taking out of any building component, system, finish or assembly of a facility together with any related handling operations.
- 24. Disposal Bag: 6 mil thick leak-tight plastic bags used for transporting asbestos waste from work and to disposal site. Each is labeled as follows:

# DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD

and shall also be labeled per NESHAP and DOT regulations.

- 25. Encapsulation: Treatment of asbestos-containing materials, with an encapsulant.
- 26. Enclosure: The construction of an air-tight, impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.
- 27. Equipment Decontamination Enclosure System: A decontamination enclosure system for materials and equipment, typically consisting of a designated area of the work area, a washroom, a holding area and an uncontaminated area.
- 28. Equipment Room: A contaminated area or room which is part of the worker decontamination enclosure system, with provisions for storage of contaminated clothing and equipment.
- 29. Filter: A media component used in respirators to remove solid or liquid particles from the inspired air.
- 30. Friable Asbestos Material: Material that contains more than 1.0% asbestos by weight and that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.
- 31. Glovebag: A sack (typically constructed of 6 mil transparent polyethylene or polyvinylchloride plastic) with two inward projecting long sleeve gloves, which is designed to enclose an object from which an asbestos-containing material is to be removed.
- 32. HEPA filter: A High Efficiency Particulate Absolute (HEPA) filter capable of trapping and retaining 99.97% of asbestos fibers greater than 0.3 microns in length.
- 33. HEPA Filter Vacuum Collection Equipment (or vacuum cleaner): High efficiency particulate air (absolute) filtered vacuum collection equipment with a filter system capable of collecting and retaining asbestos fibers. Filters should be of 99.97% efficiency for retaining fibers of 0.3 microns or larger.
- 34. High-Efficiency Filter: A filter which removes from air 99.97% or more of monodisperse dioctyl phthalate (DOP) particles having a mean particle diameter of 0.3 micrometer.
- 35. Holding Area: A chamber between the washroom and an uncontaminated area in the equipment decontamination enclosure system. The holding area comprises an airlock.
- 36. MSHA: Mine Safety and Health Administration.
- 37. Negative Pressure: Air pressure lower than surrounding areas, generally caused by exhausting air from a sealed space (work area).
- 38. Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.
- 39. Negative Pressure Ventilation System: A local exhaust system, utilizing HEPA filtration capable of maintaining a negative pressure inside the work area and a constant air flow from adjacent areas into the work area and exhausting that air outside the work area.
- 40. NIOSH: National Institute for Occupational Safety and Health
- 41. Non-Friable Asbestos Materials: Material that contains asbestos in which the fibers have been locked in by a bonding agent, coating, binder, or other material so that the asbestos is well bound and will not release fibers in excess of the asbestos control limit during any appropriate use, handling, demolition, storage, transportation, processing, or disposal.
- 42. Personal Monitoring: Sampling of air in the breathing zone of individual workers to determine the concentration of fibers, longer than 5 micrometers, per cubic centimeter of air.
- 43. PACM: Presumed asbestos-containing material. Any surfacing or thermal system insulation that was installed in a building no later than 1980 and that has not been tested for asbestos, must be presumed to contain asbestos until tested.
- 44. Protection Factor: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
- 45. RACM: Regulated asbestos-containing material as defined by NESHAP. Any material that is friable or has become friable.

- 46. Regulated Area: Means an area established by the employer to demarcate areas where Class I, II and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit.
- 47. Removal: All herein specified procedures necessary to strip all asbestos-containing materials from the designated areas and to dispose of these materials at an acceptable site.
- 48. Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.
- 49. Shower Room: A room between the clean room and the equipment room in the worker decontamination enclosure system, with hot and cold or warm running water and suitably arranged for complete showering during decontamination. The shower room comprises an airlock between contaminated and clean areas.
- 50. Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.
- 51. Time Weighted Average (TWA): The TWA is an 8-hour time weighted average airborne concentration of fibers, longer than 5 micrometers, per cubic centimeter of air, calculated using formulas found in 29 CFR 1910.1000.
- 52. TSI: Thermal system insulation.
- 53. Visible Emissions: Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
- 54. Washroom: A room between the work area and the holding area in the equipment decontamination enclosure system. The washroom comprises an airlock.
- 55. Wet Cleaning: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with amended water or diluted removal encapsulant and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.
- 56. Work Area: The area where asbestos related work or removal operations are performed which is defined and/or isolated to prevent the spread of asbestos dust, fibers or debris, and entry by unauthorized personnel. Work area is a Regulated Area as defined by 29 CFR 1926.1101.
- 57. Worker Decontamination Enclosure System: A decontamination enclosure system for workers, typically consisting of a clean room, a shower room and an equipment room.

# C. Medical Requirements: 29 CFR 1926.1101

- 1. Medical Examinations: Before exposure to airborne asbestos fibers, provide workers with a comprehensive medical examination as required by 29 CFR 1926.1101. This examination is not required if adequate records show the employee has been examined as required by 29 CFR 1926.1101 requirements within the past year.
- 2. Medical Records: Maintain complete and accurate records of employees' medical examinations for a period of 30 years after termination of employment and make records of the required medical examination available for inspection and copying to authorized representatives of: The Assistant Secretary of Labor for Occupational Safety and Health Administration (OSHA), and an employee's physician upon the request of the employee or former employee.

#### D. Permits and Notifications:

Secure necessary permits in conjunction with asbestos removal, hauling and disposition, and provide timely notification of such actions as may be required by Federal, State, regional and local authorities.

Send Written Notification as required by US EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos Regulations (40 CFR 61, Subpart M) to the regional Asbestos NESHAP Contact at least 10 days prior to beginning any work on asbestoscontaining materials. Send notification online to: <a href="mailto:deqacponline@mt.gov">deqacponline@mt.gov</a>; or to the following address:

Montana Department of Environmental Quality Waste and Underground Tank Management Bureau 1520 East Sixth Avenue P. O. Box 200901 Helena, Montana 59620-0901 (406) 444-5300

#### E. Safety Compliance:

In addition to detailed requirements of this specification, comply with laws, ordinances, rules and regulations of storing, transporting and disposing of asbestos waste materials. Comply with 40 CFR Part 61. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work. Where the requirements of this specification and referenced documents vary, the most stringent requirement shall apply.

# F. Respirator Program:

Establish a written respirator program as required by 29 CFR 1910.134 and CFR 1926.1101. This program shall be posted in the clean room of the worker decontamination enclosure system.

#### 1.9 SUBMITTALS

- A. Make submittals required by the contract documents in a timely manner and at appropriate times in the execution of the work to allow for sufficient and prompt review by the Asbestos Consultant. Revise and resubmit as necessary to establish compliance with the specified requirements.
- B. Submit two complete bound sets of the submittals as described in this section. Submit separate sets entitled "Qualification Submittals", "Pre-Work Submittals", "Project Submittals", and "Final Submittals".
  - 1. Contractor Qualification Submittals shall be submitted by the low bidder within five (5) working days following the bid date.
  - Submit Pre-Work submittals at the pre-construction meetings. Work may not proceed until
    the complete Pre-Work Submittal package has been reviewed and approved by the
    Industrial Hygiene Consultant.
  - 3. Submit Job Submittals to the Owner or owner's representative by 9:00 a.m. daily. Submit copies of the preceding week's daily submittals to the Industrial Hygiene Consultant at the weekly progress meeting.
  - 4. Submit Final Submittals to the Industrial Hygiene Consultant following completion of the work. Requests for final payment will not be processed until the final submittal package has been reviewed and approved by the Owner and the Industrial Hygiene Consultant.

#### C. Contractor Qualification Submittals:

- 1. Name and location of at least 2 asbestos abatement projects performed by the Contractor, including name and telephone number of contract representative.
- 2. Name of and experience record of superintendent and foreman. Include evidence of knowledge of applicable regulations; evidence of participation and successful completion of EPA approved training course in asbestos removal and/or supervision of asbestos related work; and experience with asbestos related work in a supervisory position as evidenced through supervision of at least five asbestos abatement contracts.
- Name and experience record of workers who will be assigned to this project. Include for each person the location of last two abatement projects, and evidence of successful completion of in-house training given by qualified superintendent or foreman, or its equivalent.
- Provide a copy of the Montana State Contractor's License and registration to perform asbestos abatement.

