Section I - Items for Board of Directors Action

TO: Chair and Members of the Executive Committee

Meeting #7/19, Friday, September 06, 2019

FROM: Moranne McDonnell, Director, Restoration and Infrastructure

RE: REQUEST FOR PROPOSAL FOR 2019 SLOPE STABILITY AND EROSION

RISK ASSESSMENTS WITHIN CITY OF TORONTO

RFP No. 10020502

KEY ISSUE

Award of Request for Proposal (RFP) No. 10020502 to undertake geotechnical investigations to complete various slope stability and erosion risk assessments for multiple private properties within the City of Toronto.

RECOMMENDATION

WHEREAS Toronto and Region Conservation Authority (TRCA) is engaged in a project that requires the services of professional geotechnical engineering consultants;

AND WHEREAS TRCA solicited proposals through a publicly advertised process and evaluated the proposals based on the technical and financial criteria;

AND WHEREAS staff was subsequently authorized at Authority Meeting #7/19 under Resolution #A143/19 to commence with the said investigation;

THEREFORE LET IT BE RESOLVED THAT Request for Proposal (RFP) No. 10020502 for 2019 Slope Stability and Erosion Risk Assessments Within City of Toronto be awarded to the following consultants KGS Group Inc. (Section 1 – East Toronto Sites), AECOM Canada Ltd. (Section 2 – Parkview Hill Crescent and Welby Circle), Terraprobe Inc. (Section 3 – West Toronto Sites) and Frontop Engineering Ltd (LTSSC Update Sites);

THAT TRCA staff be authorized to approve additional expenditures to a maximum of \$67,928.00 (approximately 15% of the project cost), plus applicable taxes, in excess of the contract cost as a contingency allowance if deemed necessary;

THAT should TRCA staff be unable to negotiate a contract with the above-mentioned proponents, staff be authorized to enter into and conclude contract negotiations with other Proponents that submitted proposals, beginning with the next highest ranked Proponent meeting TRCA specifications for each section;

AND FURTHER THAT authorized TRCA officials be directed to take whatever action may be required to implement the contract, including the obtaining of necessary approvals and the signing and execution of any documents.

BACKGROUND

TRCA has been inventorying, assessing and remediating erosion hazards for more than 30 years under various program names and special projects. In recent years, intensifying storm events such as the July 8, 2013 severe storm, the May 2017 severe rain event, and the high Lake Ontario water levels along the waterfront in 2019 have resulted in more frequent widespread flooding, surcharges of water infrastructure, debris jams, damage to river and valley systems including extensive damage to park trails and pedestrian bridges, and an unprecedented number of slope failures on hundreds of private properties that border these natural areas. The result of these intensifying and more severe weather events has been a significant increase in the number of erosion hazard sites in the City of Toronto which are awaiting assistance through TRCA's Erosion Risk Management Program (ERMP). Through this long-standing program, TRCA supports our municipal partners to effectively deal with the effects of climate change by implementing cost-effective solutions to protect essential infrastructure.

Prioritization of sites under the Valley Erosion Hazard portfolio for implementation is based on the level of risk to essential structures (i.e. dwellings) and risk to the public safety. TRCA's Erosion Risk Management staff complete inspections throughout the City of Toronto annually and all erosion hazard sites are then prioritized for a detailed slope stability and erosion risk assessment to determine the extent of the risk to essential structures. Only the highest scoring sites will be proposed to be studied in detail every year due to the number of active sites and limited program funding as TRCA also plans & implements remedial erosion control works at the highest risk sites.

The services of professional geotechnical engineering consultants are required to complete slope stability and erosion risk assessments at various erosion hazard sites across the City of Toronto. These services are also required to review existing subsurface information and previous studies to complete a detailed slope stability analysis to ensure the erosion hazard sites are being prioritized for assistance using the same parameters.

