

Part 1 General

1. INTENT

The Work is defined as the supply and install of six (6) altar structures in the Memorial Chamber of the Peace Tower.

- .1 Specialty Trade Work required, per altar structure:
 - .1 Fabrication of custom metal and glass display cases.
 - .2 Fabrication of bronze legs and decorative skirts and corner braces using lost wax casting process.
 - .3 Cut and finish stone altar components, including: hand carving stone moulding profile and hand carving individual inscriptions on each altar to match existing font, and installation of prefinished stone feet on altar structure.
 - .4 Pre-assemble all elements in a shop in National Capital Region for review and approval by Departmental Representative.
 - .5 Deliver and assemble altar structures at Final Installation Site.
- .2 Government Owned Material provided, per altar structure:
 - .1 Four (4) pre-finished black marble stone feet.
 - .2 Models for the bronze casting.
 - .3 Pre-cut Hopton Wood stone slab with honed finish for altar structure top.
 - .4 Pre-finished cast bronze medallions.
 - .5 One (1) Book mount.
- .3 Contractor to provide, per altar structure:
 - .1 Fabrication the custom metal-framed glass display case.
 - .2 Fabricate four (4) bronze legs, eight (8) decorative poppy corner braces, and four (4) skirt sections, all of which are to be moulded and cast using lost-wax casting technique.
 - .3 Cut and hand carve the stone altar structure elements – cut moulded stone profile on the altar structure top and each individual hand carved inscription and cut away centre section of stone slab to accept display case.
 - .4 Fabricate packing and pack all components for delivery.
 - .5 Deliver to Assembly Shop in the National Capital Region.
 - .6 Complete shop assembly of all components for review and approval by Departmental Representative.
 - .7 Disassemble, pack and transport all components to designated loading dock.
 - .8 Transport to Final Installation Site and reassemble with Departmental Representative present.
 - .9 Provide all record photographs and reports to Departmental Representative.

2. MINIMUM STANDARDS

- .1 Materials shall be new and work shall conform to the minimum applicable standards of the Canadian General Standards Board, the Canadian Standards Association, the National

Building Code of Canada 2010 (NBC) and all applicable Provincial and Municipal codes. In the case of conflict or discrepancy the most stringent requirement shall apply.

3. TAXES

- .1 Pay all taxes properly levied by law (including Federal, Provincial and Municipal).

4. FEES, PERMITS and CERTIFICATES

- .1 Pay all fees and obtain all permits.
- .2 Provide authorities with plans and information for acceptance certificates.
- .3 Provide Departmental Representative inspection certificates as evidence that work conforms to requirements of Authority Having Jurisdiction.

5. CONSTRUCTION PROGRESS SCHEDULE & SCHEDULING

- .1 On award of contract, submit a detailed bar chart construction schedule for work, indicating anticipated progress stages within time of completion. When Departmental Representative has reviewed schedule, take necessary measures to complete work within scheduled time. Do not change schedule without notifying Departmental Representative.
- .2 Schedule and execute work with least possible interference or disturbance to the normal use of premises.
- .3 Schedule off site reviews by Departmental Representative during "regular hours", Monday to Friday from 09:00 to 18:00 hours.
- .4 Carry out delivery work during "off hours" or statutory holidays.
- .5 Carry out assembly work during "regular hours", Monday to Friday from 7:00 to 18:00 hours.
- .6 All deliveries shall be coordinated with the Departmental Representative. A minimum of three (3) business days advance notice is required.
- .7 Give Departmental Representative three (3) business days notice for work to be carried out during "off hours".
- .8 Work is not permitted, and deliveries or removal of materials are not permitted, at the following times:
 - Sound and Light Show – daily from July through September from 20:30 to 23:20 hours.
 - Police Memorial Service, last Sunday in September from 08:30 to 12:30 hours and
 - Changing the Guard Ceremony daily from June 28 to August 24, from 10:00 to 10:30 hours.
- .9 The Departmental Representative reserves the right to temporarily stop noisy operations and fume generating activities considered disruptive to adjacent occupied areas.
- .10 The Department Representative reserves the right to temporarily stop work due to Parliament Hill operational activities. Contractor will be given 48 hour notice.
- .11 In the event that the Departmental Representative deems it necessary to order a temporary stop work due to health and safety concerns, work shall cease immediately.