#### D. Pre-work Submittals

- 1. Project Schedule: Include information detailing sequencing and scheduling of asbestos work, and schedule coordination with the work of other trades.
- Work Plan: Provide a detailed work plan, including sketches of intended work zones, layout of containment areas, and HEPA filtration setup. Delineate the portable HEPA ventilation system and procedures for isolation and close out of the building's HVAC system.
- 3. Decontamination Procedure: Provide location and layout of decontamination areas, and explanation of intended decontamination sequence.
- 4. Methods: Provide a description of all asbestos removal methods to be used and sequence of activities. Include information detailing schedule coordination with the General Contractor and with other trades.
- 5. Subcontractors: Provide a listing of subcontractors, and interface of trades involved in the performance of work.
- 6. Safety Plan: Delineate the methods to be used to assure the safety of workers, building occupants, and visitors to the site.
- 7. Personnel Protective Equipment: Provide a description of protective clothing, and approved respirators to be used.
- 8. Equipment: Provide manufacturer's specifications of all equipment, including respirators, to be used.
- 9. Vacuum Equipment: Submit specifications and product date for all vacuum equipment. Include evidence of approval and testing of HEPA exhaust filtration and wetting and packaging methods for waste collection.
- 10. Asbestos Disposal Plan: Include explanation of handling, transport, and disposal of asbestos-contaminated waste. Identify any disposal site at which any waste material generated during the project will be disposed and furnish evidence of all necessary government approvals to dispose of the waste.
- 11. Project Staffing: Provide identity of project site supervisor, project manager, and list of trained workers to be used on project. Include documentation of appropriate training and certification for each employee.
- 12. Medical Examinations: Provide evidence of medical examinations for workers to be used on this project as required by OSHA. Include most recent written physician's opinion regarding employee's fitness to work and utilization of mandatory protective equipment.
- 13. MSDS: Provide Material Safety Data Sheets for all chemicals (i.e., encapsulants, surfactants) to be used on the project.
- 14. Cleanup: Provide a description of final cleanup procedures to be used.
- 15. Emergency Procedures: Provide a description of emergency procedures to be followed in case of injury, fire, temporary utility failures, and breach of barriers. Include evacuation procedures, source of medical assistance (names and phone numbers for Owner's Representative, Asbestos Consultant, fire, police, emergency squad, local hospital, and Owner), and procedures to be used for access by medical personnel (for example, rescue squad and physician).
- 16. OSHA Requirements: Submit a notarized certification signed by an officer of the abatement contracting firm that exposure measurements, medical surveillance, and worker training records are being kept in accordance with OSHA.
- 17. Laboratory Qualification Information: Submit proof of qualifications of testing laboratory and personnel. Certification that persons analyzing the samples have been judged proficient by successful participation in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing (PAT) Program, shall be considered sufficient proof of compliance.
- 18. Certificates of Compliance: Submit certification that vacuums, ventilation equipment, and other equipment required to contain airborne asbestos fibers conform to ANSI Z9.2.
- 19. Notifications and Policies: Submit copies regulatory agency abatement permits and

notifications, copies of all types of specified bonds and insurance, and notification of bonding and insurance companies indicating extent of coverage.

#### E. Job Submittals

- Daily Logs: Submit copies of all personal air monitoring results and daily logs. Submit
  copies of the preceding week's daily logs to the Industrial Hygiene Consultant at each
  weekly progress meeting. Daily logs must indicate the date, time, identity, company or
  agency represented, and reason for entry for all persons entering the work area.
- 2. Progress Schedule: Submit updated progress schedule to the Owner's Representative at each weekly progress meeting.
- 3. Disposal Manifests: Submit copies of preceding week's manifests and disposal site receipts to Asbestos Consultant at each weekly progress meeting.
- 4. Employee Documentation: Submit information as required under Pre-Work Submittals for each new employee hired during the course of the project prior to that person's first day of work on the project.

#### F. Final Submittals

- 1. Certification: Provide written certification that Contractor has fully completed work in strict accordance with the Specifications.
- 2. Air Monitoring: Submit documentation of all employee personal air monitoring results relative to the OSHA respiratory protection level compliance. Include copies of all air monitoring data and analysis reports conducted at the site.
- 3. Project Record Documents: Provide record drawings and specifications of abatement work with all contract changes clearly indicated, project photographs, security log, safety log, sign-in sheets, supervisor's daily field reports, and similar final record documentation.
- 4. Disposal Manifests: Submit copies of all asbestos waste disposal transportation and disposal manifests including signed receipts from the landfill.
- Contract Revisions: Provide documentation of all Modification Proposals and Change Orders.

#### 2 - PRODUCTS

# 2.1 EQUIPMENT

- A. Compliance: Equipment, including protective clothing and respirators, used in the execution of this contract and provided to visitors to the site, shall comply with ASTM E 849 and with the applicable Federal, State, and local regulations. Respirators shall conform to the OSHA requirements in 29 CFR 1910.134. Use supplied air type (type "C") units during actual removal operations, except as approved by the Asbestos Consultant prior to the start of work.
- B. Work Area Responsibility: It is the Contractor's responsibility to require that each person (worker or visitor) entering the work area wear an approved respirator and protective clothing. There shall be no exceptions to this requirement.
- C. Protective Clothing: Provide approved protective clothing to all workers and to all official representatives of the Owner, State, or other governmental entity, and the Asbestos Consultant who may inspect or visit the project.
- D. Respirators: Respirators will be of a type approved by NIOSH and MSHA for use during asbestos removal operations. See Paragraph 2.2; "Respiratory Protection".
- E. Miscellaneous Safety Equipment: Hardhats, protective eyewear, gloves, rubber boots or other footwear shall be provided as required for workers and authorized visitors. Safety shoes may be required for some activities. Protective equipment used in the removal of asbestoscontaminated items and demolition activities shall be of proper materials to adequately protect the individual conducting the work.
- F. Disposal Bags: Polyethylene bags used for containing removed asbestos-containing materials shall be at least 6 mils thick and sufficiently large for their intended use. These bags should be

- printed with warning labels per OSHA regulations.
- G. Vacuums: All vacuum cleaners must be equipped with HEPA filters.
- H. Duct Tape: All tape shall be high quality duct tape. All spray-on adhesives, glue, and other barrier securing material shall be high quality products.
- I. Inventory Maintenance: Provide and maintain sufficient inventory of protective clothing, respirators, filter cartridges, plastic sheeting of proper size and thickness, duct tape, glue, adhesives, disposable towels, and air filters for the work required and the numbers of workers, visitors, and inspection personnel entering the work areas.
- J. Showers: Provide shower stalls constructed with opaque walls, and sufficient plumbing for these showers, including hot and cold running water and sufficient hose lengths and drain systems or an acceptable alternate such as a portable decontamination trailer with showers. Waste shower water shall be filtered through 5-um filters and disposed of in accordance with all Federal, State, and local regulations.
- K. Demolition Equipment: Provide sufficient appropriate equipment for demolition of plaster, brick, and concrete walls, pipe chases and ceiling areas (if needed) such that the work can be performed without hindering the project schedule.
- L. Local Exhaust System & HEPA Filtration: Provide air filtering equipment capable of filtering asbestos fibers to 0.3 um at 99.97 percent efficiency and of sufficient quantity and capacity to cause a complete air change or total air filtration within the work area once every 15 minutes. Air shall flow into the work site through all openings, including the decontamination chamber and waste exit ports, and any areas in the work site where air leakage may occur. Air should exhaust through the local exhaust air filtration units by means of a high quality flexible or solid duct leading outside the building. If air exhaust outside the building is not feasible, the Asbestos Consultant shall determine where the exhaust shall be emitted outside the work area. The air-filtering equipment should be positioned at a maximum distance from the decontamination chamber to maximize filtration of airborne fibers. Local exhaust air filtration units shall be in operation at all times. One additional air filtration unit will be inside the work area as a backup unit.
- M. Electrical Equipment: All electrical appliances used in conjunction with the removal will be used with ground fault interruption units. Each electrical appliance will have its own electrical outlet.
- N. Fire Extinguishers: Fire extinguishers in sufficient quantity to deal with any small fires shall be kept in containment, minimum one per each homogeneous work area. Ten-pound ABC rated fire extinguishers shall be used.
- O. Encapsulants and Sealants: Encapsulant and sealant shall be commercially available and specifically designed for use as an asbestos sealant.

#### 2.2 RESPIRATORY PROTECTION

Contractor shall select and provide respirators for all workers based on selection procedures outlined under current OSHA regulations. If contractor has properly documented historic personal exposures during abatement activities, respiratory protection may be based on this data. If adequate historic data is not available, all work shall commence utilizing Type C supplied air respirators. Respiratory protection may be downgraded upon documentation that lower levels of respiratory protection will maintain personal exposures below the Permissible Exposure Limit and the Excursion Limit as set forth under 29 CFR 1926.1101.

#### A. Air Purifying Respirators

- Provide one-half-face or full-face type respirators. All respirators must be approved for the use intended by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH).
- 2. Provide, at a minimum, filter cartridges labeled with the NIOSH and MSHA certification for Radionuclides, Radon Daughters, Dust, Fumes, and Mists (P-100) and color coded in accordance with ANSI Z228.2. In addition, a chemical cartridge may be added, if required, for solvents, etc. In this case, provide a combination cartridge labeled with the appropriate color code and MSHA/NIOSH certification. All cartridges shall be manufactured by the same manufacturer as the facepiece.

- 3. Provide sufficient filters for replacement as necessary by workers.
- 4. Single-use, disposable, or quarter-face respirators are not permitted.

#### B. Supplied-Air (Type C) Respirator Systems

- Provide equipment capable of producing a continuous sufficient supply of Grade D breathing air as described in the Compressed Gas Association Commodity Specifications G-7.1.
- 2. Provide monitors which will shut down compressor and sound audible alarms if any of the following occur:
  - a. Carbon Monoxide (CO) concentrations exceed five parts per million per volume of air in the air line.
  - b. Compressor temperature exceeds normal operating range.
- Provide full face-piece and hose by the same manufacturer. Face-piece and hose must be certified by MSHA/NIOSH as an approved Type C respirator assembly. Operate system in pressure demand mode with a positive pressure face-piece. Maximum hose length is 300 feet.

# 2.3 SPECIAL CLOTHING

# A. Protective Clothing

Provide personnel exposed to airborne concentrations of asbestos fibers with fire retardant disposable protective whole body clothing, head coverings, gloves and foot coverings. One-piece clothing is acceptable and preferred. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber gloves for comfort but shall not be used alone.

Make sleeves secure at the wrists and make foot coverings secure at the ankles by the use of tape. Reusable type protective clothing and footwear shall be left in the contaminated equipment room until the end of the asbestos abatement work at which time such items shall be thoroughly cleaned of all asbestos-contaminated material or disposed as asbestos-contaminated waste.

