LEAD IN CONSTRUCTION

PART 1 - GENERAL

1.01 SCOPE OFWORK

A. This specification outlines the required tasks and procedures involved with construction activities such as demolition and/or removal of Lead-based Paint (LBP)/Lead Containing Coating (LCC) materials which are covered by this specification.

B. The General Contractor and/or Lead Abatement Contractor (LAC) must demonstrate they have the necessary personnel, equipment, materials, training, licenses and experience to complete a project of this nature in the required time period.

C. The Contractor shall supply all labor, materials, equipment, testing, permits, notifications, insurance and incidentals that are necessary and/or required to perform the work in accordance with applicable local, state and federal regulations; as may be necessary to comply with the OSHA Lead in Construction Standards 29CFR1926.62 and 29CFR1910.25 and for the demolition/construction activities as specified in this section or as indicated in associated drawings, sketches, or details of the work.

D. Demolition/construction activities associated with Lead Containing Coatings include the following components.

Mechanical closet, all walls and wall components

Entrance foyer, all walls and wall components

Storage in foyer, all walls and wall components

Women’s Restroom, all walls and wall components

E. This project shall include the LBP/LCC materials that are required to be modified, removed or demolished to facilitate the work indicated by this contract. This responsibility includes locations identified or locations not identified in the report.

F. Included in the lead work areas shall be buffer zones. These buffer zones shall be intended for staging areas as well as locations to install decontamination chambers, if applicable. Buffer zones are also intended to protect all occupants from airborne lead exposure in the event that “outside the work area” air samples show elevated levels of airborne lead particulate.

G. The Contractor and its Subcontractors shall inform themselves fully of the scope and scale of the lead related demolition/construction activities as it relates to this project.

H. The contractor shall coordinate with work being performed in adjacent areas. Coordination procedures shall be explained in a work plan and shall describe how the Contractor will prevent lead exposure to other contractors and/or occupants/personnel.

1.02 CODES AND REGULATIONS

A. All work and disposal shall be performed in compliance with all applicable Federal, State, and City regulations including, but not limited to:

1. 29 CFR 1926.62 (OSHA).
2. 29 CFR 1910.25 (OSHA).
3. 40 CFR 300-399, EPA Comprehensive Environmental Response Compensation & Liability Act.
4. 40 CFR 260-299, Resource Conservation and Recovery Act (RCRA).
5. 42 CFR Part 84 & 30 CFR Part 11 (NIOSH/DHHS respirator standards).
6. This Specification.

1.03 SUBMITTALS

A. Occupational and Environmental Assessment Data Report (if objective data is used to justify excluding the initial occupational exposure assessment).

B. Lead Compliance Plan.

C. The contractor and subcontractors must identify a competent person. A Competent Person refers to a person employed by the contractor who is trained in the recognition and control of lead hazards in accordance with current federal, State, and local regulations and has the authority to take prompt corrective actions to control the lead hazard.

D. If applicable, a completed and signed hazardous waste manifest from treatment or disposal facility.

E. Fit test and medicals. These may be submitted as the crew is selected or changed.

F. A detailed written description of emergency procedures to be followed in the event of injury or fire. This submittal must include execution procedures, source of emergency assistance (including telephone numbers), and access procedures to be used by emergency personnel.

1.04 OWNER RESPONSIBILITIES

A. The Owner shall ensure work areas will be unoccupied prior to demolition/construction activity commencing.

B. The Owner shall make water and electricity available at the site at no cost to the Contractor. The Owner shall notify the Contractor of scheduled system shutdowns to ensure no interruptions to the project’s engineering controls.

C. The Owner shall be responsible to remove all contents from the scheduled work areas. A list of such items includes, but is not limited to:

1. Personal items throughout the work areas.

2. All computers and computer accessories in any of the work areas.
3. Stored maintenance and building supply items, paper products, paints, cleaners, replacement ceiling tiles and florescent light bulbs, excess furniture, etc. located in any of the work areas scheduled for demolition and/or construction.
4. Any other items deemed appropriate by the Owner.

1.05 CONTRACTOR'SRESPONSIBILITIES

A. The Contractor is responsible for reviewing the "Synertech Inc. Report for environmental investigation (ACM &LBP) and visiting the site to locate LBP/LCC materials and locations of utilities, prior to submitting a bid.

