

September 7, 2010

**INVITATION TO TENDER (ITT) PS10157
CITY HALL HERITAGE EXTERIOR UPGRADE - MASONRY RESTORATION CONTRACT**

ADDENDUM NO. 4

1. RE: PART C - FORM OF TENDER - SCHEDULE A

PLEASE ADD:

Table 5: Cash Allowances

These cash allowances, as set out in Part 4 Allowances of the General Conditions, exclude HST and shall be included in the Tender Price:

Item	Allowance
Removal and restoration of electrical and mechanical items on Site for the Work	\$6,000

2. RE: PART D - FORM OF AGREEMENT, SCHEDULE 1 - SCHEDULE OF PRICES

PLEASE ADD:

Table of Cash Allowances

These cash allowances, as set out in Part 4 Allowances of the General Conditions, exclude HST and shall be included in the Tender Price:

Item	Allowance
Removal and restoration of electrical and mechanical items on Site for the Work	\$6,000

3. RE: PART F -SUPPLEMENTARY GENERAL CONDITIONS FOR CCDC2-2008, SPECIFIC INSURANCE COVERAGE

PLEASE ADD:

11.2.1 Additional Pollution Insurance

The Contractor shall purchase and provide additional Pollution Insurance with the following coverage:

- a. For all losses as a result of Bodily Injury, Property Damage or Environmental Damage resulting from Pollution Conditions; and
- b. This insurance shall be for an amount of not less than \$5,000,000 inclusive per occurrence, and the deductible per occurrence shall not exceed \$10,000 and the Contractor shall be liable for all deductible amounts.

4. RE: APPENDIX 2 SPECIFICATIONS AND DRAWINGS

PLEASE ADD:

ATTACHED SPECIFICATIONS - Section 02100 Environmental

This addendum must be completed, and attached to your Tender form.

If you have already submitted your Tender, the **notification of the receipt of this addendum** shall be submitted to the Purchasing Services Office, 3rd Floor, Suite #320, East Tower, 555 West 12th Avenue, Vancouver, British Columbia, Canada, V5Z 3X7 in an envelope clearly marked "Addendum No. 4 to Invitation to Tender No. PS10157: City Hall Heritage Exterior Upgrade - Masonry Restoration Contract" before the closing time of **3:00 P.M., Tuesday, September 14, 2010.**

NAME OF VENDOR

SIGNATURE OF AUTHORIZED SIGNATORY

DATE

Jim Lowood C.P.P.
Contracting Specialist

PART 1 GENERAL

1.1 SCOPE

- 1.1.1 This specification covers all work activities including but is not limited to the cutting, grinding, drilling, clean-up, disposal, handling of, silica located on the site known as the Vancouver City Hall, in Vancouver, British Columbia.
- 1.1.2 Building cladding stone on the exterior façade of Vancouver City Hall shall be repaired as specified.
- 1.1.3 Wet methods shall be used whenever dust generating activities are being conducted. If wet methods are not feasible, an effective shroud connected to a Certified HEPA Class C local exhaust system shall be used. A more detailed scope of work is included in Section 1.2 - Description of Work.
- 1.1.4 All work shall be carried out according to these specifications, the Work Safe BC (formerly WCB) Occupational Health and Safety Regulations and guidance documents.

1.2 DESCRIPTION OF WORK

- 1.2.1 Work specified in this section is to include repair of silica containing stone and mortar at the location outlined in section 1.1.1. No significant dust generation is to be observed during the repair process. If significant dust generation is observed, more stringent controls and air monitoring must be implemented. Description of work on an individual basis is provided below and may be superseded by the contract documents:
- Honing may be conducted with wet methods, using hand tools, or electric grinder wheels connected to HEPA local exhaust ventilation (LEV).
 - Dutchman repairs using an electric saw or grinder must be connected to a HEPA LEV.
 - Repointing is to be conducted using hand tools and wet methods. Should electric tools be used, they are to be connected to a HEPA LEV.
 - In areas where silica debris is to be cleaned using a vacuum, a certified HEPA vacuum shall be used.
- 1.2.2 Provide all labor, materials, services, insurance and equipment, in accordance with requirements of the Work Safe BC (former WCB), the British Columbia Ministry of the Environment and other regulatory agencies to

complete the removal and clean-up as specified of all silica containing and contaminated materials within the allotted time frame.