6. PROJECT MEETINGS

- .1 Organize weekly project meeting to discuss progress, schedule and project issues. Take and distribute minutes of meeting. Arrange for sub-contractors to attend meetings as required.
- .2 Within ten (10) business days after Contract award, schedule a meeting of all parties in contract to discuss and resolve administrative procedures and responsibilities.

7. SUBMITTAL PROCEDURES

- .1 Submit promptly to Departmental Representative submittals listed for review, in orderly sequence to not cause delay in work.
- .2 Do not proceed with work affected by submittals until review is complete with written approval of Departmental Representative.
- .3 Shop Drawings:
 - .1 Submit, for Departmental Representative review, five (5) electronic copies of shop drawings in PDF format, unlocked, minimum 300 dpi, oriented right side up for viewing on computer screen with sheets ordered in sequence within the pdf.
 - .2 The review is for the sole purpose of ascertaining conformance with the general design concept, and does not mean approval of the design details inherent in the shop drawings, responsibility for which remains with the Contractor. Such review does not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents.
 - .3 Do not commence fabrication or order materials before shop drawings are reviewed.
 - .4 Make changes in submissions as Departmental Representative may require, consistent with Contract Documents. When submitting, notify Departmental Representative in writing of revisions other than those requested.
 - .5 Include transmittal sheet indicating: project name and number, Division and section number of the shop drawing being submitted for; name, address and contact information of company submitting; stamp review by General Contractor for conformance to contract Documents.
- .4 Product Data:
 - .1 Submit five (5) copies of product data: manufacturers' catalogue sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products.
 - .2 Submit electronic copies of product data in PDF format, unlocked, minimum 300 dpi, oriented right side up for viewing on computer screen with sheets ordered in sequence within the pdf.
 - .3 Delete information not applicable to project.
 - .4 Cross reference product data information to applicable portions on Contract Documents.
 - .5 Include transmittal sheet indicating: project name and number, Division and section number of the shop drawing being submitted for; name, address and contact information of company submitting; stamp review by General Contractor for conformance to contract Documents.

- .5 Samples:
 - .1 Submit samples: examples of materials, equipment, quality, finishes and workmanship.
 - .2 Where colour, pattern or texture is criterion, submit full range of samples.
 - .3 Reviewed and accepted samples will become standard of material and workmanship, against which installed work will be verified.
- .6 Record Documentation:
 - .1 Submit one annotated record copy each of Contract Drawings and shop drawings. Mark each item to record actual construction, including:
 - .1 Dimensions of components.
 - .2 Field changes of dimensions and detail.
 - .3 Changes made by change orders.
 - .4 Details not on original Contract Drawings.
 - .5 References to related shop drawings and modifications.
 - .2 Submit one annotated record copy Contract Specifications. Mark item to record actual construction, including:
 - .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.
 - .2 Changes made by Addenda and change orders.
 - .3 Submit three (3) copies of a photographic record of each component process.
 - .1 Photographically record the conditions before, during and after the work for the process.
 - .2 Provide electronic and processed prints for the photographic record.
 - .3 Submit photographs in JPEG format, unlocked, oriented right side up for viewing on computer screen. Provide DVDs of the electronic photographic record.
 - .4 Place processed photographic prints in appropriate archival quality, clear plastic sleeves and label and arrange in numeric order in a loose leaf binder.
 - .5 Obtain approval of the photographic record by Departmental Representative before submission.
- .7 Photographic Record:
 - .1 Submit to Departmental Representative full photographic record of Final Installation Site over period of installation.
 - .2 Submit photographs in JPEG format, unlocked, oriented right side up for viewing on computer screen. Provide three (3) DVDs of the electronic photographic record.

