

# 193-2022 ADDENDUM 4

#### TACHE BOOSTER PUMPING STATION AND SURGE TOWER UPGRADES

# <u>URGENT</u>

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

ISSUED: November 17, 2022 BY: John D'Ignazio TELEPHONE NO. 204 477-5381

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID/PROPOSAL 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/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.

## FORM B: PRICES

Replace: 193-2022 Form B: Prices with 193-2022 Addendum 4 Form B: Prices.

The following is a summary of changes incorporated in the replacement Bid/Proposal Submission:

Form B(R1): Item 7 in Unit Prices – Repointing Mortar Joints (Surge Tower and to be based on 500 lineal meters)

Item 3 in Separate Price – Repointing Mortar Joints (Surge Tower and to be based on 500 lineal meters)

#### PART B – BIDDING PROCEDURES

Add:	B10.5	The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
Add:	B10.6	The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
Add:	B18.7	Further to B18.1(a) in the event that a unit price is not provided on Form B: Prices, the City may determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

#### **DRAWINGS**

- Replace: 193-2022\_Drawing\_1-0660M-B0004\_Sht001-R0 with 193-2022\_Addendum\_4\_Drawing\_1-0660M-B0004\_Sht001-R1
- Replace: 193-2022\_Drawing\_1-0660M-B0006\_Sht001-R0 with 193-2022\_Addendum \_4\_Drawing\_1-0660M-B0006\_Sht001-R1

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- Replace: 193-2022\_Drawing\_1-0660M-B0007\_Sht001-R0 with 193-2022\_Addendum\_4\_Drawing\_1-0660M-B0007\_Sht001-R1
- Replace: 193-2022\_Drawing\_1-0660R-B0001\_Sht001-R0 with 193-2022\_Addendum\_4\_Drawing\_1-0660R-B0001\_Sht001-R1
- Replace: 193-2022\_Drawing 1-0660R-B0002\_Sht001-R0 with 193-2022\_Addendum\_4\_Drawing\_1-0660R-B0002\_Sht001-R1
- Replace: 193-2022\_Drawing 1-0660R-B0003\_ Sht001-R0 with 193-2022\_Addendum\_4\_Drawing\_1-0660R-B0003\_Sht001-R1
- Replace: 193-2022\_Drawing 1-0660R-S0002\_ Sht001-R0 with 193-2022\_Addendum\_4\_Drawing\_ 1-0660M-S0002 \_Sht001-R1

#### **APPENDICES**

- Add: Appendix B Hazardous Materials Inventory System Report– HMIS Pinchin Dated June 21, 2021
- Add: Appendix C Existing Surge Tower Drawings
- Add: Appendix D Surge Tower Photos Photos 1 30

### **NMS SPECIFICATIONS**

Section 04 03 07 Masonry Repointing

Delete: 3.5.4.

Section 09 91 00 Painting

Replace: 3.6 Painting Formula

- .1 Design Standard of acceptance is Dulux.
  - .1 Accepted alternate paint manufacturers or approved equal in accordance with B7: Benjamin Moore, Behr, Cloverdale and Para.
    - .1 Each accepted alternate paint manufacturer shall be the requirements of the Design Standard manufacturer.
  - .2 Apply paint to surfaces with the following:
    - .1 All exterior Steel Doors and Frames (steel and fiberglass) and longitudinal areas each side of the Tache Booster Pumping Station adjacent to the new door frame:
  - .3 Exterior surfaces:
    - .1 Minimum preparation: SSPC-1.
    - .2 One (1) coat Dulux X-Pert Gripper (250) or approved equal in accordance with B7. Coat thickness 1.8 2.0 mils DFT.
    - .3 Minimum of two (2) coats Dulux Diamond Exterior Latex Semi-gloss (1650.501) or approved equal in accordance with B7. Each coat at 1.2 mils DFT per coat. Colour to match existing south door slab.

- .4 All guardrail assemblies, handrail assemblies and Section 05 50 00 Metal Fabrications interior surfaces (excluding interior galvanized steel floor grating):
  - .1 Minimum preparation: Initial preparation SSPC-1, followed by SSPC-2 with final preparation utilizing SSPC-1.
  - .2 Primer: One (1) coat Dulux X-Pert Gripper (250) or approved equal in accordance with B7. Coat thickness 1.8 2.0 mils DFT.
  - .3 Minimum of two (2) coats Dulux Diamond Interior Acrylic Eggshell (14220) or approved equal in accordance with B7. Each coat at 1.0 mils DFT per coat. Colour to match existing guardrails within the building.

#### Section 05 50 00 Metal Fabrications

Revise:	2.1.2 to read:	Galvanized Steel Guardrails and Handrails: conforming to ASTM A53/A53M, DN 32 XS (Schedule 80). All components to be galvanized.
Revise:	2.1.3 to read:	Angles, plates, channels and miscellaneous steel: conforming to CSA G40.21, Grade 300 W with minimum yield strength of 300 MPa. All components to be galvanized.