#### B. Work Clothing:

Provide cloth work clothes for wear under the disposable protective coveralls and foot coverings.

#### 2.4 WORKER DECONTAMINATION ENCLOSURE SYSTEM

#### A. Class I Work

Provide a decontamination unit consisting of a serial arrangement of rooms or spaces adjoining the work area, or a decontamination trailer if approved, for decontamination of workers conducting asbestos removal, and for any authorized visitor entering the work area. The decontamination unit or trailer shall conform to the following specifications:

1. Provide an adequate decontamination unit consisting of a serial arrangement of rooms or spaces adjoining the Work Area or a decontamination trailer. Each airlock shall be clearly identified and separated from the other by plastic sheet crossover doors, designed to minimize fiber and air transfer as people pass between areas. Decontamination chamber doors shall be of sufficient height and width to enable replacement of equipment that may fail and to safely stretcher and carry an injured worker from the site without destruction of the chamber or unnecessary risk to the integrity of the work area. At least two layers of 6 mil black plastic sheeting shall be required for walls and ceilings for on-site constructed decontamination units. Two layers of 6 mil clear plastic may be used for the floors. On-site constructed decontamination units must be able to withstand wind and rain if built outdoors. Construction must use 2" x 3" or 2" x 4" framing or equivalent and must be large enough to

accommodate large individuals adequately.

Required decontamination areas comprising the decontamination unit and their usage shall be as follows: (reference Section 3.3 for further information).

Clean Room: In this room persons remove and leave all street clothes and put on clean disposable coveralls. Approved respiratory protection equipment is also picked up in this area. No asbestos contaminated items are permitted in this room.

Shower room: In this room, personnel shower prior to exiting the containment.

Equipment Room: Work equipment, footwear, and all other contaminated work clothing are left here. This is also a change and transit room for people. All areas between Shower Room and Work Area shall be considered part of the Equipment Room. Plastic floor and wall covering is required. This is a contaminated area.

#### B. Class II Work

- For work conducted inside the building, provide a decontamination unit consisting of a serial arrangement of rooms or spaces adjoining the work area, or a decontamination trailer if approved, for decontamination of workers conducting asbestos removal, and for any authorized visitor entering the work area. The decontamination unit or trailer shall conform to the following specifications:
  - a) Provide an adequate decontamination unit consisting of a serial arrangement of rooms or spaces adjoining the Work Area or a decontamination trailer. Each airlock shall be clearly identified and separated from the other by plastic sheet crossover doors, designed to minimize fiber and air transfer as people pass between areas. Decontamination chamber doors shall be of sufficient height and width to enable replacement of equipment that may fail and to safely stretcher and carry an injured worker from the site without destruction of the chamber or unnecessary risk to the integrity of the work area. At least two layers of 6 mil black plastic sheeting shall be required for walls and ceilings for on-site constructed decontamination units. Two layers of 6 mil clear plastic may be used for the floors. On-site constructed decontamination units must be able to withstand wind and rain if built outdoors. Construction must use 2" x 3" or 2" x 4" framing or equivalent and must be large enough to accommodate large individuals adequately.

Required decontamination areas comprising the decontamination unit and their usage shall be as follows: (reference Section 3.3 for further information).

Clean Room: In this room persons remove and leave all street clothes and put on clean disposable coveralls. Approved respiratory protection equipment is also picked up in this area. No asbestos contaminated items are permitted in this room.

Equipment Room: Work equipment, footwear, and all other contaminated work clothing are left here. This is also a change and transit room for people. This is a contaminated area.

2. For work conducted outside the building, the decontamination unit shall consist of a delineated and signed area with drop cloths.

#### 2.5 EQUIPMENT DECONTAMINATION ENCLOSURE SYSTEM

Install separate equipment and contamination enclosure system where allowed by available space and practical site considerations.

#### 2.6 EYE PROTECTION

Provide goggles to personnel engaged in asbestos operations when the use of a full-face respirator is not required.

# 2.7 WARNING SIGNS AND WARNING LABELS

Post warning signs conforming to the requirements of 29 CFR 1926.1101 and 40 CFR 763.120, 121, at all approaches to asbestos control areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps. Provide warning labels and affix to all asbestos products contaminated with asbestos. Sign and label formats to conform to 29 CFR 1910.145(d)(4).

Warning Signs:

Provide signs of sufficient size to be clearly legible, displaying the following legend:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
WEAR RESPIRATORS AND PROTECTIVE CLOTHING IN THIS AREA

Warning Labels:

Provide labels of sufficient size to be clearly legible, displaying the following legend:

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

#### 2.8 PLASTIC SHEET

Plastic sheet, of 4 mil (0.10 mm) and 6 mil (0.15 mm) thickness in sizes to minimize the frequency of joints for isolation and sealing of designated work areas. Plastic sheet may be either clear or opaque. Black plastic may only be used in the construction of decontamination units.

#### 2.9 TAPE

Tape - capable of sealing joints of adjacent sheets of plastic sheets and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.

# 2.10 SURFACTANT (WETTING AGENT)

Surfactant (wetting agent) shall consist of 50% polyoxyethylene ether and 50% of polyoxyethylene or polyglycol ester, or equivalent, and shall be mixed with water to provide a concentration of one-ounce surfactant to 5 gallons of water (for 32 ml/20 l of water).

#### 2.11 IMPERMEABLE CONTAINERS

Impermeable containers shall be 6 mil plastic bags of size to fit within the drum listed hereafter and capable of being sealed and 55 gallon (200 L) capacity metal or fiber drums with tightly fitting lids. The containers shall be labeled in accordance with OSHA Regulation 29 CFR 1926.1101. Containers must be both air and watertight.

#### 2.12 SEALABLE PLASTIC DISPOSAL BAGS

Sealable plastic bags of 6 mil minimum thickness for transportation and disposal of asbestoscontaminated material.

#### 2.13 ENCAPSULANT PRODUCTS

Penetrating and bridging encapsulant and sealant (lock down) products shall be either those manufactured by Foster, Certified Technologies Corporation, or approved equal materials. The Contractor shall submit product data for any materials proposed for use. Approval of "or equal" products will not include substitution of product lines where compatibility for successive applications may be violated.

# 3 - EXECUTION

#### 3.1 EXECUTION OF REMOVAL

Removal and disposal of all asbestos-containing materials is to be performed in accordance with the following procedures.

#### 3.2 PROJECT SITE CONDITIONS

Means of Egress: Establish and maintain emergency and fire exits from the work area

#### A. Use of Existing Facilities

- Water Supply: The Owner will provide access to water either via outdoor faucets or at designated outlets in the building. The Contractor shall connect to the owner's system at locations as allowed by the Owner, after review of the work plan indicating desired locations of connection. Contractor is responsible for installation and maintenance of back flow prevention devices on all water connections. Contractor is responsible for any damage resulting from leaking hoses, connections, or from other water supply system components under the direct control of Contractor.
- 2. Electricity: Adequate electrical supply should be available in the building. If additional breaker panels or connections are necessary, Contractor shall provide them at Contractor's expense and all connections must be made by a licensed electrician of at least journeyman level experience.
- 3. Toilets: The Abatement Contractor shall provide a portable toilet for use by its employees.
- 4. Waste Storage: Asbestos waste must be either double bagged, double wrapped, or the bags must be in metal drums prior to their transport to the transport vehicle. All bags must be properly labeled. If not removed from the site each day, waste must be stored in a labeled, locked, plastic-lined dumpster in a location approved by the Owner.
- B. Environmental Conditions to be Maintained. Outside Asbestos Work Area: Air concentrations of asbestos shall be maintained at 8-hour time weighted average below 0.01 fiber (longer than 5 microns) per cubic centimeter of air.
- C. Access to Work Area: Access to work areas shall be controlled through the use of signs, barricades, or other means as appropriate. Whenever, possible, all access shall be through decontamination areas. The following shall have access to work area: EPA and OSHA inspectors; Owner's engineer and on-site representative (IHC). These persons shall be the only non-asbestos specialist personnel who shall be permitted access while work is in progress.

#### 3.3 WORK PRACTICES – INSIDE WORK

# A. Preparation for Class I and II Containments:

- Post warning signs meeting the specifications of OSHA 1926.1101 at any location and approaches to the location of the asbestos removal area. Signs shall be posted at a distance sufficiently far enough away from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of workplace enclosure barriers.
- Seal off all openings between the work area and uncontaminated areas outside of the work area by installing two layers of 6-mil polyethylene sheeting and tape or fire-retardant caulk as needed to form critical barrier.
- 3. Define the work area using barrier tape so it is secure at all times to prevent access of unauthorized visitors or unprotected persons.

