

Agenda Item #      Page #

--	--

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON AUGUST 25, 2014</b>
<b>FROM:</b>	<b>JOHN BRAAM, P. ENG. MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>POLLUTION PREVENTION AND CONTROL PLAN INFOWORKS MODELLING CONSULTANT APPOINTMENT</b>

### RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services & City Engineer, the following actions **BE TAKEN** with respect to award of Infoworks modelling assignments as part of Phase II of the Pollution Prevention and Control Plan:

- a) The following Consulting Engineering firms **BE APPOINTED** for the completion of Infoworks hydraulic modelling assignments, in the amounts identified below (all including contingency but exclusive of HST), in accordance with the estimate on file, based upon the Fee Guideline for Professional Engineering Services, recommended by the Ontario Society of Professional Engineers; and in accordance with Section 15.2 of the City of London's Procurement of Goods and Services Policy; it being noted that these consultants shall obtain approval to proceed with subsequent phases of engineering for their projects subject to satisfying all financial, reporting and other conditions contained within this Policy.
- (i) Assignment 1: Dillon Consulting Limited, in the amount of \$199,832.00.
  - (ii) Assignment 4: AECOM Canada Ltd., in the amount of \$74,176.00.
  - (iii) Assignment 5: XCG Consultants Ltd., in the amount of \$195,667.00.
  - (iv) Assignment 6: WSP Canada Inc., in the amount of \$138,708.00.
  - (v) Assignment 8: GM BluePlan Engineering Limited, in the amount of \$269,812.00.
  - (vi) Cavendish Assignment: Stantec Consulting Ltd., in the amount of \$65,343.00
- b) the financing for the projects identified in (a) above, **BE APPROVED** in accordance with the Sources of Financing Report attached hereto as Appendix "A";
- c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with these projects;
- d) the approval given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with each consultant for the work; 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

"Pollution Prevention and Control Plan Consultant Appointment Continuation", Civic Works Committee, February 3 2014.

"Consultant Appointment Pollution Prevention and Control Plan Project ES5419", Civic Works Committee, May 14 2012.

### BACKGROUND

Agenda Item #	Page #

### **Purpose:**

The purpose of this report is to recommend the award of five (5) Infoworks modelling assignments to the following engineering consultants; one each to Dillon Consulting Limited, AECOM Canada Ltd, XCG Consultants Ltd., WSP Canada Inc., and GM BluePlan Engineering Limited which will form conclusions for Phase II of the Pollution Prevention and Control Plan (PPCP), which is being completed by CH2M Hill Limited (CH2M Hill).

Additionally, this report seeks approval of an Infoworks modelling assignment to Stantec Consulting Ltd. to identify sanitary sewer servicing needs to aid future infrastructure lifecycle renewal projects in the Cavenish area (located southwest of Riverside Drive and Wharncliffe Road North) at the site of the former Douglas Avenue Pumping Station.

### **Context:**

The City of London is currently undertaking a Pollution Prevention and Control Plan (PPCP) to address and mitigate 149 confirmed sewer system overflows. These overflows were originally put in place to prevent basement flooding to area homes.

London's PPCP is a multi-year master plan project, split into three phases, designed to provide a long term solution for conveyance system sewer overflows and bypasses in an effort to meet system wide conformance with Ministry of Environment and Climate Change (MOECC) Procedure F-5-5 and to mitigate impacts on receiving water bodies, including the Thames River.

Phase II of the PPCP is currently underway. The scope of Phase II includes the need to undertake twelve (12) hydraulic sewer modelling and flow monitoring assignments to characterize all sewer system overflows. This report seeks approval to award five (5) hydraulic modelling assignments at this time.

### **Discussion:**

#### **PPCP Infoworks Modelling Assignments:**

Phase I of the PPCP Master Plan divided London's 149 sewer system overflows into 12 distinct hydraulic modelling assignments. Hydraulic modelling is required to properly characterize the sewer overflows and understand their role in the sanitary sewer network. The hydraulic modelling will also be used to determine whether the overflow sites are meeting the MOE's Procedure F-5-5 objectives. The City has chosen five assignments to be completed in 2014. The remaining assignments will be awarded in 2015 and 2016.

The City chose to utilize a three stage process following Section 15.2 of the City of London's Procurement of Goods and Services Policy to procure consulting services for award of this first group of hydraulic modelling assignments. The first stage consisted of an Expression of Interest/ Request for Qualification (EOI/RFQUAL) wherein consultants were invited to submit a proposal indicating their interest in completing hydraulic modelling assignments. Consultants were required to show that they had experience in sewer hydraulic modelling. Also, the City required that consultants own and have experience with Infoworks hydraulic modelling software, which was the sole modelling software to be used in the assignments. The EOI/RFQUAL was posted on Bidding.com and closed on February 14, 2014. Overall, eight (8) consultants submitted proposals. Following review and evaluation of proposals, seven (7) consultants were deemed to be eligible to have the opportunity to provide proposals to be awarded one (or more) hydraulic modelling assignments.

