

PART 3 – DRAWINGS AND SPECIFICATIONS

RFT No. Doc4704136526, Contract No. N/A

1 **SUMMARY:**

The Work of this Contract includes, in general but not limited to the following:

- Supply all equipment, material, and labour to complete the project.
- Excavation and backfilling.
- Electrical feed to new natural gas generator and site electrical from remote reader building maintenance location.
- Removal of all existing electrical controls (conduit, wire, supports) to existing diesel generator.
- Contractor to include the pricing for arborist report and tree protection plan and installation of the tree protection plan.
- Contractor to include the pricing to coordinate new roof opening and reinstallation as required for the existing satellite disk.
- Contractor to arrange and apply for the new natural gas connection at the higher pressure for the new generator.
- Contractor is to include the pricing for the backup generator when the new generator is being installed, including the fuel.
- Contractor is to include the price for removal of the existing roof mounted diesel generator, c/w all electrical and controls (not being relocated for the new NG generator) and the existing roof curbs – the new roof is to match the existing roofing.
- Concrete slab to support new generator (11,000kg) c/w enclosure.
- Bollards as identified on drawings – various locations – 150mm diameter.
- Asphalt paving as per detail on S-100.
- Demolition of an existing fuel oil storage tank which includes the following:
 - Removal of u/g steel 13,600l tank.
 - Removal of all oily water, tank fittings, etc. and dispose as per code.
 - Removal of all petroleum impacted soils.
 - Replace excavated area with granular B backfill and asphalted.
 - All work to be conducted as per TSSA and MOE regulations.

This site is located at 51 Parliament Street, City of Toronto – Police Station – 51 Division.

All work must be retained strictly within the confines of the work site area, as shown on the drawings, except for landscaping and repairing of adjacent existing asphalt and landscaped areas.

PART 3 – DRAWINGS AND SPECIFICATIONS

RFT No. Doc4704136526, Contract No. N/A

Note that the Owner reserves the right to occupy the building and site at any time prior to possession. Such use shall not be construed as final acceptance of the project any portion thereof.

2 GENERAL

2.1 GENERAL

- 2.1.1. The following is a general description of the scope of work to complete the natural gas generator installation. For a detailed description of the technical aspects of the work, refer to the specification sections and contract drawings.
- 2.1.2. Notify and co-ordinate with Owner, Consultant, and Occupants, whenever work will effect operation of the building.
- 2.1.3. Contractor to ensure there will be no obstruction to the fire route and must coordinate any obstructions of the bay doors with the station captain during the construction work. Onsite parking for the contractor may be limited. If required, contractor may be asked to park off site at no additional cost to the contract.
- 2.1.4. Contractor to coordinate with the city of Toronto Police Service regarding access during proposed works. Contractor must call into Toronto Police Service security daily on days the contractor wishes to work onsite to be granted access. Any issues with coordination of site access will not result in additional costs to the contract.
- 2.1.5. Contractor to repair any disturbed or damaged waterproofing during installation.
- 2.1.6. Contractor to locate all underground and above ground utilities and structures within vicinity of proposed works (exterior and interior) to minimize disruption during proposed works.
- 2.1.7. Once the Contract has been awarded, construction shall be carried out in one continuing operation, unless agreed to and approved by the City and Consultant at the time of such request.
- 2.1.8. The Contractor and his/her Sub-Contractors shall assume full responsibility for their equipment and all materials required for this project and shall store them in a locked secure area at the end of each days work. No equipment or materials shall be left in an open area unprotected at the end of each days work.
- 2.1.9. It is the Contractor's total responsibility for the overall performance and completion of the Work. Breakdown of Work by trades is for the convenience of the Contractor only. All trades are required to examine all Sections of the Drawings and Specifications. The Consultants assume no responsibility for the division of Work or for any jurisdictional involvement as a result of such divisions.

PART 3 – DRAWINGS AND SPECIFICATIONS

RFT No. Doc4704136526, Contract No. N/A

- 2.1.10. Work specified in the specification has been divided into technical sections for the purpose of ready reference. Division of work among subcontractors and suppliers is solely the contractor's responsibility and the Contract Administrator assumes no responsibility to act as an arbitrator to establish subcontract limits between sections or divisions of work.
- 2.1.11. Prior to Tender submission examine the sites and surrounding areas and be fully informed as to the conditions and limitations under which the work has to be executed. Additional costs will not be entertained with respect to conditions which could reasonably have been ascertained by an inspection of the site prior to tender closing.
- 2.1.12. During the Contract duration, the Contractor is responsible to correct immediately, any interruption to essential services caused by his/her work whether they occur during the day or night, (business days or weekend and/or holidays). The maximum response time of two (2) hours is required. Other types of interruptions shall be corrected within 24 (twenty four) hours. Failure to respond within the specified time period shall render the Contractor responsible for payment of all changes incurred by the Owner when a third party has to be called to perform the necessary work.
- 2.1.13. Contractor to provide a 2 year full parts and labor warranty on all workmanship and equipment.
- 2.1.14. Contractor shall engage Enbridge within five business days of issuance of a Purchase Order for the natural gas station/regulator upgrades. Project delays due to inadequate/delayed coordination with Enbridge will not be accepted. Contractor to pay Enbridge directly for the natural gas station/regulator upgrades. Direct costs for the Enbridge upgrades will be taken from the cash allowance.
- 2.1.15. All coordination costs (Enbridge, ESA, THES, TFS, EMS, etc...) is to be included in the base bid. No coordination costs or markup will be accepted as contract extras.

