



473-2016 ADDENDUM 7

**WAVERLEY STREET UNDERPASS AT CN MILE 3.89 RIVERS SUB:
CONTRACT 2 – UNDERPASS STRUCTURE, RAILWAYS, ROADWORKS,
LAND DRAINAGE SEWER, PUMPING STATION AND LANDSCAPING
WORKS**

ISSUED: March 21, 2017
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URGENT

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

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID OPPORTUNITY AND SHALL
FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: A20160708

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: 473-2016_Addendum_5-Bid Submission with 473-2016_Addendum_7-Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

Form B(R6): Revise Line Item: G.20 i)
 Add Line Item: G.23 & i)

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

PART E – SPECIFICATIONS

Revise: E21.3.3 to read: Electrical

- (a) Provide and install new buried electrical service to the proposed bus shelters. Coordinate the **120 volt underground** service point with Manitoba Hydro.
- (b) The Contractor shall be responsible for the installation of the feeder cable in trench from bus shelter to Manitoba Hydro service point. Contractor to allow 15 m of trench and 20 m of feeder cable.**
- (c) Feeder cable for Transit Shelter electrical service to be suitable for direct burial. Feeder cable to be rated 240 volt, minimum #10 AWG wire size. Contractor shall be responsible for the installation of cable in trench and for connection to Transit Shelter electrical service point. Refer to drawing C2-CT-077 for location of transit shelter electrical service point. Manitoba Hydro shall be responsible for connection to Manitoba Hydro service point.
- (d) The Contractor shall be responsible for providing trench for Bus Shelter electrical service cable. Trench to be maximum 150 mm wide 750 mm deep. Bus Shelter feeder cable to be buried at 600 mm with 150 mm sand below feeder cable and 150 mm sand on top of feeder cable. Sand to be to City of Winnipeg Specification CW 2030 Type 1. Backfill to be to City of Winnipeg specification CW 2030 Class 1 backfill.
- (e) The Contractor shall be responsible for the supply and installation of a 100 Amp, 240 Volt rated CSTE to be installed at Manitoba Hydro service point location. Contractor to terminate Bus Shelter electrical service cable at CSTE. Manitoba Hydro forces to make electrical connection at CSTE.

- Revise: E63.4.1(i) to read: Bearings shall be manufactured as a single unit. **However, bearing pads "EB2" may be supplied as two-part units.**
- Revise: E80.3.1(a) to read: The ~~4450 mm~~ steel casing pipe is being supplied under a separate Contract. The Contract Administrator will provide the Contractor with a contact for the supply contractor upon award.
- Delete: E80.3.1(b)(i)
- Revise: E80.3.1(b)(ii) to read: ~~Pipe Dimensions~~ **1511 mm steel casing pipe with the following dimensions:**
- Outside Diameter: ~~4473~~ **1511 mm (58-59.5")**
 - Inside Diameter: ~~4429~~ **1467 mm**
 - Wall Thickness: 22.2 mm (7/8")
 - Pipe Length: 3.05 m
- Revise: E80.3.6(a)(v) to read: Bolts and nuts to be ~~shall be~~ **Type 316 Stainless Steel complete with di-electric isolating washers and sleeves.**
- Revise: E80.4.3(c) to read: The ~~4500 mm~~ steel casing pipe shall be installed in accordance with the manufacturer's recommendations, including assembly of pipe joints. Permalok joint shall be assembled complete with RTV silicone recommended by the manufacturer.
- Add: E96.4 Construction Methods
- E96.4.1 The construction of a New Manhole on an Existing Sewer splits an existing sewer segment into two segments and cleaning and inspection of both sewer segments is required. The upstream and downstream manhole to manhole sewer segments connecting to the constructed a New Manhole on an Existing Sewer shall be cleaned and inspected according to CW2140 and CW2145, respectively.
- Revise: E97.2.2 to read: Thermocable
- (a) C13-240-COJ Constant Watt Trace Cable (13 W/m)
 - (b) Urecon UTC-2030 01 Electronic Controller**
 - (c) Urecon PFK-1 Power Feed Kit**
 - (d) Urecon URTD 06-R High Limit Sensor**
 - (e) Urecon URTD 06-G Low Limit Sensor**
 - (f) Stainless Steel NEMA four times Junction Box, Lockable**
- Revise: E97.3 to read: Construction Methods
- E97.3.1 Installation shall be according to specifications and manufacturer's recommendations and specifications.
- E97.3.2 Securely mount the electronic controller in the Pumping Station, as shown on the Drawings.**
- E97.3.3 The thermocable shall be terminated at a junction box, as shown on the Drawings.**
- Revise: E97.4.1 to read: Measurement and payment for Pre-Insulated Heat Traced Leads will be on a length basis measured from catchbasin/manhole to catchbasin/manhole and shall include supply and installation of all materials specified and detailed on the Drawings. ~~Measurement and payment for~~ Heat trace elements to be supplied and installed outside of the limits of the manhole/catchbasin segments of pre-insulated pipe such as the connecting cables to the Pumping Station, junction boxes, control panel **electric controller, and sensors, will not be measured for payment and shall be included in the Contract Lump Sum Price for "Electrical, Instrumentation and Control Systems" Pumping Station price.**

