

GRANT SCHOOL DISTRICT 3 - GUHS LIBRARY  
PRE-RENOVATION ASBESTOS REMOVAL  
Call for Quotes

Quotes will be accepted by Nick Green, Catalyst Public Policy Advisors, LLC, until 3:00 p.m., Local Time, Wednesday, January 3, 2024 for asbestos removal and targeted demolition. Email transmitted Quotes shall be accepted at [nick@catalyst.com](mailto:nick@catalyst.com). Nick Green telephone is 541-620-2809.

Quotes shall be publicly opened at this time in the School District office boardroom, 401 N. Canyon City Boulevard, Canyon City, OR, and shall be read aloud and recorded. All interested persons are invited to attend. Quotes received after the date and time affixed will not be considered.

The Grant School District 3 reserves the right to reject all quotes and to waive informalities. Any quote may be rejected for not complying with all prescribed public bidding procedures and requirements.

The work is to be performed under one contract which will include all work required to complete the project.

A Quote will not be considered unless it contains a statement that the provisions of ORS 279.350 Prevailing Wage, shall be complied with.

Prevailing wage rates which are in effect September 2023 to be required on this project.

A Quote will not be considered unless it contains a statement as to whether the bidder is a resident bidder as defined in ORS 279.029.

Contractors must be licensed as required by ORS 468.883 & 468A.720.

A mandatory pre-quote meeting shall be held on *December 20, 2023*, 11:00 am, local time, at GUHS Library SE exterior entrance, 911 S. Canyon Boulevard, John Day, OR.

This project involves the removal of approximately: 1,800 sq. ft. of drywall and asbestos containing (AC) texture, 40 sq. ft. of AC covebase and AC mastic, 200 sq. ft. of AC floor tile, 3,500 sq. ft. of AC floor tile mastic, 2,800 sq. ft. of AC 24" x 48" suspended ceiling tile and grid; removal of approximately 3,500 sq. ft. of carpet, 2,900 sq. ft. of 12" x 12" ceiling tile, 2,800 sq. ft. of plasterboard ceiling.

QUOTE

Quote Page 1

Quoter's Employer ID or Social Security Number: \_\_\_\_\_

To: Board of Directors Date: \_\_\_\_\_

The undersigned proposes to furnish in the time specified the services described in the specifications of this Quote.

As explained in paragraph 2-26, in Part 2, the Quoter must provide resident/non-resident bidder information. In order for the Board to determine whether a Quoter is a resident/non-resident bidder, the following definitions apply: a "resident" bidder is one who has paid unemployment taxes or income taxes in Oregon during the twelve calendar months immediately preceding submission of the bid, has a business address in this state, and states in the bid that the bidder is a "resident" bidder pursuant to this definition. A "non-resident" bidder is one who is not a "resident" as previously defined.

The undersigned certifies by initialing the appropriate line below whether the Quoter is a resident/non-resident bidder:

Bidder is resident \_\_\_\_\_

Bidder is non-resident \_\_\_\_\_

Non-resident bidder is a resident of \_\_\_\_\_

As explained in paragraph 2-27, the bidder must check one:

\_\_\_\_\_"Foreign" Bidder

\_\_\_\_Oregon (Domiciled or Registered Bidder)

Total Quote \$ \_\_\_\_\_

\_\_\_\_\_ dollars

GRANT SCHOOL DISTRICT 3  
Quote Signature Sheet

Quote Page 2

SIGNATURE FOR INDIVIDUAL

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
SIGNATURE OF INDIVIDUAL

\_\_\_\_\_  
Address

\_\_\_\_\_  
Name of Individual (Please Print)

\_\_\_\_\_  
City/State/Zip Code

\_\_\_\_\_  
Telephone

SIGNATURE FOR PARTNERSHIP

\_\_\_\_\_  
Name of Partnership

\_\_\_\_\_  
Name of Partners (1)

\_\_\_\_\_  
Address

\_\_\_\_\_  
(2)

\_\_\_\_\_  
City/State/Zip Code

\_\_\_\_\_  
(3)

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
SIGNATURE OF ONE PARTNER

SIGNATURE FOR CORPORATION

\_\_\_\_\_  
Name of Corporation

\_\_\_\_\_  
SIGNATURE OF INDIVIDUAL

\_\_\_\_\_  
Address

\_\_\_\_\_  
Office/Title or Officer/Agent

\_\_\_\_\_  
City/State/Zip Code

\_\_\_\_\_  
Telephone

CONTACT PERSON

\_\_\_\_\_  
Please Print

\_\_\_\_\_  
Telephone

PART 1	GENERAL INFORMATION
PART 2	BIDDING INFORMATION
PART 3	DEFINITIONS
PART 4	SCOPE OF WORK
PART 5	DESCRIPTION OF WORK
PART 6	MATERIALS
PART 7	EXECUTION
PART 8	PERSONNEL PROTECTION
PART 9	REMOVAL
PART 10	TRAINING

## 1 GENERAL INFORMATION

- 1-1 These are the asbestos abatement and demolition specifications for GUHS Library
- Grant School District 3  
401 N Canyon City Boulevard  
Canyon City, Oregon 97820
- 1-2 Project Manager is Nick Green, (541) 620-2809  
Consultant is Steven M. Paulsen, (541) 473-2243
- 1-3 These specifications cover the removal of asbestos containing (AC) texture and wallboard, AC floor tile, AC mastic, AC ceiling tile and grid, AC covebase and mastic, ceiling tile, plasterboard, carpet from the GUHS Library.
- 1-4 A Quote for completion of all work described in these specifications is required for the project.
- 1-5 Grant School District, District, School District, building owner, or "owners" means Grant School District 3, Grant County, John Day, Oregon.
- 1-6 "Person" means either a natural or artificial person and includes individuals, partnerships, corporations and other associations.
- 1-7 "Specifications" means the directions, requirements, explanations, terms and provisions pertaining to the various features of the work, the manner and method of bidding for the work, the manner and method of performance of the work, and the manner and method of payment; all as they appear in the contract documents.
- 1-8 Items required as part of the Quote Submittal package:
- A. Bid Page(s)
  - B. Signature Sheet.

## 2 BIDDING INFORMATION

2-1 There will be a mandatory pre-quote meeting at the GUHS Library SE exterior door. 911 S. Canyon Boulevard, John Day, OR 97845 Wednesday, December 20, 2023 at 11:00 am local time.

2-2 By submitting a Quote, the Contractor acknowledges that he has investigated and satisfied himself as to; a) the conditions affecting the work, including but not limited to physical conditions of the site which may bear upon site access, handling and storage of tools and material, access to water, electric or other utilities or otherwise affect performance of required activities; b) the character and quantity of all surface and subsurface material or obstacles to be encountered in so far as this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Building Owner or a designated consultant, as well as information presented in drawings and specifications included with this contract. Any failure by the contractor to acquaint himself with available information will not relieve him from the responsibility for estimating properly the difficulty or cost of successfully performing the work. The Building Owner is not responsible for any conclusions or interpretations made by the contractor on the basis of the information made available by the Building Owner.

2-3 The Grant School District 3 requires that this project be started after March 21, 2024 and completed prior to April 8, 2024 in a contiguous work period with 10 days notice to the Owner and Paulsen Environmental Consulting, Inc.

2-4 The successful Quoter shall submit an invoice in triplicate at the completion of the project.

2-5 95% of the total invoice shall be due within 30 days of notification that final air sampling results met the requirement of the bid specifications. The owner shall withhold 5% for an additional 30 days to guarantee satisfaction.

2-6 Quotes shall be submitted on the forms provided or a facsimile of the forms provided.

2-7 The Quote signature sheet of these specifications shall be signed with ink or indelible pencil as follows:

a) In the case of an individual quoter, by such individual quoter.

b) In the case of a partnership, the name of the partnership must appear on such bid signature sheet, and it shall be signed in the name of such partnership by at least one partner. In addition to such signature, the names of all partners shall be stated on such quote signature sheet.

c) In the case of a corporation, the corporate name shall be subscribed by the president or other managing officer, and there shall be set forth under the signature of such officer, the name of the office he holds, or the capacity in which he acts for such corporation.

