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| TO:      | CHAIR AND MEMBERS<br>CIVIC WORKS COMMITTEE<br>MEETING ON SEPTEMBER 23, 2013                       |
| FROM:    | JOHN BRAAM, P. ENG.<br>MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES<br>& CITY ENGINEER |
| SUBJECT: | CONTRACT AWARD: TENDER NO. T13-73<br>ELGIN MIDDLESEX PUMPING STATION UPGRADES                     |

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to the award of contracts for the Elgin Middlesex Pumping Station Upgrades Project (EW3540).

- (a) the bid submitted by Baseline Constructors Inc., 550 Conestogo Rd, Waterloo, ON, N2L 4E3, at its tendered price of \$1,340,067.00 (excluding H.S.T.), for the Elgin Middlesex Pumping Station Upgrades project, **BE ACCEPTED**; it being noted that the bid submitted by Baseline Constructors Inc. was the lowest of eight bids received and meets the City's specifications and requirements in all areas;
- (b) AECOM (AECOM), 250 York Street, Citi Plaza, Suite 410 London, ON, N6A 6K2, **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 amount of \$120,389.50 (excluding H.S.T.), 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, it being noted that this firm completed the engineering design;
- (c) future additional annual operating cost savings of \$50,000 **BE RECOGNIZED** as a result of this project, it being noted that these costs are a result of replacing older maintenance prone pumps and equipment with new more energy efficient pumps and equipment, and will be considered within future Water Operating Budgets;
- (d) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";
- (e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (f) 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 13-73);
- (g) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations; and

It being noted that Administration has made an application to the Ontario Power Authority (OPA) in order to be eligible for funding for this project for the Energy Efficiency Improvements under the **SaveONEnergy Retrofit Program**.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Increase in Engineering Fees: Elgin Middlesex Pumping Station – Pumping Upgrades to the City of London, Project No. EW3540, Built and Natural Environment Committee Meeting on October 17, 2011, Agenda Item #9

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BACKGROUND

**Purpose:**

This report recommends award of a tender to a contractor and continuation of consulting services for the Elgin Middlesex Pumping Station Pump Upgrades.

**Discussion:**

This project is being undertaken in order to replace the existing pumps at the Elgin Middlesex Pumping Station which have exceeded their life expectancy, with smaller more energy efficient pumps which will be suited to our operating strategy for this facility in conjunction with the Southeast Pumping Station and Reservoir.

The Elgin Middlesex Pumping Station (EMPS) is part of the Elgin Water Supply Secondary System which conveys water to London, St. Thomas and Aylmer. Within this pumping station, there are 3 sets of pumps, one set owned by each municipality, for conveyance of water to that municipality.

The London pumps were installed in 1994, and were designed for the peak demands (68 ML/day) and emergency flows which would be conveyed to the City of London. London has been taking the minimum flow requirement (or slightly more), an average of 22.7 Million Litres per day (5 million gallons per day). Pumps P4 and P5 are not efficient for day to day use and consume significantly more energy than would be necessary if they were appropriately sized. Operating the pumps under these flow rates has caused premature wear and Pumps P4 and P5 have had significant maintenance issues.

The Elgin Area Water Supply System Master Plan recognizes that the Southeast Reservoir and Pumping Station is part of the strategy for deferring upgrades to the Elgin Area Water Treatment Plant and for enhancement of security including the provision of backfeed capability to the Primary Elgin System Users in an Emergency Basis.

With the construction of the Southeast Pumping Station and Reservoir (SERPS), the pump upgrade at the Elgin Middlesex Pumping Station is required as part of the system integration work necessary for SERPS to operate within the City of London System.

The funding to construct this project is accommodated in the approved Water Capital Works Budget and is available from the EW3540 Elgin Middlesex Pumping Station – Capital Maintenance Project and from the EW3526 Arva Pumping Station Upgrades Project.

The Elgin Pumping Station Pump Upgrade works may also be eligible for subsidy from the OPA. City Staff have initiated the application process to the OPA SaveONEnergy Retrofit Program for incentive funding available for high efficiency equipment improvements. Early estimations in pre-project calculations indicate possible subsidies estimated between \$80,000 and \$140,000.

