

**Part 1            General**

**1.1               SCOPE**

- .1     The work covered under this contract consists of the furnishing of all plant, labour and materials to replace the fuel oil storage tank system at the Discovery Centre in Gros Morne National Park, NL., in strict accordance with specifications and accompanying drawings and subject to all terms and conditions of the contract.
- .2     As required in the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations SOR/2008-197 (Federal Storage Tank Regulations), work by the Contractor will be overseen by the Departmental Representative. The cost associated with Departmental Representative oversight of the work is not part of the Contractor scope.
- .3     An uninterrupted supply of fuel oil must be available at all times. Any temporary storage tanks will be required to be installed to meet federal storage tank regulations, including containment (fixed or portable) at the product transfer area. If greater than 2500L review regulatory requirements with Departmental Representative.
- .4     Prior to the system being filled, as-built drawings stamped by a professional engineer, licensed in Newfoundland and Labrador, are required on site.
- .5     The existing generators and associated electrical will not be impacted by this project

**1.2               WORK COVERED BY CONTRACT DOCUMENTS**

- .1     In general, work under this Contract consists of, but not be necessarily be limited to the replacement of the followings items:
  - .1     Existing 5,000 L underground double-walled fiberglass reinforced plastic (FRP) fuel oil storage tank with a new 5,000 L underground double wall FRP storage tank (UST).
  - .2     Existing generator fuel oil transfer pump and daytank system with a new duplex transfer pump and daytank.
  - .3     Underground double-walled flexible product piping with a combination of new underground double wall piping and new single wall aboveground steel product piping.
  - .4     All associated wiring and accessories indicted in the contract doucuments.
- .2     Demolition work associated under this contract to include the removal and proper disposal of the following:
  - .1     Existing 5,000 L underground double-walled FRP fuel oil storage tank. The tank is identified in Environment Canada (EC) Federal Identification Registry for Storage Tank Systems (FIRSTS) as EC#-00003041.
  - .2     Underground vent and fill piping, all tank top riser piping, spill boxes, vent stack and support structure associated with the existing UST.
  - .3     Tank top concrete slab associated manholes, and covers.
  - .4     Tank top sump and all associated equipment contained within.

- .5 All underground piping from the UST to the Discovery Centre building, as shown on the drawings.
- .6 Aboveground 455 L contained steel boiler day tank located in the Discovery Centre boiler room.
- .7 Fuel transfer pump and associated piping and equipment located in the boiler room.
- .8 Aboveground 200 L contained steel generator day tank and transfer pumpset and associated piping located in the generator room.
- .9 Existing electrical equipment and controls associated with the transfer pumpset, and leak detection systems.
- .10 Removal of contents from existing tank and disposal of both at an approved disposal/recycling facility. Complete and provide disposal records in accordance with provincial and federal regulations, and these specifications.
- .11 Complete documentation as required by the Canadian Environmental Protection Act (CEPA) SOR/2008-197 Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations
- .12 Complete Public Works and Government Services Canada (PWGSC) Tank Withdrawal form, and submit to Departmental Representative. Removal of the UST will be supervised by the Departmental Representative. Contractor shall assist with collecting confirmatory soil samples. In the event any impacted soil is discovered, notify Departmental Representative.
- .3 Civil works associated with this project include but not limited to the following:
  - .1 Excavation as required for the removal and disposal of the UST and all associated underground product piping.
  - .2 Preparation of the sub-grade for installation of a new reinforced concrete tank pad.
  - .3 Supply and placement of topsoil, seed, sod, crush stone to all damaged areas and areas indicated.
- .4 Mechanical work associated with this project includes, but is not limited to the following:
  - .1 Installation of a new underground 5,000 L double-walled FRP fuel oil storage tank as indicated on drawings.
  - .2 Installation of a new tank sump, complete with water tight below grade cover, and grade level access manhole poured into the concrete cover slab.
  - .3 Installation of tank vent for the UST, as indicated on the design drawings.
  - .4 Installation of dip port for the UST, complete with above ground spill containment device.
  - .5 Installation of liquid tight fill connection for the UST installed inside an aluminum Product Transfer Area (PTA) containment box. The fill pipe connection shall have a cross bar to prevent nozzle/spout filling.
  - .6 Installation of one ULC listed 2-piece polyethylene transition sump with above grade access, for piping transition from below grade to above grade.
  - .7 Installation of new underground double-walled flex piping, run inside tertiary access duct where indicated.