2-8 Quotes may be emailed to Nick Green at nick@catalyst.win. All Quotes shall be clearly and distinctly typed or written with ink or indelible pencil. No erasures are permitted. Mistakes shall be crossed out and corrections typewritten in ink adjacent thereto and initialed in ink by the party signing the Quote. All Quotes shall be on the form provided by the owner or they may be rejected by the. It shall be the Quoter's responsibility to ensure that the bid is delivered to the Engineer's office before the time and date set for the Quote closing, and the owner will not be responsible for Quotes delivered to any location other than specified.

2-9 Insurance requirements - The Contractor shall purchase and maintain insurance that will protect him from claims that may arise out of or result from his activities under this Contract, whether those activities are performed by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

2-10 Quoters shall submit proof of coverage under the Workman's Compensation Insurance system of the State of Oregon or other similar benefit acts upon award.

2-11 Quoters shall submit a certificate of general liability insurance for bodily injury and property damage and shall be asbestos specific upon award. This certificate shall name the building owner as additional insured and shall allow for a ten day notice of cancellation. Minimum acceptable coverage is:

\$ 5,000,000 Combined Single Limit for Bodily injury and Property Damage or  
\$ 1,000,000 Bodily Injury and \$ 1,000,000 Property Damage (each occurrence)

2-12 Quoters must certify that they are licensed contractors and registered with the Construction Contractors Board. The Quoter must further certify that all subcontractors will be registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 upon award.

2-13 Quoters must be licensed by the State of Oregon Department of Environmental Quality for the purpose of removal, encapsulation, enclosure, demolition and maintenance of structures or components covered by or composed of asbestos-containing material per OAR 340-33-000 through 100. Copies of documents shall be submitted upon award.

2-14 In determining the lowest Quoter, the owner will, for the purpose of awarding the contact, add a percent increase on the quote of a non-resident quoter equal to the percent, if any, of the preference given to that quoter in the state in which the quoter resides. The quoter must provide the resident/non-resident quoter information on the quote page or the quote will be rejected as non-responsive.

2-15 A foreign contractor is a quoter who is not domiciled in or registered to do business in the State of Oregon. Each quoter shall certify on the quoter page, at the provided location, whether or not the quoter is a foreign contractor. If a contract which is in excess of \$10,000.00 is awarded to a quoter who is a foreign contractor, such quoter shall promptly submit to the Oregon Department of Revenue information which the Department may require. Final payment on the contract shall not be made by the owner until the owner satisfies itself that such information was submitted to the Department.

The form to be submitted to the Department may be obtained by:

Telephone: (503) 378-3745 or  
Writing: Oregon Department of Revenue  
955 Center Street N.E.  
Salem, Oregon 97310

2-16 Award will be made to the lowest responsive and responsible Quoter.

2-17 The owner reserves the right to waive any irregularity not affecting substantial rights.

2-18 The owner reserves the right to determine if any equipment, article, or material complies substantially in quality and performance with the specification, is acceptable to the owner, and if any variance listed in the quote is material or immaterial.

2-19 All specifications, terms and conditions contained in the Invitation for Quote shall be incorporated by reference and made a part of a contract awarded to the successful quoter.

2-20 Any contract between the owner and a quoter shall be entered into within the State of Oregon and the laws of said state, whether substantive or procedural, shall apply to the contract. In addition, the contract shall be subject to the policies and rules adopted by the Grant School District 3.

2-21 There can be no assignment or transfer of any interest in any contract between the owner and a quoter without the prior written approval of the owner.

2-22 A performance bond is not required.

2-23 The successful quoter agrees to protect, defend and hold harmless the owner and any Representative, Consultant or Agent against any demand for payment for wrongful or unauthorized use of any patented or copyrighted material, process, article or device that may enter into manufacture, construction or form a part of the work covered by the contract.

2-24 When special conditions are written in the specifications, these special conditions shall supercede any conditions which are listed under Sections 5-10.



2-25 DEQ required forms titled "Notice of Intent to Remove or Encapsulate Asbestos" and the proper fees will be submitted by the successful quoter. The contractor shall furnish copies of the forms to the owner. The successful quoter shall include in his quote the cost for all additional permits and licenses which may be required to perform this contract.

2-26 It is probable that the owner will need Safety Data Sheets (SDS's) and labels for certain products defined as hazardous chemicals by the State of Oregon. However, the responsibility for determining that a chemical product requires an SDS and labeling resides with the manufacturer, the importer and/or the distributor. This SDS is required only with the initial shipment of a given product, and with the initial shipment of a product for which there has been a change in the SDS.

Need for these requirements has been determined by the State of Oregon workers Compensation Department and published by them as Oregon Administrative Rules 437, Division 155, HAZARD COMMUNICATION, which are identified and hereby made part of this specification by reference. This document is available from:

Hazard Communication Coordinator  
Accident Prevention Division  
State of Oregon  
Room #204 Labor and Industries Building  
Salem, Oregon 97310  
Phone: (503) 378-3272

or from any local Accident Prevention Division office.

2-27 The successful Quoter shall:

a) Make payment promptly, as due to all persons supplying to such quoter labor and material for the prosecution of the work provided for in the contract with the owner. If the quoter fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the quoter or a subcontractor by any person in connection with the contract as such claim becomes due, the owner may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due, or to become due, the bidder by reason of such contract. The payment of a claim in the manner described shall not relieve the quoter or the quoter's surety from obligation with respect to any unpaid claims.

b) Pay all contributions or amounts due the Industrial Accident Fund from such quoter incurred in the performance of the contract.

c) Not permit any lien or claim to be filed or prosecuted against the owner on account of any labor or material furnished.

d) Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

e) Promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such quoter, of all sums which the quoter agrees to pay for such services and all monies and sums which the quoter collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such services.

f) Ensure that the contractor, it's subcontractors, if any, and all employers working under this project agreement are subject employers under the Oregon Worker's Compensation Law and shall comply with ORS 656.017, which requires them to provide Worker's Compensation coverage for all their subject employees.

2-28 No person shall be employed for more than ten hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, and in such cases the laborer shall be paid at least time and a half pay for all overtime in excess of ten hours a day and for work performed on Saturday and on any legal holiday as specified in ORS 279.334.

2-29 The hourly rate of wage to be paid by any contractor or subcontractor to workers upon all public works shall be not less than the prevailing rate of wage for an hour's work in the same trade or occupation in the locality where such labor is performed. This shall be in effect for contracts which meet or exceed \$ 75,000.

2-30 The successful quoter shall indemnify, hold harmless, and defend the owner from any and all liabilities, settlement, losses, penalties, costs, expenses, attorney fees (including claim based upon or allegedly based upon) resulting from or allegedly resulting from the successful quoter's negligence, omissions, activities or services provided pursuant to a contract awarded to such quoter.

2-31 In the event that the successful quoter fails to perform under a contract awarded, the successful quoter shall be liable for all costs and damages incurred by the owner in procuring and obtaining any similar equipment, article, material or service from other providers, and the additional costs of any contract awarded due to the successful quoter's failure to perform. Termination by the owner shall not affect any right, obligation or liability of the successful quoter which accrued before such termination. In addition to the right to terminate due to the successful quoter's failure to perform, the owner reserves all its rights and remedies at law and in equity available due to the failure to perform.

2-32 In the event that the successful quoter breaches a term or condition of a contract awarded, the owner may terminate the contract. In addition to the right to terminate due to the successful quoter's breach, and all other rights and remedies contained in other provisions, the owner reserves all its rights and remedies at law and in equity available due to the breach, including but not limited to the recovery from the successful quoter of any damages, costs, expenses and attorney fees (including attorney fees on appeal) arising out, or as a result, of the breach.

2-33 An offer to modify the quote which is received from the successful quoter after award of contract which makes the terms of the quote more favorable or advantageous to the owner will be considered, and may thereafter be accepted. To be effective, every modification must be made in writing on company letterhead, signed by an authorized officer.

2-34 The successful quoter agrees not to discriminate against any client, employee or applicant for employment or for services because of race, creed, color, national origin, sex, age or marital status with regard to, but not limited to the following: Employment upgrading, demotion or transfer; recruitment or recruitment advertising; layoffs or termination; rates of pay or other forms of compensation; selection for training, and rendition or services.

2-35 The Contractor shall make certification to the owner that said Contractor is in compliance with the Oregon Tax Laws in accordance with ORS 305.385.

