



177-2024 ADDENDUM 01

CONWAY LIFT STATION 2024 UPGRADES

URGENT

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

ISSUED: April 17, 2023
BY: Mark Baker, P.Eng.
TELEPHONE NO. 204-688-3805

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

Add: B3.4: For contractors who were unable to enter the substructure during the site investigations in B3.1 due to confined space requirements, the Contract Administrator is offering an optional virtual site investigation utilizing a 3D scan of the interior of the substructure. The virtual meeting will be held on Microsoft Teams on Friday, April 19, at 1:00 p.m. Please register for the meeting with the Contract Administrator in D6.

PART D – SUPPLEMENTAL CONDITIONS

Add: D3.2 (m): Replace existing 500mm diameter Comminutor Chamber gate valve.

Add: D3.2 (n): Gate Chamber concrete housekeeping pad, 1.0 m x 1.0 m x 0.6 m height for operator access to rising stem gate actuator nut.

PART E – SPECIFICATIONS

Add: E11.1.4 (c) The Comminutor Chamber gate valve shall not be relied upon to isolate the Wet Well. The gate valve will not fully close, therefore the sewer must be plugged by other means **(see E11.2.6)**.

Add: E11.1.4 (d) Conway Lift station Storage Calculation under dry weather conditions.

Time to Overflow (positive gate open): 1hr5mins
Time to Basement flooding (positive gate closed): >48hrs

Critical MH Asset #: S-MH20007884
Critical MH Location: In alley behind 2033 Portage Ave
Basement Flooding elevation: 229.87 mASL

Monitoring MH: S-MH20004694 (in front of lift station)
Monitoring MH Chamber Floor elevation: 226.600 mASL
Monitoring MH Rim Elevation: 236.71 mASL

- Revise: E11.1.5 (a) to read: A sump is to be created in the manhole located directly east of the lift station by closing **plugging the pipe into** the comminutor chamber (**see E11.2.6**) and creating a sandbag weir upstream of the CSO gate chamber. The manhole diameter is 900mm and the length from the rim to the base of the 2515x1930 sewer main below is approximately 10.0m.
- Add: E11.1.5 (c) (i): Alternatively, Two (2) Heidra 150 submersible pumps (Godwin, a Xylem Brand) may be used, each sized for 70-80 L/s. Pump-end width on cut sheets is 580mm. Power supply is 600V. Contractor must supply stepdown/up transformer(s) as necessary to power the bypass pumps. The standby pump may be diesel-powered. Please contact Dustin Warelis at Canadian Dewatering for equipment availability and rental ((204) 996-7988, DWarelis@canadiandewatering.com). The standby pump is to be ready for use at all times for the duration of bypass pumping operations.
- Add: E11.1.5 (d) (i): If the Heidra 150 submersible pumps are used in accordance with E11.1.5 (c) (i), the backup generator will only be required to power the CSO and RTU equipment.
- Add: E20.3.2 (b) Tree pruning and/or removal work will only be limited to occur from August 1 – March 31.
- Add: E33.2.1 (d) One (1) five hundred (500) millimeter gate valve to replace the existing model in the comminutor chamber – Cast iron body with flanged ends; double rotating disc or solid disc, bronze trimmed cast iron wedge; bronze stem, double O-ring stem seals and fifty (50) millimetre square operating nut.
- Add: E33.2.2 (o) For the replacement gate valve in the comminutor chamber: One (1) five hundred (500) millimeter gate valve to replace the existing model in the comminutor chamber – Cast iron body with flanged ends; double rotating disc or solid disc, bronze trimmed cast iron wedge; bronze stem, double O-ring stem seals and fifty (50) millimetre square operating nut.
- Add: E33.2.2 (o) (i) The approximate distance from the centreline of the pipe the gate valves is connected to in the comminutor chamber, to the floor of the room where the pedestal mounted operator will be installed, is 3.64m (12ft). This approximate measurement can be used to estimate operator extension stem lengths. Contractor to confirm measurement prior to fabrication.
- Add: E33.2.3 (g) For the replacement gate valve in the comminutor chamber: The pedestal mounted gate valve operators shall meet the following criteria:
- (i) Body shall be ductile iron or steel with concrete lining.
 - (ii) Gate valve operators shall have an indicator gauge with a travelling pointer to show if valve is open, closed or a position in between.
 - (iii) Bushings to be bronze and all bolting hardware to be Type 304 stainless steel.
 - (iv) Direction of opening shall be counter clockwise and shall be clearly stamped or indicated with raised letters and arrow.
 - (v) Contractor to be responsible for confirming all field measurements prior to manufacture to ensure proper function and fit for the pedestal mounted operators.
 - (vi) Contractor to verify operating torque requirements for valve and to size stem/spindle accordingly. Provide valve stem/spindle guides.
 - (vii) Contractor to supply all required valve stem extensions and guide brackets for proper valve operation.

