

712-2013 ADDENDUM 4

PLESSIS ROAD TWINNING AND GRADE SEPARATION AT CN REDDITT SUBDIVISION: PLESSIS ROAD RECONSTRUCTION, UNDERPASS STRUCTURES, PUMPING STATION, LAND DRAINAGE SEWER AND MISCELLANEOUS UNDERGROUND AND LANDSCAPING WORKS

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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

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: 712-2013 Addendum 2 - Bid Submission with 712-2013 Addendum 4 - Bid Submission. The following is a

summary of changes incorporated in the replacement Bid Submission:

Form B (R2): Numerous changes

Replace Form B (R1) Excel with Form B (R2) Excel.

Form G2 (R1): Revise expiry date on Page 2 of 2.

PART B – BIDDING PROCEDURES

Add: B14.4.1 Further to 14.4, the Bidder is advised that the Bid may be shared with CN.

PART D - SUPPLEMENTAL CONDITIONS

Replace: 712-2013 Part D – Supplemental Conditions pages 1 to 42 with 712-2013 Addendum 4 Part D – Supplemental Conditions (R1) pages 1 to 44. The following is a summary of changes incorporated in the replacement Part D – Supplemental Conditions:

- Supplemental Conditions.

Part D – Supplemental Conditions (R1) – Numerous changes

PART E – SPECIFICATIONS

Revise: E12.1.1 Plessis Road 200 m south of Kernaghan Avenue to Dugald Road will be closed to thru

traffic and pedestrians from July 28, 2013, until September 1, 2015, the date of Substantial Performance as outlined in D26. The City of Winnipeg Traffic Services Department will barricade and sign the street "Road Closed" for the duration of the

Project.

Revise: E16.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year

the Contract is commenced, the Contractor shall temporarily repair any Work

commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the

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Contract Administrator until permanent repairs are completed. The Contractor shall bear

all costs associated with temporary repairs and their maintenance.

The Contractor may not begin work at the start of each day within CN property until the E17.1.6 Add:

Protecting Foreman has advised the Contractor that protection is in place and job

briefings have been completed.

Revise: E17.7 to read: Down Time Related to Railway Operations

E17.7.1 to read: The Contractor shall anticipate down time each day for crane work or any equipment and Revise:

materials, such as drill rigs and steel casings, which could fall on CN property, whether working on or adjacent to CN property. With 15 to 20 trains a day, passing adjacent to the

project site, 140 to 200 minutes of down time within a 24-hour period is anticipated.

Add: E17.7.2 Down time related to trains is a function of the train operations and Contractor activities

> on any given day. The Protecting Foreman on-site will be advising the Contractor when they are required to shut down their operations and when it is safe to resume their

operations.

Add: E17.7.3 No measurement and payment shall be made for construction delays within the limits

specified in E17.7 Down Time Related to Railway Operations. Delays related to this Item.

of Work shall be considered incidental to the Work.

E17.8 Measurement and Payment Add:

Add: E17.8.1 No measurement and payment shall be made for the Work associated with Specification.

E23.7.8 Revise: During construction the Contractor may be required to dewater excavations. Dewatering

of excavations to be completed in accordance with E42. Discharge of the excess groundwater shall be to the existing 525 mm land drainage sewer located on the east side of the Plessis Road right-of-way upon its completion and pending City approvals. Should the 525 mm land drainage sewer connection to the north not be completed the Contractor may discharge to the 750 mm wastewater sewer located on the north side of Dugald Road pending City approvals. No measurement and payment of dewatering of

excavation will be made and shall be considered incidental to the Work.

E25.32 to read: Miscellaneous Materials and Dampproofing Revise:

Dampproofing materials shall be applied to all buried concrete surfaces in contact with E25.32.1 to read: Revise:

> the soil to within 300 mm of Finished Ground elevation, with the exception of those surfaces cast directly against the soil or in contact with prefabricated drainage composite. Dampproofing materials shall be mineral colloid emulsified asphalt complying with Canadian General Standards Board Specification No. 37.16-M89. Acceptable product is Bakelit/Flintguard 710-11 Foundation Coating as manufactured by Bakor, Elsro Fibrated Foundation Coating, Insulmastic 7103 Fibered Waterproofing, or equal as accepted by

the Contract Administrator, in accordance with B8.

E25.32.2 All damaged concrete, including tie holes to be filled with non-shrink grout prior to Add:

application of dampproofing.

Add: E25.32.3 Miscellaneous materials shall be of the type specified on the Drawings or as accepted by

the Contract Administrator, in accordance with B8.

Leveling pad shall be laminated fabric rubber such as Fabreeka, Sorbtex or equivalent. Revise: E28.4.8 (b) to read:

Revise: E28.6.1 (b) i) to read: Testing of complete bearings, as specified, shall be carried out in accordance with this

specification. The bearings shall be considered satisfactory when the results of the test

comply with this specification.

