



Staff Report for Committee of the Whole Meeting

Date of Meeting: March 20, 2024

Report Number: SRIES.24.011

Department: Infrastructure and Engineering Services

Division: Infrastructure Delivery

Subject: **SRIES.24.011 – Pavement Condition Data Collection Services on Designated Roadways within the City of Richmond Hill**

Purpose:

To obtain Council approval for a non-competitive acquisition for Pavement Condition Data Collection services on designated roadways with a value greater than \$100,000 in accordance with Procurement By-Law 113-16.

Recommendation(s):

- a) That the contract for Pavement Condition Data Collection Services on Designated Roadways within the City be awarded non-competitively to Stantec Consulting Ltd. at a cost not exceeding \$195,000 (net of the HST rebate) for a contract duration of three (3) years, pursuant to Appendix "B", Part I, Section (c) of Procurement By-Law No. 113-16; in order to ensure compatibility with existing RoadMatrix software used and maintained by the City of the Richmond Hill staff.
- b) That the Commissioner of Infrastructure and Engineering Services be authorized to execute any necessary documentation to execute the contract.

Contact Person:

Bob Levesque, Director Infrastructure Delivery

Luis De Jesus, Manager Capital Infrastructure Programming and Project Management Office

Report Approval:

Submitted by: Paolo Masaro, Commissioner, Infrastructure and Engineering Services

Approved by: Darlene Joslin, City Manager

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All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner, and City Manager. Details of the report's approval are attached.

Background:

Municipalities are legislatively mandated to inspect and maintain their road network in a state of good repair.

The City of Richmond Hill (City) owns and maintains a paved road inventory of more than 590 center-line km. The City's roadway network needs to be inspected and maintained in a state of good repair mandated by the Municipal Act 2001, more specifically, O.Reg. 239/02 Minimum Maintenance Standards for Municipal Highways. The City has adopted a three-year data collection cycle with yearly condition assessments to approximately one-third of the City roadway network.

The system used to assess pavement condition in Richmond Hill is proprietary.

The services undertaken by the City's road pavement condition assessment vendor includes annual data collection to determine the present road network status based on three performance indicators: Pavement Quality Index (PQI), Ride Comfort Index (RCI), and Surface Distress Index (SDI). Structural Adequacy Index (SAI) is also collected on selected portions of the City's paved road network. The collected field data is then uploaded to RoadMatrix, the City's current Pavement Management System. RoadMatrix is a proprietary software developed and supplied to the City by Stantec Consulting Ltd.

RoadMatrix stores the collected data and is utilized to assess and recommend various rehabilitation options. The data exported from RoadMatrix is also integrated into the City's Enterprise Asset Management (EAM) system providing evidence based prioritized road rehabilitation needs to maintain a good quality level of service for all City paved roads.

In 2023, Stantec Consulting Ltd. was retained through SRFQ-2310083 to complete the road pavement condition assessment of 191 center-line km of the City's paved road network.

Other options were examined to manage historical and future data collection.

Furthermore, the City also proactively met in 2023 with various consulting firms who specialize in pavement condition data collection services. Although all the firms utilized very similar automated vehicles to collect the data, these other firms are unable to utilize RoadMatrix to upload, assess and recommend rehabilitation options as required by the City.

Continuing with the existing software system is the preferred approach.

To ensure continuity with historical road condition data, and tie-in to the City's Enterprise Asset Management System, continued use of the Road Matrix system is required. This contract will cover a full three-year cycle, from 2024 to 2026, with one-third of the City's

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roads network assessed annually as per the following schedule and as illustrated in the Attachment (Figure 1):

Year 2024: Road network between 19th Avenue/Gamble Road to Bloomington Road.

Year 2025: Road network between Hwy 7 to Major Mackenzie Drive.

Year 2026: Road network between Major Mackenzie Drive to 19th Avenue/Gamble Road.

Procurement By-Law no. 113-16, Appendix “B”, Part I – Sole Source Acquisition Clause (c) stipulates that sole source acquisitions may be made:

- To ensure compatibility with existing products, to recognize exclusive rights such as patent, copyright, or license, or to maintain specialized products that must be maintained by the manufacturer or its representative.

Staff recommends awarding the contract as Sole Source Acquisition Clause (c) as RoadMatrix is proprietary to Stantec Consulting Ltd. and helps maintaining the consistency of the roads condition historic and new data.

Financial/Staffing/Other Implications:

The total of the proposed three-years award to Stantec Consulting Ltd. forecasted in the amount of \$195,000, net of the HST rebate, breaks down in accordance with the following table:

Proposed Three-Year Forecast

Service Provider	2024	2025	2026
Stantec Consulting Ltd.	\$65,000	\$65,000	\$65,000

Relationship to Council’s Strategic Priorities 2020-2022:

Awarding the contract to Stantec will help meet the Council Strategic Priority of Getting Around the City. This assignment will provide reliable data that will enable the City to maintain the roads in state of good repair and will provide the residents safe and quality roads to get around the City.

This assignment also demonstrates Council Strategic Priorities of Balancing Growth and Green and Fiscal Responsibility. The data and recommendations from this assignment promotes longer-term sustainability planning which is synergized with the City Asset Management Plan to support evidence-based decisions for roads rehabilitations.

