I. DESCRIPTION
This work shall consist of the on-site management and subsequent off-site disposal of petroleum-contaminated soils and onsite treatment of petroleum-contaminated groundwater encountered during excavation and other subsurface construction activities. All contaminated soil management and disposal activities shall be performed in accordance with Virginia Department of Environmental Quality (VDEQ) and Occupational Safety and Health Administration (OSHA) requirements.

II. PROCEDURES
The procedures outlined herein are necessary for the on-site management and off-site disposal of petroleum-contaminated soil and onsite treatment of groundwater encountered during construction activities. Phase I Environmental Site Assessment and Phase 2 Site Investigation reports for applicable VDOT Parcels are available for review by appointment at the Woodrow Wilson Bridge Project Office at 2901 Eisenhower Avenue, Unit C, Alexandria, VA 22314 (Tel 703-329-0300). These reports may not be all-inclusive and are provided for the Contractor’s information only. See Available Reports and Information Special Provision Copied Note for list of reports that are available.

During excavation, the Contractor shall make a reasonable effort to separate contaminated soils from clean soils. Evidence of soil contamination includes the presence of free phase petroleum product, petroleum odor or visible staining.

In the event that the Contractor needs to perform dewatering as part of the construction activities and petroleum-contaminated groundwater is encountered, the Contractor shall provide VDEQ with all necessary documentation, records, and analytical results to obtain and comply with a General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Petroleum Contaminated Sites (9 VAC 25-120-10 et seq.) The Contractor shall provide a copy of the VPDES permit to VDOT before beginning dewatering activities. The Contractor shall treat the dewatering effluent before discharging in accordance with the VPDES permit. Contaminated Water Treatment may be performed with a portable on-site system that includes oil/water separation, air stripping, carbon filtration, and/or other equipment that is approved for such use by VDEQ and VDOT.

All contaminated soils shall be stockpiled on site pending sampling and analytical results by placing suspect soil on polyethylene sheeting of at least 10-mil thickness. Plastic sheeting shall be lapped over a berm constructed by the Contractor of suitable material (e.g. straw bales, soil, etc.) in order to prevent the migration of soils. The pile shall be covered with polyethylene sheeting of at least 6-mil thickness and the cover shall extend outside the berm and be secured in a manner to prevent displacement or damage from wind or accumulation of precipitation.

Composite samples shall be collected from each 25 cubic yards of stockpiled soils and analyzed for the following parameters using the following noted Environmental Protection Agency (EPA) methods.

- Diesel range organics (DRO) by EPA method 8015
- Gasoline range organics (GRO) by EPA method 8015
- Toxicity Characteristic Leaching Procedure (TCLP) RCRA metals by EPA method 1311/6010

If the composite sample analytical results for DRO or GRO exceed 50 ppm, the corresponding soil shall be transported and disposed of at an appropriate off-site facility in accordance with VDEQ regulations. After disposal, the Contractor shall provide VDOT with copies of the transportation manifest records and a Certificate(s) of Disposal or other acceptable written documentation from the disposal facility certifying that the soil has been properly disposed and the tonnage of such soil.
III. MEASUREMENT AND PAYMENT

Contaminated Soil Management will be measured and paid for in cubic yards of contaminated soil as verified by the stockpile dimensions. The bid price for this item shall be inclusive of any required sampling and analytical testing requirements, preparation, stockpiling/staging and the second handling associated with removing the stockpiled material (whether determined to be contaminated or not). Initial excavation costs (initial handling) are included in the other applicable bid items including but not limited to regular excavation, sanitary sewer, storm sewer, and inlets.

Contaminated Soil Disposal will be measured and paid for in tons of contaminated soil as verified by certified weight tickets from the disposal facility. The bid price for this item shall be inclusive of any required transportation, documentation, and actual off-site disposal costs. Costs for the handling of the stockpiled material in preparation for hauling to disposal facility are included in the Contaminated Soil Management bid item.

Dewatering Treatment will be measured and paid for in days of on-site treatment system operation during dewatering operations when petroleum contaminated water is encountered as described in the procedures above. The bid price for this item shall be inclusive of any compliance and document preparation required under the VDEQ General VPDES Permit for Petroleum Contaminated Sites (9 VAC 25-120-10 et seq.) or other applicable permits, sampling and analytical testing requirements, preparation, and equipment rental.

Payment will be made under:

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