2-36 Contractors shall use recyclable products to the maximum extent economically feasible in the performance of the contract work set forth in this document as required by ORS 279.555.

2-37 If the Owner permits the Contractor to use any of the Owner's equipment, tools or facilities, such use will be gratuitous and the Contractor shall release the Owner from any responsibility arising from claims for personal injuries, including death, arising out of the use of such equipment, tools, or facilities irrespective of the condition thereof or any negligence on the part of the Owner in permitting their use.

2-40 The Building Owner reserves the right to reject quotes for any reason that serves the best interest of the Building Owner or building occupant. The Building Owner also reserves the right to waive any technicality or irregularity in a quote. Failure to submit requested information/documentation may result in automatic disqualification of quote proposal.

### 3 DEFINITIONS

- 3-1 Abatement - Procedures to control fiber release from asbestos containing material. Includes removal, encapsulation, enclosure, repair, demolition, and renovation activities.
- 3-2 ACGIA - American Conference of Governmental Industrial Hygienists.
- 3-3 AIHA - American Industrial Hygiene Association.
- 3-4 Airlock - A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, there-by preventing flow-through contamination.
- 3-5 Air Monitoring - The process of measuring the fiber content of a known volume of air collected during a specific period of time.
- 3-6 Air Sampling Professional - The professional contracted or employed by the Building Owner to conduct air monitoring and analysis schemes.
- 3-7 Amended Water - Water to which a surfactant has been added.
- 3-8 ANSI - American National Standards Institute.
- 3-9 ACM - Asbestos containing material, composed of asbestos of any type and in an amount greater than 1% by weight.
- 3-10 Asbestos Project Manager (Competent Person) - An individual qualified by virtue of experience and education, designated as the contractors representative and responsible for overseeing the abatement project.
- 3-11 ASTM - American Society For Testing and Materials.  
1916 Race Street  
Philadelphia, PA 19103
- 3-12 Authorized Visitor - The Building Owner and any representative of a regulatory or other agency having jurisdiction over the project.
- 3-13 Building Owner - The Owner or authorized representative.
- 3-14 Certified Industrial Hygienist (CIH) - An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.

- 3-15 Clean Room - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of worker's street clothes and clean protective clothing.
- 3-16 Contractor - The individual and/or business with which the Building Owner arranged to perform the asbestos abatement.
- 3-17 Curtained Doorway - A device to allow ingress or egress from one room to another while permitting minimal air movement between rooms, typically by placing two overlapping sheets of plastic over a temporarily framed doorway (Z-Door) or by cutting an I shaped slot with an overhanging sheet on the leeward side.
- 3-18 Decontamination Enclosure System - A series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers and equipment.
- 3-19 Demolition - The wrecking or taking out of any load-bearing structural member of a facility.
- 3-20 Encapsulant - A liquid material which can be applied to ACM which controls the possible release of asbestos fibers either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding it's components together (penetrating encapsulant).
- 3-21 Encapsulation - The application of an encapsulant to ACM to control the release of asbestos fibers into the air.
- 3-22 Enclosure - The construction of an airtight, impermeable, permanent barrier around ACM to control the release of asbestos fibers into the air.
- 3-23 EPA - U.S. Environmental Protection Agency.  
401 M Street S.W.  
Washington, D.C. 20460
- 3-24 Equipment Room - A contaminated area or room which is part of the worker decontamination enclosure system with provisions for storing contaminated equipment and clothing.
- 3-25 Fixed Object - A piece of equipment or furniture in the work area which cannot be removed from the work area.
- 3-26 Friable Asbestos - ACM which can be crumbled easily by hand pressure.
- 3-27 Glovebag Operation - A method with limited applications for removing small amount of friable ACM from pipes, ducts, valves, joints and other non-planar surfaces in a non-isolated

area. This method utilizes a specialized form of plastic bag with built-in gloves for miniature isolation.

- 3-28 HEPA Filter - A High Efficiency Particulate Air filter capable of removing particles less than 0.3 microns in diameter with 99.97% efficiency.
- 3-29 HEPA Vacuum - A vacuum system equipped with HEPA filtered exhaust.
- 3-30 Negative Pressure Ventilation System - A portable exhaust system equipped with HEPA filtration and capable of maintaining a constant low velocity air flow into the contaminated areas of uncontaminated air from adjacent rooms or outside.
- 3-31 NESHAPS - The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).
- 3-32 NIOSH - The National Institute for Occupational Safety and Health.
- 3-33 OSHA - The Occupational Safety and Health Administration.
- 3-34 Outside Air - The air outside buildings and structures.
- 3-35 Plasticize - To cover floors and walls with plastic sheeting as herein specified.
- 3-36 Prior Experience - Experience required of the contractor on asbestos projects of similar nature and scope to insure capability of performing the asbestos abatement in a satisfactory manner.
- 3-37 Removal - The stripping of any ACM from surfaces or components.
- 3-38 Renovation - Altering in any way one or more facility components.
- 3-39 Shower Room - A room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold running water controllable at the tap and suitably arranged for complete showering during decontamination.
- 3-40 Staging Area - Either the holding area or some other area near the waste transfer airlock where containerized waste has been placed prior to removal from the work area.
- 3-41 Strip - To take off friable asbestos material from any part of a facility.
- 3-42 Structural Member - Any load supporting member of a facility, such as beams and load supporting walls or any non-load-supporting member, such as ceilings and non-load supporting walls.
- 3-43 Surfactant - A chemical wetting agent added to water to improve penetration.

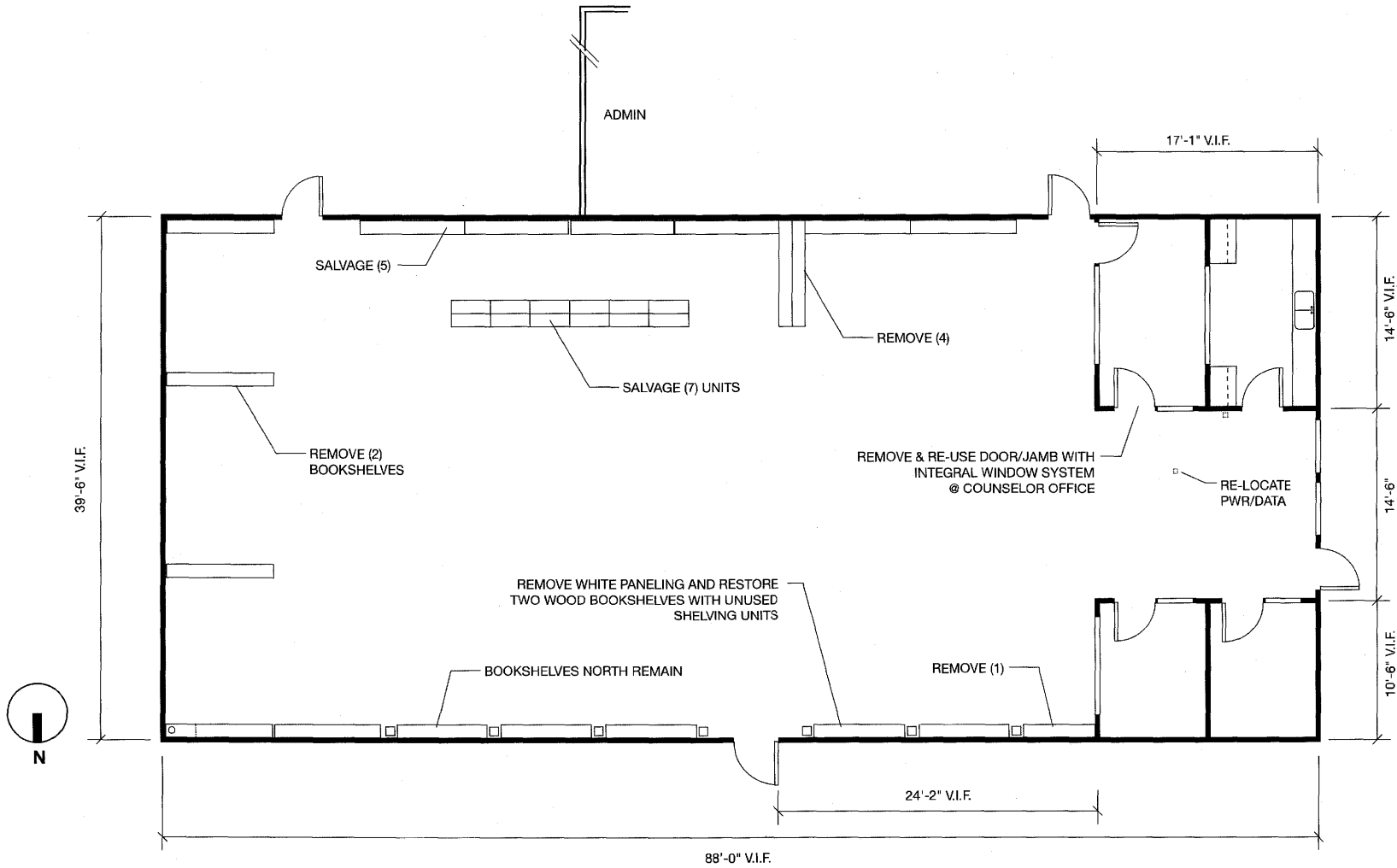
3-44 Visible Emissions - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

3-45 Waste Transfer Airlock - A decontamination system utilized for transferring containerized waste from inside to outside of the work area.