Revise: E31.3.3 to read: Painting System

- a) Uniformly tinted polyurethane seal coat shall be at least 60% solids, shall be compatible with the zinc metalizing and galvanizing, as accepted by the Contract Administrator. The Contractor shall provide a written statement clearly identifying that the proposed product is suitable for its intended use and is being applied in an acceptable manner prior to undertaking the work.
- b) Coating system shall be Amercoat 385 as tie coat/epoxy primer and intermediate coat, and Amercoat 450H as polyurethane topcoat.

Revise: E31.4.2 (a) to read: "Welcome to Transcona" signage, 350A steel backing plate installed behind the negative

cut letters: Color shall be flat black as approved by the Contract Administrator.

Revise: E31.4.2 (c) to read: Metallized areas at the girders ends: Color shall closely match the color of surrounding

weathering steel. A trial patch must first be accepted by the Contract Administrator

before the remainder of the surface is painted.

Revise: E31.5.1 to read: Clean all surfaces by removing paint, rust, mill scale, welding slag, dirt, oil, grease, and

other foreign substances by cleaning in accordance with the manufacturer's instructions.

Add: E31.5.7 For seal coat application, surface shall be rough. If surface is smooth, sand it down using

rough grit sandpaper.

Revise: E31.11.1 to read: The seal coat shall be applied in two coats of Amercoat 385 followed by a top coat of

Amercoat 450H with a Dry Film Thickness (DFT) of each coat as directed by coating manufacturer's instructions. DFT shall be checked and accepted by the Contract

Administrator.

Revise: E33.3.2 (a) to read: Continuous interlocking, flat web with minimum web thickness 9.5 mm and minimum

mass of 106.00 kg/m².

Revise: E33.3.2.(b) to read: Continuous interlocking (Z) section:

i) Minimum effective section modulus of 1300 cm³ per metre of wall.

ii) Minimum flange thickness of 9.5 mm.

iii) Minimum web thickness of 9.5 mm

Revise: E33.3.2.(c) to read: Sheet Piling: As manufactured by Piling Products, Inc., section designation PZC13 or in

accordance with B8 by Contract Administrator.

Add: E35.4.7 Stainless steel plates shall be free from "Free Iron". Protective adhesive film shall remain

on sign throughout fabrication and installation. Protective film shall only be removed after installation is complete. All stainless steel members are to be passivated and rinsed with water after installation as per ASTM A380/A380M – 13: Standard Practice for Cleaning,

Descaling, and Passivation of Stainless Steel Parts, Equipment, and Systems.

Delete: E82

Add: E99. Warning Signs

DESCRIPTION

E99.1 This Specification covers the supply and installation of permanent warning signs required to identify the presence of new pipelines at railway crossings.

MATERIALS

E99.2 Galvanized Steel Posts

- (a) 38 mm nominal diameter schedule 40 steel pipe conforming to the latest revision of CAN-Z245.1;
- (b) O.D. = 48.3 mm;
- (c) Wall thickness = 3.7 mm.

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E99.3 Warning Sign

(a) Aluminum sheet size as indicated on the drawings;

(b) Black lettering on white Type VIII retro-reflective sheeting (ASTM D4956).

CONSTRUCTION METHODS

E99.4 Install warning signs as indicated on the Construction Drawings.

MEASUREMENT AND PAYMENT

E99.5 Supply and installation of warning signs shall be measured on a unit basis and paid for at the Contract Unit Price for "Warning Signs". The number of units to be paid for will be the total number of warning signs supplied and installed in accordance with these specifications

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

DIVISION 40

Delete: 1.2.3.2 in Section 40 23 13.01

Replace: 2.1.4 in Section 40 23 13.01: Valves utilizing: Continuous rubber lining on the internal body surfaces

and extending over the flange seating area with interference fit to disk

when at a right angle to the axis of the pipe.

Replace: 2.2.3.1.2 in Section 40 23 13.01: Flanges to conform to ANSI/ASME B16.5-2013 Class 150 raised face.

Replace: Heading in Section 40 23 19.01: Process Pipe Hangers & Supports

Replace: 1.4.1 in Section 40 23 19.01: The intent of the drawings has been to indicate general arrangements

and typical spacing for pipe systems, but does not relieve the Contractor of the responsibility to provide a complete and adequate support system.

Replace: 1.5.3.3 in Section 40 23 19.01: Reaction forces due to the operation of pumps or valves.

Replace: 2.3.1.1 in Section 40 23 19.01: Anvil International Figure 260 and Figure 146.

Add: 2.3.3 in Section 40 23 19.01: Riser Clamp: Provide carbon steel pipe clamps with galvanized finish as

follows:

Add: 2.3.3.1 in Section 40 23 19.01: Anvil International: Figure 261 and Figure 146.

Add: 2.3.3.2 in Section 40 23 19.01: Taylor Pipe Supports #31Z and #54.

Replace: 2.4.1 in Section 40 23 19.01: Provide drill in seismic wedge type anchors.

