

CONTRACT ADDENDUM

Addendum No.: Owner:	1 PUC Services Inc.	Contract:	2024 Watermain Rehabilitation by CIPP Lining – Ravina St, Sisson St, Orion St, Wireless Ave, and Haviland Crescent
Contract No.:	WDS 19759	Date Issued:	May 14, 2024

THIS ADDENDUM SHALL FORM PART OF THE CONTRACT DOCUMENTS:

1. GENERAL QUESTIONS AND CLARIFICATIONS

- Q1. Section TS 7.60.21 Cleaning and Preparation of Watermain (page 195 of PDF) lists the possibility of cement mortar lining; could the PUC provide the location of the CML sections that would require removal? Can the PUC clarify if the CML was applied via insitu or factory-lined?
- A1. Our records indicate that the existing watermain to be lined in this Contract on Wireless Ave is original ductile iron (1974). No in-situ cement mortar lining is believed to have been applied since.
- Q2. Does the PUC require GPS as-built drawings? If so, can an item be added to cover the cost?
- A2. GPS as-built drawing not required. Please see Special Provisions General Item 24.
- Q3. Can PUC clarify if it is required to provide a professionally engineered hydraulic analysis of the current sewer infrastructure from the point of discharge to the treatment plant?
- A3. Yes as per City requirements (Sewer Use By-Law 2009-50).
- Q4. Can the Utility confirm that engineered drawings for cut and cap thrust restraints are a submission requirement during the tender process?
- A4. They are not required during the tender process, but as per PUC Special Provisions Waterworks, they are required in accordance with W.2. 441.04.03, at least two weeks prior to the work taking place.

The tenderer shall indicate receipt of this addendum in the space provided on the form of tender.

Q5. To minimize mobilizations and bypass costs, would the PUC consider 50mm bypass? If the 150mm bypass is required for the temporary hydrant connections, can the Utility add an item for the 150mm system?

A5. The temporary water system is lump sum price to include a combination of 50mm and 150mm temporary pipe, as required in order to provide adequate fire protection to temporary hydrants as noted on the drawings.

Q6. Per the Special Provision section, 493.07.04, Temporary Hydrants, the tender states, "one (1) municipal hydrant may be taken out of service at one time, such that there is not more than 300 meters between hydrants. In the event the hydrant spacing of 300 meters is exceeded, temporary hydrant(s) will be required in all cases. PUC will bag hydrants out of service." Can PUC clarify that the Contractor is to ensure that in-service or temporary hydrants are within 300 metres of each other regardless of how many hydrants are taken out of service?

A6. As per the temporary water system drawing, we have confirmed that 300m spacing has been maintained with the two proposed temporary hydrant locations.

- Q7. Does the 150 mm temporary water system used for temporary hydrants require more than one 150 mm supply?
- A7. Temporary supplies as per the tender drawings.
- Q8. If more than one hydrant is taken out of service, does it require more than one temporary hydrant if the spacing between live and temporary hydrants does not exceed 300 metres?
- A8. Please refer to the temporary water system drawings shown on P1-P5.
- Q9. "Section TS 7.60.37 Samples from Installed Liners and Sample Testing" states that a cylindrical sample will be required for every 250 metres. To prevent disruption and maintain a project that is as trenchless as possible, will the PUC consider the industry standard of obtaining a sample for every 500 metres?
- A9. 3 samples will be required at approximately 250m spacing and shall be compensated using the applicable item (from existing access pit or new access pit), with the preference from an existing access pit.
- Q10. The tender states that during the pressure test of the lined watermain, "The maximum allowable water loss during the pressure test shall not exceed 0.5 L/hour/100 m of watermain." The described test is to be applied to all sizes of watermain, meaning that the allowable leakage on a 150mm watermain is the same as a 300mm dia. Watermain. Will the City please consider accepting an update to the existing pressure test to change the leakage to those stated within ASTM F12-16 Sec 8.3 as it includes an escalating scale of allowable leakage of "20 U.S. gallons per inch of internal pipe diameter per mile per day, providing that all air has been evacuated from the line prior to testing and the CIPP has cooled down to ambient temperature?

A10. The allowable leakage shall remain as noted in the contract specification.

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Q11. Given that an access pit will be excavated at the intersection of Ravina Street and Birchland Court, would the Utility consider lining the watermain on Birchland Court?

A11. We are not considering Birchland Court at this time, but if required, a change order would be provided for any additional scope.

Q12. With regards to section TS 7.60.02 section B (page 186 of PDF), will the Utility adopt the industry standard that the author of the post-lining deflection capability report must be a third-party accredited laboratory or university?

A.12 Proceed with report submission requirements as specified.

- Q.13 Given that there is a requirement in Item 5 of Section TS 7.60.27, "Performance Requirements for CIPP Watermain Lining" for the ability of the lined watermain to withstand deflection up to 5 degrees in any direction, can the Utility clarify that the report submitted must highlight this capability?
- A.13 The report shall address this requirement and confirm that the liner can withstand up to 5% deflection of the host pipe.

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