3-46 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 water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.

3-47 Work Area - Designated rooms, spaces or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. An isolated work area is a work area which has been sealed, plasticized and equipped with a decontamination enclosure system. A non-isolated work area is a controlled access work area which may be using glove-bag removal methods.

3-48 Worker Decontamination Enclosure (decon) - A decontamination system consisting of a clean room, shower room and an equipment room separated from each other and from the work area with airlocks and curtained doorways. This system is used for all worker events and also exist in the work area for equipment and waste pass out.



1 EXISTING CONDITIONS  
1/8" = 1'-0"

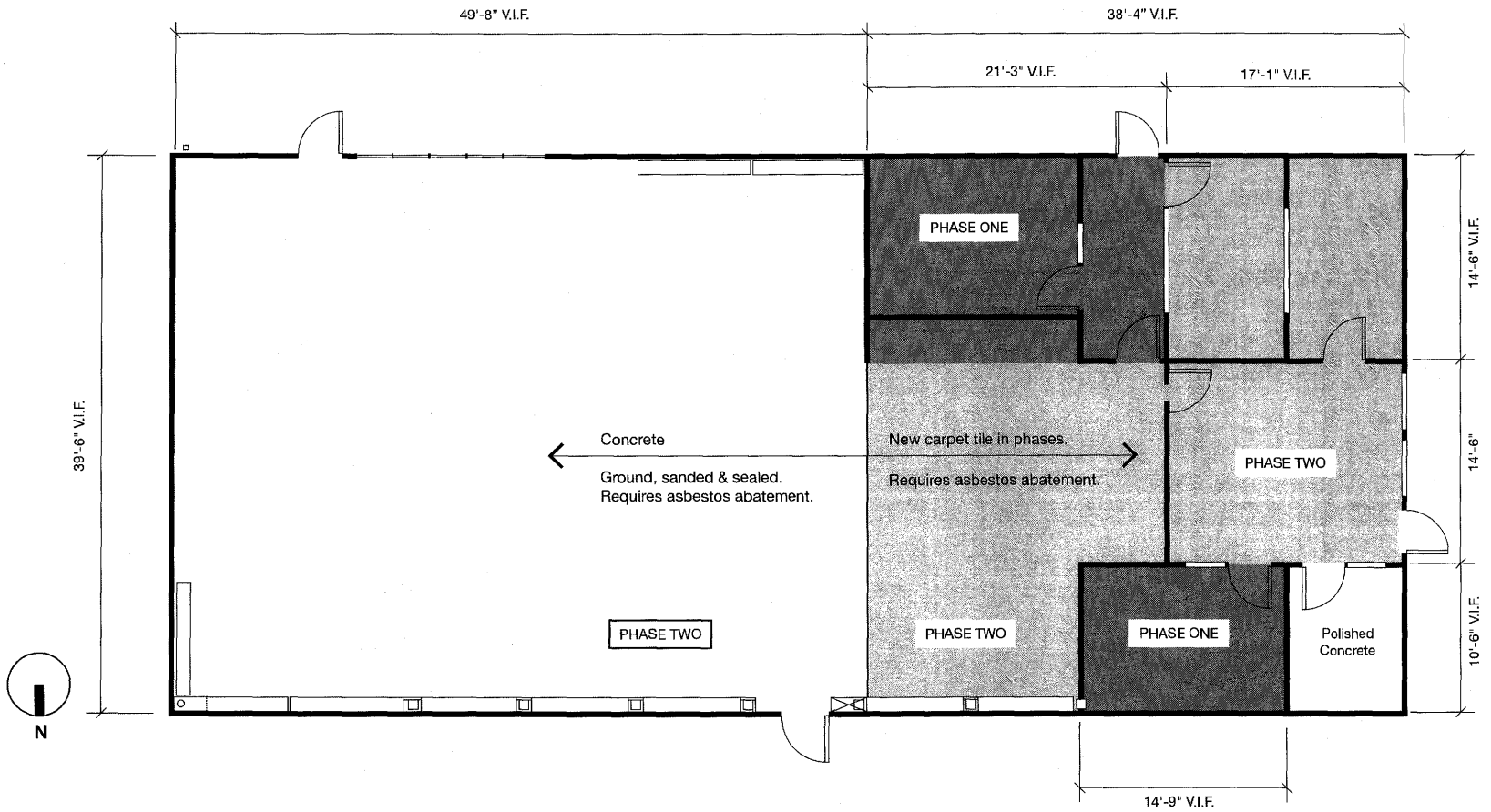


# EXISTING CONDITIONS

GRANT UNION HIGH SCHOOL STUDENT COMMONS / CONCEPT & CONSTRUCTION DOCUMENTATION / 11.22.23







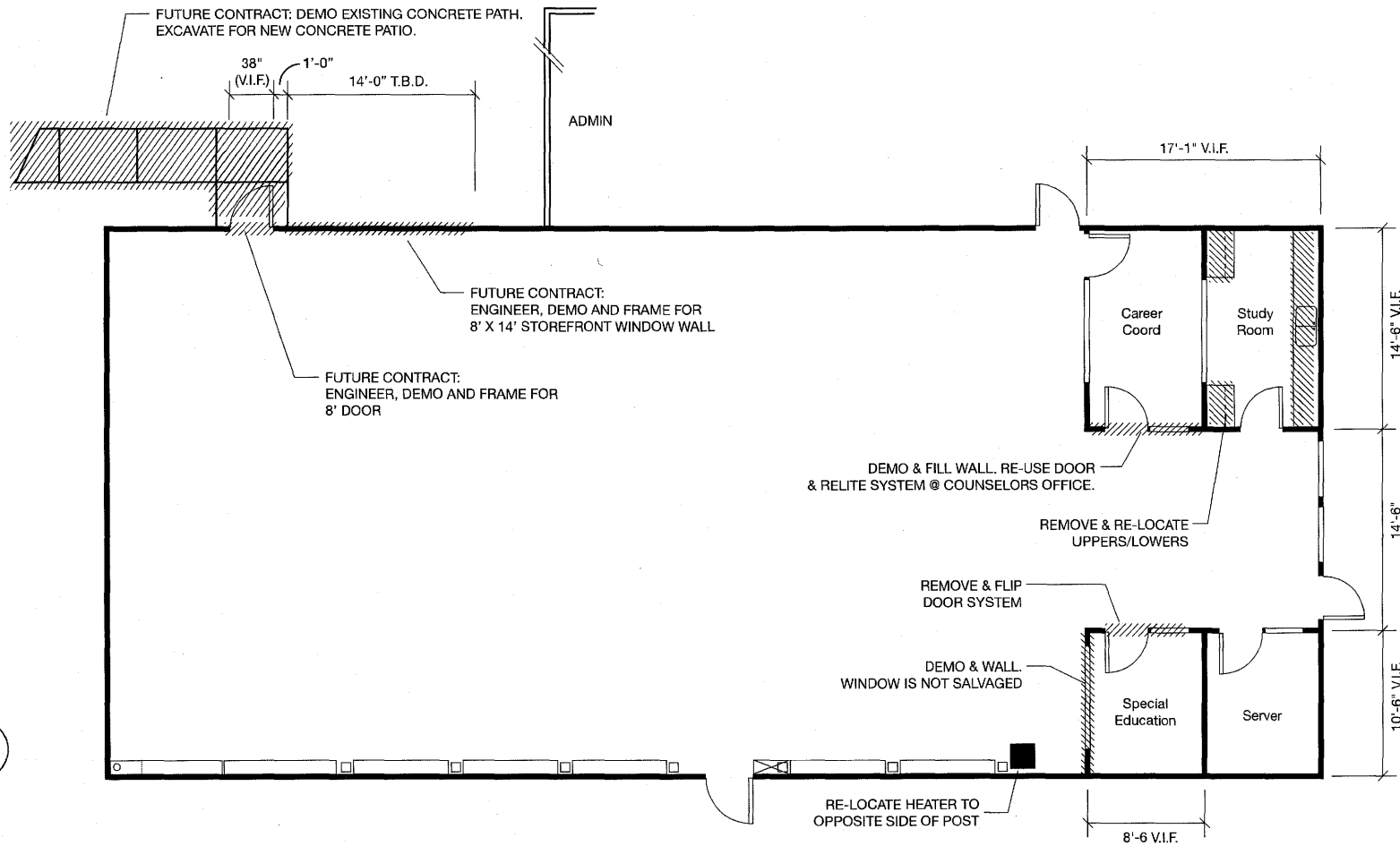
1 FLOOR FINISH PLAN  
1/8" = 1'-0"



