

SECTION 312100 – CONTAMINATED SOIL MANAGEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract including General and Supplementary Conditions and all Division 1 specification sections.
- B. Section 312000 “Earth Moving”

1.2 SUMMARY OF WORK

- A. This Section is only applicable in the event that contaminated soils are encountered during earth moving operations.
- B. Provide all labor, materials, equipment, services and accessories necessary for the excavation, removal, segregation, handling, stockpiling, management and possible transportation and off-site management of contaminated soils and debris.
- C. This Section includes but may not be limited to the following:
 - 1. Excavate, handle, re-handle, load and transport soils and materials at the site, for on-site or off-site reuse, recycling, and/or disposal. Work shall be performed in accordance the criteria contained herein, and all applicable local, state and federal laws and regulations.
 - 2. Construct a temporary staging area for contaminated soils to be excavated, and maintain a soil staging area until the material has been appropriately characterized and accepted for disposal on site or at an off-site disposal facility.
 - 3. If necessary determine the destination facility based on the data provided and contract for off-site reuse, recycling or disposal directly with the receiving facility approved by the owner. The contractor shall coordinate directly with the receiving facility. Characterization of material shall be completed at the time of excavation activities by the Architect.

The Architect will retain an Environmental Professional to monitor soil removal operations and to complete all paperwork and required documentation

necessary prior to the transport and disposal of contaminated soils and materials to off-site facilities, as specified herein.

1.3 APPLICABLE LAWS AND REGULATIONS

- A. The Contractor shall comply with all local, state and federal regulations relative to the handling and off-site reuse, recycling or disposal of contamination soil and material.
- B. The Contractor shall comply with all applicable provisions of federal, state and local health and safety statues, codes and regulations including 29 CFR parts 1910 and 1926.
- C. The Contractor shall obtain all required permits and make required notifications, including the payment of associated fees.
- D. During soil management activities, the Contractor shall employ personnel trained in compliance with the requirements of 29 CFR 1910.120.

1.4 PROJECT CONDITIONS

- A. The Contractor may review and understand the following documents related to the site. These reports are made available for the Contractor to review for information only and shall not be interpreted as a warranty of subsurface or environmental conditions.
 - 1. Geotechnical Report.

1.5 QUALITY ASSURANCE

- A. The Architect shall monitor the contractor's activities associated with the Work of this section. Monitoring shall include, but not be limited to:
 - 1. Observing and screening excavated soils, as necessary, to determine the appropriate handing of contaminated soils.
 - 2. Review submittals and requests by the Contractor for the on-site reuse, recycling or disposal of soils and materials, and approval of accepting facilities.
 - 3. Verification soil management paperwork has been completed and accompanies each load of soil and material excavated and transported from the site.

- B. The Contractor shall coordinate schedule and time for the excavation of remediation areas of concern.

1.6 SUBMITTALS

- A. In the event that soil characterization results require off site disposal, The Contractor shall, within 5 days of removal and transport of contaminated soils off-site provide the Architect with a statement from the receiving facility indicating the facility has reviewed the soil characterization data and can legally accept this material.
- B. Within 14 days of the date of transport, the Contractor shall provide the Architect with completed and signed material shipping records and logs, manifests documents or bills of lading documenting the transport of excavated soils and materials from the site to an approved off-site reuse, recycling or disposal facility, and cubic yard verification from the facility for each load of material accepted.

1.7 UNIT PRICES:

- A. Provide Unit Prices as Indicated in Division 1.

PART 2 - MATERIALS

2.1 STOCKPILE/CONTAINMENT MATERIALS

- A. Polyethylene: 6-mil and 20-mil thickness
- B. Jersey Barriers or equivalent for definition of work and contaminated stockpiles.

PART 3 - EXECUTION

3.1 GENERAL

- A. Work shall be conducted in accordance with all local, state and federal regulations and Contractor health and safety protocols

3.2 CLASSIFICATION OF SOILS AND MATERIALS

- A. Native Soils: Naturally-deposited soils that contain no detectable concentrations of TPH, VOCs, PCBs and/or other contaminant concentrations and no metals and/or PAH concentrations above background concentrations.

- B. Contaminated Soils: Soils that contain oil, waste oil or hazardous materials at concentrations greater than or equal to applicable standards, which do not meet the characteristic of a hazardous material.

3.3 EXCAVATION OF CONTAMINATED SOILS

- A. Upon discovery of suspected contaminated soils, the contractor shall notify the Architect who will monitor soil removal operations. The Contractor shall identify a location on site for the temporary stockpiling of materials for characterization and acceptance. This stockpile/ containment area shall be constructed and shall be capable of maintaining existing stockpiles during the characterization and acceptance period, until such time the material can be disposed of on site or removed from the site. The Contractor shall not be permitted to relocate stockpiles of contaminated soil without the prior approval of the Architect. Soil stockpiles shall be constructed of 20-mil polyethylene sheeting. Jersey barriers or other approved barriers shall be placed around the stockpiles to provide containment, and appropriate erosion and sediment control measures shall be required. Stockpiles shall be securely covered at the end of each day with a 6-mil polyethylene sheet.
- B. Contractor shall excavate contaminated soils and material by methods that will permit the observation of soils for the purpose of identifying, screening, testing and segregating soils as necessary prior to on-site disposal or off-site removal. Contaminated soils, when excavated, shall be immediately located to a stockpile location for appropriate characterization for disposal.

3.4 MANAGEMENT OF CONTAMINATED SOIL:

- A. Determination of clean soil and material versus impacted or contaminated soil and material shall be made by the Architect.
- B. Contaminated soils generated during the excavation and removal activities shall be re-used on site or disposed of at an off-site facility. This facility shall be approved and permitted in accordance with federal, state and local codes and regulations and shall be capable of accepting the soil and material requested for disposal. The Architect shall work closely with the Contractor to receive requested information and coordination of sampling criteria.

3.5 TRANSPORTATION OF EXCAVATED MATERIAL

- A. The Contractor shall be responsible for the handling, re-handling, loading, transporting and legal off-site removal of excavated soils and materials to approved facilities. Contaminated soils leaving the site shall be manifested and transported by a licensed

hazardous waste transporter. The Contractor is responsible to document the delivery of contaminated soil to the approved disposal facility.

- B. Excavated soils from the site shall be loaded within the site limits. Trucks leaving the site shall be covered and cleaned of debris that may fall from trucks during transport.
- C. The contractor shall take precautions to prevent debris and soil from the site onto local streets, and shall construct and operate a wheel wash, as required to prevent tracking of material out of the site.

END OF SECTION 312100