1.3 SUBMITTALS AND NOTICES

Prior to Commencement of Work, The Contractor shall:

- 1.3.1 Post a copy of the N.O.P. on site at the base workstation. Provide copy of N.O.P. to the consultant.
- 1.3.2 Submit proof to the consultant that all permits required by the City, or any other municipal, provincial, or federal agency having jurisdiction, have been attained for the project.
- 1.3.3 Post respirator fit test forms for all workers conducting the repairs on the site at the base workstation.
- 1.3.4 Submit written and individual signed forms to the consultant establishing that each employee entering the removal site has had instructions on hazards of silica exposure, on respirator use, aspects of work procedures and protective measures. Post work procedures, and consultant's inspection reports visibly near the base work station of the contractor.
- 1.3.5 Not applicable.
- 1.3.6 Post caution signs where access to the work area is possible. Such signs and barrier tape shall be located a minimum of fifteen (15) feet from any work areas. Caution signs shall delineate entry and protective requirements and provide warning of potential health consequences of exposure to silica.
- 1.3.7 Submit manufacturer's specification data sheets and material safety data sheets (MSDSs), for all products and materials used on this project, and as required for WHMIS compliance.
- 1.3.8 Submit letter of certification from qualified journeyman electrician stating that lock-out procedures, de-energizing of electrical lines, installation of temporary services, and identification of live electrical lines are in accordance with applicable electrical codes (as required).

1.4 AIR MONITORING

- 1.4.1 Air monitoring shall be conducted if the repair methods chosen by the contractor are shown to create visible airborne or settled dust against

WorkSafe BC regulations. Dust samples shall be collected by the consultant outside of work areas or as occupational samples connected to the worker. Once determined to be required, such air monitoring work done by the consultant shall be paid by the Contractor.

- 1.4.2 If air monitoring, visual inspection, or sampling show areas outside current work area to be contaminated, these areas shall be cleaned and the removal method changed.

1.5 TEST RESULTS

- 1.5.1 Test result of all samples will be available for review at the offices of ALARA Environmental Health and Safety Ltd. 3869 Commercial Street, Vancouver, BC, and on site at the contractor's base work station.

1.6 SECURITY AND SUPERVISION

- 1.6.1 Work area access shall be restricted to authorized, trained, and protected personnel. Authorized personnel are limited to the owner, the contractor's employees, the Consultant, and representatives of Federal and Provincial regulatory agencies having jurisdiction over the project.
- 1.6.2 Submit names of supervisory personnel who will be responsible for work site. The supervisory personnel must be qualified by the consultant and must remain on site at all times when silica related work is occurring.
- 1.6.3 Substitution of project or shift supervisor must be authorized by the consultant. Forty eight (48) hours notice is required prior to substitution.
- 1.6.4 During time of hazardous material handling (work at risk of dislodging silica-containing material) supervisory personnel shall coordinate work and take full responsibility for the co-ordination of, and health and safety of, all personnel working within contaminated areas.
- 1.6.5 Entry into the work area by unauthorized individuals shall be reported immediately to the Consultant.
- 1.6.6 The City shall be responsible for site security for the duration of the abatement project.

1.7 EMERGENCY PROCEDURES

- 1.7.1 Emergency procedures shall be in written form and prominently posted by the base workstation. Employees shall be trained in evacuation procedures in the event of workplace emergencies.

1.8 PROJECT SCHEDULE

- 1.8.1 Project is to begin upon approval by the City of Vancouver, and will be completed with the contractor off site as per the Contract Documents.
- 1.8.2 Removal procedures shall be undertaken as directed by the consultant, incorporating preparation, removal and clean-up procedures outlined in Part 3 of these specifications.
- 1.8.3 Not Required
- 1.8.4 Allow sufficient time for inspection of site by consultant after site preparations and barriers are completed and before actual removal work begins. (when required)
- 1.8.5 Ensure consultant's approval of work area preparation and clean up is obtained as specified.

