



1045-2019B ADDENDUM 2

JEFFERSON EAST COMBINED SEWER RELIEF – CONTRACT 5 – SEMPLER TRUNK SEWER

URGENT

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

ISSUED: January 30, 2020
BY: Jordan Thompson
TELEPHONE NO. 204 477-5381

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

Template Version: A20190115

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Tender, 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: 1045-2019B Bid Submission with 1045-2019B Addendum 2 - Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

- Form B(R1): A.3 a) i) Revised quantity 51 to 64.
- Form B(R1): Add Item A.9.
- Form B(R1): Add Item A.14.
- Form B(R1): A.18 c) Revised quantity 10 to 20.
- Form B(R1): B.1 a) Revised Unit to each.
- Form B(R1): B.1 b) Revised Unit to each.
- Form B(R1): Add Item B.2.
- Form B(R1): D.1 Revised Unit to day. Revised quantity to 5.
- Form B(R1): Remove Item D.1(a) and D.1(b).

Page numbering on some forms may be changed as a result. Item numbers changed as a result of addition.

PART E – SPECIFICATIONS

Revise: E1.4 to read: (Note: LD-9619 Drawing Title Change)

The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
LD-9593	COVER SHEET
LD-9594	INDEX PAGE
LD-9595	GENERAL PLAN
LD-9596	McKENZIE STREET LAYDOWN AREA
LD-9597	McGREGOR STREET LAYDOWN AREA
LD-9598	ANDREWS STREET LAYDOWN AREA
LD-9599	POWERS STREET LAYDOWN AREA

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
LD-9600	SALTER STREET LAYDOWN AREA
LD-9601	AIKINS STREET LAYDOWN AREA
LD-9602	MAIN STREET LAYDOWN AREA
LD-9603	SCOTIA STREET LAYDOWN AREA
LD-9604	SEMPLE AVENUE – C.P.R. WINNIPEG BEACH SUBDIVISION R.O.W. TO 170m WEST OF MCGREGOR STREET
LD-9605	SEMPLE AVENUE – 9m EAST OF MCKENZIE STREET TO 71m WEST OF MCGREGOR STREET
LD-9606	SEMPLE AVENUE – 108m EAST OF MCKENZIE STREET TO 147m WEST OF ANDREWS STREET
LD-9607	SEMPLE AVENUE – 34m EAST OF MCGREGOR STREET TO 22m WEST OF ANDREWS STREET
LD-9608	SEMPLE AVENUE – 160m EAST OF MCGREGOR STREET TO 99m WEST OF POWERS STREET
LD-9609	SEMPLE AVENUE – 83m EAST OF ANDREWS STREET TO 175m WEST OF SALTER STREET
LD-9610	SEMPLE AVENUE – 6m EAST OF POWERS STREET TO 70m WEST OF SALTER STREET
LD-9611	SEMPLE AVENUE – 111m EAST OF POWERS STREET TO 147m WEST OF AIKINS STREET
LD-9612	SEMPLE AVENUE – 31m EAST OF SALTER STREET TO 27m WEST OF AIKINS STREET
LD-9613	SEMPLE AVENUE – 151m EAST OF SALTER STREET TO 123M WEST OF MAIN STREET
LD-9614	SEMPLE AVENUE – 78m EAST OF AIKINS STREET TO 13m WEST OF MAIN STREET
LD-9615	SEMPLE AVENUE – 188m EAST OF AIKINS STREET TO 213m WEST OF SCOTIA STREET
LD-9616	SEMPLE AVENUE – 62m EAST OF MAIN STREET TO 88m WEST OF SCOTIA STREET
LD-9617	SEMPLE AVENUE – 187m EAST OF MAIN STREET TO SCOTIA STREET
LD-9618	MCKENZIE STREET – KILBRIDE AVENUE TO SEMPLE AVENUE
LD-9619	MANHOLE CHAMBERS – VARIOUS LOCATIONS
LD-9620	FUTURE MANHOLE CONNECTIONS – VARIOUS LOCATIONS
LD-9621	STANDARD DETAILS – MONITORING AND INSTRUMENTATION
LD-9622	STANDARD DETAILS – TWO-PASS TUNNELING & PIPE INSTALLATION

