

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 The Form of Tender includes a lump sum contract.
- .2 The total tendered price shall be lump sum.
- .3 The submitted tender prices will be inclusive of all costs for the complete supply and installation of all materials, labour and equipment required to complete the work. Excavation, replacement, and removals of contaminated material from site indicated in the contract drawings and specification are to be included in the lump sum pricing.
- .4 No separate payment will be made for any testing, inspections and approvals required by Contractor.
- .5 Refer to Section 1.3 for excavation, replacement and removals of material to be included for lump sum pricing.

1.2 LUMP SUM ITEM

- .1 The work of the lump sum shall include, but not necessarily be limited to the following:
 - .1 All mobilization and demobilization to the site, access to the site, temporary utilities, construction facilities and temporary barriers and enclosures.
 - .2 All environmental protection, including erosion controls, sedimentation controls, dewatering and dust control.
 - .3 Cleaning and work site, including removal of construction waste, debris and recyclable materials.
 - .4 Testing, inspections and permits from all regulatory agencies required to complete work.
 - .5 Design, construction and maintenance of all temporary structures required to complete work including fencing and barriers. Contractor to provide secure fencing to prevent any intrusion of unauthorized personnel. Gates and entrances to be secured during construction at all times. Fencing such as snow or moose fencing should not be used to secure property. Contractor to provide security plan to Departmental Representative prior to mobilizing on site.
 - .6 Supply and installations of all necessary materials and equipment to complete the Electrical Building.
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- .7 All excavation and backfilling as required.
 - .8 All testing of new water lines.
 - .9 Removal and Disposal of all contaminated soil displaced during the work from trenching and removal activities. Contaminated soil can be reused as fill if it can be used in the same trench. Refer to Section 02 61 00.01 - Contaminated Soil Management and Section 1.3.
 - .10 Removal and Disposal of all demolished structures including storm system asphalt, concrete and electrical components.
 - .11 Installation of stormwater system including catchbasins, piping, stormwater treatment unit and discharge piping.
 - .12 Supply and installation of all necessary materials and equipment to complete a new water system including hydrants, valving and temporary connections in anticipation of the future building.
 - .13 Non-disturbance of the City Sanitary Discharge Piping that is located within a easement through the site.
 - .14 Supply and installations of all necessary materials for the construction of access driveway, and walkway to Southside Road, including curbing.
 - .15 Installation of a sanitary sewage pumping station including all components of operation. Testing must be done using temporary power, then contents emptied from the wet well and pumps moved to storage in the new Electrical Building Electrical to the pumping system and the proposed guardhouse from the proposed building is included.
 - .16 Construction of retaining walls and anchoring system in support of the driveway, walkway and site protection.
 - .17 Construction of security and safety fencing, gates and guard rails.
 - .18 Construction of the site surfaces using replacement gravels, asphalt and concrete. Only the first lift of asphalt will be constricted under the contract.
 - .19 Supply and installation of primary and secondary power and communication services to the existing Wharf Services and empty conduit system to the proposed location of the future building. This work includes coordination and installation with Utility companies.
 - .20 Supply and installation of new site lighting system.
 - .21 Supply and installation of geothermal well system, including piping to the future building location. No geothermal pumps will be installed in this contract.
 - .22 Decommissioning and demolition of existing electrical building, select storm system, select power system. This demolition work will occur after installation and operation of the new systems.
 - .23 Commissioning, as required, of all installed works.
 - .24 Although the phase of the work is not LEED work, components of the work must comply for LEED accreditation under the future Building Phase
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of the project. It is required that the Contractor provide documentation supporting the future LEED application for the future building phase of the project.

- .25 Site erosion and sediment control measures as required, maintained for the duration of the project.
- .26 Diversion and maintenance of traffic flow around work site.
- .27 Protection and maintenance of features designated to remain.
- .28 Supply and Install Rock Stabilization anchors and screening.
- .29 Contractor should not move, damage or disturb existing 1800mm concrete trunk sewer during construction and excavation procedures near existing pipe.
- .30 Contractor should be aware that on-going work activities at the Coast Guard and DFO marine facility will continue during construction. Contractor to avoid any disruptions to on site Coast Guard and DFO personnel and equipment.
- .31 Excavation, replacements and removals indicated in the contract drawings and specification are to be included in the lump sum pricing. Refer to section 1.3.

1.3 Excavation, Replacement and Removals Lump Sum Pricing

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- .1 Excavation, replacement and removals of contaminated materials from site indicated in the contract drawings and specification are to be included in the lump sum pricing.
- .2 All measurement shall be along a horizontal plane unless otherwise indicated.
- .3 Written authorization of Departmental Representative is required prior to proceeding with any additional work above the quantities outlined on contract drawings and specification.

ADDITIONAL ITEMS

- .4 **Trench Excavation - Rock**
 - .1 Unit of Measurement: cubic metre (m³).
 - .2 Method of Measurement: average end area method for volume of rock material less theoretical trench volume.
 - .3 Average end area method between changes in rock cross section. Dimensions used to calculate end areas shall be theoretical trench width and depth from surface of rock as exposed on sides of trench after
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- excavation to bottom of specified bedding for each pipe in trench.
- .4 Boulders larger than one-half cubic metre, any portion of which is within theoretical trench, will be classified as rock. Boulders removed from trench shall be measured along the three maximum perpendicular axes.
- .5 This item includes: all incremental work for rock excavation and disposal of surplus material over and above cost of common excavation which is included in price for pipe and related items.
- .6 Contractor to provide lump sum cost for rock removal. Contractor to determine amount of rock to be removed based on contract drawings, specification and geotechnical report. If rock material is not contaminated and suitable for reuse on site, written authorization by Departmental Representative is required prior to proceeding with reuse of rock material on site.
- .5 Trench Excavation – Unsuitable Material
 - .1 Unit of Measurement: cubic metre (m³).
 - .2 Method of Measurement: average end area method for volume of unsuitable material less theoretical trench volume.
 - .3 Unsuitable Material includes:
 - .1 Contaminated soils with concentrations of PHC Fractions F1, F2, & F3 greater than management limits.
 - .2 Contaminated soils with concentrations of TPH greater than 1000mg/kg (landfill disposal threshold).
 - .3 Contaminated soils with concentrations of TPH greater than 1000mg/kg and metals/PAHS greater than CCME commercial guidelines (required soil treatment)
 - .4 Contractor to provide lump sum cost for removal of 1500 (m³) of unsuitable material .
- .6 Replacement of Unsuitable Material with Selected Site Material
 - .1 Unit of Measurement: cubic metre (m³).
 - .2 Refer to Section 1.3.3 for definition of unsuitable material.
 - .2 Method Measurement: average end area method for volume of unsuitable material less theoretical trench volume.
 - .3 This item includes: placing and compacting selected site material in locations where unsuitable material has been excavated from the trench beyond the limits of the theoretical trench.
 - .4 Contractor to provide lump sum cost for replacement of 2750 (m³) of unsuitable material with selected site material.

PART 2 - PRODUCTS

Not applicable

PART 3 - EXECUTION

Not applicable

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