1.9 PERSONNEL PROTECTION – Stage I

Not Required

1.10 PERSONNEL PROTECTION – Stage II

- 1.10.1 Prior to commencement of work, the workers shall be instructed, and shall be knowledgeable, in the areas described in Section 1.3.4.
- 1.10.2 Provide and post, in the clean area, these decontamination and work procedures to be followed by workers.
- 1.10.3 Provide workers with personally issued and marked respiratory equipment recognized by the WCB, the National Institute of Occupational Health and Safety (NIOSH) and the Canadian Standards Association (CSA). As a minimum, half-face passive air purifying respirators shall be used in the work area during removal procedures. Full faced, passive air purifying respirators are recommended. The provisions of CSA standard Z94.4-M1982 regarding the care, use and selection of respirators shall apply. Respiratory equipment shall be identified with permanent markings and a current list of persons using

such equipment shall be displayed. Up to date respirator maintenance logbooks shall be kept on site.

1.10.4 Provide workers with full body disposable coveralls. Once coveralls are worn in work area, they shall be treated as waste and disposed of accordingly. Provide other body protection required under applicable safety regulations such as eye protection. No coveralls shall be in use on the project for longer than 4 hours. (if required)

1.10.5 Not applicable

1.10.6 Persons leaving work area shall remove gross contamination from clothing before leaving work area, then proceed to equipment and access area and remove clothing except respirators. Place coveralls in receptacles for disposal. Dispose of filters as required.

1.10.7 When re-entry to work area is to take place all persons shall follow procedures in articles 1.10.4 above.

1.10.8 Not applicable

1.10.9 Upon completion of stone repair, clean footwear before removing from equipment and access area. (if required)

1.10.10 Not applicable

1.10.11 Workers shall not eat, drink, smoke or chew gum in the work area.

1.10.12 Workers shall be fully protected with respirators and protective clothing at all times when possibility of generating airborne silica exists.

1.10.13 No workers or authorized visitor shall wear facial hair that will affect the respirator to face seal.

1.10.14 Provide clean protective clothing and one approved Passive Air Purifying Respirator assembly, and disposable coveralls.

1.10.15 Instruct authorized visitors in use of respiratory protection and protective clothing.

1.10.16 Instruct authorized visitors in proper procedures to be followed when entering into, and exiting from, work areas, and ensure compliance.

1.11 BUILDING PROTECTION

1.11.1 Not applicable.

1.11.2 Not applicable

PART 2 MATERIALS AND EQUIPMENT

2.1 MATERIALS

- 2.1.1 Provide all materials required to complete the project according to these procedures. Criteria for the quality and type of materials to be used on this project are delineated in Section 07900, 08590 and 09900.
- 2.1.2 Deliver all materials in the original packages, containers, or bundles, bearing the name of the manufacturer and the brand name.
- 2.1.3 Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.
- 2.1.4 Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated shall be disposed of in accordance with the applicable regulations.

2.2 TOOLS AND EQUIPMENT

- 2.2.1 Provide all suitable tools and equipment for the repair, cleanup, and encapsulation.
- 2.2.2 Supply temporary service panelboard NBLP type 100 amp, 120/208 volt, single phase wire with the appropriate number and type of branch circuit breakers (standard and ground fault). GFI equipped extension cords plugged into existing outlets will be also acceptable for this project. (if required)
- 2.2.3 Tools and equipment shall include, but not be limited to, grinders with diamond cups, polishing stones, hand held honing stones, diamond cutting blades, boom lifts, scaffolding, suspended staging, ladders, and cleaning equipment.

2.3 SCAFFOLDING

- 2.3.1 Scaffolding shall be designed and constructed in accordance with CSA Standard S269.2-M1980, the Worker's Compensation Board OH&S Regulations and other applicable regulations.