- Ensure that a copy of the project design and the asbestos inspection is at the asbestos project.
- 5. Post on the entrance to the decontamination unit a copy or the original of the asbestos project permit and the permit application form issued by the Montana Department of Environmental Quality.
- B. Worker Decontamination Enclosure Systems Class I and II Work:
  - Worker decontamination enclosure system shall be provided at all locations where workers
    will enter or exit a negative pressure containment area. One system at a single location for
    each contained work area is preferred. These systems may consist of existing rooms
    outside of the work area, if the layout is appropriate from the work area. When this
    situation does not exist, enclosure systems may be constructed out of metal, wood or
    plastic support as appropriate.
  - 2. Plans for construction, including materials and layout, shall be submitted as shop drawings and approved by the Engineer prior to work initiation. Worker decontamination enclosure systems constructed at the worksite shall utilize 6-mil opaque black or white polyethylene sheeting or other acceptable materials for privacy. Detailed descriptions of portable, prefabricated units, if used, must be submitted for approval. Plans must include floor plan with dimensions, materials, size, thickness, plumbing and electrical utilities.
  - 3. The worker decontamination enclosure system for Class I work shall consist of at least a clean room, a shower room, and an equipment room, each separated from each other and from the work area by airlocks. The worker decontamination enclosure system for Class II work shall consist of at least a clean room and an equipment room, each separated from each other and from the work area by airlocks.
  - 4. Entry to and exit from all airlocks and decontamination enclosure system chambers shall be through doorways capable of providing a positive seal to the outside, should failure of the differential pressure unit(s) occur, and when not in use. Doorway designs, providing equivalent protection and acceptable to the Engineer may be utilized.
  - 5. Access between any two rooms in the decontamination enclosure system shall be through a three-piece flap doorway. Pathways into (from clean to contaminated) and out from (contaminated to clean) the work area shall be clearly designated.
  - 6. Clean room shall be sized to adequately accommodate the work crew. Benches shall be provided as well as hooks for hanging up street clothes. Shelves for storing respirators shall also be provided in this area. Clean work clothes (if required under disposables), clean disposable clothing, replacement filters for respirators, towels and other necessary items shall be provided in adequate supply at the clean room. A location for postings shall be used to permit access into the clean room from outside the work area. Lighting, heat and electricity shall be provided as necessary for comfort. This space shall not be used for storage of tools, equipment, or materials, or as office space.
  - 7. The equipment room shall be used for storage of equipment and tools at the end of a shift after they have been decontaminated using a HEPA filtered vacuum and/or wet cleaning techniques as appropriate. Replacement filters (in sealed container until used) for HEPA vacuums and negative pressure ventilation equipment, extra tools, containers of surfactant and other materials and equipment that may be required during the abatement may also be stored here as needed. A walk-off pan (a small children's swimming pool or equivalent) filled with water shall be located in the work area just outside the equipment room for workers to clean off foot coverings after leaving the work area and prevent excessive contamination of the worker decontamination enclosure system. A drum lined with a labeled 6-mil polyethylene bag for collection of disposable clothing shall be located in this room. Contaminated footwear (e.g. rubber boots, other reusable footwear) shall be stored in this area for reuse the following workday.
- C. Isolation of the Work Area Class I and Class II Removal:
  - 1. Construct isolation and negative pressure containment barriers for Class I work as follows:
    - a. Seal all surfaces (except those of asbestos-containing materials scheduled for

- removal) with 2 layers of 4-mil watertight polyethylene plastic sheeting on the walls and 2 layers of 6-mil watertight polyethylene plastic sheeting on the floor and/or fire-retardant caulk except as provided in b. below.
- b. Sole permissible exceptions to total enclosures are: (1) an entrance airlock with showers and a decontamination chamber, (2) a debris removal airlock for cleaning and asbestos waste removal, (3) staircases, and (4) emergency exits. Emergency exits shall be marked by spray-painted arrows and doorway outline, with a knife present to cut the plastic.
- c. Wet clean and/or HEPA vacuum all non-removal and non-asbestos items such as radiators and suspended light fixtures in the Work Area, including built-in equipment; and cover with two thicknesses of 6 mil plastic sheeting taped securely in place.
- d. In rooms where only partial removal of floor tile and mastic is scheduled and in rooms where above ceiling pipe fitting insulation is scheduled for removal construct temporary containment walls as necessary. Containment walls shall be constructed of 1'x2' or 2'x4' wood studs placed on 24" centers and properly braced. Studs shall be faced with 2 layers of 6-mil poly.
- e. As all existing ventilation systems in the Work Area are to be sealed throughout the removal operation, an alternate system shall be utilized. Install approved negative air filtration units utilizing appropriate HEPA filters to exhaust air from the Work Area. Negative air filtration units shall be of sufficient number and capacity to ensure that total air volume is exchanged once every 15 minutes. A negative static pressure 0.02 inches of water column shall be maintained as measured by a manometer.
- f. A written log shall be maintained for all units utilizing a HEPA filter. This log shall include, but not be limited to, hours of operation, time of filter changes, pressure gauge readings, and current location of the unit.
- g. Replacement air shall enter the Work Area through the decontamination facility and the make-up air vents, in order to reduce the possible escape of contaminated air. Install and have operating the entire alternate ventilating system prior to commencement of asbestos abatement.
- h. Demonstrate proper airflow by use of smoke producing bombs inside the decontamination unit and work area, and smoke producing tubes, or smoke producing matches, outside the work area, pressure differential reading, or other appropriate means and record the results before starting abatement work and at the start of each work shift.
- 2. Construct isolation and negative pressure containment barriers for Class II work as follows:
  - a. The contaminated work areas shall be separated from uncontaminated areas by the use of barriers constructed of polyethylene sheeting supported to ensure the barrier remains in place throughout the work.
  - b. Emergency exits shall be marked by spray-painted arrows and doorway outline, with a knife present to cut the plastic.
  - c. Wet clean and/or HEPA vacuum all non-removal and non-asbestos items such as radiators and suspended light fixtures in the Work Area, including built-in equipment; and cover with two thicknesses of 6 mil plastic sheeting taped securely in place.
  - d. Install 4-mil polyethylene sheet splash guards extending from floor level to at least 4-feet above floor level in all abatement areas. Install to minimize joints and overlap joints by at least 18 inches. No seams shall be located at corners. Cover bulletin boards, etc. with at least one layer of 4-mil polyethylene sheeting.
  - e. As all existing ventilation systems in the Work Area are to be sealed throughout the removal operation, an alternate system shall be utilized. Install approved negative air filtration units utilizing appropriate HEPA filters to exhaust air from the Work Area. Negative air filtration units shall be of sufficient number and capacity to ensure that total air volume is exchanged once every 15 minutes. A negative static pressure 0.02 inches of water column shall be maintained as measured by a manometer.
  - f. A written log shall be maintained for all units utilizing a HEPA filter. This log shall include, but not be limited to, hours of operation, time of filter changes, pressure gauge readings, and current location of the unit.

- g. Replacement air shall enter the Work Area through the decontamination facility and the make-up air vents, in order to reduce the possible escape of contaminated air. Install and have operating the entire alternate ventilating system prior to commencement of asbestos abatement.
- h. Demonstrate proper airflow by use of smoke producing bombs inside the decontamination unit and work area, and smoke producing tubes, or smoke producing matches, outside the work area, pressure differential reading, or other appropriate means and record the results before starting abatement work and at the start of each work shift.
- D. Maintenance of Workplace Barriers and Worker Decontamination Enclosure System:
  - 1. Following completion of the construction of all polyethylene barriers and decontamination system enclosures, check to ensure that barriers will remain intact and secured to walls and fixtures before beginning actual abatement activities.
  - 2. All polyethylene barriers in the workplace, in the worker decontamination enclosure system, and at partitions constructed to isolate the work area shall be inspected at least twice daily, prior to the start of each day's abatement activities and following the completion of the day's abatement activities. Document inspections and observations in the daily project log.
  - The contractor may also conduct perimeter air monitoring to demonstrate that clearance levels are met or that perimeter area levels as measured by PCM do not exceed background levels.
  - 4. Damage and defects in the enclosure system are to be repaired immediately upon discovery.
  - 5. At any time during the abatement activities, after barriers have been erected, if visible material is observed outside of the work area or if damage occurs to barriers, work shall immediately stop, repairs shall be made to barriers, and debris/residue cleaned up using appropriate HEPA vacuuming and wet mopping procedures.
  - 6. If air samples collected outside of the work area during abatement activities indicated airborne fiber concentrations greater than 0.01 f/cc, immediately stop work for inspection and repair of barriers. Cleanup of surfaces outside of the work area using HEPA vacuums or wet cleaning techniques may be necessary.
  - 7. Clearly identify and maintain emergency and fire exits from the work area.

#### 3.4 WORK PRACTICES – OUTSIDE WORK

#### A. Preparation:

- 1. Establish a regulated work area using tape or rope barriers. Size the work area to maintain unauthorized personnel at a safe distance from the work area.
- Erect a critical barrier covering the window opening to be abated with 6-mil polyethylene sheeting. The critical barrier system must be capable of withstanding windy conditions and gusts associated with thundershowers.
- 3. Post warning signs meeting the specifications of OSHA 29 CFR1910.1001 and 1926.1101 at any location and approach to the location of the asbestos removal area. Signs shall be posted at a sufficient distance from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure.
- 4. Before work begins, place an impermeable drop cloth beneath the work area. The drop cloth should extend a minimum of 6 feet beyond the immediate area of the work and extend at least one foot up the wall where work is being conducted.

#### B. Worker Decontamination Area - Class II Work:

- 1. Worker decontamination areas consisting of 6-mil polyethylene sheeting drop cloths shall be provided at all locations where workers will enter or exit an abatement work area.
- 2. The worker decontamination area will consist of 6-mil polyethylene sheeting of sufficient

- size to allow for storage of abatement equipment and decontamination of the entire crew. The decontamination area will be delineated by the use of "caution" tape or other visible means of delineation.
- 3. A HEPA vacuum will be located in the decontamination area for removal of asbestos debris from workers' disposable protective clothing prior to removal of the clothing.
- 4. Entry to and exit from all abatement work areas shall be through the decontamination area.

