

**445 MUNI CONSTRUCTION SPECIFICATION FOR WATERMAIN REHABILITATION BY
CURED-IN-PLACE PIPE (CIPP) LINING**

445.07 CONSTRUCTION

445.07.01 General

Delete the last 3 paragraphs and replace with the following:

e) The Contractor shall notify all affected residents and businesses in accordance with the Contract documents.

445.07.10 CCTV Closed Circuit Television

Add in the following:

The Contractor shall provide the City with 48 hours notice prior to commencing CCTV inspections.

445.07.10.01 Pre-Lining Video Inspection

Add in the following:

After completion of the cleaning and preparation of a pipeline section and before lining, a CCTV inspection of the full length of the pipeline section to be lined shall be made and submitted to the Contract Administrator 48 hours before lining.

445.07.19 Service Connection Reinstatements

Add in the following:

External reinstatement of water services as directed shall be paid as a separate item per the Contract documents.

445.08.03 Testing of CIPP Liner Samples and Liner Wall Thickness

Delete the first paragraph and replace with the following:

Test samples for testing shall be taken from the finished liner according to the requirements of ASTM F1216, ASTM F1743, or ASTM F2019 as applicable to the type of liner being used. CIPP field cured restrained samples shall be taken from the finished CIPP at an access point and be sufficient in size to be according to the testing specifications in the Contract Documents. For CIPP greater than 400 mm where a restrained sample is not possible, a flat-plate sample shall be provided. Test samples shall be provided by the contractor upon request. Testing is to be done by an independent testing laboratory approved by the Contract Administrator. The samples shall be tested at a third party testing agency experienced in the testing of CIPP liners.

445.08.03.01 Frequency of Sampling and Testing

Delete in its entirety and replace with the following:

The Contractor shall provide samples of completed liner within the watermain upon request.

445.09.01.01 Cleaning and Preparation of Host Pipe

Delete in its entirety.

445.09.01.02 Product Installation

Delete in its entirety and replace with the following:

445.09.01.02 Watermain Lining

Measurement for watermain lining shall be by length in metres along the centreline of the watermain between connecting points or, if there is no connecting point, to the end of the watermain.

When the connecting point is a structure, measurement for watermain lining shall be to the centre of the structure.

445.09.01.03 Service Connection Reinstatement

Delete in its entirety.

445.10 BASIS OF PAYMENT

445.10.01 Cleaning and Preparation of Host Pipe - Item Product Installation, “type, diameter, or use of product” - Item Service Connection Reinstatement - Item

Delete in its entirety and replace with the following:

445.10.01 Watermain Lining- Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment and Material to do the work.

Compensation for costs associated with temporary water supply shall be as specified in the Contract Documents.

Any extraction of reaming tools or other equipment, including extraction by excavation, shall be at no additional cost to the Owner.

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