PART 3 EXECUTION

3.1. WORK AREA PREPARATION

- 3.1.2 Isolate the work area on the ground from adjacent areas, using caution tape, and other means.
- 3.1.2 Ensure that windows adjacent (including above and below) are closed.
- 3.1.3 Post signs, at points of entry worded as follows:

**CAUTION
SILICA DUST HAZARD
Authorized Entry Only
Respiratory Hazard
Proper PPE Required**

Sign lettering must be bold, capitalized & sized to 50mm

- 3.1.4 Seal all difficult to clean equipment in work area with minimum one layer six-mil poly and secure with tape and glue as required.(if required)
- 3.1.5 Ensure that all required equipment is on hand within the work area.

3.2 REMOVAL OF SAND STONE USING MINI ENCLOSURE METHOD

- 3.2.1 Not applicable for this project at this time.

3.3 REPAIR OF SAND STONE

- 3.3.1 Sand stone repairs are to be conducted using the following methods in the order listed. Wet methods or using an effective shroud connected to a local exhaust ventilation system having a certified HEPA filter discharge.
- 3.3.2 Work is to be conducted from a platform that is tight against the building, preventing any potential loss of debris. (if possible)
- 3.3.3 A shelter is to be installed on the work platform to prevent wind from compromising the effectiveness of the local exhaust ventilation if significant concentrations of dust is observed.

3.4 WORK PREPARATION

Not applicable

3.5 WORKER DECONTAMINATION ENCLOSURES

Not applicable

3.6 WASTE AND EQUIPMENT DECONTAMINATION ENCLOSURE SYSTEM

Not applicable

3.7 CONSTRUCTION OF ENCLOSURES

Not applicable

3.8 MAINTENANCE OF WORK AREA

3.8.1 Work area shall be maintained in clean and tidy condition.

3.8.2 Ensure barriers are secure. Repair damaged barriers and remedy defects immediately upon discovery.

3.8.3 Visually inspect the work area regularly and at beginning of each working period.

3.9 DISTURBANCE AND REMOVAL

3.9.1 Prepare site (see Section 3.4). All work is to be conducted in full accordance with these procedures, the Work Safe BC OH&S Regulation, and as outlined in the WCB guidance documents. Follow manufacturer's recommendations with regard to material and equipment application and use.

3.9.2 Removal of sand stone or mortar materials shall not proceed until entire area is inspected and methods approved.

3.9.3 Not applicable

3.9.4 Do not allow deposition of waste on the floor of the work platform.

3.9.5 All surfaces in the work area shall be cleaned to high standard of cleanliness.

3.9.6 Dispose all cloths, mops, sponges, rags, wire brushes, brooms and any bristled tools as waste.

- 3.9.7 Wet or HEPA clean and bag all tools, boots, and other personal safety gear used within the work area before removal from site. (if applicable)
- 3.9.8 Place waste in sealed plastic bags 0.15 mm minimum thickness. Inner bag shall be cleaned of gross contamination and placed in clean 0.15mm suitably labeled plastic bag in holding room. (if applicable)
- 3.9.9 At a suitable stage of final clean up, conduct visual inspection of work area.
- 3.9.10 If visible accumulations of silica debris in the work area are found, final cleaning procedures shall be repeated until the work area is in compliance.
- 3.9.11 Not applicable
- 3.9.12 Work area clearance shall be based on a visual inspection of the work area.
- 3.9.13 Proceed with demobilization operations after clearance is granted.

3.10 FINAL TEAR DOWN AND CLEAN-UP

- 3.10.1 Following moderate risk procedures and protective measures outlined in sections 1.9 and 3.1, proceed to tear down enclosure systems.
- 3.10.2 If the consultant finds visible accumulations of debris in the work area after tear down is completed, final cleaning procedures shall be repeated until the work area is in compliance. Final cleaning shall be to City of Vancouver housekeeping standards.

3.11 DISPOSAL

- 3.11.1 Dispose as general construction debris.

END OF SECTION