Section 07 52 00 Modified Bituminous Membrane Roofing

Revise: 2.3.1 to read:

- .1 Base sheet vapour retarder: to CSA A123.23, Type B, Grade 3.
  - .1 Application: Torch on.
  - .2 First layer (base layer): Top surface: polyethylene.
  - .3 First layer (base layer): Bottom surface: polyethylene.
  - .4 Second layer: Top surfaces: sanded.
  - .5 Second layer: Bottom surfaces: polyethylene.
  - .6 First layer nominal thickness: 3.0 mm.
  - .7 Second layer nominal thickness: 3.5 mm.

## **QUESTIONS AND ANSWERS**

- Q1: As confined space training is a requirement to enter the Surge Tower, we request that pictures of the interior of the Surge Tower be distributed for personnel that cannot enter.
  - A1: Photos provided in Appendix D Surge Tower Photos -Photos 1-30.
- Q2: If available, please provide the weight of the existing concrete roof slab and encased steel beams of the surge tower.

Q3: Have any hazardous materials (i.e. asbestos, lead, etc.) been identified in either the pump station or surge tower?

A2: Please refer to existing drawings in Part H of this addendum for roof composition to determine weight.

- A3: Report provided in Appendix B of this Addendum.
- Q4: Please provide any existing / as-built drawings of the Pumping Station and Surge Tower.

A4: Please refer to existing drawings in Appendix C of this addendum for roof composition to determine weight.

Q5: If possible, please provide a measurement from the inside of the existing parapet wall to the middle of the existing roof drains.

A5: The roof drain is approx. 710 mm (28") from the interior parapet.

- Q6: Please confirm whether the guard and stair railings (Plan 0660M-B007, Note 5) are to be primed.
  - A6: Reference 193-2022\_Addendum\_4\_ Drawing\_1-0660M-B0007\_ Sht001-R1 attached to this Addendum.
- Q7: Request for use of either primer or hot-dipped galvanized as alternative to urethane finish specified for hand railings at cross over stairs.

A7: Reference 193-2022\_Addendum\_4\_ Drawing\_1-0660M-B0007\_ Sht001-R1 attached to this Addendum.

- Q8: Request for double leg precast tees as an alternative to single leg precast tees.
  - A8: Single leg precast tees to reman as specified.
- Q9: Plan 0660R-S0002, Detail 2, indicates tower scaffolding around perimeter of the Surge Tower. Please confirm that the use of scaffolding is to the General Contractor's discretion.

A9: The means and methods for doing the work is at the discretion of the contractor. Scaffolding however cannot be attached to Surge Tower.

- Q10: The specified product for the 2-ply vapour retarder has a sanded surface. It works for the first layer to be torched down, but not the second layer. The second layer of the vapour retarder cannot be torched onto a sanded surface. Please clarify.
  - A10: Reference this NMS Specifications in this addendum.
- Q11: Section 08 16 13, Item 2.3.2 calls for a one-piece fiberglass reinforced plastic frame. However, Plan 0060R-B0002, Note 9 calls for a thermally broken insulated welded frame. Please clarify the type of door frame required for the surge tower.

A11: Reference 193-2022\_Addendum\_4\_Drawing\_1-0660R-B0002\_Sht001-R1 attached to this Addendum.

Q12: What type of anchor system is required for fall arrest, please provide specs.

A12: Please refer to Section 03 41 00 of the specifications.

Q13: Specs has Specialty coatings for concrete, where would this be used? According to Stonehard Carboline 890 is made for metal coating not concrete coating. Please advise.

A13: Reference Section 09 98 50 clause 2.1.3.1 for location.

Q14: Section 04 03 07, Item 3.5.4 calls for damp cure via wet burlap. Please confirm whether this is required for both the Pumping Station and the Surge Tower.

A14: The requirement is deleted. See NMS Specifications this addendum.

Q15: Please describe the current function of the water well and if it will be in use as a water distribution storage during construction.

A15: The Tache Surge Tower protects the Branch I Aqueduct against excessive overpressure and negative pressure and pump start up and pump shut down. Under gravity flow conditions it also serves to regulate pressures on the eastern portion of the Branch I Aqueduct. It **WILL** be in use during construction.

Q16: Section 04 03 07, Item 3.5.4 calls for damp cure via wet burlap. Please confirm whether this is required for both the Pumping Station and the Surge Tower.

A16: The requirement has been deleted as per the note under NMS Specifications of this addendum.

Q17: Please clarify the general expectations of well protection from contamination. Is the intention to keep any concrete debris from the well or on a more granular level (i.e. dirt, particulates, etc.)? What is the level of remediation should the well be contaminated?

A17: The surge tower well is a direct connection to the City's drinking water supply. The intent would be to have it sealed to keep out dirt, particulates, etc., as well as concrete debris. The level of remediation would depend on the source and extent of contamination.

Q18: Plan 0660M-B0004, Drawing Note calls to touch up paint 1 meter around work area on the interior of pump station (main and lower). Please clarify what is meant by 'Work Area' and what are the expectations of this note

A18: Working area is defined as areas where interior work interfaces with the wall areas.

- Q19: Please clarify whether existing doors D102, D103 and D104 require painting.
  - A19: These doors do not require painting.
- Q20: Please indicate whether there is a load restriction above the 1650 Branch Aqueduct Line along the southwest corner of the property.
  - A20: There should not be any crane or loaded semi-trucks in the area of the 1650 branch aqueduct line as there is no room for the crane or semi-truck in this area. The aqueduct should not be subject to any loads.