The second stage consisted of a quality based Request for Proposal which required consultants to submit a proposal to undertake sanitary sewer hydraulic modelling using Infoworks software. As this was a quality based selection process, fee estimates were not required at this stage of the process. All seven (7) eligible consultants submitted proposals, which closed on June 25, 2014. Following review and evaluation of proposals by City staff from the Wastewater and

Agenda Item #	Page #

Drainage Division (WADE) and Wastewater Treatment Operations (WTO), five (5) consultants were chosen to complete an assignment. The City selected one assignment for each consultant which best matched with the consultant's modelling experience and understanding of the subject areas. Consultants were notified of their opportunity to present a detailed work plan and fee estimate for their respective assignment on July 4, 2014. This represented the third stage of the consultant award process. During the following two weeks in July, each consultant met directly with City staff to discuss particulars of their modelling assignment to aid in their preparation of work plan and fee estimate. Submissions from each of the five (5) consultants were received during the week of July 21, 2014. It is noted that if City staff and the consultant could not come to an agreement regarding their work plan or fee estimate, the City reserved the right to negotiate with another firm. This was clearly communicated to all consultants.

Following review of work plan and fee estimates, discussion with each consultant, and comparison to conceptual cost estimates provided by CH2M Hill in the PPCP Phase I document, City staff is recommending the following:

- Award Assignment #1 to Dillon Consulting Limited to an upset limit of \$199,832.00
- Award Assignment #4 to AECOM Canada Ltd. to an upset limit of \$74,176.00
- Award Assignment #5 to XCG Consultants Ltd. to an upset limit of \$195,667.00
- Award Assignment #6 to WSP Canada Inc. to an upset limit of \$138,708.00
- Award Assignment #8 to GM BluePlan Engineering Limited to an upset limit of \$269,812.00

It is noted that these five (5) assignments vary in size and complexity. Each assignment also includes a detailed flow monitoring program which is required to quantify actual sewer flows to calibrate the hydraulic models. The total upset limit for the five (5) assignments is \$878,195.00 including \$114,977 in contingencies.

#### **Cavendish Assignment:**

Stantec was one of the seven (7) firms selected to be eligible to submit a proposal for one of the five (5) PPCP Infoworks modelling assignments. Ultimately, Stantec was not offered one of these assignments as other firms were considered to be better suited to provide services for the assignments available. However, the City did have an uncompleted Infoworks modeling assignment which was started in-house in the Cavendish area to provide additional insight into the hydraulic characteristics of sanitary sewers which converge at the site of the former Douglas Avenue Pumping Station, which was decommissioned in the 1960s. Sewer infrastructure replacement is required in this area and the City needs to better understand hydraulic needs to provide adequate sanitary servicing upon infrastructure renewal. Stantec submitted a workplan and fee estimate on July 25, 2014 and following review and discussion, City staff are prepared to recommend that Stantec be awarded the Cavendish assignment to an upset limit of \$65,343.00, including \$5,940.00 in contingency.

#### **Summary:**

The City is currently undertaking a Pollution Prevention and Control Plan (PPCP) which will provide the City, Ministry of the Environment and Climate Change, Upper Thames River Conservation Authority and community with a long term plan for managing sewer system overflows and bypasses in London. Hydraulic modelling of the sewer system overflows is required to properly characterize overflows and provide long term mitigation strategies. This report seeks approval to award five (5) PPCP Infoworks hydraulic modelling assignments to five (5) different engineering consultants. It is noted that this investment will lead to substantial infrastructure improvements in the future and the mitigation of 149 sewer system overflows throughout the City to reduce the environmental impacts to receiving water bodies, including the Thames River. The investment in future mitigating strategies could be in the tens of millions of dollars. Additionally, City staff are seeking approval to award the Cavendish Infoworks modelling assignment to identify future sanitary sewer servicing needs as infrastructure renewal is required in this area. Total upset limit for all six (6) assignments is \$943,538.00

Agenda Item #	Page #

**Acknowledgements:**

This report was prepared within the Wastewater and Drainage Engineering Division by Kyle Chambers, P.Eng., Environmental Service Engineer.

<b>PREPARED BY:</b>	<b>REVIEWED AND CONCURRED BY:</b>
<b>TOM COPELAND, P. ENG. DIVISION MANAGER, WASTEWATER AND DRAINAGE ENGINEERING</b>	<b>JOHN LUCAS, P. ENG. DIRECTOR, WATER AND WASTEWATER</b>
<b>RECOMMENDED BY:</b>	
<b>JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>	

August 19, 2014

/kjc

Attach: Appendix "A" – Sources of Financing

Y:\shared\Wastew\WPDOCS\RPRT\_Civic Works Committee

c.c. Pat Shack, Budget Analyst