#### C. Maintenance of Workplace Barriers and Worker Decontamination Area:

- Maintain work area delineation, decontamination area and work area drop cloths in good condition throughout the course of the day's work. Document inspections and observations in the daily project log.
- 2. Remove and dispose of the work area drop cloths at the end of each day's abatement activities. Dispose of drop cloths as asbestos-contaminated materials.
- 3. Take down work area delineation and signage at the end of each day's work. Store materials ins a secure location for re-use.
- 4. Damage and defects in the delineation system are to be repaired immediately upon discovery. In addition, the IHC may conduct area monitoring showing that clearance criteria (40 CFR 763, Subpart E) are met or that perimeter area levels measured by PCM are not greater than background levels representing the same area before the asbestos work began.
- 5. If visible material is observed outside of the work area or if damage occurs to delineation barriers at any time during the abatement activities, work activities shall immediately stop, repairs shall be made to the barriers, and debris /residue cleaned up using appropriate procedures.
- 6. If air samples collected outside of the work area during abatement activities indicated airborne fiber concentrations >0.1 f/cc of air, work shall immediately stop for reevaluation and adjustments in work methods.
- 7. Clearly identify and maintain emergency and fire exits from the work area.

#### 3.5 REMOVAL OF ASBESTOS IN NEGATIVE PRESSURE CONTAINMENT PROCEDURE

- A. Clean and isolate the Work Area in accordance with Section 3.3.A. Containments shall be constructed in accordance with 3.3.C for all indoor asbestos removal.
- B. Wet all asbestos-containing material with an amended water solution using equipment capable of providing a fine spray mist, in order to reduce airborne fiber concentrations when the material is disturbed. Saturate the material; however, do not allow excessive water to accumulate in the work area. Keep all removed material wet enough to prevent fiber release until it can be containerized for disposal. Maintain a high humidity in the work area by misting or spraying to assist in fiber settling and reduce airborne concentrations. Wetting procedures are not equally effective on all types of asbestos-containing materials but, shall nonetheless be used in all cases.
- C Saturated asbestos-containing material shall be removed in manageable sections. Removed material should be containerized before moving to a new location for continuance of work. Surrounding areas shall be periodically sprayed and maintained in a wet condition until visible material is cleaned up.
- D. All mastic shall be removed by chemical means using a low odor mastic remover that is compatible with new flooring mastics.

#### 3.6 GLOVEBAG REMOVAL

- A. Application: This paragraph applies to the removal of materials, which may be adequately accommodated by a glovebag including pipe insulation, pipe fitting insulation, and hanger insulation.
- B. Preparation: The preparation of the work area for glovebag removal shall include the requirements of paragraph 3.3.

- C. Workers: A minimum of two persons is required to perform a glovebag removal project. A third person will be required to control access to the work area, to conduct air monitoring and assist with supplies.
- D. Work Area Isolation: The work area where the technique is to be utilized shall be isolated in accordance with paragraph 3.3.
- E. Local Exhaust System: HEPA filter equipped negative air machines shall be placed in operation as close as is feasible throughout the glovebag removal process.
- F. Materials & Equipment: All necessary materials, equipment, and supplies shall be brought into the work area before any removal begins. The following is a list of recommended equipment and tools for the removal of asbestos by the glovebag technique:
  - 1. The glovebag, which consists of a 6-mil bag fitted with long sleeve gloves, a tool pouch, and a 2-inch opening used for water application.
  - 2. A pump-up sprayer (garden type) with a 2- or 3-gallon capacity.
  - 3. Wetting Agent: Amended water (water with a surfactant) or a removal encapsulant.
  - 4. Six mil polyethylene disposal bags with the proper markings for asbestos waste.
  - 5. A HEPA filtered vacuum with a capillary tube for insertion into the glovebag.
  - 6. Tools such as a small scrub brush, a utility knife for cutting the insulation, a stapler, wire cutters, smoke tubes with aspirator bulb, tin snips, duct tape, and wettable cloths.
  - 7. A roll of 6-mil polyethylene.
  - 8. An encapsulant.
- G. Glovebag Removal procedures shall be conducted as follows:
  - 1. Preparation: A visual inspection of the pipe where the work will be performed shall be made to determine if any damaged pipe covering (broken lagging, hanging, etc.) exists. If there is, the pipe shall be wrapped in polyethylene plastic and fully secured with duct tape. This procedure will prevent high airborne fiber concentrations from occurring during the glovebag work caused by pipe lagging, hanging several feet or even several yards away, which may be jarred loose by the abatement work activities. Debris on the floor and other surfaces that has accumulated and contains asbestos must be cleaned up as necessary. If the pipe is undamaged, one layer of duct tape shall be placed around the pipe at each end of where the glovebag will be attached. This permits a good surface to which to seal the ends of the glovebag and it minimizes the chance of releasing fibers when the tape at the ends of the glovebag is peeled off at the completion of the job. Place one layer of 6-mil plastic underneath the work area, extending at least 6 feet in all directions.
  - Installation and Removal: Install the glovebag according to manufacturer's
    recommendations. Cut covering on the insulation along the top seam to allow wetting of
    the insulation, then cut cover all around sections to be removed. Remove material in small
    sections. Lower the material carefully inside the glovebag. Do not permit it to drop.
  - 3. Removal of Glovebag and Disposal: Following ACM removal, ensure that all visible material is inside the bag. Spray all tools in glovebag with amended water while it is still attached. Evacuate bag with portable HEPA vacuum and while the bag is collapsed, squeeze bag below tool pouch, and twist bag. Seal bag with tape or locking ties, separating the waste from the removal area. Vacuum the inside of the top of the glovebag and unsealed portion of the glovebag below. Keep HEPA vacuum connected until the glovebag is removed. Replace HEPA filters as recommended by manufacturer. Cut the glovebag along the top and sides, and then remove it from the pipe. Wet pipe and wash all tools and removal area thoroughly.
- H. Immediately remove any asbestos-containing debris which collects on the drop sheet either by using a HEPA vacuum or by spraying with amended water or removal encapsulant, collecting with wet towels, placing in a disposal bag while still wet, and cleaning the surface of the plastic sheet with wet towels.
- I. Upon completion of the work, fold the drop sheet and all of its contents toward the center. Place the sheet in a properly labeled 6-mil polyethylene disposal bag. Neck down the bag and

- collapse it with the HEPA vacuum. Twist the bag shut, fold over, and seal with duct tape by wrapping around the bag neck at least three times
- J. Clean all surfaces of the work area by use of a HEPA filter vacuum and/or wet wiping until no visible residue remains.
- K. Dispose of glovebag, waste material, disposable clothing, and contaminated equipment in accordance with all applicable regulations and paragraph 3.8.B
- L. Upon completion of abatement, conduct final cleanup, encapsulation, and clearance procedures as described in paragraph 3.7.

#### 3.7 REMOVAL OF ASBESTOS WINDOW CAULK PROCEDURES

- A. Isolate the work area in accordance with Section 3.4. Isolation in accordance with 3.4.C will be required for removal of all asbestos window caulk located outside of the building. Selective demolition and disposal of these items is covered elsewhere in this specification.
- B. Wet all ACM with an amended water solution using equipment capable of providing a fine spray mist; in order to reduce airborne fiber concentrations when the material is disturbed. Saturate the material; however, do not allow excessive water to accumulate in the work area. Keep all removed material wet enough to prevent fiber release until it can be containerized for disposal. Maintain wet surfaces in the work area by misting or spraying to assist in fiber settling and reduce airborne fiber concentrations. Wetting procedures are not equally effective on all types of ACM but shall nonetheless be used in all cases.
- C. Scrape, wire brush, or otherwise remove all window frame caulking on the exterior of the window opening and place into plastic bags. HEPA vacuum all window openings.
- D. Surrounding areas shall be periodically sprayed and maintained in a wet condition until visible window glazing debris is cleaned up.
- E. When work in this area is completed, poly sheeting shall be folded onto itself, bagged and disposed as general construction debris.

#### 3.8 ALTERNATIVE PROCEDURES

- A. Procedures described in this specification are to be utilized at all times.
- B. If specified procedures cannot be utilized, a request must be made in writing to the IHC providing details of the problem encountered and recommended alternatives.
- C. Any alternative procedure must be approved in writing by the IHC prior to implementation.

# 3.9 FINAL CLEANUP PROCEDURES

- A. Remove and containerize all visible accumulations of asbestos-containing material and asbestos contaminated debris utilizing rubber dust pans and rubber squeegees to move material around. Do not use metal shovels to pick up or move waste.
- B. Remove all containerized waste from the work area.
- C. Decontaminate all tools and equipment and remove at the appropriate time in the cleaning sequence.
- D. Inspect the work area for visible residue. If any accumulation of residue is observed, it will be assumed to be asbestos and cleaning cycle repeated.
- E. The work area shall be cleaned until it is visually clean as determined by the Certified Industrial Hygienist or assigned IHC. Additional cleaning cycles shall be provided as necessary at no cost to the Owner until cleaning is satisfactory.
- F. The contractor shall notify the building owner's representative (IHC) 24 hours in advance for the performance of the final visual review and inspection. The final visual review and testing will be performed by the IHC.
- G. Final inspection will include the entire work area, the personnel decontamination facility, all plastic sheeting, seals over ventilation openings, doorways, windows, other openings, and all surfaces from which asbestos-containing material has been removed. Contractor must provide

adequate lighting to perform visual inspections. If any debris, residue on surfaces, dust, or other matter is found, repeat final cleaning and continue decontamination. When the work area is visually clean, notify the owner's representative. Visual inspection is not complete until confirmed in writing, by the owner's representative. Visual inspections will be performed in accordance with the "Standard Practice for Visual Inspection of Asbestos Abatement Projects", ASTM Designation E1368-90.

H. Failure of general areas to meet the specification requirements for cleanliness will require further area cleaning at the contractor's expense.

