



## 473-2016 ADDENDUM 2

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

#### **URGENT**

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

ISSUED: February 8, 2017  
BY: David Wiebe, P.Eng.  
TELEPHONE NO. 204 453-2301

**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\_1-Bid Submission with 473-2016\_Addendum\_2-Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

Form B(R2): Add Line Items: E.45, E.46, and G.14iv)

Revise Line Items: A.66i) and ii), B.47i) and ii), B.52, C14 ii), G.9i)a), G.13i), H.1ii)a), H.2i), H.4ii), H.5ii)b),c), and d), H.5iii)c) and P.1 – P.30

Delete Line Items: A.23, A.24, A.24i), D.3, H.1ii)b), and H.5i)b)

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

#### **PART D – SUPPLEMENTAL CONDITIONS**

Revise: D23.2 to read: The Contractor shall submit a Site Plan for Phase I of the Work to the Contract Administrator with:

- (a) access points from public roads to laydown areas;
- (b) construction access crossings of the rail lines (if any);
- (c) fenced laydown area locations including gates;
- (c) **confirmation that parked equipment, materials, temporary works, or other items will not be permitted to block sightlines of motorists to rail crossing controls (flashing lights, bells, and gates) to the satisfaction of the Contract Administrator;**
- (d) staging areas for various types of work (Undergrounds, Rail, Roadworks, etc.); and
- (e) office facility locations with power supply, for both the Contractor and Contract Administrator.

#### **PART E – SPECIFICATIONS**

Add: E35.1.8 Pole locations shall be designed so as not to block sightlines for motorists to rail crossing controls (flashing lights, bells, and gates).

- Revise: E39.1.1(a) to read: This Specification covers all operations relating to the ~~supply~~ **pick-up** and installation of benches and waste receptacles along the Active Transportation pathway.
- Revise: E39.2.1(a) to read: The Contractor shall be responsible for the **supply pick-up**, safe storage and handling of **all benches and waste receptacles** ~~all materials~~ set forth in this Specification ~~and~~ ~~All materials supplied under this Specification~~ shall be subject to inspection and acceptance by the Contract Administrator.
- Revise: E39.2.2(a) to read: Bench: Tache Style Composite Bench with Arm Rests - **cedar tone, galvanized**, as per SCD-121A, Product #52501085**GLV**, or substitute approved in accordance with ~~Substitution procedures~~ **B8**.
- Revise: E39.2.2(b) to read: ~~Trash-Waste~~ Receptacle: Metal Slat Type - **galvanized**, as per SCD-119, Product #52501063**GLV** with Wire Basket, Product #52501058**GLV**, or substitute approved in accordance with ~~Substitution procedures~~ **B8**.
- (i) Contact for Bench and ~~Trash-Waste~~ Receptacle **pick-up**:  
Todd Hendry, 204-470-4834 (THendry@winnipeg.ca) or  
Derrick Downey, 204-391-2860 (DDowney@winnipeg.ca) or  
Marc Laurin, 204-479-5489 (MLaurin@winnipeg.ca)  
Centralized Park Services  
City of Winnipeg  
960 Thomas Ave  
Winnipeg MB R2L 2E1  
~~Aaron Lennon, 204-986-5505~~  
Supervisor of Central Repair/Manufacturing Facility  
City of Winnipeg  
Fleet Management Agency Division  
Public Works Department  
215 Tecumseh St.  
Winnipeg, MB R3E 3S4  
Email: ALennon@winnipeg.ca
- Add: E39.2.3 All fasteners shall be galvanized.
- Revise: E39.3.1 to read: Benches and ~~Trash-Waste~~ Receptacles
- (a) Install benches and ~~trash waste~~ receptacles with in-ground mountings as indicated on the Construction Drawings **and following manufacturer's instructions, using approved vandal resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work.**
- (b) **All furnishings and fixtures to be installed plumb and true. Locations to be confirmed by Contract Administrator prior to installation.**
- (c) **All furnishings and fixtures to be carefully handled so that no parts shall be bent, broken, or otherwise damaged.**
- Revise: E39.4.1 to read: Benches and ~~Trash-Waste~~ Receptacles
- (a) Benches and ~~trash waste~~ receptacles will be measured on a unit basis and paid for at the Contract Unit Prices, each, for "Bench (**pick-up and installation only**)" and "Waste Receptacle (**pick-up and installation only**)", which prices shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the work included in this Specification, accepted and measured by the Contract Administrator.
- Revise: E40.1.1(a) to read: The work covered under this item shall include all operations related to supply and installation of:
- (i) New chain link fencing;

