

--	--

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 8, 2016
FROM:	JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	ROADMATRIX PAVEMENT MANAGEMENT SYSTEM SERVICES AWARD

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the procurement of two years of RoadMatrix Pavement Management System services:

- (a) Stantec Consulting Ltd. **BE AWARDED** the assignment to provide two years of RoadMatrix Pavement Management System Services in the amount of \$370,757.20 (excluding H.S.T.) in accordance with Section 14.3 (b) of the Procurement of Goods and Services Policy, it being noted that Stantec Consulting Ltd. is the only authorized distributor of RoadMatrix and related products and services;
- (b) the financing for this project **BE APPROVED** as set out in 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 this project;
- (d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the consultant for the work; and,
- (e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents including rail-related agreements, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
--

- Civic Works Committee – Oct 7, 2013 – Transportation Infrastructure Gap
- Corporate Services Committee – Dec. 10, 2013 – State of the Infrastructure Report 2013
- Corporate Services Committee – Aug. 26, 2014 – Corporate Asset Management Plan 2014

--	--

- Corporate Services Committee – Dec. 1, 2015 – Corporate Asset Management Plan 2015 Review

2015 – 19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of *Building a Sustainable City* by managing the infrastructure gap by obtaining updated condition data of the City’s existing paved road network and using analytical tools to predict the City’s future needs for long term maintenance based on funding levels and anticipated degradation.

BACKGROUND

Purpose

This report seeks the approval of the Municipal Council of the procurement of two years of RoadMatrix Pavement Management System services.

Background

Pavement Management is the process used for planning the maintenance and repairs of our network of roadways in order to optimize pavement conditions over the entire network. Pavement management encompasses many aspects and tasks needed to maintain a quality pavement inventory and ensure the overall condition of the road network can be sustained at required levels. Transportation Planning and Design Division has been utilizing “RoadMatrix” as the pavement management system. RoadMatrix is a proprietary software program developed and licenced by Stantec Consulting Ltd. as outlined in Appendix B.

On a network wide basis, the RoadMatrix Pavement Management process is a tool which have been utilized by City staff to track the present condition of the road network, predict future performance based on anticipated road maintenance and rehabilitation funding levels, help develop future rehabilitation plans and develop annual reporting numbers for the Ontario Municipal Benchmarking Initiative (OMBI) and the Financial Information Report (FIR). As well, RoadMatrix was used extensively to develop the Corporate Asset Management State of the Infrastructure Report. The Roads Service continues to support Corporate Asset Management as a subject area for the ongoing pilot trial project. These tools are also used to help determine long-term maintenance funding requirements and to examine the consequences on network condition of various funding scenarios.

DISCUSSION

The City of London has a paved road network of approximately 3,629 lane-km. The road network must be maintained in order to meet the needs of the City’s residents and the Municipal Act Minimum Maintenance Standards. Since 1997, the City of London has commissioned the Infrastructure Management and Pavement Engineering group of Stantec Consulting Ltd. to provide annual services and ongoing support for pavement

--	--

management practices. The mechanized pavement condition assessment methods used by Stantec are very cost-effective. These annual services have included surface condition surveys of one quarter (¼) of the City’s paved network on a four-year rotational cycle, maintenance and updating of the City’s extensive road network database, analysis of the current and future conditions utilizing Stantec’s RoadMatrix pavement management software and the provision of an Annual Network Analysis Summary Report.

The annual report is based on ¼ of the paved road network being annually surveyed for its present condition, the remaining ¾ of the network being statistically aged through the RoadMatrix software to reflect anticipated degradation based on known factors and predicted degradation curves. The analysis recommends a network level treatment plan to maintain city roads based on the available funding. City staff utilize the network level treatment plan as a key tool which determines the road needs subsequently identified in the Road Rehabilitation Programs and the Infrastructure Life Cycle Renewal program.

Over the past 20 years, Stantec Consulting Ltd. has provided software updates, and the City has worked diligently to keep the quality of the background data updated within the software and database. The information in the database includes past pavement rehabilitations, constructed pavement structures, subgrade strengths and traffic volumes. The database is tied to the City’s Geographic Information and Mapping Systems.

To better support asset management systems, it is recommended to complete the pavement condition survey over of the entire road network spread within the next two years (½ of the network each year). This approach will provide a more accurate current picture of the paved road network and improved infrastructure gap analyses.

Stantec is the sole authorized distributor of the RoadMatrix software that is a key component of the Roads Corporate Asset Management processes. No other service providers can provide consistency of data collection and RoadMatrix analysis. The service provided by Stantec offers value for the needs of the City of London, while maintaining the historical records and continuity with the current process for the City’s pavement management practices.

CONCLUSION

The City’s pavement management system requires RoadMatrix software that provides complex analysis, technical expertise, historical linkages and continuity of asset management processes. Competition for the provision of this RoadMatrix service was precluded due to software licence rights. It is therefore recommended the services be procured from Stantec Consulting Ltd through the sole source provisions in Clause 14.3 (b) of the Procurement of Goods and Services Policy to survey, report and analyze the condition of the City of London’s entire paved road network over the next two years at an upset amount of \$370,757.20 (excluding HST).

--	--

Acknowledgements

This report was prepared with assistance from Jane Fullick, C.E.T., Technologist II, and Karl Grabowski, P. Eng., Transportation Design Engineer of the Transportation Planning and Design Division.

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

Attachments: Appendix A - Source of Financing
 Appendix B – Stantec Road Matrix Licensing, Maintenance, and
 Support Services Letter

c: B. Walker, Stantec Consulting, 835 Paramount Dr. Stoney Creek, ON L8J 0B4

Agenda Item # Page #

--	--

APPENDIX B
**Stantec Road Matrix Licensing,
Maintenance, and Support Services Letter**



Stantec Consulting Ltd.
300 Hagey Boulevard, Suite 100, Waterloo, ON N2L 0A4

February 1, 2016
File: 1620.80040.100.200

Attention: Mr. Karl Grabowski, P. Eng., Transportation Design Engineer
Corporation of the City of London
Transportation Division
Environmental Services Department
300 Dufferin Ave., P.O. Box 5035
London, ON N6A 4L9

Dear Karl,

Reference: RoadMatrix Software Licensing, Maintenance, and Support Services

Stantec Consulting Ltd. has been providing asset management software solutions for over 35 years. We are the developers and sole vendors of **RoadMatrix**, Stantec's licensed, copyrighted, and proprietary Pavement Management software product that provides municipal road agencies with a powerful decision support tool to manage their large-scale road networks. Stantec provides development and support services out of our Waterloo, ON office, and is the only authorized company to provide software licensing, maintenance, and support for **RoadMatrix**.

This letter is to confirm that Stantec is the only authorized distributor of **RoadMatrix** and its related products and services.

Please do not hesitate to contact us should you have any questions. We look forward to our continued relationship with the City of London.

Regards,

STANTEC CONSULTING LTD.

Bill Walker, B.A.Sc.
Project Manager,
Infrastructure Management
& Pavement Engineering
Tel: (905) 381-3244
Fax: (905) 385-3534
bill.walker@stantec.com

Amir Abd El Halim, Ph.D., P.Eng.
Managing Principal,
Infrastructure Management
& Pavement Engineering
Phone: (519) 585-7465
Fax: (519) 579-6733
amir.abdelhalim@stantec.com

c. Bill Walker

ch:\a\promotion\proposals\82100\london\2016-2017_rm\let_sole_source_rm_20160201.docx

Design with community in mind