

SECTION 02 82 13 - ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Removal, demolition, and disposal operations for asbestos-containing materials (ACM) and contaminated debris, and procedures and equipment required to protect workers and occupants.

B. Scope of Work:

1. An asbestos survey (Survey) was completed by the Owner prior to award of this Contract. The survey is available to all Bidders through the Owner.
2. Contractor shall contract with a licensed asbestos abatement subcontractor to perform asbestos abatement Work.
3. Asbestos abatement subcontractor shall be responsible for, but not limited to, the following:
 - a. Submission and approval of required notification prior to commencement of Work.
 - b. Removal of all ACM within the asbestos removal limit line as defined in the Owner's Survey.
 - c. Inspection of facility and assurance that all ACM has been removed in accordance with the specifications.
 - d. Furnish labor, materials, services, insurance and equipment necessary to carry out the ACM removal operation in accordance with all applicable regulations and codes of authority having jurisdiction.
 - e. Be responsible for obtaining approval for a waste disposal site and transportation of waste to waste disposal facility.
 - f. Post all applicable regulations at the job site.
 - g. Maintain the required log of all persons entering work area.
 - h. Provide Owner with close-out report and record drawings containing information pertaining to the removal and disposal of ACM (quantity and location).
 - i. Provide Owner with record drawing of asbestos removal including location, quantity and type of asbestos removed.
 - j. Monitoring of air.

1.2 ADMINISTRATIVE REQUIREMENTS

- A. Contractor Liability: It is understood and agreed that the handling, removal and disposition of asbestos or asbestos products involves certain health risks which require specific safety measures. Owner and Architect shall not be responsible for safety measures on the job, including measures for the protection of employees or other contractors or subcontractors, nor for the protection of the general public. Such responsibility for safety is and shall remain that of Contractor. Therefore, except for claims and damages arising for negligent acts, errors or

omissions of the Owner or Architect, Contractor agrees to hold harmless, defend and indemnify Owner and Architect from all claims, suits, expenses, or damages arising from or alleged to arise from exposure to or inhalation of asbestos or asbestos fibers.

- B. Pre-Construction Meeting: At least one week before work commences, conduct a pre-construction meeting at the Project site. Attendees shall include the Owner, Contractor, asbestos abatement subcontractor, and others as necessary.
 - 1. Agenda: Include a review of project safety requirements, the asbestos abatement subcontractor's written asbestos compliance work plan, emergency contacts and notification plan, containment and work area design, facility requirements, submittals, and any other issues pertinent to the safe execution of the asbestos abatement work.
- C. Scheduling: Work shall not commence until all required submittals and plans have been approved by the Owner and authorities having jurisdiction.

1.3 SUBMITTALS

- A. Asbestos Removal Plan: Detailed plan of work procedures to be used in removal and disposal of ACM, approved by testing laboratory.
- B. Monitoring Results: Submit within three business days.
- C. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept asbestos-containing wastes.
- D. Qualification Data:
 - 1. For qualified testing laboratory selected for monitoring of airborne concentrations of asbestos fibers.
 - 2. For qualified asbestos abatement subcontractor.
- E. Statement of Visual Inspection: Prior to application for final payment, submit to Owner a statement of visual inspection signed by the asbestos abatement subcontractor. Include the following:
 - 1. Statement that the work was completed according to applicable federal, state, and local laws, and this Section.
 - 2. Statement that the asbestos abatement subcontractor has visually inspected the work site and has found no dust, debris, or other suspect asbestos containing materials that were part of the scope of work.

1.4 QUALITY ASSURANCE

- A. Testing Laboratory Qualifications: Provide certification by the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing (PAT) Program or the American Industrial Hygiene Association.

1. Perform asbestos laboratory testing by using the Polarized Light Microscopy (PLM) method with Scanning Electron Microscopy (SEM) and Transmission Electron Microscopy (TEM) methods if necessary.
 2. Conduct air monitoring, observation, and evaluation of the Work as certified by authorities having jurisdiction.
- B. Asbestos Abatement Subcontractor: A firm certified in safe removal of asbestos and licensed to perform asbestos abatement work by the authority having jurisdiction.
- C. Permits and Notifications: Secure necessary permits in conjunction with asbestos removal, transport, and disposition. Provide notifications as required by authorities having jurisdiction.
- D. Safety Compliance: In addition to the requirements of this Section, comply with laws, ordinances, rules, and regulations of governing authorities regarding handling, storing, transporting, and disposing of asbestos-containing waste.

1.5 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to asbestos abatement area. Conduct asbestos abatement so Owner's operations will not be disrupted or contaminated.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Products to be per asbestos abatement subcontractor and approved by testing laboratory.
- B. Floor Tile Mastic Removal Material:
1. Do not use soybean based or any other oil based mastic remover. These types of mastic remover have harmful effects to colored or stained polished concrete floors.
 2. Do not use mastic removers that have harmful odor or are otherwise offensive to employees or customers. Schedule removal while facility is closed or during times of low occupancy.

PART 3 - EXECUTION

3.1 GENERAL

- A. Perform asbestos abatement related work in accordance with all applicable Federal, State, Local, and Municipal regulations and the approved asbestos abatement plan.

3.2 MONITORING

- A. General: Monitor airborne concentrations of asbestos fibers in accordance with authorities having jurisdiction.
- B. Provide area monitoring to establish reference Time-Weighted Average (TWA) one day prior to working operations for each asbestos control area.
- C. Monitoring During Asbestos Removal Work: Where appropriate, provide personnel and area monitoring to establish TWA during first exposure to airborne concentrations of asbestos. Thereafter, provide area monitoring as appropriate. If monitoring outside asbestos control area shows airborne concentrations have reached specified TWA, stop work and correct condition causing increase, then proceed to monitor.
- D. Monitoring After Final Clean-Up: Provide area monitoring of asbestos fibers and establish TWA after final clean-up but before removal of asbestos control area enclosure. Should any final sampling indicate higher value than the referenced TWA, take appropriate action to clean area and repeat monitoring.

3.3 DISPOSAL AND CLEAN-UP

- A. Title to Materials: ACM and contaminated debris resulting from demolition work shall become the property of the Contractor.
- B. Housekeeping: Maintain surfaces of asbestos control area free from accumulation of asbestos fibers. Restrict spread of dust and debris. Keep waste from being distributed over general area. When asbestos removal and final clean-up is complete, certify area as safe for occupancy. Remove filters on building HVAC system and provide new filters of same type and efficiency. Reestablish affected building systems to acceptable working order.
- C. Hauling and Disposal: Comply with authorities having jurisdiction. Obtain signed dump receipts from landfill authority.

END OF SECTION 02 82 13