#### 3.10 DISPOSAL OF ASBESTOS-CONTAINING MATERIALS

- A. Permits and Notifications: Secure necessary permits in conjunction with asbestos removal, hauling and disposition and provide timely notification of such actions, as may be required by Federal, State, regional and local authorities. Notify the Regional Office of the United States Environmental Protection Agency and provide copies of the notification to the Owner/IHC a minimum of 10 working days prior to the start of the work. Provide notification in accordance with 40 CFR 61.22(d) (1).
- B. Disposal of Asbestos: Collect and dispose of all RACM, Category I and Category II asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing which may produce airborne concentrations of asbestos fibers in sealed impermeable bags or drums. Prior to placing in bags or containers, wet down asbestos wastes to reduce airborne concentrations. Waste asbestos material shall be disposed of in accordance with EPA and Montana Department of Health and Environmental Sciences requirements at a Class II landfill. The "small quantity exclusion" of the regulations shall not apply to disposal of waste asbestos materials. Establish a temporary holding area approved by the Owner for properly packaged asbestos waste. This area is only to be used during the regular Asbestos Abatement Contractor's work hours.

End of Section 02080 - Asbestos Abatement

# Exhibit A

# RULES OF ON-SITE CONDUCT

Stevensville Public Schools takes the protection and safety of its students and staff very seriously. These Rules of On-Site Conduct apply to all persons or firms engaged in providing on-site work for this project. Failure to abide by these rules may result in the immediate, temporary suspension and/or permanent removal of the offending person or firm from the project, at the sole discretion of the Superintendent and/or the Executive Director of Facilities.

# **Registered Sex/Violent Offenders**

No person shall be employed for any on-site portions of this project who is a registered sex offender in any jurisdiction. No person shall be employed who has been convicted or pled guilty to any crime involving a minor or any crime of violence.

# **Sexual Harassment**

Sexual harassment in any form is prohibited. This includes, but is not limited to lewd comments, leering, offensive clothing and whistling.

# **Weapons**

No weapons are allowed on District property at any time, including stored in a vehicle. A "weapon" is any type of firearm, a knife with a blade 4 or more inches in length, a sword, a straight razor, a throwing star, nun-chucks, brass or other metal knuckles, or any other article or instrument possessed with the purpose to commit a criminal offense.

# **Contact and interaction with students**

No contact or interaction with students is allowed under any circumstances. If approached by a student you must introduce yourself as a member of the project team and then politely decline to engage in conversation and immediately terminate the contact. Avoid putting yourself in a position where students have direct or unsupervised access to you.

# **Visual Identification**

While working on school grounds, workers will be identified according to procedures established by the Construction Manager.

# Tobacco, alcohol and illegal drugs

In accordance with district policy and Montana State Law, no tobacco or vaping products may be used on school property. All tobacco and vaping products must be concealed at all times. No alcohol or illegal drugs are allowed on school property at any time.

# **Language and Music**

Loud or offensive music or language is not allowed, and must be discontinued immediately upon the offending party being notified.

# **Self-Reporting**

If you are accused of any of these violations, or if there is any question about a specific circumstance or situation, immediately report the incident or circumstance to the project superintendent and/or District's Construction Manager, Architect or Engineer.

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Situations reported by others:

In the event that an alleged incident is reported to the School District by a student, parent, staff member or any other observer, the named party will be suspended from on-site duties until the issue is fully resolved.

# **Zero-tolerance policy**

The District reserves the right to refuse access to the site of any person either accused or found guilty of a breach of any of the listed rules of conduct.

# **Accountability**

Every person engaged in any on-site work of this project must be issued a copy of these rules and acknowledge, in writing, that they have fully read and understand them. Each employer is required to provide the name and signature of every employee expected to perform work or visit the site. The District reserves the right to spot check any person on the site and to have them immediately removed from District property if their name does not appear on the acknowledgement list.

It will be the Construction Manager's responsibility to ensure all workers and visitors associated with the contracted work have been screened by their employers to not be in violation of any of the requirements listed herein. Any person with a felony conviction of any kind will have to have written approval by the Stevensville Public School's Superintendent before being allowed on the School's property.

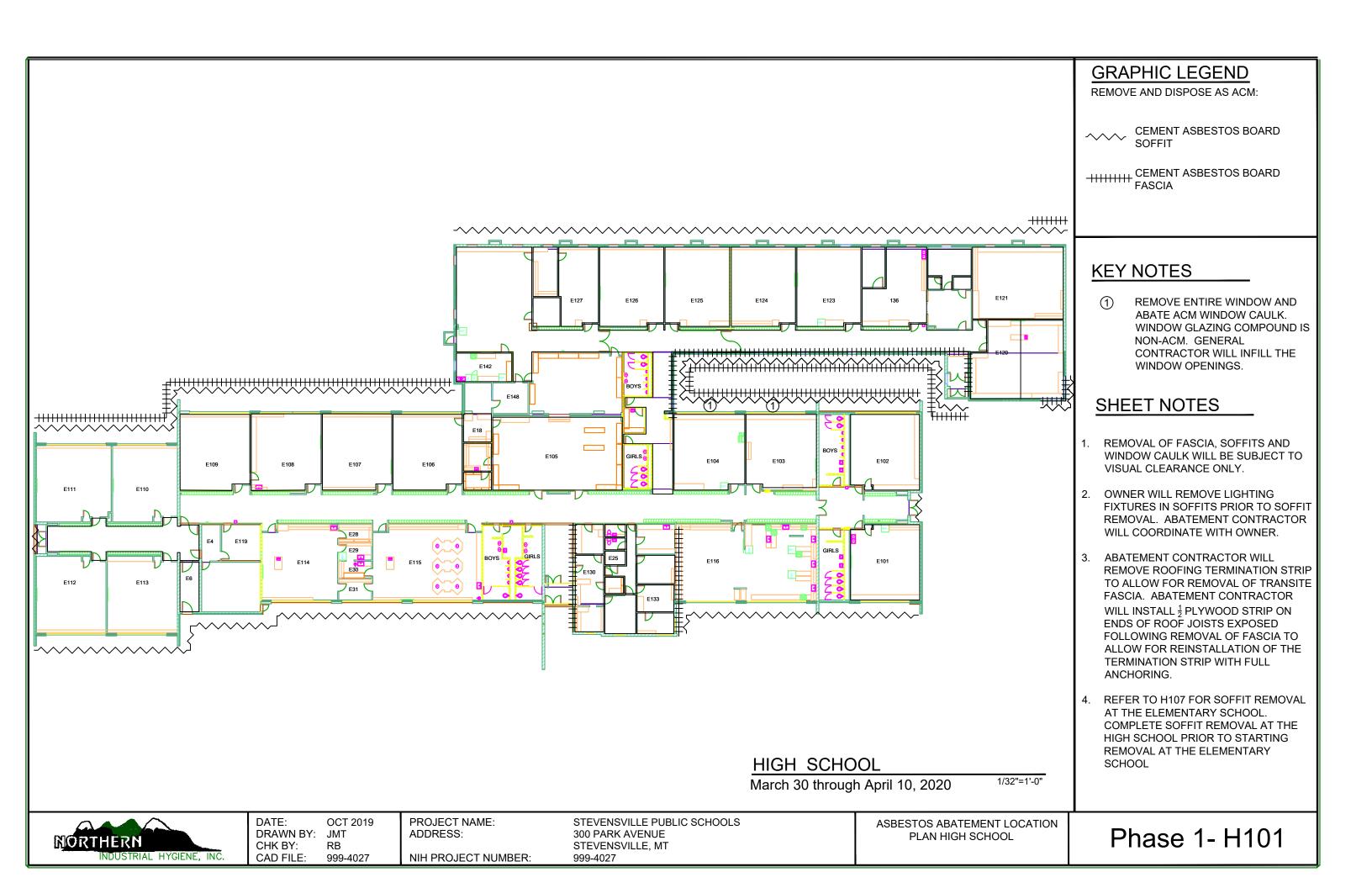
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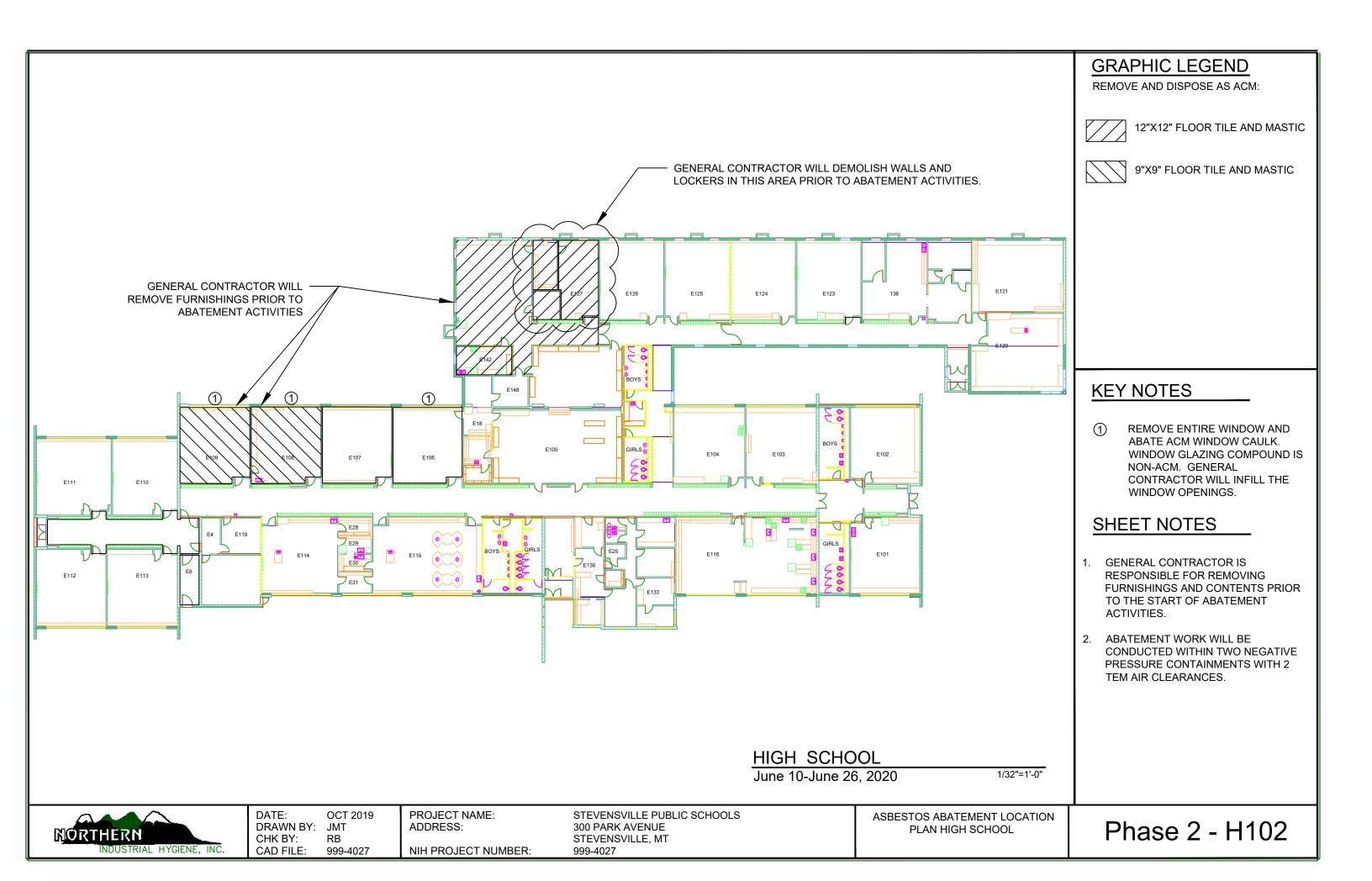
# **On-Site Conduct Rules Acknowledgement Sheet**

