



1021-2011 ADDENDUM 2

STURGEON ROAD BRIDGE REPLACEMENT

URGENT

PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID OPPORTUNITY

ISSUED: February 3, 2012
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THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

Template Version: A20070419

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid may render your Bid non-responsive.

PART A – BID SUBMISSION

Replace: 1021-2011_Addendum_1-Bid_Submission with 1021-2011_Addendum_2-Bid_Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

- Form B(R2): Revise Item No. A.15
- Form B(R2): Add Item No. B.2
- Form B(R2): Add Item No. C.25(vi)
- Form B(R2): Revise Item No. F.2
- Form B(R2): Delete Item No. F.4

Page numbering on some forms may be changed as a result.

Replace: 1021-2011_Addendum_1_Form_B-Excel with 1021-2011_Addendum_2_Form_B-Excel

PART E – SPECIFICATIONS

- Revise: E2.1 to read: The Geotechnical Report for the Sturgeon Road Bridge Replacement is included in Appendix D of this Specification:
 - (a) Final Report Geotechnical Investigation and Foundation Engineering for Sturgeon Creek Bridge Replacement

Prepared by: National Testing Laboratories Limited October 28, 2011

- Add: E2.2 The soils information presented in the Geotechnical Report and shown on the Drawings are primarily for design purposes and the City does not Guarantee the information is free from errors or discrepancies.
- Add: E2.3 No test holes shall be drilled without the approval of the Contract Administrator.
- Add: E2.4 Further to GC: 3.1, the Contractor shall make his own investigation as to the soil conditions which will be encountered in the Work. The City assumes no responsibility for

failure or neglect on the part of the Contractor to determine the working conditions at the Site.

- Revise: E16.5.4(a) to read: Reinforcing steel shall be deemed to include all reinforcing bars, tie-bars, dowels and sleeves.
- Add: E16.5.4(f) Stainless steel plates for sleeves to ASTM A167, Type 308 or equivalent as per section B6.
- Add: E25.2.1(b)(iii) The design life for all retaining walls shall be 75 years.
- Revise: E25.3.6 to read: Cast-in-Place Concrete Levelling Pad
- (a) The concrete levelling pad, if determined to be required by the Contractor, shall be in accordance with E17 "Structural Concrete".
- Add: E25.4.1(q) The global, geotechnical stability of the retaining walls, will be determined and confirmed by the Contract Administrator, based on the sealed shop drawings and calculations prepared and provided by the Contractor. The Contractor is not required to complete the global stability analysis for the retaining walls, but will be required to changes to the retaining walls as required by the Contract Administrator based on the global stability analysis completed by the Contract Administrator.
- Revise: E48.2 to read: Materials
- Revise: E48.2.1 to read: Wooden Bollards
- (a) The (uprights) shall be 200mm x 200mm x 2400mm long (8" (in) x 8" (in) x 8' (ft)) timbers, S4S, square edge to CSA 080, pressure treated pine or fir to National Lumber Grades Authority standard grading rules, all kiln dried to a maximum moisture content of 19%.
- (b) Detailing shall be 6mm (¼" (in)) radius on all exposed edges except on reveille and top peak, 25mm (1" (in)) dado reveille 4" (in) from top of timber on all four sides, peaked 1" (in) relief on top of timber, equal distant front and back.
- (c) All timber bollards shall be free of defects, warping, checked or bent materials as they will be rejected.
- (d) Timber bollards shall be identified by an official grade mark, continuing symbol of grading agency, mill number or name, grade of lumber, species or species grouping or combination designation, rules under which grade and conditions of seasoning at time of manufacture.
- Revise: E48.2.2 to read: Crushed Limestone Base
- (a) Supply crushed limestone base as per CW 3110.
- Revise: E48.3 to read: Construction Methods
- Revise: E48.3.1 to read: Installation of Wooden Bollards
- (a) Post will be set 990 mm below surface elevation resting on crushed limestone base.
- (b) Set post exactly vertical into 500 mm diameter hole and backfill with crushed limestone base, installed in 150 mm lifts, tamped thoroughly on each lift.
- (c) Ensure posts are plumb.