(ii) **New chain link fencing with conspicuity rail;**

(iii) Chain link baseball backstop; and,

(iv) New ornamental fencing.

Revise: E40.2.1(a) to read: The Contractor shall submit to the Contract Administrator for review and approval, at least Ten (10) Business Days prior to the scheduled commencement of any fabrication, the proposed Shop Drawings showing fabrication details of:

(i) All chain link gates;

(ii) **Conspicuity rail and bracket;**

(iii) Chain link baseball backstop; and,

(iv) New ornamental fencing.

Revise: E40.3.2(b)(ii) to read: Chain link fencing to be 1.83 m in height **complete with conspicuity rail** and supplied in accordance with CW 3550.

Revise: E40.5.1(a) to read: Chain Link Fencing will be measured for payment on a linear basis and paid for at the Contract Unit Price per metre for "Chain Link Fencing 1.22 m height", ~~and~~ "Chain Link Fencing 1.83 m height" **and "Chain Link Fencing 1.83 m height with Conspicuity Rail"** which prices shall be payment in full for supplying all materials and for completing all operations herein described and all other items incidental to the Work included in this Specification, accepted and measured by the Contract Administrator.

Delete: E52

Revise: E57.5.2 to read: General Staging and Construction Requirements

(a) Construct the Underpass Structure generally in accordance with the requirements identified on the Drawings.

**(b) Construction dewatering system in accordance with the Water Management Plan as described in D22 and accepted by Contract Administration shall be in place and complete with approved water disposal procedure prior to the commencement of any excavation or shoring operation to control groundwater, facilitate, and allow construction in the dry.**

(c) Prepare and submit a Structural Excavation and Shoring Safe Working Plan **including construction dewatering system** to the Contract Administrator for review a minimum of two (2) weeks prior to the commencement of this work.

(d) Prior to commencing excavation operations, install sediment control fencing or other such erosion control structures to prevent sediment-laden runoff from leaving the job Site and entering the City land drainage system. The sediment control fencing shall remain in place until all construction activities are complete.

(e) Complete excavations in accordance with the approved Excavation Plan and to the elevations and dimensions shown on the Excavation Plan or to adjusted elevations as directed by the Contract Administrator in order to obtain a firm, stable foundation.

(f) Dewater excavations so that construction of the underpass is completed in the dry. Keep the bottom of excavations free from excessive moisture or free-flowing water.

(g) Handle, store and dispose of excavated materials in accordance with the Environmental Protection Plan as described in D21 and accepted by the Contract Administrator.

Revise: E61.3.14 to read: Architectural Formwork Liner

**(a) Architectural formwork liner is not required.**

- Revise: E63.7.2(b) to read: The Contractor shall guarantee in writing, the performance of the bearings for a period of five (5) years from the date **of bearing installation** ~~issuance of the Total Performance~~. Provided in the guarantee for the replacement of the bearings at no cost to the City of Winnipeg in the event that the bearings do not perform satisfactorily in the range of design movement and under the design loads.
- Revise: E64.4.7(a) to read: The following areas shall be zinc metallized with a minimum coating of 0.25 mm in accordance with AWS C2.23-03/SSPC-CS 23.00.
- (i) ~~Girders bottom flanges, to the extent shown on the Drawings.~~ **Girder metallizing is not required.**
- Revise: E70.8.1(a) to read: the Supply, Fabrication and Erection of Miscellaneous Metal are considered incidental to the Items of Work referencing this Specification and no separate measurement or payment will be made, **except as specified herein.**
- Revise: E72.1.2(a) to read: Refer to Drawing C2-~~CTS~~-062 and 063.
- Revise: E72.2.1(a) to read: Refer to Drawing C2-~~CTS~~-062 and 063.
- Revise: E72.3.1(a) to read: Refer to Drawing C2-~~CTS~~-062 and 063.
- Delete: E91

