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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JUNE 19, 2012
FROM:	JOHN BRAAM, P. Eng. ACTING EXECUTIVE DIRECTOR, PLANNING, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	CONTRACT AWARD: TENDER NO. 12-78 TRUNK WATERMAIN CHAMBER INSTALLATION PROGRAM

RECOMMENDATION

That, on the recommendation of the Acting Executive Director, Planning, Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the award of the contract for the Trunk Watermain Chamber Installation Program (EW3717-11 and EW3717-12):

- (a) the bid submitted by Bre-Ex Limited, at its tendered price of \$415,339.89 (excluding H.S.T.), for the Trunk Watermain Chamber Installation project, **BE ACCEPTED**; it being pointed out that the bid submitted by Bre-Ex Limited was the lowest of five (5) bids received and meets the City's specifications and requirements in all areas;
- (b) Archibald, Gray, and McKay, 3514 White Oak Road, London, Ontario N6E 2Z9, **BE AUTHORIZED** to carry out the resident inspection and contract administration for the said project in accordance with the estimate, on file, at an upset limit amount of \$40,100 (excluding H.S.T.), noting that this firm completed the engineering design, based upon the Fee Guideline for Professional Engineering Services, recommended by the Ontario Society of Professional Engineers; and in accordance with Section 15.2 (g) 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;
- (e) the approval given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract or issuing a purchase order for the material to be supplied and the work to be done relating to this project (Tender 12-78); and
- (f) 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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- EW3717 Concrete Pressure Pipe Inspection – Fibre Optic Installation – Amendment of Existing Contract, May 29, 2012, Civic Works Committee, Agenda Item # 10
- EW3717 Concrete Pressure Pipe Inspection – Fibre Optic Installation, April 14, 2010, Board of Control, Agenda Item #27

BACKGROUND

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Purpose:

This report recommends award of tender to a contractor and continuation of consulting services by Archibald, Gray, and McKay (AGM) for the installation of access chambers on the 900mm concrete watermain along Commissioners Rd. between Wellington and the Springbank Reservoir.

This work includes installation of twelve (12) 1800mm concrete maintenance chambers to facilitate the installation of an acoustic fibre optic (AFO) monitoring system inside the watermain. Each chamber will be installed on either side of the existing valves and will serve as the entry and egress points for the AFO system.

Discussion:

The large diameter concrete watermain that connects the Arva Pump Station with Springbank Reservoir is one of the most critical links in our system and directly serves two hospitals, and a majority of homes and businesses in London. The partial installation of the fibre optic line already in place is providing the City with real time acoustic data of any wire breaks that occur on the pipe. Information received from the fibre gives the City the ability to react immediately to prevent a possible break similar in scope and magnitude to the March 2010 and May 2012 Mt. Carmel watermain breaks on the Huron pipeline that feeds the Arva Reservoir. The section of pipe that is currently monitored is of the same vintage (1965) and was installed under the same provincial grant funding as the pipe that broke in Mt. Carmel in 2010 and 2012.

When the pipeline was built in 1965, acoustic monitoring technology had not developed to a point where the monitoring of sound waves within the water column of a concrete pressure pipe could be easily achieved. As a result, engineering design of this pipeline is not set-up for this type of installation. As a result, there is a significant level of effort required to retrofit the pipeline to facilitate the installation of the AFO system. Originally the project had been planned for one year's installation, but given the complexity of this advance work it has been stretched out over three years. This contract award allows the contractor to install the access chambers this summer, ahead of the final AFO section installation in October.

The project includes the construction of 12 maintenance chambers on top of the existing watermain which will allow for the AFO system to transition in and out of the pipe at valve locations when Pure Technologies returns to London in the fall. The chamber work is not complicated in nature, although the traffic management portion presents significant challenges to limit the effect on drivers and commuters as the chambers are installed. A combination of night work, weekend work, and daytime work has been scheduled to complete the chamber installations with the least social impact possible.

The work has also been coordinated along with the Construction Administration Division, Transportation Department, and the Wastewater and Drainage Engineering Division to limit the disruption to traffic along Commissioners Rd. In locations where road width safely allows, a minimum two lanes of traffic are open at all times. Where traffic flow is more restricted, weekend work has been implemented as well as enhanced traffic monitoring through the assistance of the London Police.

The limits of the work will be from Wellington Rd. to Cranbrook Drive along Commissioners Rd. West:



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Tender Summary:

Tenders for the Trunk Watermain Chamber Installation Program were opened on May 30, 2012. Five (5) contractors submitted tender prices, and one was excluded as a result of an incomplete submission, the four (4) remaining are listed below (exclusive of H.S.T.).

CONTRACTOR		TENDER PRICE SUBMITTED	CORRECTED TENDER PRICE
1.	Bre-Ex Limited	\$415,339.32	\$415,339.89
2.	L-82 Construction Ltd.	\$452,725.00	
3.	J-AAR Excavating	\$457,562.50	
4.	2153592 Ontario Limited (Elgin Construction)	\$693,655.63	

All tenders have been checked by the City's consultant AGM and by the Planning, Environmental and Engineering Services Department. One (1) of the tender bids contained a mathematical error, and the corrected amount did not change the ranking of the four (4) submitted tenders.

The tender estimate just prior to tender opening was \$384,000.00 (excluding H.S.T.). The low tender is approximately 8% above the estimate. All tenders include a contingency allowance of \$30,000 (excluding H.S.T.).

Consulting Services:

AGM was awarded the detailed design through administrative award at a value of \$67,500 based on the proposal submitted February 6, 2012 and in accordance with Section 15.2 (c) of the City of London's Procurement of Goods and Services Policy. Due to their knowledge and experience with this project, AGM was requested to submit a proposal to carry out the contract administration and resident supervision for this project. In accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, staff are recommending that AGM be authorized to carry out the remainder of engineering services to complete this project for the provided fee estimate of \$40,100 (excluding H.S.T.), noting the upset amount for total engineering services for the project is \$118,360 which includes a 10% contingency (excluding H.S.T.).

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Conclusions:

Award of the construction contract to Bre-Ex Limited will allow the project objectives to be met within the available budget.

The use of Archibald, Gray, and McKay for the remainder of engineering services for this project is in the best financial and technical interests of the City.

Acknowledgements:

This report was prepared by Matt Feldberg, Water Demand Manager, with assistance from Robert Moore, Technologist II, within the Water Engineering Division.

SUBMITTED BY:	RECOMMENDED BY:
	
ROLAND WELKER, P.ENG. MANAGER, WATER ENGINEERING	JOHN BRAAM, P.ENG. ACTING EXECUTIVE DIRECTOR, PLANNING, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

June 5, 2012

Attach: Appendix "A" – Sources of Financing

c.c. Bre-Ex Limited Contractor
AGM Engineering