APPENDICES

Add: Appendix I – Substructure Photographs

Add: Appendix J – Godwin Heidra 150 Cut Sheet

DRAWINGS

Replace: 177-2024_Drawing_P0001-001-00 with 177-2024_Addendum_01_Drawing_P0001-001-01

Replace: 177-2024_Drawing_M0005-001-00 with 177-2024_Addendum_01_Drawing_M0005-001-01

Replace: 177-2024_Drawing_C0001-001-00 with 177-2024_Addendum_01_Drawing_C0001-001-01

NMS SPECIFICATIONS

Section 26 05 01

Revise: Section 26 05 01

QUESTIONS AND ANSWERS

Q1: The CSO and RTU panel will be kept in operation until the changeover and left in place for as long as possible, it is anticipated that the contractor will mount the equipment in a temporary frame with temporary wiring when the walls need to come down. The CSO panel will be relocated as shown on the floor plan to be reconnected to the new PLC after installation.

A1: The contractor is to provide a continued service plan for how the monitoring will be maintained during construction. Existing CSO will remain inside the superstructure on the main floor. The RTU panel will be removed and a new PLC Control Panel installed on the main floor. Please note that CSO equipment is currently mounted in the top rim of the manhole just east of the lift station. Maintaining operation is to be required during bypass pumping.

Q2: (Ref Spec 26 05 01 1.20.2) Spec section states: "Provide as-built drawings in AutoCAD current format. Retain and pay MPE for this service." Please provide budget for the electrical drawing package.

A2: Contractor will be required to provide red line as-built markups in pdf format. MPE will be creating Record Drawings from red line as-built markups. Contractor will not pay MPE for this service. For the purposes of the tender, do not include a cost for record drawings. See revised Section 26 05 01.

Q3: On the VFD schematic, there are VIC-L010-1 and VIC-L010-2 bearing controllers. These appear to be door mounted devices. Can the manufacture and PN be advised as these designations do not provide any details.

A3: See NMS section 262419-2.11 for the vibration controllers. Each VFD will include two (2) process meters mounted on the VFD door. VIC-L010-1 and VIC-L010-2 are associated with VFD-L01 while VIC-L020-1 and VIC-L020-2 are associated with VFD-L02. From specification 26 24 19, these meters are Precision Digital PD6000-6R7. Please note that these instruments are included in Appendix E: Instrument List.

Q4: Please confirm if the following mechanical equipment are approved equals:

Fan: PennBarry as equal to specified Greenheck

Exhaust Fan: Loren Cook as equal to specified Greenheck

Dampers: Alumavent as equal to specified Greenheck

Louvre: Ventex or Nailor as equal to specified Price

Grilles, Registers, and Diffusers: Titus, Airvector, or Nailor as equal to specified Price

Ductless AC (SC Split): Samsung, Daikin, or Gree as equal to specified Carrier

Sump Pump: Bell & Gosset as equal to specified Liberty

Wastewater Lift Pumps: Bell & Gossett or Flygt as equal to specified Flowserve or Cornell

A4: The following are approved equivalents so long as the products meet or exceed specified performance and specifications.

Exhaust Fan (23 34 00): Loren Cook as equal to specified Greenheck

Dampers (23 33 15): Alumavent as equal to specified Greenheck

Louvre (23 37 20): Ventex or Nailor as equal to specified Price

Grilles, Registers, and Diffusers (1-0131L-M0013-001): Titus, Airvector, or Nailor as equal to specified Price

Sump Pump (22 10 10): Bell & Gosset or as equal to specified Liberty

The following are not approved equivalents but may be reviewed again if cut-sheets and product specifications are provided and are found to meet or exceed project specification requirements:

Fan (23 34 00): PennBarry as equal to specified Greenheck

Ductless AC (SC Split) (23 81 23): Samsung, Daikin, or Gree as equal to specified Carrier

Wastewater Lift Pumps (E32): Bell & Gossett or Flygt as equal to specified Flowserve or Cornell

Q5: Are you accepting lighting equals for this project?