2.2 SCOPE OF WORK

This work shall include, but not necessarily be limited to the short summary below:

- 2.2.1. Labour, material and equipment to complete work of Contract in conformity with Contract Documents and Construction Schedule.
- 2.2.2. Permits, inspections, tests, and systems verifications. Demolition, relocation, and removal of existing equipment and services to complete Work.
- 2.2.3. Delivery, receiving, inspection at time of delivery, unloading, and hoisting of materials and equipment.
- 2.2.4. Clean-up of materials and garbage on daily basis or as directed, and removal of unused equipment/materials from site.

PART 3 – DRAWINGS AND SPECIFICATIONS

RFT No. Doc4704136526, Contract No. N/A

- 2.2.5. The contractor shall install a new natural gas life safety generator equipped as per the latest approved CSA standard C282 "Emergency Electrical Power Supply for Buildings" (battery warmer, enclosure heater, enclosure lighting, enclosure panelboard, etc...). The electrical scope of work includes the installation of the standby generator, associated power and control equipment, and the reconnection of the existing building loads to the new generator as shown in the drawing package.
- 2.2.6. Building temporary power is not anticipated to be required by the contractor during the time of reconnection from existing power distribution system to new power distribution system (less than 4 hour outage). Contractor must provide city PM 10 business day advance notice of any power outages so that temporary power can be arranged at an additional cost if the fire chief deems it necessary to maintain operation at the fire station during the time of reconnection.
- 2.2.7. Disconnect, remove and/or relocate all existing services and/or equipment and reconnect where necessary.
- 2.2.8. All disturbed areas are to be restored to match existing conditions or better.
- 2.2.9. The contractor shall build new generator pad including bollards as specified in the contract drawings complete with restoration of surfaces. The restoration of surfaces indicated on the contract drawings include any disturbed landscape areas.
- 2.2.10. The contractor shall provide and install all equipment indicated in the contract drawings. The contractor shall set up and commission all systems and provide ready to operate power distribution and life safety emergency power supply system capable to operate under all applicable standards and regulatory requirements. The generator equipment includes but is not limited to the following:
- New natural gas powered generator c/w weatherproof sound rated enclosure. The initial startup of the Gas Generator to be performed by the Generator Manufacturer;
 - New monitoring and protection systems for generator operation including remote generator annunciator in the maintenance office-room 125.
 - Connection of the new generator to the existing fire alarm panel (use spare zones) c/w all required programming and updating of labels on remote annunciator(s) for the new connections as required.
 - Contractor to retain a manufacturer-authorized service provider to perform an inspection, preventative maintenance including cleaning/lubrication/adjustments of the existing ASCO double bypass ats. The authorized service provider shall also commission the ats with once connected to the new generator system to ensure proper operation of the complete system.

PART 3 – DRAWINGS AND SPECIFICATIONS

RFT No. Doc4704136526, Contract No. N/A

- New led emergency lighting units in the new generator enclosure and in the electrical room around the existing transfer switch to provide a minimum lighting level of 50 lux for 2 hours as per CSA 282.
 - Equipment supplier to provide appropriate device settings for all new equipment. Contractor to coordinate with equipment supplier and is responsible for all field verifications required for the supplier to provide the appropriate device settings /coordination.;
- 2.2.11. The contractor shall supply and install updated lamacoid labels and updated panel schedules for all existing/new electrical equipment impacted by this construction within the electrical room / area of work.
- 2.2.12. Electrical contractor to provide power and controls as required by mechanical trade.
- 2.2.13. The contractor shall provide and install complete natural gas piping system for generator from Enbridge modified gas station. The contractor shall pay for and coordinate the installation of the Enbridge modified gas station directly with Enbridge to ensure minimal disruption to the facility.
- 2.2.14. The contractor shall supply and install fire stopping materials and penetration seals to maintain the required fire-resistance rating of existing/new walls and structures.

The contractor shall remove and dispose of the old Generator and all associated lovers/accessories/systems not being reused. The old generator room shall be cleaned out and repurposed as a general storage room. The contractor shall maintain the existing heater in the room. Refer to the drawing package for the complete demolition scope. Confirm with the City the disposed equipment prior to its removal.

Project Manual (Specifications)

The Project Manual (specifications) related to this contract include, but are not limited to, the additional general conditions and the technical specifications related to all disciplines associated with this contract.

Refer to attached 51 Division Generator – Specifications.

Drawings

The drawing package related to this contract include, but are not limited to: general details, typical details, demolition plans, layouts and phasing plans for all applicable disciplines.

Refer to attached 51 Division Generator – Drawings

Reports

Refer to attached DSS Report