- .8 Installation of all flexible entry boots where indicated.
- .9 Installation of new aboveground steel piping as indicated on drawings.
- .10 Installation of all valves indicated to facilitate a working system.
- .11 Installation of fuel transfer pumpset.
- .5 Electrical work associated with this project includes the following:
  - .1 Installation of new transfer pumpset controller, complete with float switches, flow switch, liquid sensors, etc., as shown in the design drawings.
  - .2 Installation of all rigid galvanized steel conduit and wiring as shown on drawings and as required to facilitate a working system.
  - .3 New overfill alarm.
  - .4 New electronic monitoring console.
- .6 As required in the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations SOR/2008-197, work by the Contractor will be overseen by the Departmental Representative. The cost associated with this overseeing is not in Contractor scope.
- .7 The Contractor is responsible to supply all plant, labour and materials to perform work.
- .8 New system will be identified with the Environment Canada (EC) Federal Identification Registry for Storage Tank Systems (FIRSTS) by the Departmental Representative. Contactor shall post the new EC identification number (decal) at the PTA spill containment box. The EC identification number will be provided to Contractor prior to first fill of the UST.

### **1.3 FAMILIARIZATION WITH SITE**

- .1 Prior to submitting a bid, it is recommended bidders visit the site to review existing conditions and determine materials needed, the means of access and the temporary facilities required to perform the Work.
- .2 Obtain prior permission from the Departmental Representative before carrying out site inspection.
- .3 Any omissions from contractor bid as a result of not performing site visit shall not be considered valid for additions to contract amount.

### **1.4 CODES AND STANDARDS**

- .1 Perform work in accordance with the following:
  - .1 Canadian Environmental Protection Act, Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, SOR/2008-197,
  - .2 Canadian Council of the Ministers of Environment – Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, PN1326, 2003,
  - .3 Canadian Standard Association (CSA) B139-Series 19, Installation Code for Oil-Burning Equipment, 2019,
  - .4 CSA-C282-15, Emergency Electrical Power Supply for Buildings, 2015;

- .5 other code of provincial or local application, including all amendments up to bid closing date, provided that in any case of conflict or discrepancy, the more stringent requirement shall apply.
- .2 Materials and workmanship must meet or exceed requirements of specified standards, codes and referenced documents.

## **1.5 INTERPRETATION OF DOCUMENTS**

- .1 Supplementary to the Order of Precedence article of the General Conditions of the Contract, the Division 01 sections take precedence over the technical specification sections in other Divisions of the Specification Manual.

## **1.6 DOCUMENTS REQUIRED**

- .1 Maintain at job site, one copy each of the following:
  - .1 Contract Drawings
  - .2 Specifications
  - .3 Addenda
  - .4 Reviewed Shop Drawings
  - .5 List of outstanding shop drawings
  - .6 Change Orders
  - .7 Other modifications to Contract
  - .8 Field Test Reports
  - .9 Health and Safety Plan and other safety related documents
  - .10 Other documents as stipulated elsewhere in the Contract Documents.

## **1.7 WORKS COORDINATION**

- .1 Coordinate the work of the various trades, where the work of such trades interfaces with each other.
- .2 Convene meetings between trades whose work interfaces and ensure that they are fully aware of the areas and the extent of where interfacing is required. Provide each trade with the plans and specifications of the interfacing trade, as required, to assist them in planning and carrying out their respective work.
- .3 Canada will not be responsible for or held accountable for any extra costs incurred as a result of the failure to carry out coordination work. Disputes between the various trades as a result of their not being informed of the areas and extent of interface work shall be the sole responsibility of the General Contractor and shall be resolved at no extra cost to Canada.

## **1.8 WORK SEQUENCE**

- .1 Construct Work in stages to accommodate continued use of premises during construction.
- .2 Co-ordinate Progress Schedule with Departmental Representative.
- .3 Maintain fire access/control.