A5: Lighting equals will be reviewed. Lights must meet the necessary lighting levels, dispersion pattern, and required area (hazardous/wet/normal) ratings and specifications. Please note outdoor lights must remain on 0-10V dimming controls.

Q6: Are the following Paint & Coating – related products acceptable as approved equals?

A6: Products:

Graffiti-Resistant Coating (09 96 50): Sherwin Williams 2K Waterbased Anti-Graffiti Coating is approved as an equal.

Resinous Epoxy Flooring (09 67 23): Sherwin Williams Resufloor 3746 is approved as an equal.

Wet Well Resurfacing (E26, 07 16 00): Sherwin Williams Dura-Plate 2300 is not approved to be used in the wet well. The product used will be subject to high concentrations of H₂S gas and sulphate and/or acid attack. Product may be reviewed again if at least two (2) reference projects are provided (with owner contact information) where this product has been applied to the interior of an existing wastewater wet well.

Q7: What is all required with the Confined Space Entry to the lower levels of the Lift Station?

A7: Contractors are required to follow provincial regulations for Confined Space Entry including completing a permit each day staff are required to enter the lower levels along with a standby watch. All individuals must sign onto the permit and have valid certification of Confined Space Entry Training.

The dry well is considered a confined space so long as there is only one entry/exit.

Regardless of the Confined Space requirement, all Contractors are required to have a calibrated portable gas detector for entering the lower levels of the station.

Q8: For temporary bypass pumping, what is required?

A8: Two (2) pumps are required to be installed and powered at all times. Each pump is to be sized for 70 - 80 L/s and a backup power generator compatible to power each pump is to be on site during bypass pumping operations, regardless if bypass pumping is done during winter months. Both pumps shall be electrically powered and only run off the backup power generator during a power failure.

One notable alternative that is approved is as follows: Two (2) Heidra 150 submersible pumps (Godwin, a Xylem Brand) may be used, each sized for 70-80 L/s. Pump-end width on cut sheets is 580mm. The duty pump is to be electrically driven. Power supply is 600V. Contractor must supply stepdown/up transformer(s) as necessary to power the bypass pump. The standby pump may be diesel-powered. Please contact Dustin Warelis at Canadian Dewatering for equipment availability and rental ((204) 996-7988, DWarelis@canadiandewatering.com). If this strategy is utilized, no backup generator is required to power the pumps, but the standby pump is to be ready for use at all times. Please note that a backup generator will still be required to power the CSO and RTU equipment.

Q9: When can tree removal/pruning take place?

A9: Any tree work (including all types of trees, not just Elm specific) will only be allowed to be pruned and/or removed between August 1, 2024 – March 31, 2025. Clause E20.3.2 (b) has been added above to reflect this.

Q10: Will the City still need access to the site?

A10: The City will require access to the site, including the Gate Chamber at the back. The City may also require access to the CSO panel within the Lift Station.

Q11: Is the entire site City property and can the area at the back be used as a lay down area?

A11: The entire site is classified as a Right-of-Way that is owned by the province. A Waterway Permit will be required for the site, does not allow any storage of supplies within 107 metres of the regulated summer levels of the Assiniboine River. Contractors will not be allowed to use the back area as a lay down area.

Q12: Can the Comminutor Chamber gate valve be used to isolate the Wet Well?

A12: Operators have only been able to close the gate valve to be 70% closed. The Contractor shall not rely on the Comminutor Chamber gate valve to isolate the Wet Well. Clause E11.4.1 (c) has been added above to reflect this. Please note clauses D3.2 (m) and E33.2.1 (d) added above for the Contractor to replace the Comminutor Chamber gate valve. Valve can only be replaced while temporary bypass pumping is in place.

Q13: Can the Contract Administrator's 3D scan .RCP file be made available?

A13: The .RCP file will not be made available.

Q14: What is required for the product specified for wet well resurfacing?

A14: Please contact Gary Tench with W.R. Meadows of Canada. 780-237-6268. GMTench@wrmeadows.com

Notably, approved applicators are required, a list of which may be acquired from the contact above.

Q15: How much time should be allotted for obtaining permits from Manitoba Hydro?

A15: Hydro contract is already in place. Hydro requires 6-8 weeks notice to install service.