## **DRAWINGS**

- Replace: 473-2016\_Drawing\_C2-BB-002-R0 with 473-2016\_Addendum\_2-Drawing\_C2-BB-002-R1
- 473-2016\_Drawing\_C2-BB-401-R0 with 473-2016\_Addendum\_2-Drawing\_C2-BB-401-R1
- 473-2016\_Drawing\_C2-BC-001-R0 with 473-2016\_Addendum\_2-Drawing\_C2-BC-001-R1
- 473-2016\_Drawing\_C2-BS-002-R0 with 473-2016\_Addendum\_2-Drawing\_C2-BS-002-R1
- 473-2016\_Drawing\_C2-BS-005-R0 with 473-2016\_Addendum\_2-Drawing\_C2-BS-005-R1
- 473-2016\_Drawing\_C2-BS-006-R0 with 473-2016\_Addendum\_2-Drawing\_C2-BS-006-R1
- 473-2016\_Drawing\_C2-BS-102-R0 with 473-2016\_Addendum\_2-Drawing\_C2-BS-102-R1
- 473-2016\_Addendum\_1\_Drawing\_C2-CT-011-R1 with 473-2016\_Addendum\_2-Drawing\_C2-CT-011-R2
- 473-2016\_Drawing\_C2-CT-048-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CT-048-R1
- 473-2016\_Addendum\_1\_Drawing\_C2-CT-066-R1 with 473-2016\_Addendum\_2-Drawing\_C2-CT-066-R2
- 473-2016\_Drawing\_C2-CU-020-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-020-R1
- 473-2016\_Drawing\_C2-CU-021-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-021-R1
- 473-2016\_Drawing\_C2-CU-022-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-022-R1
- 473-2016\_Drawing\_C2-CU-023-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-023-R1
- 473-2016\_Drawing\_C2-CU-024-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-024-R1
- 473-2016\_Drawing\_C2-CU-025-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-025-R1
- 473-2016\_Drawing\_C2-CU-026-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-026-R1
- 473-2016\_Drawing\_C2-CU-034-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-034-R1
- 473-2016\_Drawing\_C2-CU-037-R0 with 473-2016\_Addendum\_2-Drawing\_C2-CU-037-R1

473-2016\_Addendum\_1\_Drawing\_C2-GE-039-R1 with 473-2016\_Addendum\_2-Drawing\_C2-GE-039-R2  
473-2016\_Addendum\_1\_Drawing\_C2-GE-041-R1 with 473-2016\_Addendum\_2-Drawing\_C2-GE-041-R2  
473-2016\_Addendum\_1\_Drawing\_C2-GE-042-R1 with 473-2016\_Addendum\_2-Drawing\_C2-GE-042-R2  
473-2016\_Addendum\_1\_Drawing\_C2-GE-044-R1 with 473-2016\_Addendum\_2-Drawing\_C2-GE-044-R2  
473-2016\_Addendum\_1\_Drawing\_C2-GE-048-R1 with 473-2016\_Addendum\_2-Drawing\_C2-GE-048-R2  
473-2016\_Addendum\_1\_Drawing\_C2-GE-051-R1 with 473-2016\_Addendum\_2-Drawing\_C2-GE-051-R2  
473-2016\_Addendum\_1\_Drawing\_C2-GE-052-R1 with 473-2016\_Addendum\_2-Drawing\_C2-GE-052-R2  
473-2016\_Drawing\_C2-LS-011-R0 with 473-2016\_Addendum\_2-Drawing\_C2-LS-011-R1  
473-2016\_Drawing\_C2-LS-021-R0 with 473-2016\_Addendum\_2-Drawing\_C2-LS-021-R1

## **NMS SPECIFICATION**

### **Section 05 50 00**

Replace: 2.1.5 to read: Aluminum to requirements of CSA-S157, 6061-T6 or 6063-T6 aluminum alloy. Mill finish. Structural design based on Alcan structural shapes.