B. The Contractor shall provide all labor, tools, materials and scaffold necessary to complete the project safely, in a timely fashion, and in accordance with the specification and all applicable regulations.

C. If water and electric are not available at the site. The Contractor shall provide water and electric as necessary to complete the project safely.

D. Any movable items remaining in the scheduled work areas shall be removed by the Contractor.

E. The Contractor shall protect all non-movable furniture, cabinetry and equipment from damage throughout the duration of this project.

F. The Contractor shall maintain current copies of all pertinent specifications and regulations on-site.

G. The Contractor shall provide fire protection in accordance with all State and Local codes. This includes, but is not limited to:
   1. Providing a written fire prevention and emergency action plan.
   2. Providing multi-purpose ABC rated fire extinguishers, ensuring that on-site personnel are aware of the location and proper use of all fire extinguishers and other safety equipment.
   3. Performing a fire watch of the overall work area.
   4. Designating a safety coordinator to implement the above actions. The Contractor's safety coordinator shall be responsible for:
      a. Fire/life safety entries shall be entered into the Contractor's log daily and shall be submitted with the Contractor's final report.
      b. Daily entries shall include names, dates, duration, problems & corrective actions taken by the fire watch-must be signed by the safety coordinator.

H. The contractor and subcontractors shall follow work permit procedures for all work including, but not limited to, working near potentially live electric, hot work, working at heights.

I. Hot work is defined as all work that causes or requires the use of open flames, arcs,

sparks, or other forms of high temperature ignition sources that could initiate a fire or explosion.

1. Examples of hot work include welding, burning, soldering, hot tapping, drilling, grinding, abrasive blasting, chipping, the operation of impact wrenches, the operation of electronic or electrical equipment that is not intrinsically safe, opening explosion proof electrical enclosures and any other work that may generate sufficient heat that it would pose a possible ignition source.

J. The contractor shall use appropriate ladders, scaffolds, lifts, and/or hoists to provide safe access for work activities. Personnel safety lines and harnesses are required where appropriate.

1. Fall protection equipment and guidelines shall comply with OSHA Regulation Standards 29 CFR1926.501.
2. The use of aerial lifts shall comply with OSHA Regulation Standards 29 CFR 1926.453 and ANSIA92.2-1969.
3. All stairs, platforms, catwalks and walking surfaces shall be kept, as is practical, free from obstructions, accumulation of water, and tripping hazards, and where elevated, be protected by OSHA specified top-rails, mid-rails, and toe boards.
4. Ladders of sufficient quantity and of suitable length or height shall be provided. Ladders shall be kept in good repair and inspected regularly. Personnel shall be instructed in the proper use of ladders. No structural alterations shall be made to any ladder.
5. Ladders shall arrive at the project site in good condition and free of any residual contamination.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.01 ENVIRONMENTAL SAMPLING BY THE OWNER

A. The Owner may utilize an Industrial Hygienist to perform quality assurance evaluations and sampling outside the work area(s).

B. After all work areas are completed, the owner has the option to collect surface dust wipe samples inside of the work completed work areas. The clearance surface dust wipe criteria are as follows:

1. The clearance surface dust wipe sample results collected inside the work area must be less than (<) 10 micrograms per square foot on all floor surfaces and less than (<) 100 micrograms per square foot on all window sill surfaces.

C. The owner shall be responsible for costs incurred for the initial required laboratory work. Any subsequent testing required due to failed clearance sampling shall be paid by the contractor. These costs include both labor and analysis.

1. The Owner shall retain possession and ownership of all air and surface sampling data and documentation.

3.02 RESPIRATORY AND PERSONAL PROTECTIVEEQUIPMENT

A. If required, the contractor shall provide approved respirators and protective clothing to all workers.

B. If it has been determined via the IEA that the OSHA Permissible Exposure Limit (PEL) is exceeded, the contractor shall require that each person entering the work areas to wear an approved respirator and protective clothing. There shall be no exceptions to this rule.

