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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 17 2012
FROM:	JOHN BRAAM, P. ENG. ACTING EXECUTIVE DIRECTOR AND CITY ENGINEER PLANNING, ENVIRONMENTAL AND ENGINEERING SERVICES
SUBJECT:	PALL MALL SEWERSHED MODELLING STUDY

RECOMMENDATION

That, on the recommendation of the Acting Executive Director and City Engineer, Planning, Environmental and Engineering Services, the following actions **BE TAKEN** with respect to the appointment of an engineering consultant for the Pall Mall Sewershed Modelling Study (ES2464):

- (a) CH2M Hill Canada Limited, 72 Victoria Street South, Suite 300, Kitchener, ON N2G 4Y9, **BE APPOINTED** Consulting Engineers for consulting services for said project of \$173,426.00 to a revised total of \$220,902.00 (excluding HST), 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;
- (b) the financing for the project **BE APPROVED** in accordance with the "Sources of Financing Report" attached hereto as Appendix "A";
- (c) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work;
- (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

- [Consultant Appointment - Pollution Prevention and Control Plan \(Project ES5419\), Civic Works Committee, May 14, 2012, Agenda #12.](#)

BACKGROUND

Purpose:

The purpose of this report is to recommend award of consulting services to CH2M Hill for the modelling study of the Pall Mall Sewershed.

Context:

The Pall Mall sanitary trunk sewer, constructed in 1897, contains many overflows to the adjacent storm and relief sewer, constructed in the late 1950s. This was undertaken to mitigate basement flooding. Opportunities exist to better manage this system and minimize overflows within the City of London. This work will also support the development of the Pollution Prevention Control Plan Master Planning study currently being undertaken.

Discussion:

Overflows

The Pall Mall trunk sanitary sewer has a number of overflows to the Storm and Relief sewer,

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dating back to the 1950s. These overflows were originally installed to prevent basement flooding which was previously experienced in the area. These overflows have not been analyzed in detail since their original installation. Initial analysis and study of the area indicates that there exists potential to improve the functionality of this system and reduce overflow occurrences. However, it must be recognized that overflows may still be required to prevent basement flooding. In order to fully understand the operation of the overflows and ability to remove or adjust them, the City needs to undertake detailed modeling and flow monitoring of the entire Pall Mall sanitary system.

Kellogg's Flow

Sanitary flows from the Kellogg's plant on Dundas Street currently end up at the Vauxhall Wastewater Treatment Plant (WTP). The nature of these flows cause excessive loading and operational issues on the smaller Vauxhall plant. Wastewater Treatment Operations have expressed a desire to divert these Kellogg's flows to Greenway WTP, where the nature of the flows can be handled much easier. Functionally, this can be accomplished by diverting to the top end of the Pall Mall trunk sanitary sewer, which is directly adjacent to the Kellogg's flow outlet. Operationally however, further study and system optimization is required. The additional volume from Kellogg's, if diverted today, may cause dry weather (non rainfall induced) overflows, which is not acceptable. However, if overflows are eliminated or adjusted, the additional Kellogg's flows may be accommodated.

Consultant Appointment

In 2011, CH2M Hill was hired by the City to undertake an initial overview study of the Pall Mall sanitary system. This included some high level analysis to evaluate the state of the system. Through their work, a number of opportunities to improve functionality of the system were identified. Following this initial study work, the City asked CH2M Hill to provide a work plan for a more detailed, comprehensive study, which included detailed modeling. The City has received and reviewed the work plan and fee estimate, and deemed it to be appropriate for this work. Hiring CH2M Hill is considered to be of best value to the City due to their modeling expertise and previous direct work with the Pall Mall sanitary sewershed.

Conclusions:

The Pall Mall sanitary sewershed requires detailed modeling and analyses to further improve the functionality of the system, reduce the frequency and volume of overflows, and provide the opportunity to divert Kellogg's flows to Greenway. CH2M Hill has been involved with previous Pall Mall work, and is considered an expert in sewer modeling. Staff recommends that CH2M Hill be appointed engineering consultants for this project with upset fees of \$173,426.00. It is noted that previous engineering work by CH2M Hill for Pall Mall related work has been \$47,476.00, bring the total anticipated fees to \$220,902.00.

Acknowledgements:

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

SUBMITTED BY:	RECOMMENDED BY:
TOM COPELAND, P. ENG. DIVISION MANAGER WASTEWATER AND DRAINAGE ENGINEERING	JOHN BRAAM, P.ENG. ACTING EXECUTIVE DIRECTOR AND CITY ENGINEER; PLANNING, ENVIRONMENTAL AND ENGINEERING SERVICES

July 18, 2012

/kjc

Attach: Appendix "A" – Sources of Financing

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c.c. Pat Shack, Budget Analyst