

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON FEBRUARY 5, 2019
FROM:	KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL AND ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	2019 LARGE DIAMETER WATERMAIN INSPECTION

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the Large Diameter Watermain Inspection:

- (a) The bid submitted by Echologics Engineering Ltd., 6295 Northam Drive, Mississauga, Ontario, L4V 1W8, in the amount of \$874,649 (excluding H.S.T.) **BE AWARDED** in accordance with Section 15.2 (e) of the City of London's Procurement of Goods and Services Policy;
- (b) The contract value for Pure Technologies Ltd., 3rd Floor, 705-11 Avenue SW, Calgary, Alberta, T2R 0E3, in the amount of \$744,582 (excluding H.S.T.) **BE APPROVED**, in accordance with section 14.4 (e) of the Corporation of the City of London's Procurement of Goods and Services Policy;
- (c) The financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";
- (d) The Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project; and
- (e) The Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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- Large Diameter Watermain Inspection – Elgin Pipeline, October 24, 2017, Civic Works Committee.
- Long-Term Large Diameter Pipe Inspection Strategy and Single Source Procurement, July 21, 2014, Civic Works Committee.
- Concrete Pressure Pipe Inspection Fiber Optic Installation – Amendment of Existing Contract, May 29, 2012, Civic Works Committee.
- Sole Source: EW3717 Concrete Pressure Pipe Inspection – Fiber Optic Installation, April 14, 2010, Board of Control.
- Water System Risk Management Exercise and Evaluation, April 23, 2007, Environment and Transportation Committee.

2015-2019 STRATEGIC PLAN

This report supports the Strategic Plan in the following areas:

- Building a Sustainable City: robust infrastructure; strong and healthy environment; responsible growth.
- Leading in Public Service: Open, accountable and responsive government; excellent service delivery.

BACKGROUND

Purpose

This report recommends that Echologics be appointed as the consultant to undertake the large diameter watermain inspection of the Adelaide Street, Clarke Road, and Dingman Drive pipelines. This report also recommends that Pure Technologies be appointed as the consultant to undertake the large diameter watermain inspection of the Horton Street pipeline.

Context

The City of London's trunk watermain are critical infrastructure in London's water supply system. The trunk watermain supply water to the smaller diameter pipelines which in turn supply water to individual customers. The City's trunk watermain are critical infrastructure that ensure adequate water supply and reliability for customers.

Inspection of the City's trunk watermain will secure the reliability of the City of London's water supply and allow staff to make informed decisions regarding condition and need for repair. This year's annual inspection will identify the need to carry out maintenance on the trunk watermain which will reduce the potential for catastrophic watermain breaks in the future.

DISCUSSION

The City's annual trunk watermain inspection program involves inspection of approximately 10 km of trunk watermain every year. This will allow the City to inspect every trunk watermain in the City over a period of 20 years. The decision of which sections of pipeline are to be inspected each year is based on pipe age, pipe material, criticality, and anticipated construction projects for that section.

For the 2019 inspection program, four sections of pipe were identified for inspection with a total length of 15 km. Horton Street (7.5 km), Adelaide Street (1 km), Clarke Road (4.5 km), and Dingman Drive (2 km) were identified to be inspected in 2019 in advance of major infrastructure projects in order for staff to make informed decisions regarding the infrastructure replacement needs. The inspection locations are shown in the attached Appendix 'B' maps.

Procurement Process

The 2019 inspections were divided into two assignments; one request for proposal (RFP) assignment and one single source assignment in accordance with section 14.4 (e) of the City of London's Procurement of Goods and Services Policy. The first assignment includes a water main on Horton Street. The sensitive location and the age of Horton Street watermain requires specialized technology that is only available from Pure Technologies. The Horton Street watermain is located in London's downtown core and also extends through Springbank Park and adjacent to the Thames River. Pure Technologies' exclusive technology will provide the highest level detailed condition assessment information while also requiring minimal disturbance to traffic and the sensitive features in proximity to the watermain like the Thames River, a large retaining wall, and natural heritage features. This technology uses a device that can be inserted in the pipe to assess its condition over long distances while only creating the need to access the pipe at the insertion and extraction points. Some other inspection technologies require frequent access to the pipe throughout the length being assessed.

The second assignment includes watermain on Adelaide Street, Clarke Road, and Dingman Drive. These watermain were assessed and it was determined that a number of different technologies and technology providers would be able to provide the desired level of inspection. This decision was based on the relative age of the watermain and the locations of these three watermain, which are mostly located in the boulevards of

rural roads. In November of 2018, three engineering firms responded to an open request for proposal (RFP) in accordance with section 15.2 (e) of the City of London's Procurement of Goods and Services Policy. After evaluation of the RFP, the City's evaluation team determined that Echologics provided the best value and their technology presented the least amount of operational risk.

Project Costs

Echologics proposal for the inspection of the Adelaide Street, Clarke Road, and Dingman Drive watermains includes a fee submission of \$874,649 (excluding H.S.T.). The technical proposal and fee submission was evaluated in accordance with the City of London's Procurement of Goods and Services Policy and it was found that the proposal met all of the key project requirements and provided the best value to the City for inspection services of the Adelaide Street, Clarke Road, and Dingman Drive watermains.

Pure Technologies' proposal for inspection of the Horton Street watermain includes a fee submission of \$744,582 (excluding H.S.T.). The technical proposal and fee submission was evaluated in accordance with the City of London's Procurement of Goods and Services Policy and it was found that the proposal met all of the key project requirements and provided the best value to the City for inspection services of the Horton Street Watermain.

CONCLUSIONS

Echologics and Pure Technologies both have experience undertaking similar work of this caliber while providing useful and actionable information for large diameter watermain repairs. Both of the proposed consulting teams have extensive experience with similar work and is well qualified to undertake the required inspections.

Based on the results of the Adelaide Street, Clarke Road, and Dingman Drive RFP and based on the review by the evaluation team, it is determined that retaining Echologics is in the best financial and technical interests of the City. It is recommend that Echologics be awarded this contract in the amount of \$874,649 (excluding H.S.T.) to undertake all tasks related to the large diameter watermain inspection of the Adelaide Street, Clarke Road, and Dingman Drive pipelines.

Based on Pure Technologies' specific technology and experience, it is determined that retaining Pure Technologies for the Horton Street watermain inspection is in the best financial and technical interests of the City. It is recommend that Pure Technologies be awarded this contract in the amount of \$744,582 (excluding H.S.T.) to undertake all tasks related to the large diameter watermain inspection of the Horton Street pipeline.

Acknowledgements

This report was prepared by Michelle Morris, E.I.T, of the Water Engineering Division.

PREPARED BY:	REVIEWED & CONCURRED BY:
AARON ROZENTALS, P. ENG. DIVISION MANAGER, WATER ENGINEERING	SCOTT MATHERS, MPA, P. ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

January 24, 2019

Attach: Appendix “A” – Sources of Financing
 Appendix “B” – Project Location

CC.
 John Freeman – Manager, Purchasing & Supply
 Chris Ginty – Procurement Officer
 Gary McDonald – Budget Analyst, Finance & Corporate Services
 Michelle Morris, E.I.T, Water Engineering