### **Section 26 05 25**

Add: 2.1.4 Rigid PVC conduit: to CSA C22.2 No. 211.2.

Replace: 3.1.4 to read: Use epoxy coated conduit or rigid PVC conduit under, in concrete, and in Category 2 locations.

Replace 3.4.1 to read: Use epoxy coated conduit or PVC conduit.

Replace 3.5.1 to read: Use epoxy coated conduit or PVC conduit.

## **ATTACHMENTS**

473-2016\_Addendum\_2\_Reference\_Drawings\_REF-CT-070-R0

473-2016\_Addendum\_2\_Attendance\_List\_Waverley-Bidder's-Conference-R0

## **QUESTIONS AND ANSWERS**

The following questions were asked at the Non-Mandatory Bidder's Conferences on January 26, 2017 and February 2, 2017.

### **1.0 January 26, 2017 Non-Mandatory Bidder's Conferences Questions and Answers**

Q1.1. Are there defined limits for the Parts of the Work (A, B, C, etc.) listed in Form B: Prices and in D2?

A1.1. To assist bidders, reference drawing REF-CT-070 (3 pages) has been created and is part of Addendum 2 and is attached as 473-2016\_Addendum\_2\_Reference\_Drawings\_REF-CT-070-R0. In addition, limits can be inferred through the Part description titles and through the "BGSA" definition in D3.1(e).

Q1.2. Can you provide the Addenda schedule?

A1.2. Addendum 1 is currently being drafted and will be issued by the week of January 30, 2017. Addendum 2 will be issued after the February 2, 2017 Bidder's Conference. Additional addenda to be issued as necessary.

- Q1.3. Steel girders are to be hot-dip galvanized and bottom flange exposed surfaces are to be painted. Is girder metallizing also required?
- A1.3. Refer to Addendum 2 clause E64.4.7(a)(i) above.
- Q1.4. Are girder field splices permitted?
- A1.4. Girder field or shop splices are not permitted.
- Q1.5. Groundwater depressurization clarification. Is the groundwater depressurization necessary for the bridge excavation or just the Pumping Station?
- A1.5. Groundwater depressurization as described in E104 is not applicable to the "bridge excavation". Instead, the successful contractor should come up with a dewatering plan for those areas as per D22. This is clarified in Addendum 2.
- Q1.6. Are all major rail work by CN?
- A1.6. The earthwork and embankments up to the subballast surface are the responsibility of the Contractor. Track, ties, Ballast, etc. and rail related signal work by CN.
- Q1.7. The Common Excavation is a much smaller number than the Fill Material (An example of Item B.1 vs. B.10 in Form B: Prices was discussed at conference). Why?
- A1.7. In general, there is more earth material to remove from the project site than to place as fill material due to the nature of the underpass. Note that the definition and thus scope of "Common Excavation", "Fill Material" and other earthwork items have been modified by E19 from their respective City of Winnipeg standard specifications as noted in Form B: Prices.
- Q1.8. Staging Drawings – please clarify when the final lift of asphalt occurs.
- A1.8. Final lifts of asphalt can be placed during appropriate stages of work (i.e., The final lift for the eastbound lanes of Taylor Avenue can be placed in Phase II – Stage 2 as indicated in Major Construction Activities Item #4 on Drawing C2-GE-038). The exception to this is the final lift of asphalt on Waverley Street in the vicinity of the Wilkes intersection is noted in Major Construction Activities Item #1 on Drawing C2-GE-052.
- Q1.9. B.11.1.1 – it states that MRST will be applicable. Please clarify.
- A1.9. Within this Bid Opportunity, MRST that is applicable to mechanical and electrical works under items N.3 to N.5 of Part B: Prices is to be included as line item N.12 in Form B: Prices. For all other items, as is typical practice, applicable PST is to be included in unit prices. GST is extra in all cases and is not part of the bid price.
- Q1.10. Are there road cross-sections available in a similar format to rail drawings C2-CR-301 to 315?
- A1.10. No. Typical road cross-sections are shown in drawings C2-CT-067 to 74.
- Q1.11. Regarding weekend related works. Is CN in agreement with the weekend works indicated in D31 Critical Stages and the Staging Drawings?
- A1.11. CN is a stakeholder in the project and is aware of the weekend works and their participation in the project. A formal agreement including critical dates between the City of Winnipeg and CN is being worked out. Note that not all weekend closures are dependent on CN work. (see next question).
- Q1.12. What specific work does CN do for each weekend closure?
- A1.12. 1.First weekend closure. Refer to Staging Drawings C2-GE-030 to 31. No CN work.  
2.Second weekend closure. Refer to Staging Drawing C2-GE-41. CN to reconstruct crossing.  
3.Third weekend closure. Refer to Staging Drawings C2-GE-46-48. No CN work.