# FLOOR FINISH PLAN

GRANT UNION HIGH SCHOOL STUDENT COMMONS / CONCEPT & CONSTRUCTION DOCUMENTATION / 11.22.23





1 DEMO PLAN  
1/8" = 1'-0"



# DEMO PLAN

GRANT UNION HIGH SCHOOL STUDENT COMMONS / CONCEPT & CONSTRUCTION DOCUMENTATION / 11.22.23



## 4 SCOPE OF WORK

4-1 All measurements are to be verified by Quoters; the Owner and/or Consultants are not responsible for incorrect measurements. This project is based on removal of the materials from the locations stated, not on the square footage stated in these specifications. The bidders shall familiarize themselves with any and all conditions of the work prior to submitting a bid. There are no warranties, written or otherwise, which state the conditions of the walls, ceilings, carpet, flooring, concrete or number of layers of material to be removed.

4-2 This project involves the removal of approximately: 1,800 sq. ft. of drywall and asbestos containing (AC) texture from the special education room and the career coordinator room, 40 sq. ft. of AC covebase & AC mastic from the South, East, & West walls of the Library area, 200 sq. ft. of AC floor tile from the Library area, 3,500 sq. ft. of AC floor tile mastic from all areas, 2,800 sq. ft. of AC 24" x 48" suspended ceiling tile and grid from the library area.

4-2-1 Floor mastic shall be removed using grinding methods with HEPA filtered dust collectors. Floor finish plan by Ditroen indicates polish floor areas, these are to be Class B 'salt & pepper' Level 3 satin polish. Other areas shall be ground sufficiently for carpet squares by others.

4-2-2 Asbestos Containing Materials removal shall be completed prior (excepting carpet) to removal of other materials.

4-3 Removal of approximately: 3,500 sq. ft. of carpet from all areas, 2,900 sq. ft. of 12" x 12" ceiling tile from Library area and special education room, 2,800 sq. ft. of plasterboard ceiling from the Library area.

4-3-1 All interior lighting shall be removed and disposed in areas of ceiling removal, wire leads shall be protected with wire nuts.

4-3-2 The door systems from the special education room and career coordinator room shall be saved; and stored by owner.

4-3-3 Doors, windows, wall penetrations, electrical panels and other immovable items shall be covered with two (2) separate layers of 6 mil, minimum thickness, poly sheeting.

4-4 All removal of all ACM friable materials, or materials made friable during removal, shall be conducted inside a HEPA filtered containment work area, with fully operational worker decon consisting of equipment room, shower room and clean room. Shower shall have hot and cold running water, controlled by person showering. Workers shall completely shower every egress from work area or will not be allowed to continue working on this project.

4-5 Final cleaning of the work area shall include HEPA vacuuming of all surfaces in the work area, including but not limited to; framing, floors, walls, pipes, electrical outlets, poly sheeting, etc.

- 4-6 Paulsen Environmental Consulting, Inc. (PECI) shall be conducting all building owner air sampling, including but not limited to; HEPA exhaust, work area, clean room and clearance.
- 4-7 Contractor Supervisor shall conduct a visual clearance prior to requesting visual clearance from PECI personnel.
- 4-8 Upon receipt of visual clearance from PECI personnel, a thin coat of lockdown encapsulant shall be applied to all surfaces.
- 4-9 Upon sufficient drying of encapsulant, aggressive air sampling shall be conducted by PECI personnel.
- 4-10 Air clearance samples shall be analyzed by Transmission Electron Microscopy (TEM) methods. Reporting of TEM analyses is expected to be within 3 days of sample collection.
- 4-11 Successful quoter shall provide temporary restroom facilities for their personnel.

## 5 DESCRIPTION OF WORK

5-1 The work specified herein shall be the removal of ACM by competent persons trained, knowledgeable and qualified in the techniques of abatement, handling and disposal of ACM and asbestos contaminated waste and the subsequent cleaning of contaminated area, who comply with all applicable Federal, State and Local regulations and are capable of and willing to perform the work of the contract.

5-2 The contractor shall supply all labor, materials, services, insurance, permits and equipment necessary to carry out the work in accordance with all applicable Federal, State and Local regulations and these specifications.

5-3 The contractor is responsible for restoring the work area and auxiliary areas utilized during the abatement to conditions equal to or better than original. Any damages caused by or during the performance of these specifications shall be repaired by the contractor at no additional cost to the Building Owner.

5-4 All work under this contract shall be done in strict accordance with all applicable Federal, State and Local regulations, standards and codes governing asbestos abatement and any other trade work done in conjunction with the abatement.

5-5 The most recent edition of any regulation, standard, document or code shall be in effect. Where conflict among the requirements or with these specifications exists, the most stringent requirements will be utilized.

5-6 The Contractor shall ensure that copies of all standards, regulations, codes and other applicable documents, including this specification, shall be available at the work site in the clean room of the worker decontamination system.

5-7 Specific Requirements:

- A. Title 29 Code of Federal Regulations Section 1910.1001  
General Industry Standard for Asbestos.
- B. Title 29 Code of Federal Regulations Sections 1910.134  
General Industry Standard for Respiratory Protection.
- C. Title 29 Code of Federal Regulations Section 1926  
Construction Industry.
- D. Title 29 Code of Federal Regulations Section 1920.2  
Access to Employee Exposure and Medical Records.
- E. Title 29 Code of Federal Regulations Sections 1910.1200  
Hazard Communication.
- F. Title 40 Code of Federal Regulations Part 763 AHERA,
- G. Title 40 Code of Federal Regulations Part 61 Subparts A and M.
- H. National Emission Standard for Asbestos (revised Subpart B).
- I. Oregon Occupational and Health Code, Division 83 ORS 279.348.