<u>Appendix</u>	<u>Title</u>
A	Geotechnical Data Report
B	Geotechnical Baseline Report

Add:	E4.5(a)(ii)	RCP designs, as per E24.3.1.
Add:	E4.5(a)(iii)	RCP shop drawings, as per E24.3.2.
Add:	E4.5(a)(iv)	FGP designs, as per E25.3.2.
Add:	E4.5(a)(iii)	FGP shop drawings, as per E25.3.2.
Revise:	E8.5 to read:	Maintain access for approaches, driveways, and public lanes. Request temporary closures if required. Homeowner access to driveways and garages, and access for waste collection services must be accommodated during temporary closures.
Revise:	E13.2(a) to read:	The Contractor will receive compensation for encountered geotechnical conditions that are materially different than those identified in the Geotechnical Baseline Report and as defined in D26 and D28 during construction of tunnelling construction shafts and the tunnelling work. Compensation shall be paid for from the allowance under the Contract unit price for “Change in Contract Conditions”.

Revise: E13.2(b) to read: Daily costs for all equipment, including but not limited to TBM and associated equipment, soil extraction and process plants, other trenchless construction equipment, cranes, construction vehicles, trucks, storage facilities, rental equipment, site offices, and all other ancillary equipment required to undertake the Tunnelling Work belonging to the Contractor or their sub-contractor's shall be paid for at the daily rate under the contract unit price of "Daily Equipment Rate". Equipment costs for the first four (4) hours for each occurrence relating to conditions differing from those defined in the GBR shall be the responsibility of the Contractor, after which the "Daily Equipment Rate" will apply.

Revise: E15.2 to read: Materials

(a) Surface Monitoring Point (SMP)

- (ii) SMPs shall be installed at the location shown on the Contract Drawings or as approved by the Contract Administrator.
- (iii) Details of installation are shown on the Drawings.
- (iv) After completion of installation, determine as-built location of the surface box in the horizontal and vertical position. Accuracy of the position measurements shall be +/-100 mm and +/-5 mm for horizontal and vertical positions, respectively.

(b) Utility Monitoring Point (UMP)

- (i) UMPs shall be installed at the location shown on the Contract Drawings or as approved by the Contract Administrator.
- (ii) Details of installation are shown on the Drawings.
- (iii) Installation shall be by vacuum excavation or hand excavation to minimize disturbance to adjacent utilities and infrastructure and to protect instrumented utility from damage.
- (iv) After utility is exposed, clean the area where extensometer rod will be placed. Bottom of extensometer rod and utility should be in direct contact.
- (v) Install PVC riser pipe on exposed utility and backfill the annulus surrounding the pipe with sand. Provide a seal surrounding the riser pipe at the interface with the exposed utility to prevent migration of sand into the riser pipe.
- (vi) Insert rebar into PVC riser pipe such that bottom of rod is in direct contact with exposed utility. Center the rebar as necessary to prevent contact with walls of the riser pipe. Adjust the rebar length as necessary to allow depth to exposed utility and to allow sufficient rebar length for installation of head assembly within flush mounted surface box.
- (vii) Install reference head assembly. Apply mastic sealant between riser pipe and surface box to prevent migration of sand and/or grout into the riser pipe. Backfill below surface box with a minimum thickness of 150 mm Portland cement grout.
- (viii) Adjust position of surface box prior to grout set to allow sufficient clearance between grout surface and flanges to allow for access.
- (ix) After completion of installation, determine as-built location of the surface box in the horizontal and vertical position. Accuracy of the position measurements shall be +/-100 mm and +/-5 mm for horizontal and vertical positions, respectively.

(c) Building Monitoring Point (BMP)

- (i) BMPs shall be installed at the location shown on the Contract Drawings or as approved by the Contract Administrator.
- (ii) Building/Structure Monitoring Point: Structural monitoring points shall be established by an inscribed marking or approved prism mounted securely to the structure.
- (iii) Each control point shall have a tag or marking indicating the identification number and offset from centerline.