C. Respiratory protection shall be in compliance with:

1. OSHA regulations 29 CFR 1910.1001, 1926.1101, and 1910.134; ANSI Z88.2-1980;NIOSH 30CFR Part11 for type B and C respiratory protection;

2. NIOSH and DHHS 42 CFR Part 84 for non-powered, air-purifying particulate-filter respirators.

D. If determined that respiratory protection is required, at a minimum, the respiratory protection shall be:

1. Dual Cartridge, Air Purifying respirator, Type A.

2. Powered Air Purifying Respirators (PAPR) - Type B.

3. Supplied Air with Constant Flow – Type C.

E. All persons performing lead removal work requiring respiratory protection shall be clean shaven and have an unobstructed face mask seal. Only mustaches that do not exceed the corners of the upper lip and sideburns that do not extend below the earlobes are permitted.

3.03 MEDICALSURVEILLANCE

A. Under the occupational health standard for inorganic lead, a program of biological monitoring and medical surveillance is to be made available to all employees exposed to lead above the action level of 30 ug/m^3 TWA for more than 30 days each year. This program consists of periodic blood sampling and medical evaluation to be performed on a schedule that is defined by previous laboratory results, worker complaints or concerns, and clinical assessment of the examining physician. Employers shall maintain complete and accurate medical records of employees for the duration of employment plus 30 years.

B. Any worker blood lead level increases of 10 micrograms/dl or greater or any blood lead level greater than 25 micrograms/dl will trigger an investigation of protective equipment and work practices. All workers on this project shall be informed of their blood lead levels as soon as the testing results are received.

3.04 DECONTAMINATION FACILITIES

A. Provide clean and contaminated change rooms and hand washing stations in

accordance with this specification and 29 CFR1926.62.

3.05 GENERAL PREPARATION AND CONTROLS FOR ALL LEAD RELATEDACTIVITIES

A. Physical Boundary- Provide physical boundaries around the lead control area by roping off the area designated in the workplan or providing curtains, portable partitions or other enclosures to ensure that lead will not escape outside of the lead control area.

B. Warning Signs - Provide warning signs at approaches to lead control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area. Signs shall comply with the requirements of 29 CFR1926.62.

C. Shutdown, lockout, and isolate HVAC systems that supply, exhaust, or pass through the lead control areas. Seal intake and exhaust vents in the lead control area with 0.15 mm 6 mil plastic sheet and tape. Seal seams in HVAC components that pass through the lead control area.

D. To the extent feasible, use local exhaust ventilation or other collection systems. Local exhaust ventilation systems shall be evaluated and maintained in accordance with 29 CFR1926.62.

E. Vent local exhaust outside the building and away from building ventilation intakes or ensure exhaust system shall connected to HEPA filters prior to discharge.

F. Use locally exhausted, power actuated tools or manual hand tools.

G. Manual or power sanding or grinding of lead containing or coated materials is not permitted unless tools are equipped with HEPA attachments or wet methods are applied. The dry sanding or grinding of surfaces that contain lead is prohibited. Provide methodology for removing lead in the Lead Compliance Plan. Select lead removal processes to minimize contamination of work areas outside the control area with lead-contaminated dust or other lead-contaminated debris or waste and to ensure that unprotected personnel are not exposed to hazardous concentrations of lead. Describe this removal process in the Lead Compliance Plan.

H. Perform manual or mechanical removal in the lead control areas using barriers and powered locally exhausted tools.

3.06 LEAD WASTE DISPOSAL

A. All removed LBP components that will not be recycled, lead containing dust and waste water shall be disposed of in accordance with the Hazardous and Universal Waste Disposal Regulations set forth by the Resource Conservation and Recovery Act (RCRA); 40 CFR 260-299.

B. All lead-contaminated material classified as hazardous waste will be transported to and disposed of at an EPA or State approved hazardous waste treatment, storage, or disposal facility off site.

C. Dispose of lead contaminated waste/rinse water as hazardous or non-hazardous waste on the basis of sample analysis (TCLP) results.

D. All documentation of transportation and disposal transactions such as dump receipts, trip tickets, and waste manifests shall be completed and include in the final report for the building owner.

3.07 PROJECT CLOSE OUT

A. After achieving acceptable air sample clearance and dismantling the work area, the Contractor shall be released after the following items are completed:

1. Removal of all temporary signs, labels, tape and glue/tape adhesive residue.
2. Removal of all temporary devices, facilities, and equipment.

B. Upon completion of the project, the Contractor shall submit final documentation to the Owner, including but not limited to, all waste handling/shipping documentation/manifests.

END SECTION