Replace: 2.4.1.1 in Section 40 23 19.01: Overhead Trubolt+ Wedge anchors consisting of high-strength threaded

study body, expansion clip, coupling nut and washer"

Delete: 2.4.1.2. in Section 40 23 19.01

Add: 2.10 in Section 40 90 01 Building Pressure Alarm

Add: 2.10.1 in Section 40 90 01 A building pressure alarm shall be provided for the pumping station. If

PSL-100 indicates low building pressure and alarm condition within the PLC will be generated. If the door contacts for the exterior doors ZA-110 or generator room doors ZA-111 indicate a door or doors are open the alarm will remain local. If doors are closed, or if PSL-100 is indicating low pressure more than 5 seconds after door closure, a signal shall be sent to the McPhillips Control Centre indicating a low pressure condition, the 120 VAC entry alarm beacon shall activate and the 80 dB audible

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horn used with the building security system shall activate on for 1 second, off for 1 second. This alarm is required by code to maintain the control room free of hazardous gasses from the pumping station wetwell.

Add: 2.11 in Section 40 90 01 Remote Monitoring of Alarms

Add: 2.11.1 in Section 40 90 01 All alarms and conditions shown on the P&ID drawings shall be

configured to transmit to the McPhillips Control Center unless otherwise

indicated by the Contract Administrator."

DIVISION 43

Replace: 1.1.1 in Section 43 21 39.02: This Section specifies the provision and supervision of the installation,

testing and commissioning of submersible pumps including two (2) sump pumps (P-1400 and P-1500) and two (2) dry pond pumps (P-2100 and

P-2200).

Add: 2.8.4 in Section 43 21 39.02: Discharge elbow with integral foot base.

Replace: 1.1.1 in Section 43 21 43.01: This section specifies the provision and supervision of the installation,

testing and commissioning of three (3) submersible axial-flow pumps (P-1100, P-1200 and P-1300) with motors, vertical discharge columns,

alarm monitoring panel and power and signal cables.

Replace: 2.17.1 in Section 43 21 43.01: Provide one set of the following spare parts:

Delete: 2.17.2 in Section 43 21 43.01

DRAWINGS

Replace: 712-2013 _Drawing_U238-2014-2002-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2002-R1

712-2013 _Drawing_U238-2014-2011-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2011-R1

712-2013 Drawing U238-2014-2012-R0 with 712-2013 Addendum 4 -Drawing U238-2014-2012-R1

712-2013 _Drawing_U238-2014-2013-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2013-R1

712-2013 _Drawing_U238-2014-2015-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2015-R1

712-2013 _Addendum_2-Drawing_U238-2014-2016-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2016-R2

712-2013 _Addendum_2-Drawing_U238-2014-2020-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2020-R2

712-2013 Drawing U238-2014-2022-R0 with 712-2013 Addendum 4-Drawing U238-2014-2022-R1

712-2013 _Addendum_2-Drawing_U238-2014-2023-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2023-R2

712-2013 _Drawing_U238-2014-2025-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2025-R1

712-2013 _Drawing_U238-2014-2026-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2026-R1

712-2013 _Drawing_U238-2014-2027-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2027-R1

712-2013 _Drawing_U238-2014-2028-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2028-R1

- 712-2013 _Drawing_U238-2014-2029-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2029-R1
- 712-2013 _Addendum_2-Drawing_U238-2014-2201-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2201-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2202-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2202-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2203-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2203-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2204-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2204-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2205-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2205-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2206-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2206-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2271-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2271-R1
- 712-2013 _Addendum_2-Drawing_U238-2014-2272-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2272-R1
- 712-2013 _Addendum_2-Drawing_U238-2014-2273-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2273-R1
- 712-2013 _Addendum_2-Drawing_U238-2014-2274-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2274-R1
- 712-2013 _Addendum_2-Drawing_U238-2014-2275-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2275-R1
- 712-2013 _Drawing_U238-2014-2305-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2305-R1
- 712-2013 _Drawing_U238-2014-2309-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2309-R2
- 712-2013 _Drawing_U238-2014-2322-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2322-R1
- 712-2013 _Drawing_U238-2014-2323-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2323-R1
- 712-2013 Drawing U238-2014-2357-R0 with 712-2013 Addendum 4 -Drawing U238-2014-2357-R1
- 712-2013 _Addendum_2-Drawing_U238-2014-2358-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2358-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2359-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2359-R2
- 712-2013 _Drawing_U238-2014-2371-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2371-R1
- 712-2013 _Drawing_U238-2014-2372-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2372-R1
- 712-2013 _Drawing_U238-2014-2373-R0 with 712-2013 _Addendum_4 -Drawing_U238-2014-2373-R1
- 712-2013 _Addendum_2-Drawing_U238-2014-2374-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2374-R2
- 712-2013 _Addendum_2-Drawing_U238-2014-2375-R1 with 712-2013 _Addendum_4 -Drawing_U238-2014-2375-R2

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Delete: 712-2013 _Drawing_U238-2014-2115-R0

712-2013 _Drawing_U238-2014-2116-R0