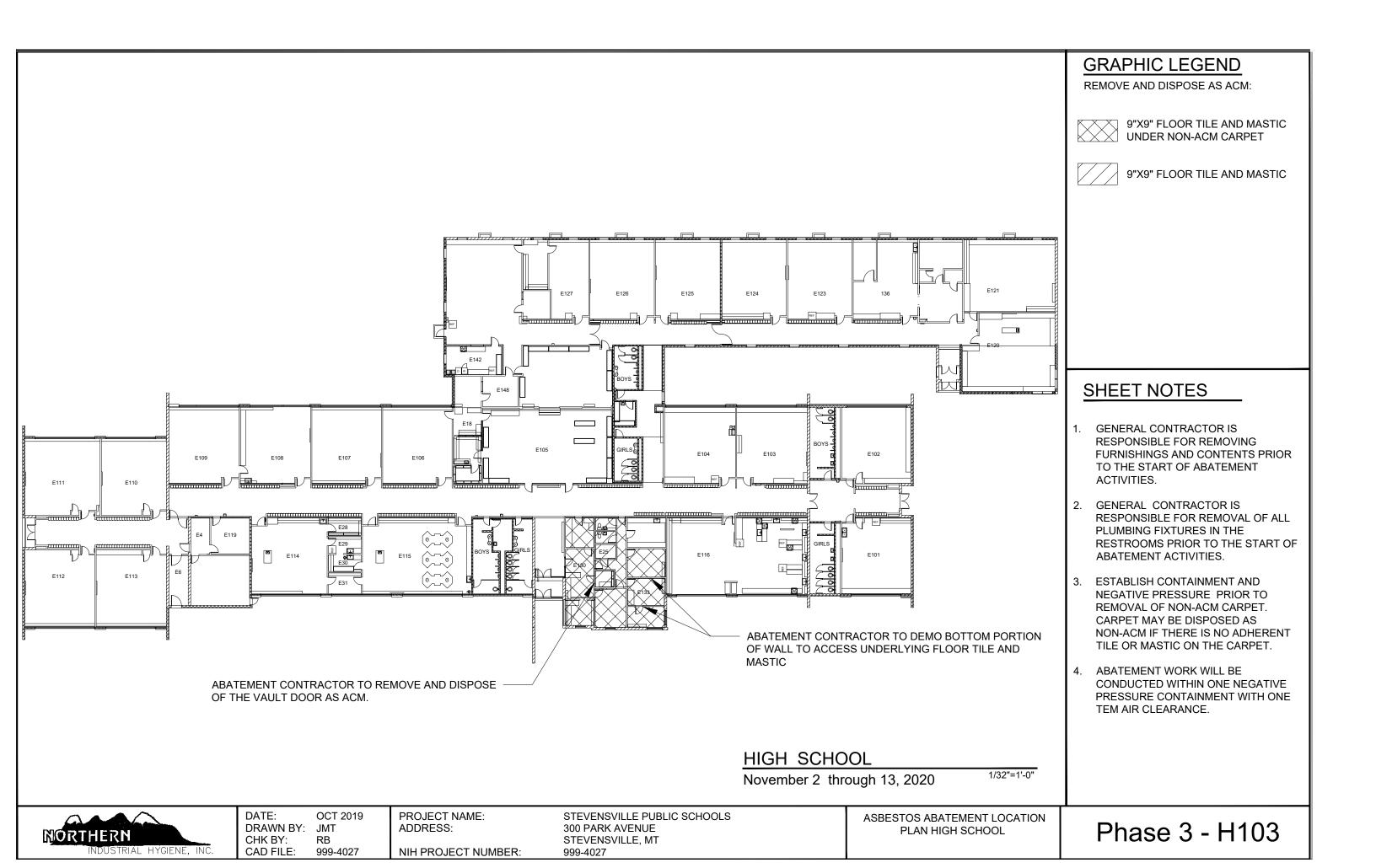
Each sub-contractor is required to provide a current copy of this sheet to the Construction Manager before on-site work begins. Each employee must sign, signifying receipt and understanding of the Rules of On-Site Conduct. The sub-contractor is required to update this list as needed in order to maintain a current list of employees.

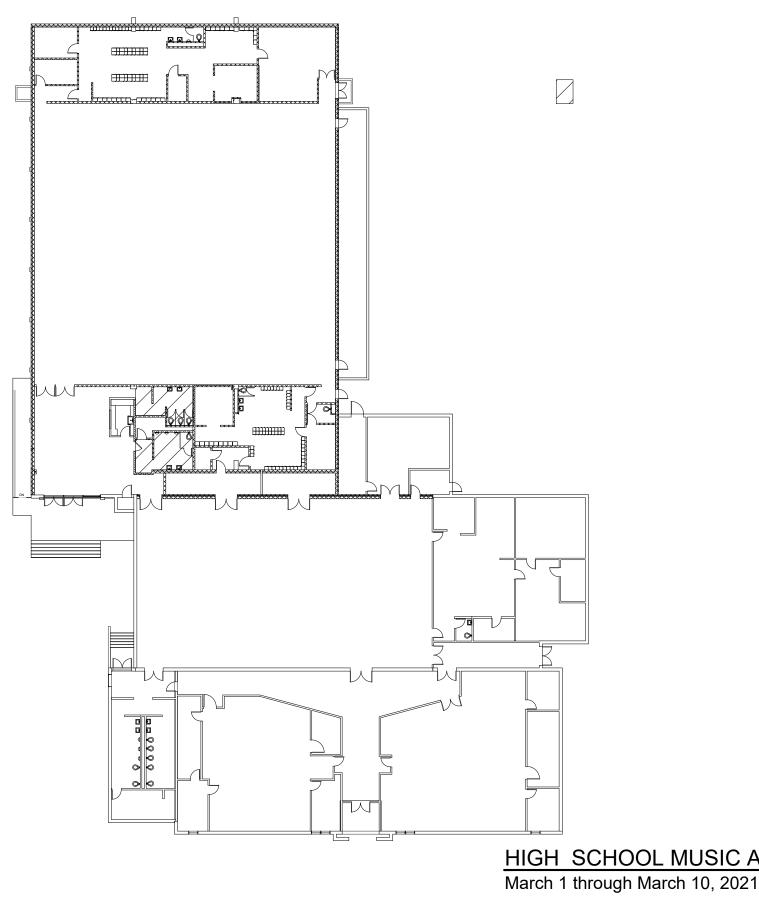
Employer				
Name	Signature	Received Rules		

		Page 3 of 3
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# **GRAPHIC LEGEND**

REMOVE AND DISPOSE AS ACM:



12" FLOOR TILE AND MASTIC

# **GENERAL NOTES**

- 1. GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING FURNISHINGS AND CONTENTS PRIOR TO THE START OF ABATEMENT ACTIVITIES.
- 2. GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL PLUMBING FIXTURES IN THE RESTROOMS PRIOR TO THE START OF ABATEMENT ACTIVITIES.
- 3. ABATEMENT WORK WILL BE CONDUCTED WITHIN TWO NEGATIVE PRESSURE CONTAINMENTS WITH TWO TEM AIR CLEARANCES.