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**Tender Summary:**

Tenders for the Elgin Middlesex Pumping Station Pump Upgrades (EW3540) (Tender T13-73) Project were opened on August 14, 2013. Eight (8) contractors submitted tender prices as listed below (excluding H.S.T.).

| CONTRACTOR |                                    | TENDER PRICE SUBMITTED | CORRECTED TENDER PRICE |
|------------|------------------------------------|------------------------|------------------------|
| 1.         | Baseline Constructors Inc.         | \$1,340,067.00         | --                     |
| 2.         | BGL Contractors Corp.              | \$1,355,986.00         | --                     |
| 3.         | Dielco Industrial Contractors Ltd. | \$1,375,720.85         | --                     |
| 4.         | H2Ontario Inc.                     | \$1,410,916.09         | --                     |
| 5.         | Finnbuilt General Contracting Ltd. | \$1,488,304.05         | --                     |
| 6.         | Kingdom Construction Ltd.          | \$1,525,772.00         | --                     |
| 7.         | Stone Town Construction Ltd.       | \$1,633,600.00         | --                     |
| 8.         | Trade-Mark Industrial Inc.         | \$1,740,961.62         | --                     |

All tenders have been checked by the Environmental and Engineering Services Department and the City’s consultant, AECOM. None of the eight bids contained a mathematical error.

The tender estimate just prior to tender opening was \$1,455,324.00 (excluding H.S.T.). The low tender is 7.9% below the estimate. This indicates a competitive environment.

Future annual operating cost decreases of \$50,000 are recognized as a result of this project beginning midway through 2014, noting that these costs are attributed to the replacement of maintenance prone pumps with new more energy efficient pumps and will be considered and accommodated within future Water Operating Budgets.

**Consulting Services:**

AECOM was awarded the design services for the project originally in October 2005 by direct appointment. Subsequently, an increased scope in design services was approved by Council on October 24, 2011. Due to their knowledge and experience with this project, AECOM 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, administration is recommending that AECOM be authorized to carry out the remainder of engineering services to complete this project for the provided fee estimate of \$120,389.50 (excluding H.S.T.).

**Conclusions:**

Award of the Elgin Middlesex Pumping Station Pump Upgrades Project, Tender T13-73 (EW3540) to Baseline Constructors Inc. will allow the project objectives to be met within the available budget.

The use of AECOM to complete the remainder of engineering services for this project is in the best financial and technical interests of the City.

City staff have initiated the application process to the OPA SaveONEnergy Retrofit Program to apply for incentive funding available for high efficiency equipment improvements. If the City’s pre-project application is approved for subsidy, City staff will report back and update Committee and Council and seek direction for authorization in order to enter into an agreement with OPA to receive the funding subsidy.

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**Summary:**

It is anticipated that operating costs will decrease by approximately \$50,000 annually due to the work to be completed as part of this project.

London’s portion of the hydro costs for the site is approximately \$270,000.00 annually. It is anticipated that with the implementation of smaller pumps better suited to the operating strategy, and having the ability to pump at off peak consumption period, will reduce costs by approximately \$50,000 annually. These operating cost savings will be recognized in the 2015 and future years Water Budget.

**Acknowledgements:**

This report was prepared by Water Engineering Division, Patricia Lupton, P.Eng. Environmental Services Engineer, with assistance from Daryl Diegel, Corporate Energy Management Coordinator and reviewed by Roland Welker, P.Eng. Division Manager, Water Engineering Division.

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| <b>SUBMITTED BY:</b>  | <b>RECOMMENDED BY:</b>  |
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| <b>JOHN LUCAS, P. ENG.<br/>DIRECTOR, WATER AND WASTEWATER</b> | <b>JOHN BRAAM, P.ENG.<br/>MANAGING DIRECTOR,<br/>ENVIRONMENTAL &amp; ENGINEERING<br/>SERVICES &amp; CITY ENGINEER</b> |

September 17, 2013

PAL/jrg

Attach:   Appendix “A” – Sources of Financing

|      |              |               |                            |
|------|--------------|---------------|----------------------------|
| c.c. | John Simon   | Roland Welker | Geordie Gauld              |
|      | Andrew Henry | Jay Stanford  | Baseline Constructors Inc. |
|      | AECOM        |               |                            |