**1.9 CONTRACTOR USE OF SITE**

- .1 Construction operations, including storage of materials are not to interfere with the day to day activities and/or operations of the local users at the facility.
- .2 Arrange storage of materials on or off site, and any materials stored at the site which interfere with any of the day to day activities at or near the site will be moved promptly at the Contractor's expense, upon request by Departmental Representative.
- .3 At completion of work, restore area as per conditions set within. All damage to ground and property will be repaired by Contractor. Remove all construction materials, residue, excess, etc.
- .4 Leave site in a condition acceptable to Departmental Representative.

**1.10 PERMITS**

- .1 Obtain and pay for building permit, certificates, licenses and other permits as required by municipal, provincial and federal authorities.
- .2 Provide appropriate notifications of project to municipal and provincial inspection authorities.
- .3 Obtain compliance certificates as prescribed by legislative and regulatory provisions of municipal, provincial and federal authorities as applicable to the performance of work.
- .4 Submit to Departmental Representative, copy of application forms and approval documents received from above referenced authorities.

**1.11 OWNER OCCUPANCY**

- .1 Owner will occupy premises during entire construction period for execution of normal operations.
- .2 Co-operate with Departmental Representative in scheduling operations to minimize conflict and to facilitate Owner usage.

**1.12 ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING**

- .1 Execute work with least possible interference or disturbance to building operations, and normal use of premises. Arrange with Departmental Representative to facilitate execution of work.
- .2 Where security has been reduced by work of Contract, provide temporary means to maintain security.
- .3 Provide temporary dust screens, barriers, warning signs in locations where renovation and alteration work is adjacent to areas which will be operation during such work.

**1.13 CUTTING, PATCHING AND FITTING**

- .1 Ensure that cutting and patching required by all trades is included in total bid price submitted for the work.

- .2 Execute cutting including excavation, fitting and patching required to make work fit properly.
- .3 Where new work connects with existing and where existing work is altered, cut, patch and make match existing work. This includes patching of openings in existing work resulting from removal of existing services.
- .4 Do not cut, bore, or sleeve load-bearing members, except where specifically approved by Departmental Representative.

#### **1.14 EXISTING SERVICES**

- .1 Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission. Prior to work commencing, establish location and extent of service lines in the area of the work and notify Departmental Representative of findings.
- .2 Where Work involves breaking into or connecting to existing services, give Departmental Representative minimum 48 hours notice for necessary interruption of mechanical or electrical service throughout course of work. Minimize duration of interruptions. Carry out work at times as directed by governing authorities with minimum disturbance to tenant operations.
- .3 Provide alternative routes for pedestrian and vehicular traffic.
- .4 Establish location and extent of service lines in area of work before starting Work. Notify Departmental Representative of findings.
- .5 Submit schedule to and obtain approval from Departmental Representative for any shut-down or closure of active service or facility including power and communications services. Adhere to approved schedule and provide notice to affected parties.
- .6 Provide temporary services to maintain critical building and tenant systems.
- .7 Provide adequate bridging over trenches which cross walkways/foot paths or roads to permit normal traffic.
- .8 Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.
- .9 Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction.
- .10 Record locations of maintained, re-routed and abandoned service lines.
- .11 Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.

#### **1.15 SMOKING**

- .1 Comply with smoking restrictions.

#### **1.16 PROJECT MEETING**

- .1 1 Departmental Representative will arrange project meetings and assume responsibility for setting times and recording and distributing minutes.

- .2 A pre-construction meeting will be held prior to mobilization to site. Contractor to provide the following items at, or prior to, this meeting:
  - .1 Construction schedule,
  - .2 Health and safety hazard assessment
  - .3 Breakdown of costs in Lump Sum bid
  - .4 Methods of construction
  - .5 Environment protection
  - .6 Workplace NL letter of recognition
  - .7 Insurance, Bonding
  - .8 Shop drawings
- .3 No work will begin until the pre-construction meeting is held.
- .4 Interim reviews of work progress based on work schedule will be conducted as decided by Departmental Representative and schedule updated by Contractor in conjunction with and to approval of Departmental Representative.
- .5 Departmental Representative will provide date, time and agenda for Construction meetings.

**END OF SECTION**