## 2.0 February 2, 2017 Non-Mandatory Bidder's Conferences Questions and Answers

- Q2.1. Re: D37.2(b) and (c) - References to "no extension to time will be given for....". Do these clauses also refer to delays by others in D31?
- A2.1. These clauses are only applicable to Accelerated Completion noted in D37. Also note D37.2(d) that the final determination of compensable acceleration or delay is at the discretion of the Contract Administrator. Delays due to work by others would be considered by the Contract Administrator as part of the final determination.
- Q2.2. Re: D45.1 Warranty. Some of the warranty periods in other specifications are not clear on when the warranty starts, for example bearings and expansion joints. What date does the warranty begin for those items?
- A2.2. E63.7.1 notes the bearing fabrication warranty period of five (5) years begins on the date of bearing installation. In recognition that Total Performance for this project is likely one to two years after the bridge is complete, E63.7.2 will be changed in Addendum 2 to also start the installation warranty of five (5) years on the date of bearing installation.
- Q2.3. Re: D31 - Critical dates. As all CN tasks are critical paths, dates for CN work are needed for the Contractor's coordination and available timelines. Will these CN dates be provided?
- A2.3. This question is being further reviewed and clarification may be provided in an upcoming addendum.
- Q2.4. Re: D31.1(b)(i). Mainline Railway Embankment to be complete by July 23, 2018. How much of the Railway Embankment needs to be completed for CN to begin their work.
- A2.4. The clause should be taken to mean the entire embankment needs to be completed except for areas that cannot be completed in the immediate vicinity of the detour road and bridge structure due to staging. Hence there is a separate critical date for bridge structure completion and weekend raising of tracks in D31.1(b)(ii) and (iii) respectively.
- Q2.5. E53 – Cash Allowance for Irrigation Systems. There is no cash allowance value listed under Item B.52 of Form B: Prices.
- A2.5. This item will be addressed and included in Addendum 2. A value will be added.
- Q2.6. E91 Watermain Casing- There is no method of measurement and payment for Watermain Casing
- A2.6. The casing is no longer required as this specific watermain has been eliminated from the work in Addendum 2.
- Q2.7. Re: E111 Roadside Safety in Close Proximity to Pumping Station Excavation - Is the contractor responsible for crash protection during the shoring of the Pumping Station? Will the City of Winnipeg provide concrete barriers for crash protection?
- A2.7. Yes, protection is the Contractor's responsibility. The Contractor is responsible for providing and installing roadside safety mitigation measures (which could include concrete barriers) as necessary.
- Q2.8. Will landscaping completion be tied to the Phases and Stages during the project or is it to be done closer to the end of construction?
- A3.8. See drawing C2-GE-025 – General Construction Staging Notes – Note 10: "Landscaping occurs throughout project as areas are final graded. Do not seed rail embankments until track construction is complete".
- Q2.9. What is the timing for the next Addendum?
- A2.9. See A1.2 under Questions and Answers.
- Q2.10. Is there any thought of an extension to the bid close date?
- A2.10. Not at this time.