

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 18, 2013</b>
<b>FROM:</b>	<b>EDWARD SOLDI, P. ENG. DIRECTOR, ROADS AND TRANSPORTATION</b>
<b>SUBJECT:</b>	<b>APPOINTMENT OF A CONSULTING ENGINEER 2013 STRUCTURE INVENTORY INSPECTION PROGRAM AND BRIDGE MANAGEMENT SYSTEM DATABASE UPDATE</b>

**RECOMMENDATION**

That on the recommendation of the Director, Roads & Transportation, the following actions **BE TAKEN** with respect to the appointment of a Consulting Engineer for the 2013 Structure Inspection Program and Bridge Management System Database Update:

- a) AECOM Canada Ltd. **BE APPOINTED** as the Consulting Engineers for the 2013 Structure Inventory Inspection Program and Bridge Management System Database Update in accordance with the estimate, on file, at an upset amount of \$119,688.25 (excluding H.S.T.), in accordance with Section 15.2 'd' of the Procurement of Goods and Services Policy;
- b) the financing for this project **BE APPROVED** as set out in the Source of Financing Report attached hereto as Appendix 'A';
- c) the consulting fee for the project identified in (a), above, which is in accordance with the estimate on file, and which is based upon the Fee Guideline for Professional Engineering Services recommended by the Ontario Society of Professional Engineers **BE APPROVED**; and
- d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work.

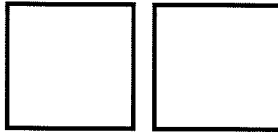
**BACKGROUND**

**Purpose:**

The purpose of this report is to seek approval for the appointment of an Engineering Consultant to initiate engineering services necessary to undertake inspections of all the City of London's structures, including bridges, culverts, pedestrian bridges, pedestrian tunnels, retaining walls and overhead sign structures, followed by an update to the City's Bridge Management System database (BMS). The consultant will also proceed with conversion of the City's BMS data to the Ontario Good Roads Association (OGRA) Municipal DataWorks (MDW) program which will allow for transition to that format for future inspections and database updates.

**DISCUSSION**

A bi-annual inspection of bridges and culverts by a Professional Engineer is mandated by the Public Transportation and Highway Improvement Act. It is imperative to maintain a structure management system such that optimization of available funding can occur. By allocating rehabilitation resources at critical life cycle stages for the structures, the City will benefit as a significant extension of design life can be achieved.



The scope of this engineering assignment includes inspecting all transportation structures in the City of London. There are 244 structures in the City's inventory, including 102 bridges, 94 large culverts, 27 pedestrian bridges, 7 pedestrian tunnels, 17 retaining walls and 1 overhead sign structure. It is to be noted, two (2) structures (West Brough's Bridge and Meadowlily Footbridge) are planned for rehabilitation this summer and will NOT require an inspection this year. In conjunction with the results of the new inspections, previous inspection data and photographs will be incorporated into the updated database. This system will serve to identify and prioritize immediate, mid-term, and long-term needs and suggest yearly work plans for budget purposes. Part of the assignment is to recommend a 0-5, 6-10 and 11-20 year work plans for major, minor, normal and routine repair.

The 2013 Structural Inventory Inspection Program will provide input into the implementation strategy for the Transportation Master Plan as it will help identify the long term requirements and the gap in funding needed to maintain the City's bridge structures in good repair.

The preliminary schedule is as follows:

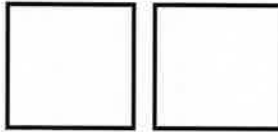
Assignment awarded by Council	March 26, 2013
Field Inspection of Structures	April – June 2013
Inspection Summary (noting any major deficiencies requiring emergency repair)	July 2013
Conversion to Municipal DataWorks	August 2013
Finalize Inventory & BMS update	November 2013

**CONCLUSION**

**Recommendation:**




Three Consulting firms were invited to submit proposals for this project. Two firms responded with written proposals including a summary of the project tasks, schedule, and costs. The proposal from AECOM Canada Ltd. identified an experienced project team with a clear understanding of the project scope and requirements. AECOM Canada Ltd. has extensive experience with structural inspections, having completed the 2007, 2009 and 2011 Bridge Inspection Programs for the City of London along with numerous structural studies and projects across Ontario.

Based on the technical evaluation of the proposals, it is recommended AECOM be awarded the 2013 Structure Inventory Inspection Program and Bridge Management System Database Update at an upset amount of \$119,688.25 (excl HST). This assignment will be funded from the 2013 Bridges – Major Upgrade capital account.



**Acknowledgements:**

This report was prepared with assistance from Jane Fullick, Technologist II in the Transportation Planning & Design Division and Karl Grabowski, Transportation Engineer.

<b>PREPARED BY:</b>	<b>RECOMMENDED BY:</b>
	
DOUG MACRAE, P. ENG. DIVISION MANAGER TRANSPORTATION PLANNING & DESIGN	EDWARD SOLDO, P. ENG. DIRECTOR, ROADS AND TRANSPORTATION
<b>REVIEWED &amp; CONCURRED BY:</b>	
	
JOHN BRAAM, P. ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

KPG/jef

Attachment: Appendix 'A' – Source of Financing

- c I. Blevins, AECOM Canada Ltd.
- I. Bartlett, Stantec Consulting

APPENDIX 'A'

#13018

Chair and Members  
Civic Works Committee

March 1, 2013  
(Appoint Consulting Engineer)

**RE: 2013 Structure Inventory Inspection Program and  
Bridge Management System Database Update  
Capital Project TS1763-13 - 2013 Bridges Major Upgrades  
AECOM Canada Ltd. - \$119,688.25 (exculding H.S.T.)**

**FINANCE DEPARTMENT REPORT ON THE SOURCES OF FINANCING:**

Finance Department confirms that the cost of this project can be accommodated within the financing available for it in the Capital Works Budget and that, subject to the adoption of the recommendations of the Director, Roads and Transportation, the detailed source of financing for this project is:

<b><u>ESTIMATED EXPENDITURES</u></b>	<b><u>Approved Budget</u></b>	<b><u>This Submission</u></b>	<b><u>Balance for Future Work</u></b>
Engineering	\$200,000	\$121,794	\$78,206
Construction	1,580,000		1,580,000
City Related Expenses	20,000		20,000
<b>NET ESTIMATED EXPENDITURES</b>	<b><u>\$1,800,000</u></b>	<b><u>\$121,794</u> 1)</b>	<b><u>\$1,678,206</u></b>
<b><u>SOURCE OF FINANCING:</u></b>			
Federal Gas Tax	\$1,800,000	\$121,794	\$1,678,206
<b>TOTAL FINANCING</b>	<b><u>\$1,800,000</u></b>	<b><u>\$121,794</u></b>	<b><u>\$1,678,206</u></b>

**Financial Note:**

- 1) Contract Price  
Add: HST @13%  
Total Contract Price Including Taxes  
Less: HST Rebate  
Net Contract Price

\$119,688
15,559
<u>135,247</u>
13,453
<u>\$121,794</u>

EH



Alan Dunbar  
Manager of Financial Planning & Policy