- Add: E48.3.2 All bollards judged by the Contract Administrator to be in unsatisfactory condition shall be disposed of by the Contractor and replace with equivalent new bollards.
- Add: E48.3.3 In the event of damage to any materials by the Contractor, the Contractor shall immediately notify the Contract Administrator and make all repairs or replacements necessary, at his own expense, to the satisfaction of the Contract Administrator. In no case shall the Contractor install a damaged bollard component.
- Add: E48.4 Measurement and Payment
- Add: E48.4.1 Supply and installation of bollards will be measured on unit basis and will be paid for at the Contract Unit Price per unit for "Supply and Installation of Bollards," which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.
- Add: E53.1.2 All materials, procedures and equipment shall be as described in this specification or equivalent as approved by the Contract Administrator in accordance with B6.
- Delete: E54 **RAKED ASPHALT**
- Add: E55 **GEOTECHNICAL INSTRUMENTATION**
- Add: E55.1 Description
- Add: E55.1.1 The Contractor shall be responsible for the supply and installation of vibrating wire piezometers and slope inclinometer casing at various locations along the north and south banks of Sturgeon Creek within the limits of the project site.
- Add: E55.1.2 The locations for the instrumentation installation will be determined by the Contract Administrator and Contractor during construction to ensure the instrumentation will be installed at locations that will not impact Work activities.
- Add: E55.2 Materials
- Add: E55.2.1 Vibrating Wire Piezometers
- (a) The vibrating wire piezometers shall consist of item No. FR-100DPWS standard vibrating wire piezometer with stainless steel filter supplied by RocTest Inc. or equivalent as approved by the Contract Administrator in accordance with B6.
- Add: E55.2.2 Slope Inclinometer Casing
- (a) The slope inclinometer casing shall consist of 85 mm outside diameter, 73 mm inside diameter QC casing supplied by Durham Geo Slope Indicator Inc. or equivalent as approved by the Contract Administrator in accordance with B6.
- Add: E55.3 Construction Methods
- Add: E55.3.1 General
- (a) All instrumentation shall be installed according to the manufacturer's specifications for drilling, installation techniques, backfill and casing protection.
- (b) The location of all instrumentation shall be as laid out in the field by the Contract Administrator, in consultation with the Contractor to ensure the instrumentation is placed in areas that will not affect the Works.

- (c) The Contract Administrator shall be present during all instrumentation installation. Any instrumentation damaged by the Contractor shall be re-installed within five working days to the satisfaction of the Contract Administrator.

Add: E55.3.2 Vibrating Wire Piezometers

- (a) A total of eight piezometers will be installed within four separate test holes (i.e. each testhole shall consist of two nested piezometers).
- (b) It shall be assumed that four piezometers will be installed at each side of the creek. The piezometers shall be installed at elevations ranging from 228 m to 232 m (geodetic), and shall have sufficient cable lead lengths to allow the leads from the four piezometers located on each side of the creek to be monitored from a single location which will be situated away from an active construction area.
- (c) All piezometers shall be equipped with Item No. CA-IRC41A cable 2 shielded cable pairs supplied by RocTest Inc. or equivalent as approved by the Contract Administrator in accordance with B6, to allow for monitoring with a remote monitoring device.

Add: E55.3.3 Slope Inclinator Casing

- (a) The Contractor shall assume a total of four slope inclinometer casings will be installed at the site, two on each side of the creek.
- (b) The slope inclinometer casing shall be installed through all clay overburden material, with the bottom of each casing extending a minimum of 1.0 m into dense silt till.
- (c) All inclinometers shall be protected at ground surface with a lockable steel protective casing.
- (d) To accommodate the staged nature of the existing bridge removal and replacement, the it is assumed two drill rig mobilizations will be required, with one half of the total instruments at each side of the creek is to be installed with each drill rig mobilization.

Add: E55.4 Measurement and Payment

Add: E55.4.1 Supply and place Geotechnical Instrumentation will be measured on a unit basis and will be paid for at the Contract Unit Price per unit for the "Items of Work" listed here below, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.

Items of Work:

Supply and place Geotechnical Instrumentation:

- (a) Supply and Place Vibrating Wire Piezometers
- (b) Supply and Place Slope Inclinator Casing

DRAWINGS

Replace: 1021-2011_Addendum_1_Drawing_B120-12-015_Sht15-R1 with 1021-2011_Addendum_2-Drawing_B120-12-015_Sht15-R2

1021-2011_Addendum_1_Drawing_B120-12-016_Sht16-R1 with 1021-2011_Addendum_2-Drawing_B120-12-016_Sht16-R2

1021-2011_Drawing_B120-12-049_Sht49-R0 with 1021-2011_Addendum_2-Drawing_B120-12-049_Sht49-R1

1021-2011_Addendum_1_Drawing_B120-12-052_Sht52-R1 with 1021-2011_Addendum_2-Drawing_B120-12-052_Sht52-R2

1021-2011_Addendum_1_Drawing_B120-12-057_Sht57-R1 with 1021-2011_Addendum_2-Drawing_B120-12-057_Sht57-R2

1021-2011_Addendum_1_Drawing_B120-12-058_Sht58-R1 with 1021-2011_Addendum_2-Drawing_B120-12-058_Sht58-R2

1021-2011_Addendum_1_Drawing_B120-12-059_Sht59-R1 with 1021-2011_Addendum_2-Drawing_B120-12-059_Sht59-R2

1021-2011_Addendum_1_Drawing_B120-12-060_Sht60-R1 with 1021-2011_Addendum_2-Drawing_B120-12-060_Sht60-R2

1021-2011_Addendum_1_Drawing_B120-12-062_Sht62-R1 with 1021-2011_Addendum_2-Drawing_B120-12-062_Sht62-R2

1021-2011_Addendum_1_Drawing_P3331-20_Sht82-R1 with 1021-2011_Addendum_2-Drawing_P3331-20_Sht82-R2

APPENDICES

Add: Appendix D 1021-2011_Appendix_D-Geotechnical_Investigation