- Revise: E15.5(e)(i)(i) to read: Existing Buildings:
- Review Level: 2 mm
 - Alert Level: 4 mm
- Revise: E15.5(e)(i)(ii) to read: Utility Monitoring Points:
- Review Level: 6 mm
 - Alert Level: 12 mm
- Revise: E15.5(e)(i)(iii) to read: Surface Monitoring Points:
- Review Level: 12 mm
 - Alert Level: 20 mm
- Revise: E15.5(e)(ii) to read: When the instruments indicate movement equal to the Review Level, the Contractor shall actively control ground movement in accordance with the reviewed plan to prevent reaching the Alert Level and meet with City to discuss the construction means and methods to determine what changes, if any, shall be made to better control ground movement. Instrument readings shall be required on a daily basis until readings remain unchanged for five (5) consecutive days.
- Revise: E15.5(e)(iii) to read: When the instruments indicate movement equal to the Alert Level, the Contractor may be directed to suspend activities in the affected area with the general exception of those actions necessary to avoid reaching or exceeding the Alert Level.
- Delete: E15.5(e)(iv)
- Revise: E15.5(f) to read: Duration of Monitoring
- (i) Settlement monitoring shall commence prior to excavation for the tunnelling shaft construction.
 - (ii) The monitoring schedule shall be as indicated on the Drawings.
- Revise: E16.1(b) to read: Depending on the means and methods chosen by the Contractor, implementation of vibration monitoring may or may not be necessary. Implementation of vibration monitoring will be required if the Contractor's proposed means and methods of construction utilize techniques that could induce potentially harmful or damaging vibrations. A determination as to whether or not vibration monitoring will be required will be made by the Contract Administrator following submission and review of the Contractor's planned means and methods of executing the Work.
- Revise: E16.1(d) to read: While a current by-law on acceptable vibrations does not exist for the City of Winnipeg, the monitoring data should be compared to the California Department of Transportation and Construction Vibration Guidance Manual (September 2013) which presents probabilistic damage thresholds.
- Revise: E16.6(a) to read: Building inspections as specified herein shall be measured on a unit basis and paid for at the Contract unit price for "Building Inspection".
- Revise: E16.6(b) to read: Vibration monitoring as specified herein shall be measured on a unit basis and paid for at the Contract unit price for "Vibration Monitoring".
- Delete: E16.6(c)
- Revise: E17.2.3(a)(i) to read: Natural Gas: The City will arrange and pay for a maximum of three 50 mm natural gas relocations to accommodate shaft construction only. Costs associated with additional relocations required to facilitate construction shall be borne by the Contractor.

Revise: E23.5.3(b) to read: TBM Operator: Experience requirements include the construction and completion of a minimum of three (3) pipeline projects installed by tunnelling methods, each with at least 300 m of tunneling. At least one of the projects shall have a minimum drive length of 60 percent of the proposed maximum drive length for installed pipe 1800 mm or larger. The reference projects shall have been completed in the previous 5 years prior to the bid date. At least one of the referenced projects shall include the installation and use of an IJS. The TBM operator shall also have:

- (i) Operated a TBM similar to the one proposed.
- (ii) Utilized the same type of pipe material as that used for the jacking pipe on this project.
- (iii) Successfully completed a project in similar ground conditions to those contained in the GBR.
- (iv) Operator for drives using a structural pipe monitoring system, if required, shall demonstrate experience with the system, else documentation of manufacturer recommended training will be required at no additional cost to City.

Delete: E24.5.1(e)(v)

Revise: E25.2(f) to read: Minimum pipe internal diameters shall be:

- i) 1800 mm (nominal): 1780 mm
- ii) 2100 mm (nominal): As per the drawings.
- iii) The Contractor will be permitted to upsize pipe diameter to accommodate tunneling equipment or to facilitate construction in a single drive. All costs for increasing pipe size to accommodate Contractors selection of tunneling equipment or methods of installation shall be borne by the Contractor.

Revise: E26.3(b)(i) to read: The connection of the catch basin leads shall be installed as shown on Drawings.

DRAWINGS

Replace: 1045-2019B_Drawing_LD-9619-R0 with 1045-2019B_Addendum_2-Drawing_LD-9619-R1

Reasons for revisions:

Added details for manhole chambers at McKenzie Street and Andrews Street.