- 5-8 Contractor shall prior to commencement of work:
- A. Ensure written notification in accordance with 40 CFR Part 61.146 Subpart M, has been sent to the appropriate State and Federal air pollution control agency responsible for the enforcement of the National Emission Standard for Asbestos at least ten (10) days prior to the commencement of any on-site project activity. Provide copy to Building Owner.
  - B. Submit proof to the Building Owner that required permits, landfill site and transport arrangements are sufficient. Provide Building Owner with copies of landfill forms.
  - C. Submit documentation satisfactory to the Building Owner that the contractor's employees that may be exposed to airborne asbestos fibers have been trained as required by the EPA, 40 CFR Part 763.93 Paragraph 7.
  - D. Submit documentation that all employees who may be exposed to airborne asbestos fibers have received medical monitoring as required by OSHA 29 CFR 1910.1001 (j).
  - E. Submit to the Building Owner shop drawings for containment and decontamination facilities if different than shown in these specifications.
  - F. With the Building Owner, inspect the premises where all abatement and abatement related activities will occur and submit a statement signed by both, agreeing on building and fixture condition prior to commencement of work.
  - G. Submit manufacturer's certification that HEPA vacuums, negative pressure ventilators and any other equipment conform to ANSI 29.2-79.
  - H. Document NIOSH approvals for all respiratory protective devices utilized on site.
  - I. Submit documentation of respirator fit testing for all Contractor employees and agents who must enter the work area. This fit testing shall be in accordance with qualitative procedures as detailed in OSHA Lead Standard 29 CFR 1910.1025 Appendix D or be Quantitative in nature.
- 5-9 Prior to Abatement Activities the Building Owner shall:
- A. Provide to the Contractor information concerning access, shutdown and protection requirements of equipment and systems in work area.
  - B. Submit to the Contractor any air sample or bulk sample analysis data collected prior to the abatement.
- 5-10 During Abatement Activities the contractor shall:
- A. Submit daily verbal or telephone job progress reports detailing abatement activities to the Building Owner Representative.
  - B. Submit weekly written job progress reports detailing abatement activities.
  - C. Submit copies of all transport manifests, trip tickets and disposal forms for all asbestos and asbestos waste removed from the work area.
  - D. Document that Building Owner's employees who must enter the work area during abatement must have received training as detailed in Section 10.
  - E. Provide to the Building Owner information concerning access, shutdown and protection requirements of equipment and systems in work area.
  - F. Submit to the Building Owner any air sample or bulk sample analysis data collected during the abatement.

- 5-11 The work area is to be restricted to authorized, trained and protected personnel.
- 5-12 Entry into the work area by unauthorized individuals shall be reported immediately to the Building Owner by the contractor.
- 5-13 A logbook shall be maintained in the clean room to document the entrance of the work area by anyone and shall record name, affiliation, time in and time out for each entry.
- 5-14 Access to the work area shall be through a single worker decontamination system located adjacent to the work area. All other means of access (doors, window, halls, etc.) shall be blocked or locked so as to prevent entry to or exit from the work area. The only exception to this rule is the waste pass out airlock which shall be sealed except during removal of containerized waste from work area.
- 5-15 Contractor will have control of site security during abatement operations to protect work efforts and equipment.
- 5-16 Contractor will have Building Owner's assistance in notifying occupants and enforcement of restricted access.
- 5-17 Emergency Planning shall be developed before abatement initiation and agreed to by contractor and Building Owner.
- 5-18 Emergency procedures shall be in written form and prominently posted in the clean room and the equipment room of the decon unit. Everyone prior to entering the work area shall read and sign off on these procedures to acknowledge understanding of these procedures.
- 5-19 Emergency planning shall include notification of police, fire and emergency medical personnel of planned abatement activities, work schedule and layout of work area.
- 5-20 Employees shall be trained in evacuation techniques in the event of work place emergencies.
- 5-21 For non-life-threatening situations employees will use normal decontamination procedures, with help from other employees if necessary, before exiting work area to obtain proper medical attention.
- 5-22 For life-threatening injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker.
- 5-23 Telephone numbers of all emergency response personnel shall be prominently posted in the clean room.

5-24 The successful Quoter shall attend a pre-start job meeting which will be held at Contractor's convenience just prior to starting the project. Attending this meeting will be representatives of the Owner, and the owner's agents including testing/monitoring personnel. The Contractor and supervisory personnel who provide on-site direction of abatement activities must attend. The contractor shall be prepared to provide detailed information concerning:

- A. Preparation of work area.
- B. Personal protective equipment including respiratory protection and protective clothing.
- C. Employees and their training.
- D. Decontamination procedures for personnel, work area and equipment.
- E. Abatement methods and procedures to be used.
- F. Required air monitoring procedures.
- G. Waste handling procedures.
- H. Scheduling
- I. Emergency procedures.



## 6 MATERIALS AND EQUIPMENT

- 6-1 Deliver all material in the original packages, containers or bundles bearing the name of the manufacturer and the brand name.
- 6-2 Store all materials subject to damage off the ground, away from wet or damp surfaces and under cover sufficient to prevent damage or contamination. Replacement materials shall be stored outside of the work area until abatement is completed.
- 6-3 Damaged, deteriorated or previously used materials shall not be used and shall be disposed of properly.
- 6-4 Polyethylene sheeting for walls, floors and stationary objects shall be a minimum of two layers of 6-mil thickness in widths selected to minimized the frequency of joints.
- 6-5 Method of attaching sheeting shall be agreed upon in advance by the contractor and Building Owner. Method of attachment may include any combination of duct tape, furring strips, spray glue, staples, nails, screws or other effective procedures capable of sealing poly under both wet and dry conditions.
- 6-6 Poly sheeting used for worker decon unit shall be opaque or black.
- 6-7 Disposal bags shall be of 6-mil polyethylene, pre-printed with labels as required by EPA 40 CFR 61.152 and OSHA 29 CFR 1910.1.
- 6-8 Disposal drums shall be metal or fiberboard with locking rings.
- 6-9 Stick-on labels as per EPA and OSHA requirements.
- 6-10 Warning signs as required by OSHA 29 CFR 1910.1001.
- 6-11 Surfactant (wetting agent) shall be a mixture of 50/50 poly-oxyethylene ether and polyoxyethylene ester, or equivalent, mixed in a proportion of 1 fluid ounce to 5 gallons of water or specified by manufacturer.
- 6-12 Penetrating encapsulation shall be MEI 44-15 or equal, approved at least seven days before beginning project.
- 6-13 Replacement materials shall be asbestos-free and provide performance characteristics equal to or better than the original material and should be evaluated and selected by the Building Owner.
- 6-14 Encapsulant should not be solvent-based or utilize a vehicle (the liquid in which the solids of the encapsulant are suspended) consisting of hydrocarbons.

6-15 Encapsulant shall not be flammable.

6-16 A sufficient number of negative pressure ventilation units equipped with HEPA filtration and operated in accordance with ANSI 29.2-79 and EPA guidance document EPA 560/5-83-002 Guidance for Controlling Friable Asbestos Containing Materials in Buildings Appendix F. Recommended specifications and operating procedures for the use of negative pressure systems for asbestos abatement shall be utilized so as to provide work place air change every 15 minutes or better.

To calculate total airflow requirements:

$$\text{Total ft}^3/\text{min} = \frac{\text{Vol. of work area (ft}^3\text{)}}{15 \text{ min.}}$$

To calculate the number of units needed for the abatement:

$$\text{Number of units needed} = \frac{\text{ft}^3/\text{min}}{\text{Capacity of unit in ft}^3}$$

When air-supplied respirators are utilized, estimate the volume of supplied air and add to work place air volume when calculating ventilation requirements.

Avoidance of utilizing a patented system without authorization may be achieved with a pressure differential system. This includes using one HEPA filtered exhaust fan, several air filtration machines, tight fitting decon and waste load out doors, and a differential pressure monitor.

6-17 Type "C" air supplied respirators in pressure demand mode with full face-pieces and HEPA filtered disconnect protection are recommended by the EPA for all full shift workers until the successful completion of final air clearance monitoring. Powered air purifying respirators (PAPR) equipped with HEPA filters and full face-pieces may be used for inspection or repair work of less than one hour duration per day. A sufficient supply of charged replacement batteries and filters and a flow test meter shall be available in the clean change area for use with PAPRs. Air purifying respirators with dual HEPA filters may be utilized during work area preparations. Spectacle kits and eyeglasses must be provided for employees who wear glasses and who must wear full face-piece respirators. Respirators provided for asbestos abatement must be tested and approved by NIOSH.

6-18 Compressed air systems shall be designed to provide air volumes and pressures to accommodate respirator manufacturer's specifications. The compressed air systems shall have a receiver of adequate capacity to allow escape of all respirator wearers from contaminated area in the event of compressor failure. Compressors must meet the requirements of 29 CFR 1910.134. Compressors must have an in-line CO monitor and

periodic inspections of the monitor must be evidenced. Documentation of adequacy of compressed air systems/respiratory protection system must be retained on site. Periodic testing of compressed air shall insure that systems provide Grade D breathing air as described in Compressed Gas Association Commodity Specifications G-7.1.

6-19 Full body disposable protective clothing, including head, body and foot

coverings consisting of material impenetrable by asbestos fibers shall be provided to all workers and authorized visitors in sizes adequate to accommodate movement without tearing.