Revise: E114.3.1(a) to read: ~~Shop Prequalification: The Contractor performing the shop work shall have either an SSPC-QP 3 Certification or an AISC Sophisticated Paint Endorsement certification. The certification(s) shall remain current throughout the duration of the Works.~~

- (i) The Contractor performing the shop work shall **provide evidence that they** have satisfactorily performed a minimum of three (3) previous projects involving abrasive blast cleaning, metallizing, and paint application. At least one project within the past two (2) years shall have involved a bridge or similar industrial type application. The suitability of the Contractor's qualifications and prior experience will be considered by the Contract Administrator before granting approval to proceed.

Revise: E114.9.3 to read: Specific inspection and testing requirements within this specification are designated as Hold Points. Unless other arrangements are made, the Contractor shall provide the ~~Engineer~~ **Contract Administrator** with a minimum four-hour notification in advance of the Hold Point. If four-hour notification is provided and the work is ready for inspection at that time, the ~~Engineer~~ **Contract Administrator** will conduct the necessary observations. If the work is not ready at the appointed time, unless other arrangements are made, an additional four-hour notification is required. Permission to proceed beyond a Hold Point without a quality assurance inspection will be at the sole discretion of the ~~Engineer~~ **Contract Administrator** and will only be granted on a case-by-case basis.

DRAWINGS

Replace: 473-2016_Addendum_1-Drawing_C2-CS-074-R1 with 473-2016_Addendum_7-Drawing_C2-CT-035-R2
473-2016_Drawing_C2-CS-075-R0 with 473-2016_Addendum_7-Drawing_C2-CT-036-R1
473-2016_Drawing_C2-CS-076-R0 with 473-2016_Addendum_7-Drawing_C2-CT-037-R1
473-2016 _Addendum_6-Drawing_C2-CU-028-R2 with 473-2016 _Addendum_7-Drawing_C2-CU-028-R3
473-2016 _Addendum_6-Drawing_C2-CU-029-R2 with 473-2016 _Addendum_7-Drawing_C2-CU-029-R3
473-2016 _Addendum_5-Drawing_C2-CU-030-R2 with 473-2016 _Addendum_7-Drawing_C2-CU-030-R3
473-2016_Drawing_C2-CT-0077-R0 with 473-2016_Addendum_7-Drawing_C2-CT-077-R1
473-2016 _Addendum_5-Drawing_C2-BE-007-R1 with 473-2016 _Addendum_7-Drawing_C2-BE-007-R2
473-2016 _Addendum_5-Drawing_C2-BS-001-R1 with 473-2016 _Addendum_7-Drawing_C2-BS-001-R2
473-2016 _Addendum_5-Drawing_C2-BS-103-R1 with 473-2016 _Addendum_7-Drawing_C2-BS-103-R2

NMS SPECIFICATIONS

Section 26 05 02

Replace: 3.1.1 to read: Provide all unit heaters, baseboard heaters, and wiring to all force flow and unit heaters, and their thermostats.

Section 26 24 19

Delete: 2.3.1

Delete: 2.3.3

Add: 2.15 Power Factor Correction Capacitors

.1 Comply with CSA C22.2 NO. 190-14 - Capacitors for power factor correction.

.2 Acceptable Manufacturers

.1 Shall be provided by MCC supplier.

Section 26 29 03

Replace: 2.1 to read: Refer to Section 26 05 00 - Common Work Results for Electrical and Drawing C2-BE-003.

Section 26 32 14

Replace: 2.2.3.2 to read: Minimum of 300 kW and must be suitable for starting two (2) 100 kW pumps with soft starters. The two (2) pumps will be started individually with a 30 second delay between load steps. If the generator provided exceeds 300 kW, the Contractor shall be responsible for upgrading size of cables, breakers, and automatic transfer switch accordingly.