Climate Change Considerations:

Evaluating City asset conditions and utilizing strategic evidence-based planning for rehabilitation/replacement contributes to climate change mitigation by minimizing the

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frequency of construction activity and the use of gas-powered equipment that result in GHG emissions.

Conclusion:

Staff are recommending that the non-competitive contract for Pavement Condition Data Collection Services on Designated Roadways within the City be awarded to Stantec Consulting Ltd. at a cost not exceeding \$195,000 (net of the HST rebate) for a contract duration of three (3) years, pursuant to Appendix “B”, Part I, Section (c) of Procurement By-Law No. 113-16

Attachments:

Figure 1: Road Pavement Condition Assessment Study Areas with Respective Years

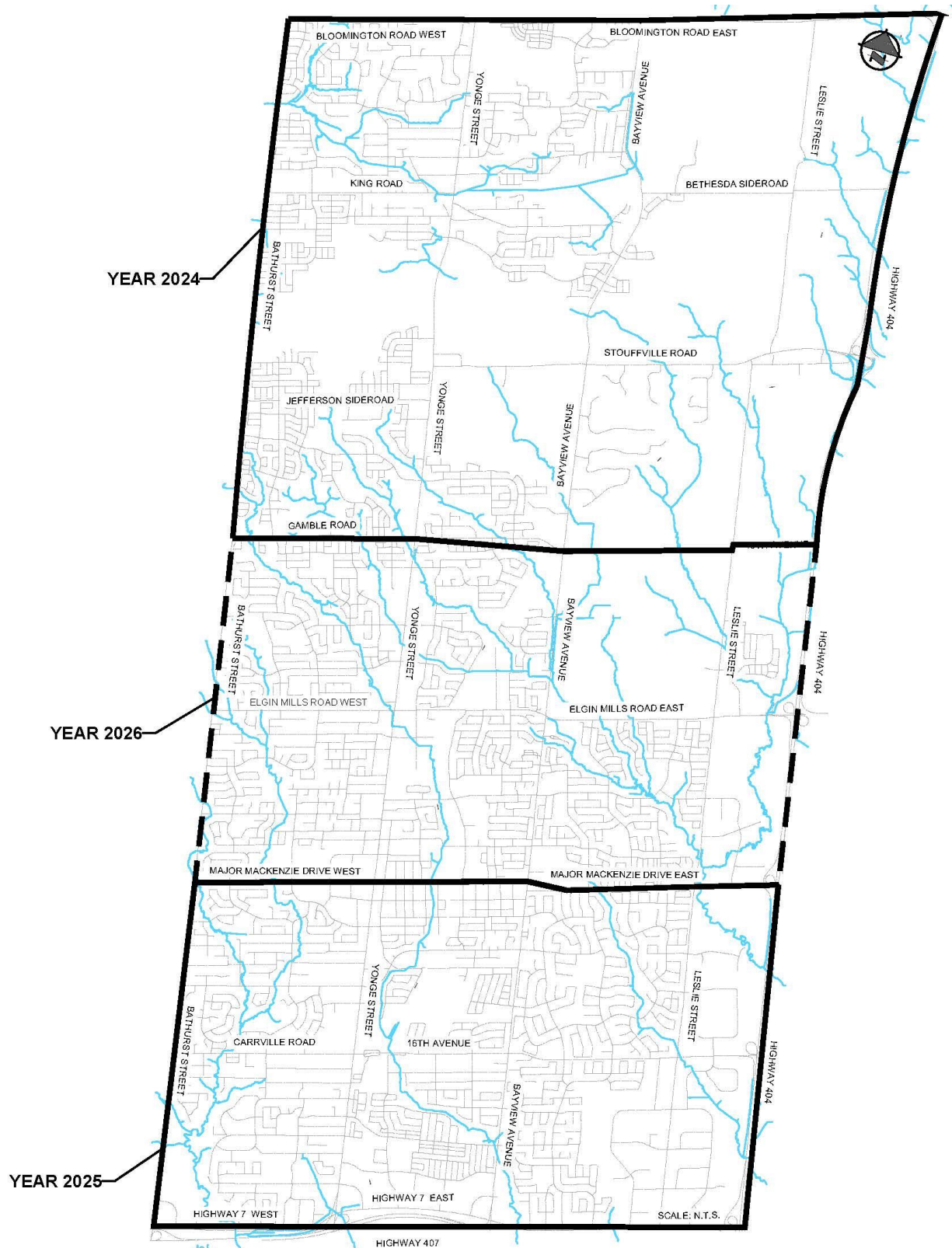


Figure 1: Road Pavement Condition Assessment Study Areas with Respective Years

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Report Approval Details

Document Title:	SRIES.24.011 Pavement Condition Data Collection Services on Designated Roadways within the City of Richmond Hill.docx
Attachments:	
Final Approval Date:	Feb 23, 2024

This report and all of its attachments were approved and signed as outlined below:

Bob Levesque - Feb 22, 2024 - 10:52 AM

Paolo Masaro - Feb 22, 2024 - 4:56 PM

Darlene Joslin - Feb 23, 2024 - 9:39 AM