



286-2024B ADDENDUM 2

FERRY ROAD AND RIVERBEND COMBINED SEWER RELIEF – CONTRACT 6

URGENT

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

ISSUED: 2025-01-24
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**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID/PROPOSAL AND SHALL FORM
A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2024-02-01

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

PART B – BIDDING PROCEDURES

Revise: B2.1 to read: The Submission Deadline is 12:00 noon Winnipeg time, February 13, 2025.

PART D – SUPPLEMENTAL CONDITIONS

Revise: D21.1 to read: The Contractor shall achieve Substantial Performance by October 31, 2026.

Revise: D22.1 to read: The Contractor shall achieve Total Performance by June 30, 2027.

Revise: Specification D23: Subclause D23.1 - Replace all instances of 'Working Day' with 'Calendar Day'.

Revise: Specification D34: Subclause D34.4 - Replace all instances of 'Working Day' with 'Calendar Day'

PART E – SPECIFICATIONS

Remove Specification E32 in its entirety and replace with:

E32. MONITORING AND REPAIR OF WEST END FEEDER MAIN AT TUNNEL CROSSING

E32.1 Description

E32.1.1 This specification shall cover the potential repair of the 900 mm circa 1985 Prestressed Concrete Cylinder Pipe (PCCP) West End Feeder Main at the north boulevard of Silver Avenue. A proposed design to expose and stabilize the feeder main pipe against settlement was deemed to have too many risks of inadvertent damage to the pipe. Instead, the pipe will be inspected internally before and after tunnelling by the City of Winnipeg under a separate contract and the feeder main and nearby roadway and ground monitored for settlement in accordance with Specification E42 Instrumentation and Monitoring.

E32.2 Methods

E32.2.1 The City of Winnipeg will undertake an electromagnetic internal monitoring and pipe wall assessment of the feeder main prior to the commencement of shaft construction and tunnelling near the feeder main. This will be done as part of another ongoing contract with Pure Technologies. The results of this monitoring in the vicinity of the proposed tunnel and feeder main undercrossing will be provided to the Contractor for their information.

E32.2.2 Demolition of the St. James Rod's driveway approach and removal to be in accordance with E31.

- E32.2.3 Contact the Water Services Division to request that the feeder main be placed on reduced pressure.
- E32.2.4 Install Surface Monitoring Markers (SMM) and Utility Monitoring Points (UMP) in accordance with E42 and as shown on the drawings.
- E32.2.5 Undertake tunnelling, contact grouting and related works.
- E32.2.6 Contact the Water Services Division to request that the feeder main be returned to normal operating pressure. Observe the area for potential leaks and undertake an emergency shutdown and leak repair if leakage is found.
- E32.2.7 The City of Winnipeg will undertake a repeat internal monitoring and pipe wall assessment of the feeder main following completion of the tunnelling and contact grouting near the feeder main crossing. These results and a comparison of before and after conditions will be provided to the Contractor.
- E32.2.8 If settlement measured at the any of the three Utility Monitoring Points near the feeder main exceeds 10 mm based on 5 days repeat measurements, the Contractor shall expose and repair mortared joints in the vicinity of the crossing as indicated in the following subclause. The theoretical settlement prediction on ground surface at the tunnel centreline is 20 mm.

E32.2.9 Repair of existing mortared joints

- (a) Identify the location of pipe joints near the tunnel. Based on the pipe laying schedule (City of Winnipeg drawing F-1716) there are three (3) feeder main joints within 10 m of the tunnel crossing as shown in the following table. For reference, the proposed tunnel centreline would be Station 33+94.18m based on the 1985 feeder main stationing (drawing D-1586) and 7.3 m (24 foot) pipes.

Feeder Main Station (Drawing D-1586)	Distance from Tunnel Centreline
33+89.42m	4.76m (west)
33+96.74m	2.56m (east)
34+04.07m	9.89m (east)

- (b) Expose and repair of pipe joints does not need to be completed immediately following tunnelling and contact grouting. It is preferable to defer this work to when the weather is above freezing.
- (c) Contact the Water Services Division to request that the feeder main be placed on reduced pressure or shut down if practical based on water demand, prior to any excavation or joint re-mortaring works.
- (d) Excavate to full expose the feeder main pipe joints using the requirements shown in section E31 and using the method described below to prevent damage to the feeder main or the parallel 400 mm AC feeder main.
- (e) Excavation to 1.0m above the feeder main crown elevation by normal methods with a backhoe/excavator will be permitted.
- (f) All excavation shall be done equally on both sides of the pipe to avoid non-uniform loading on the pipe.
- (g) Excavation equipment should straddle the pipe with tracks placed on either side of the pipe. If the pipe is shallow or if the excavation must be staged such that there is less than 2.0 m of cover between bottom of excavator tracks and top of pipe, excavation equipment should be positioned to the side of the pipe with tracks not closer than 2.0 m from the projected edge of pipe.
- (h) Excavation to below the pipe zone to fully expose the point joint shall be by excavators with smooth edge buckets only and by hand or vacuum methods. Hydrovac excavation may be used but excess water must be removed promptly to avoid saturating the pipe bedding and resultant wet working conditions.
- (i) Clean the existing mortar joint. The Contract Administrator and Water and Waste Department representatives shall inspect the joint and nearby pipe for cracks, defects, or damage.
- (j) If the joint is deemed to be damaged, leaking or potentially compromised, remove the existing joint mortar using small handheld pneumatic tools and hand tools, working carefully to avoid damage to the pipe. Expose the external steel joint ring. Mortar firmly bonded to the steel joint rings may be left in place. No dewatering of the pipe is anticipated. Install a new mortar diaper. Mortar to conform to CW 2160 Table CW 2160.1 Type B. Allow the mortar to cure for three days before backfilling.

- (k) For the purposes of bidding, assume that three joints will require the joint mortar to be removed and replaced.
- (l) Reinstall the pipe bedding and backfill material in accordance with CW 2030 using only static or light compaction equipment minimum vibration.

E32.2.10 If the results of the City's internal condition inspecting indicate that the pipe prestressing wires have experienced breakage loss exceeding 15% due to the works, the impacted section of pipe will require replacement at the Contractor's expense. The replacement pipe section may be AWWA C-900 PVC (DR-18) and coupled to the PCCP with flange adapters or compatible AWWA C-301 PCCP equalling or exceeding the original pressure class 14.

E32.2.11 Contact the Water Services Division to request that the feeder main be returned to normal operating pressure.

E32.2.12 Restore pavement overtop of the feeder main using methods that will not impose loading on the pipe. Compact the subgrade using static methods or light vibratory compaction only. Subbase and base materials shall not be dumped directly on the pipe but shall be bladed into place from beside the pipe.

E32.3 Measurement and Payment

E32.3.1 Repair of the feeder main joints due to excessive settlement will be measured on a lump sum basis and paid for at the Contract Unit Price for '900 PCCP Feeder Main Settlement Repair' including pavement removal, excavation, removal and replacement of joint mortar, backfilling, and compaction.

Revise clause E37.10.1 to read:

Cement used for microtunnelling pipe shall meet CSA A23 exposure class S-1. Suppliers shall provide a mix design statement and testing to confirm that the requirements of exposure class S-1 are met.

Remove clause E57.2.1 (ii)

(Clause referred to pipe coupling. Structural Plate pipe has bolted connections and does not have couplers).

DRAWINGS

Delete: Drawing LD-13194

The proposed pre-emptive feeder main stabilization has been changed to a monitor and post construction repair, described in replacement Specification E32 included in this addendum.

[END OF ADDENDUM]