HIGH SCHOOL MUSIC AND GYM



DATE: OCT 2019 DRAWN BY: JMT CHK BY: RB CAD FILE: 999-4027

PROJECT NAME: ADDRESS:

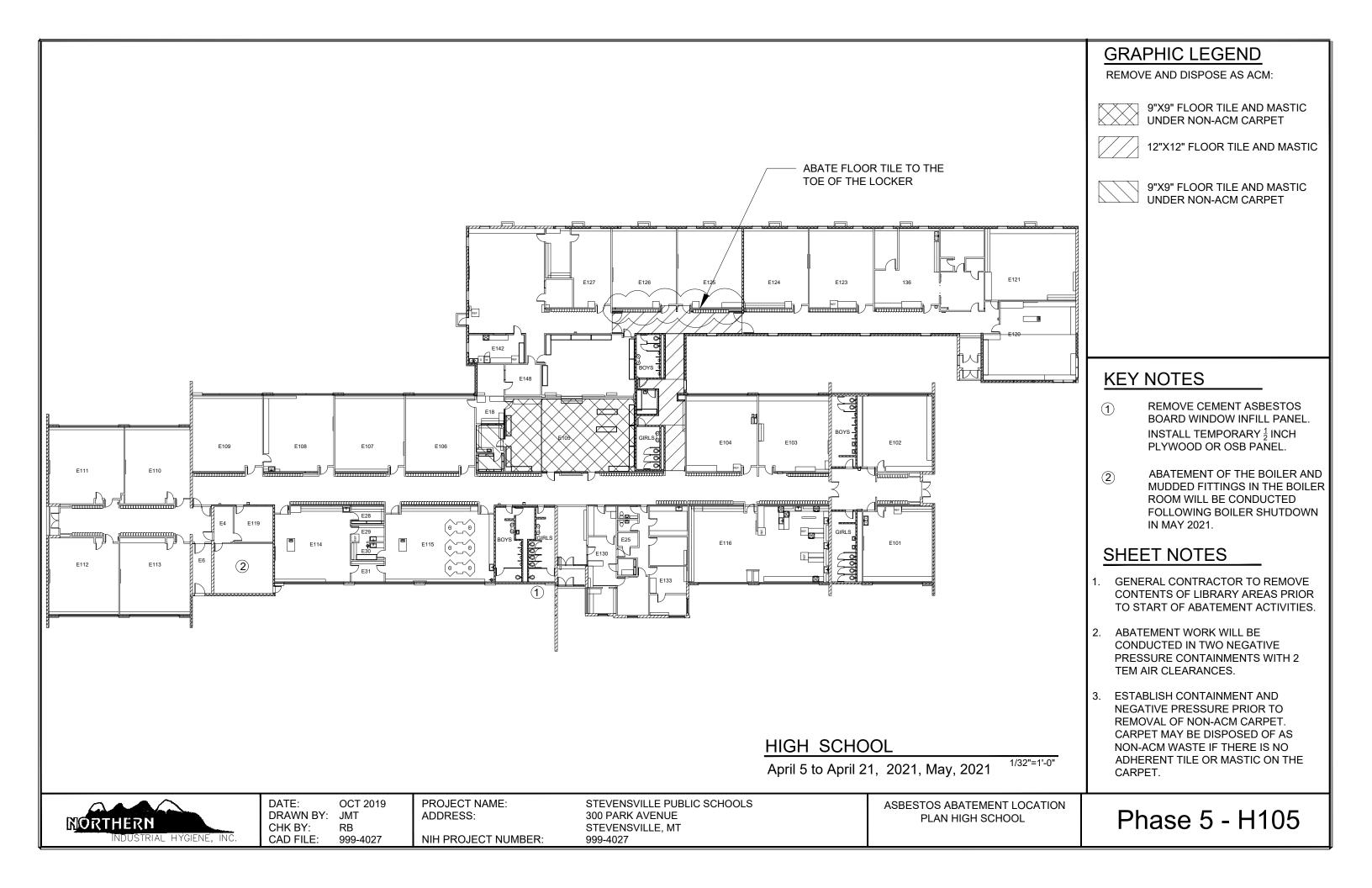
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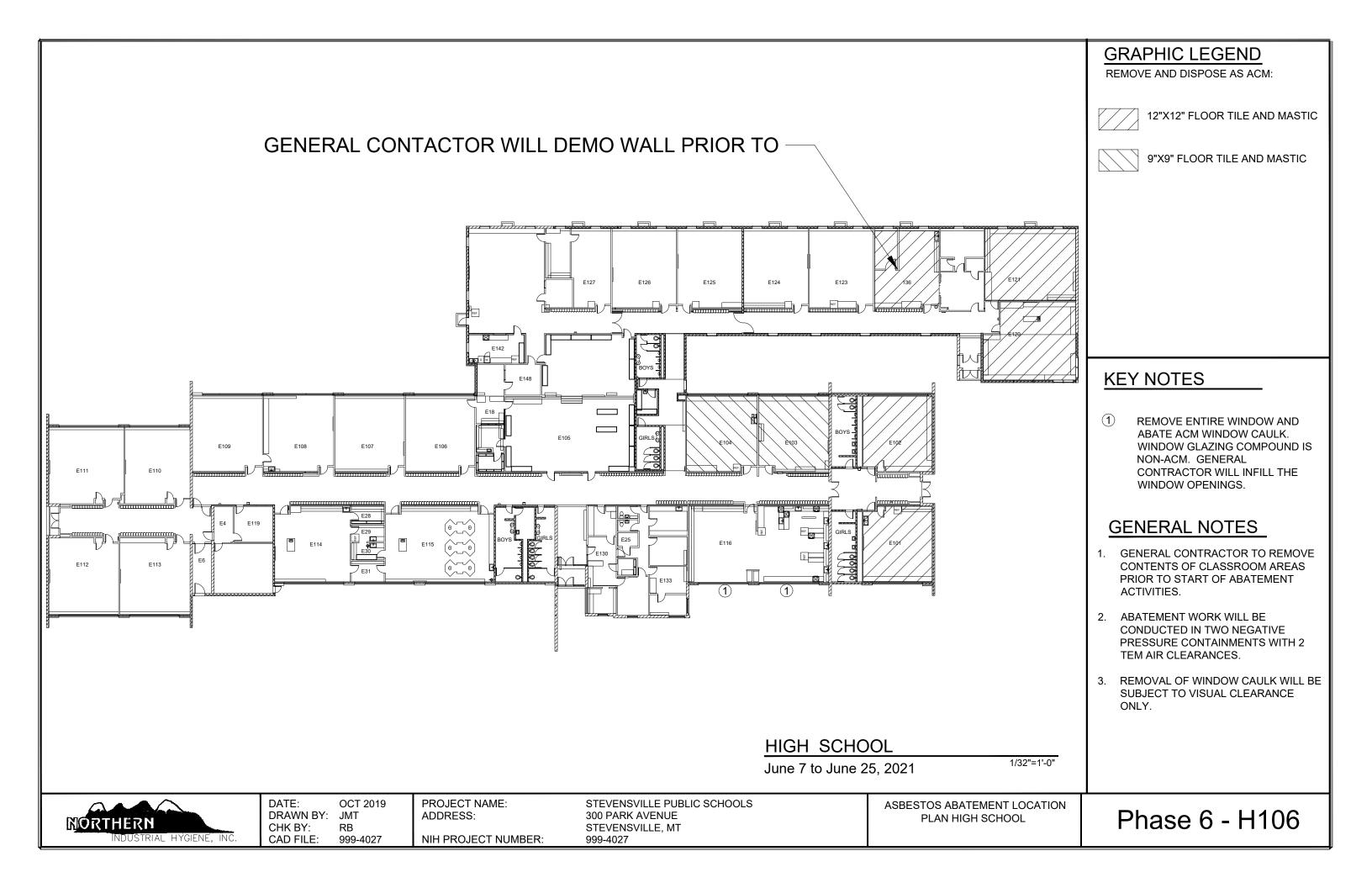
STEVENSVILLE PUBLIC SCHOOLS 300 PARK AVENUE

STEVENSVILLE, MT 999-4027

ASBESTOS LOCATION PLAN HIGH SCHOOL GYM

Phase 4 - H104







# **GRAPHIC LEGEND**

REMOVE AND DISPOSE AS ACM:

**CEMENT ASBESTOS BOARD SOFFIT** 

(March 30 Through April 10, 2020)

12" FLOOR TILE AND MASTIC Phase 6

(June 7 through June 11, 2021)

# SHEET NOTES

- 1. REMOVAL OF SOFFITS WILL BE SUBJECT TO VISUAL CLEARANCE ONLY.
- 2. OWNER WILL REMOVE LIGHTING FIXTURES IN SOFFITS PRIOR TO SOFFIT REMOVAL. ABATEMENT CONTRACTOR WILL COORDINATE WITH OWNER.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL PLUMBING FIXTURES IN THE RESTROOMS PRIOR TO THE START OF ABATEMENT ACTIVITIES.
- 4. ABATEMENT WORK WILL BE CONDUCTED WITHIN ONE NEGATIVE PRESSURE CONTAINMENT WITH ONE TEM AIR CLEARANCE.

**ELEMENTARY SCHOOL** 

1/32"=1'-0"



DATE: OCT 2019 DRAWN BY: JMT CHK BY: RB CAD FILE: 999-4027

ADDRESS:

NIH PROJECT NUMBER:

PROJECT NAME: STEVENSVILLE PUBLIC SCHOOLS 300 PARK AVENUE

STEVENSVILLE, MT 999-4027

ASBESTOS ABATEMENT LOCATION PLAN **ELEMENTARY SCHOOL** 

Phases 1 and 6 H107