8. REGULATORY REQUIREMENTS

- .1 References and Codes:
 - .1 Materials: new unless specified otherwise.
 - .2 Work to conform to the minimum applicable standards of the "References" indicated in the specification sections, the National Building Code of Canada

2010 (NBC) and all applicable Provincial and Municipal codes. In the case of conflict or discrepancy the most stringent requirement applies.

- .2 Building Smoking Environment:
 - .1 Smoking is not permitted in the Building.
- .3 Hazardous Material Discovery:
 - .1 Stop work immediately when material resembling spray or trowel-applied asbestos, Polychlorinated Biphenyl (PCB), mould or other designated substance or hazardous substance is encountered during work.
 - .1 Take preventive measures and promptly notify Departmental Representative.
 - .2 Do not proceed until written instructions have been received from Departmental Representative.

9. FIRE SAFETY REQUIREMENTS

- .1 Comply with both National Building Code of Canada 2010 and National Fire Code of Canada 2010 for safety of persons in buildings in the event of a fire and the protection of buildings from the effects of fire.

10. QUALITY CONTROL

- .1 Related Sections:
 - 1. Section 01 45 00 – Quality Control.

11. HAZARDOUS MATERIALS

- .1 Hazardous Materials: product, substance, or organism that may cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.
- .2 Comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and regarding labelling and the provision of Material Safety Data Sheets (MSDS).
- .3 For work in occupied buildings, give the Department Representative one (1) week notice for work involving designated substances (Ontario Bill 208), hazardous substances (Canada Labour Code Part II Section 10), and before using adhesives and other materials, that cause off gassing.

12. TEMPORARY UTILITIES

- .1 Existing services required for onsite work may be used without charge. Ensure capacity is adequate prior to imposing additional loads. Connect and disconnect at own expense and responsibility.
- .2 Notify Departmental Representative and utility companies of intended interruption of services and obtain requisite permission.

13. USE OF SITE FACILITIES AND DELIVERIES

- .1 Contain deliveries and temporary parking to loading dock area as specified by Departmental Representative. No parking is permitted on Parliament Hill other than scheduled and approved delivery times.

- .2 Existing elevators: will be designated for transport of components and materials.
 - .1 Co-ordinate use with Departmental Representative.
 - .2 Protect from damage, safety hazards and overloading of existing equipment.
- .3 Site storage:
 - .1 Departmental Representative will assign storage space that will be equipped and maintained by the Contractor.
 - .2 Do not unreasonably encumber site with components, equipment or waste packaging.
 - .3 Move components or equipment that interferes with operations of occupants, Departmental Representative or other contractors.
 - .4 Obtain and pay for additional storage or work areas needed for operations.
 - .5 Do not load or permit to load any part of work with weight or force that will endanger work.
- .4 Use only Sanitary Facilities assigned by Departmental Representative. Keep facilities clean.
- .5 Signage:
 - .1 Provide common-use signs related to traffic control, information, public safety, etcetera, in both official languages or by the use of commonly understood graphic symbols to the approval of Departmental Representative.
 - .2 No advertising permitted on this project.

14. TEMPORARY BARRIERS AND PROTECTION

- .1 Maintain existing services to building and provide for occupant, visitor and vehicle access.
- .2 Protection:
 - .1 Provide dust covers and protection to ensure no damage to adjacent surfaces, workers, finished work and public during delivery and on-site assembly.
 - .2 Maintain and relocate protection until such work is complete, ensuring against damage until take-over.
 - .3 Remove coverings following assembly and inspect with Departmental Representative.

15. COMMON PRODUCT REQUIREMENTS

- .1 Quality of Work:
 - .1 Carry out work using qualified licensed workers or apprentices in accordance with Provincial Act respecting manpower vocational training and qualification.
 - .2 Permit employees registered in Provincial apprenticeship program to perform specific tasks only if under direct supervision of qualified licensed workers.
 - .3 Determine permitted activities and tasks by apprentices, based on level of training attended and demonstration of ability to perform specific duties.
- .2 Storage, Handling and Protection:
 - .1 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions.

- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove packaging or bundling until required in work.
- .3 Manufacturer's Instructions: unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.

16. EXAMINATION and PREPARATION

- .1 Examine site and conditions likely to affect work and be familiar and conversant with existing conditions.
- .2 Examine on-site delivery route to the Final Installation Site from the loading dock with Departmental Representative.
- .3 Examine alternate on-site delivery route to the Final Installation Site from the loading dock with Departmental Representative.
 - .1 Temporary ramps may be required to move oversize components and must be provided by Contractor.
 - .2 Submit shop drawings for construction of temporary ramps for review and approval of Departmental Representative.

17. WASTE MANAGEMENT

- .1 Comply with Environmental Protection Act, Ontario Regulations: O. Reg. 102/94 – Waste Audits and Waste Reduction Work Plans; and O. Reg. 103/94 – Industrial, Commercial and Institutional Source Separation Programs; for waste management on construction and demolition projects.
- .2 Provide a "source separation program" to disassemble and collect in an orderly fashion the following "materials designated for alternative disposal" from the "general waste" stream:
 - .1 Packaging materials and pallets.

18. CLOSEOUT SUBMITTALS

- .1 Operational and Maintenance Manuals:
 - .1 Two (2) weeks prior to any scheduled training, submit to Departmental Representative six (6) copies of information related to the keying of the metal framed glass display case.
 - .2 Include following information plus data specified:
 - .1 Maintenance instructions for finished surface and material of display case.
 - .2 Maintenance: use clear drawings, diagrams or manufacturers' literature which specifically apply and detail the following:
 - .1 lubrication products and schedules.
 - .2 trouble shooting procedures.
 - .3 adjustment techniques.

- .3 Suppliers' names, addresses and telephone numbers and components supplied by them must be included in this section. Components must be identified by a description and manufacturers part number.
- .3 Spare parts: list all recommended spares to be maintained on site to ensure optimum efficiency. List all special tools appropriate to unique application. All parts/tools detailed must be identified as to manufacturer, manufacturer part number and supplier (including address).
- .2 Guarantees and Warranties:
 - .1 Before completion of work collect all manufacturer's guarantees or warranties and deposit with Departmental Representative.

19. CLEANING

- .1 Clean up as installation work progresses. At end of each work period for on-site work, and more often if ordered by Departmental Representative, remove debris, neatly stack material for use, and clean up generally.
- .2 Upon completion remove temporary protection and surplus materials. Make good defects noted at this stage.
- .3 Clean and polish glass, floors and hardware. Clean manufactured articles in accordance with manufacturer's written instructions.
- .4 Clean areas under contract to a condition equal to what previously existed and to approval of Departmental Representative.
- .5 On completion, wipe down surfaces to remove fingerprints and markings and leave in clean condition.
- .6 Remove stains, spots, marks and dirt from decorative work.
- .7 Protect completed and cleaned Work until acceptance by Departmental Representative.

20. SECURITY ESCORT

- .1 All personnel employed on this project will be escorted when executing work in non-public areas during normal working hours and after normal working hours.
- .2 Submit an escort request to Departmental Representative at least 14 days before the service is needed. For requests submitted within the time mentioned above, the Departmental Representative will pay for the costs of the security escort. The cost incurred by a late request will be charged to the Contractor.
- .3 Any escort request may be cancelled free of charge if notification of cancellation is given at least four (4) hours before the scheduled time of the escort. The cost incurred by a late cancellation will be charged to the Contractor.
- .4 The calculation of costs will be based on the average hourly rate of a security officer for a minimum of eight (8) hours per day for a late service request and four (4) hours for late cancellations.

21. COST BREAKDOWN

- .1 Before submitting first progress claim submit breakdown of Contract Amount in detail as directed by Departmental Representative and aggregating the Contract Amount. After approval by Departmental Representative cost breakdown will be used as the basis of progress payments.

Part 2 Products

1. NOT USED

.1 Not used.

Part 3 Execution

1. NOT USED

.1 Not used.

END OF SECTION