6-20 Additional safety equipment (e.g. hard hats, safety shoes, disposable gloves) as necessary shall be provided to all visitors and workers.

6-21 Non-skid footwear shall be provided to all abatement workers. Disposable clothing shall be sealed to footwear to prevent body contamination.

6-22 A sufficient supply of scaffolds, ladders, lifts and hand tools shall be provided as needed.

6-23 Sprayers with pumps capable of providing a maximum of 500 psi at the nozzle tip at a maximum flow rate of 2 gallons per minute shall be used for spraying of amended water.

6-24 Rubber dustpans and rubber squeegees shall be provided for cleanup.

6-25 Brushes utilized for removing loose ACM shall have nylon or fiber bristles, not metal.

6-26 A sufficient number of HEPA filtered vacuum systems shall be available.

6-27 Encapsulants shall be sprayed using airless equipment.

6-28 The contract is based upon the materials, equipment and methods described in the contract documents.

6-29 The Building Owner will consider proposals for substitutions of materials, equipment and methods only when such proposals are accompanied by full and complete technical data.

6-30 Do not substitute materials, equipment or methods unless such substitutions have been specifically approved by the Building Owner.

6-31 Where the phrase "or equal" occurs in the contract document, do not assume that materials, equipment or methods will be approved by the Owner unless the item has been specifically approved for this work by the Owner.

6-32 The decision of the Building Owner shall be final.

6-33 Costs of delays because of non-availability of specified items, when such delays could have been avoided by the contractor, will be back-charged as necessary and shall not be borne by the Building Owner.

## 7 EXECUTION

- 7-1 Post danger signs meeting the specifications of OSHA 29 CFR 1910.1101 at any location and approaches to any location where airborne concentrations of asbestos fibers may exceed ambient background levels. Signs shall be placed 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 enclosure barriers.
- 7-2 Shut down and lock out electric power to all work areas. The Contractor will provide temporary power and lighting. Insure safe installation and ground faulting of temporary power sources and equipment by compliance with all applicable electrical codes. All costs for electricity shall be paid by the Building Owner.
- 7-3 The contractor shall provide sanitary facilities for abatement personnel outside of the work area and maintain them in a clean and sanitary manner.
- 7-4 The Building Owner will provide water for all abatement needs. The contractor will make necessary connections.
- 7-5 Shut down and lockout all heating, cooling and air-conditioning systems. Seal all intake or exhaust vents with 6-mil poly and tape. Also seal any seams in system components which pass through. Remove all HVAC system filters and place in labeled bags for disposal.
- 7-6 Preclean all moveable objects within the work area using a HEPA filtered vacuum and/or wet cleaning methods as appropriate. After cleaning, these objects shall be removed from the work area and stored in an uncontaminated area.
- 7-7 Preclean all fixed objects in the work area with HEPA filtered vacuums and/or wet cleaning methods. Careful attention must be paid to machinery behind grills or gratings where access may be difficult but contamination is significant. Also pay particular attention to wall, floor and ceiling penetrations behind fixed items. After precleaning, enclose fixed objects in 6-mil poly and seal securely in place. Control panels in the work area may have to be accessible to Owner during abatement. These shall be designated and access allowed via sealable flaps.
- 7-8 All wall, floor and ceiling penetrations (i.e. doors, windows, grills, etc.) shall be individually sealed.
- 7-9 The worker decon unit shall consist of at least a clean room, shower room and an equipment room, each separated from each other and the work area with airlocks.
- 7-10 Entry to and exit from all airlocks and decon system chambers shall be through curtained doorways consisting of either two overlapping sheets of poly or sufficient negative air is established to allow one sheet of weighted poly on the negative air side of the doorway.

7-11 Clean room shall be adequately sized to 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 disposable clothing, replacement filters, towels and other necessary items shall be provided in adequate supply in the clean room. A location for postings shall also be provided here. Whenever possible a lockable door should be utilized. Lights, heat and electricity shall be provided as necessary for comfort. This space shall not be used for tool storage or as office space.

7-12 Shower room shall contain one or more showers as needed to accommodate workers. Each shower head shall be supplied with hot and cold water adjustable at the tap. The shower shall be constructed to insure against leakage of any kind. An adequate supply of soap, shampoo and towels shall be provided by the contractor and available at all times. Shower water shall be drained, collected and filtered through a system with at least a 5 micron particle size collection capability.

7-13 The equipment room shall be used for storage of equipment and tools at the end of a shift. Replacement filter for HEPA vacuums and negative ventilators, extra tools, surfactant and other tools and supplies that may be needed during the abatement may be stored here. A walk-off pan filled with water shall be located in the work area just outside the equipment room for workers to clean off foot coverings to prevent excessive contamination of the worker decon area. A drum or holder lined with 6-mil labeled bags shall be located in this area for disposable clothing. Contaminated foot wear shall be stored here for use the next day.

7-14 The waste container pass out airlock shall be constructed at some location separate from the worker decon system. Wherever possible this shall be located where there is direct access to the outside of the building. This airlock system shall consist of an airlock and container staging area. An airlock is required following the container staging area when immediate access to outside is not feasible.

7-15 The waste container pass out airlock system shall be constructed in a similar manner using similar materials to the worker decon. This airlock system shall not be used to exit the work site.

7-16 Emergency exits shall be established and clearly marked with duct tape arrows or other effective means. They shall be secured to prevent access from uncontaminated areas and still permit emergency exiting. These exits may be the worker decon, the waste pass out or other alternative exits satisfactory for escape needs.

7-17 The contaminated work area shall be separated from the remainder of the uncontaminated building by the construction of air tight barriers.

7-18 Walls shall be constructed of wood or metal framing to support barriers in all openings larger than 4' x 8', when unaffected portions of the building(s) is occupied by other personnel.

7-19 A sheathing material (plywood, drywall) of at least 3/8" thickness shall be applied to the work side of the barrier.

7-20 Cover both sides of partition with a double layer of 6-mil poly with staggered joints and seal in place. Caulk edges of partition at floor, ceiling and walls to form an airtight seal.

7-21 Following completion of the construction of all poly barriers and decon system, allow overnight settling to insure that barriers will remain intact before beginning abatement activities.

7-22 All poly barriers shall be inspected at least twice daily, at the beginning and the conclusion of each shift. Damage and defects in the barrier system are to be repaired immediately upon discovery. Use smoke tubes to test the effectiveness of the barrier system and negative pressure daily. Record inspections, observations and smoke testing in the daily project log.

7-23 Initiate operation of negative air equipment as needed to provide one air change at least every 15 minutes. Insure that adequate power supply is available to satisfy the requirements of the ventilating units. Negative pressure ventilation units shall be exhausted to the outside of the building at all times. They shall not be exhausted into interior spaces of the building. Careful installation, air monitoring and daily inspections will be done to insure no contamination is occurring on the interior of the building. These items shall also be entered into the daily logbook.

7-24 Remove, clean and/or enclose in poly sheeting, all ceiling mounted objects such as lights and other items that may interfere with abatement procedures.

- 7-25 Commencement of work shall not occur until:
- A. Enclosure systems have been constructed and tested.
  - B. Negative pressure systems are operating properly.
  - C. All pre-abatement submissions, postings, notifications and permits have been provided and are satisfactory.
  - D. All equipment for abatement, clean-up and disposal are on hand.
  - E. All worker training and certification has been completed.
  - F. Contractor receives written notice from Building Owner or agent to begin abatement.

7-26 At any time during the abatement activities, after barriers are erected, if visible material is observed outside of the work area or if damage occurs to barriers, work shall immediately stop, repairs be made to barriers, and debris/residue cleaned up using appropriate HEPA vacuuming and wet mopping procedures. Work shall not recommence until approval by Building Owner representative.

7-27 If air samples collected outside of the work area during abatement activities indicate airborne fiber concentrations greater than 0.01 f/cc or pre-measured background levels (whichever is greater) work shall immediately stop for inspection and repair of barriers. Cleanup of surfaces outside of the work area using HEPA vacuums and wet wiping techniques may be necessary. Work shall not recommence until approval by Building Owner representative.

7-28 Procedures described in this specification are to be utilized at all times. If specified procedures cannot be utilized, a request must be made in writing to the Building Owner providing details of the problem encountered and recommended alternatives. Alternative measures shall provide equivalent or greater protection than procedures being replaced. Any alternative must be authorized in writing by the Building Owner prior to implementation.

7-29 All workers and authorized visitors shall enter the work area through the worker decon. All personnel who enter the work area must sign the entry log, located in the clean room, upon entry and exit.

7-30 All personnel, before entering the work area, shall read and be familiar with all posted regulations, personal protection and emergency procedures. A sign-off sheet shall be part of the record keeping requirements.

7-31 Entry and exit procedures:

- A. All personnel shall proceed first to the clean room, remove all street clothing and don appropriate protective clothing, respirators and other safety equipment as required for conditions in the work area. Clean respirators and protective clothing shall be provided and utilized by each person for each separate entry into the work area.
- B. Personnel wearing designated personal protective equipment shall proceed from the clean room through the shower and equipment room to the work area.
- C. Before leaving the work area all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing, vacuuming or wet wiping procedures. Each person shall utilize the walk-off pan for cleaning the bottom of their footwear.
- D. Personnel shall proceed to the equipment room where they remove all protective equipment except respirators. Deposit disposable clothing into appropriately labeled containers. Reusable footwear shall be stored in the equipment room when not in use in the work area.
- E. Still wearing a respirator, the personnel shall proceed to the shower, clean the outside of the respirators and exposed areas of the face and body before removing respirator. Complete showering and shampooing shall then occur to remove any residual asbestos contamination.
- F. After showering and drying, proceed to the clean room and dress in either street clothes or clean disposables, whichever is appropriate.
- G. These procedures shall be posted in the clean room.



7-32 Asbestos waste which has been containerized shall be transported out of the work area through the waste pass out airlock. Waste pass out shall utilize two teams of workers, an inside and an outside team. The inside team shall clean the outside of the containers, including the bottoms, using HEPA vacuums and wet methods and transport them into the waste pass out airlock. The outside team shall enter the airlock from the outside of the work area, enclose the containers in clean, labeled 6-mil poly bags and remove them to the outside of the airlock system. The exit from this airlock shall be secured to prevent unauthorized entry.

## 8 PERSONNEL PROTECTION

8-1 Prior to the commencement of abatement activities all personnel who will be required to enter the work area or handle containerized asbestos waste must have received EPA certified training. Special on-site training on equipment and procedures unique to this job site shall be performed as required. Training in emergency response and evacuation procedures shall be provided.

8-2 All respiratory protection shall be provided to workers in accordance with the written respiratory program. This program shall be available in the clean room. This includes all items in OSHA 29 CFR 1910.134 b) (1-11). Workers shall be supplied with personally issued, individually identified respirators.

8-3 Respirators shall be selected that meet the following level of protection requirements:

- A. Type "C" air supply pressure demand for full shift workers, in unknown fiber concentrations as per OAR 437 - 1926.1101
- B. PAPR may be utilized for inspection or entrance for up to 1 hour or if personal air monitoring shows levels less than 1.0 f/cc.
- C. Half-face dual HEPA cartridge respirators may be used for initial barrier erection and other set-up needs, unless pre-abatement air monitoring shows levels less than 0.01 f/cc.
- D. Historical data collected by the contractor may be utilized for respirator selection.

8-4 Sufficient numbers of disposable coveralls and booties shall be provided by contractor for all employees, State and Federal inspectors, air sampling professionals, Building Owners employees (if needed) and any other authorized visitors.

8-5 Non-skid footwear shall be supplied to all contractor's employees by contractor at no cost to the employee. These may be reusable steel-toed rubber boots or canvas shoes which will be discarded as asbestos contaminated waste at conclusion of the project.

8-6 The contractor shall supply Type-C or PAPR respirators for all authorized visitors if required.

## 9 REMOVAL PROCESS

- 9-1 Clean and isolate the work area as described in Part 7.
- 9-2 Wet all ACM with an amended water solution using equipment capable of providing a fine spray mist, in order to reduce airborne asbestos fiber concentrations when the material is disturbed. Saturate the material to the substrate, 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.
- 9-3 Saturated ACM shall be removed in manageable sections. Removed material should be containerized before moving to a new location for continuance of work. Surrounding areas should be periodically sprayed and maintained in a wet condition until visible material is cleaned up.
- 9-4 Material removed from building structures or components shall not be dropped or thrown to the floor. Material shall be removed as intact sections or components whenever possible and carefully lowered to the floor. If this cannot be done for materials greater than 20 feet above the floor, a dust tight chute shall be constructed to transport the material to containers on the floor or the waste can be containerized at elevated levels and carefully lowered to the floor by mechanical means.
- 9-5 Containers (6-mil poly bags and/or drums) shall be sealed when full. Double bagging of waste material is required. Bags shall not be over full. Bags should be securely sealed to prevent accidental opening and leakage by tying tops of bags in an over-hand knot or by taping in gooseneck fashion. Do not seal bags with wire or cord.
- 9-6 Large components removed intact may be wrapped in 2 layers of 6-mil poly secured with tape and labeled with stickers.
- 9-7 Asbestos contaminated waste with sharp edges will tear poly bags and should be placed into drums for disposal.
- 9-8 After completion of all stripping work, surfaces from which ACM has been removed shall be wet brushed or wiped to remove all visible residue.
- 9-9 After the work area has been rendered free of visible residues and visual clearance has been granted by the Building Owner, a thin coat of penetrating encapsulant shall be applied to all surfaces in the work area including structural members, building components and poly sheeting to seal in any escaping fibers.
- 9-10 Following the completion of clean-up operations, the contractor shall notify the Building Owner that the work area is ready for final air sampling.

- 9-11 The Owner shall then arrange for the air sampling professional to sample the air in accordance with EPA 40 CFR Part 763.90 (ASHERA).
- 9-12 All samples, analyzed by PCM, in all locations shall indicate concentrations of airborne fibers less than 0.009 f/cc for release of the work area.
- 9-13 For TEM analysis, when the average number of asbestos structures on samples inside the abatement area is no greater than 70 structures/mm<sup>2</sup> of filter, the response action may be considered complete without comparing the inside samples to the outside samples.
- 9-14 Areas exceeding this level shall be re cleaned using procedures listed above and retested until satisfactory results are obtained.
- 9-15 Documentation of proper disposal shall be maintained by contractor and Chain-of-Custody forms provided by the Building Owner shall be used in addition to other forms required.
- 9-16 Reestablishment of the work area shall only occur following the completion of clean up procedures and after clearance air monitoring has been performed and documented to the satisfaction of the Building Owner.
- 9-17 Poly barriers shall be removed from the walls and floors at this time and all surfaces shall be wet-wiped or HEPA vacuumed.
- 9-18 Reestablish HVAC, mechanical and electrical systems in proper working order. Remove contaminated HVAC filters and dispose of as asbestos waste.
- 9-19 Repair all areas of damage that occurred as a result of abatement activities.
- 9-20 The final air clearance sampling and analysis costs are borne by the Owner. In the event that the final air clearance samples do not meet clearance standards, the contractor shall be liable for all costs of air sampling and laboratory analysis for any subsequent sampling.

## 10 TRAINING

10-1 Training shall be provided by the contractor to all employees or agents who may be required to disturb asbestos containing or asbestos contaminated materials for abatement and auxiliary purposes and to all supervisory personnel who may be involved in planning, execution or inspection of abatement projects.

10-2 Training shall meet the requirements of EPA 40 CFR Part 763.93 Subpart E and OAR 340-33-000 through -100. The contractor must document training by providing date of training, training entity, course outline and names of trainers or certificate copy.

10-3 Medical monitoring must be provided by the contractor as set forth in OAR Chapter 437, Oregon Occupational Safety and Health Code, 1926.1101.

10-4 Documentation of medical monitoring shall be provided to the Building owner on request.

10-5 All supervisors or "competent persons" shall be certified as required by OAR 340-33-050.

10-6 All contractors shall be certified as required by OAR 340-33-040.

10-7 All workers shall be certified as required by OAR 340-33-050.

10-8 Copies of certificates with pictures shall be presented as part of the quote package after award. Copies of certificates with pictures shall be on site at all times that the particular worker/supervisor/contractor is on site.