The sites are located throughout the City of Toronto and have been organized within the RFP into four (4) sections due to their geographic location and scope of work. In addition, the sites within the RFP were divided into four sections to ensure that the geotechnical investigations will be completed simultaneously using multiple consultants and borehole drilling subcontractors to maintain schedule. Section 1 - East Toronto Sites includes 40 private properties, Section 2 - Parkview Hill Crescent and Welby Circle includes 65 private properties, Section 3 - West Toronto Sites includes seven private properties, and Section 4 - LTSSC Update Sites includes 75 private properties. The properties included in these four different sections have been brought to TRCA's attention by Erosion Risk Management staff while in the field, private property owners that have noticed signs of erosion on their property, and by desktop review and analysis of other information. Site specific details are described in Attachment 1. Some in-year adjustments to the proposed sites may be required due to delays with property owner negotiations, owner opt-outs, and other factors.

RATIONALE

RFP documentation was posted on the public procurement website www.biddingo.com on July 3, 2019 and closed on August 2, 2019. Three (3) addendums were issued to respond to questions received. A total of forty-five (45) firms downloaded the documents and eight (8) proposals were received from the following Proponent(s) with the respective sections bid upon:

- AECOM Canada Ltd.
- EXP Services Inc.
- Frontop Engineering Ltd.
- Geomaple Geotechnics Inc.
- HLV2K Engineering Ltd.
- KGS Group Inc.
- Soil Engineers Ltd.
- Terraprobe Inc.

The proposals from EXP Services Inc. (Sections 1-4), Soil Engineers Ltd. (Sections 2-4) and Geomaple Geotechnics Inc. (Sections 1-3) did not meet the minimum score of 60 out of 85 percentage for technical criteria and were not evaluated further.

An Evaluation Committee comprised of staff from the Engineering Projects group reviewed the technical and financial proposals. In addition, TRCA's Senior Geotechnical engineer reviewed the scope of work and drilling program for the more involved sections to confirm the approach proposed is appropriate. The criteria used to evaluate and select the recommended Proponents included the following:

Criteria	Weight (%)	Minimum Score
Conformance with the terms of the RFP	10	-
Expertise, qualifications, and availability of project team	15	-
Similar projects – scope and magnitude	10	-
Understanding of project and scope of work	15	-
Sub-Total Technical	85	60
Pricing (Reasonableness of cost)	15	-
Sub-Total Pricing	15	-
Total Points	100	-

Through the evaluation process, it was determined that KGS Group Inc. is the highest ranked vendor for Section 1, AECOM Canada Ltd. for Section 2, Terraprobe Inc. for Section 3, and Frontop Engineering Ltd. for Section 4. All of these firms met the qualifications and requirements set out in the RFP. Therefore, staff recommends the award of contract No. 10020502 to KGS Group Inc., AECOM Canada Ltd., Terraprobe Inc. and Frontop Engineering Ltd. Proponent's scores and staff analysis of the evaluation results can be provided in an incamera presentation, upon request.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan
This report supports the following strategic priority set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 2 – Manage our regional water resources for current and future generations

Item 8.1.

FINANCIAL DETAILS

Based upon a review of previous geotechnical investigations completed for various private properties within City of Toronto, the anticipated costs for the requested services are approximately \$500,000.00. An increase or decrease in workload and potential property owner opt-outs will have an impact on the value of this contract. All vendors understand both the potential cost and resource implications associated with changes in workload.

Funds for the contract are identified in the 2019 Valley Erosion Hazard budget funded by City of Toronto. The investigation was approved as part of the 2019 workplan authorized at Authority Meeting #7/19 under Resolution #A143/19. The cost of executing this contract, including all staff time and associated costs to manage the project, are charged to account 133-03.

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Report approved by: Matt Johnston, extensions 5525

Date: September 6, 2019

Attachments: 2

Attachment 1: Proposed 2019 Geotechnical Investigation Sites within City of Toronto Attachment 2: Key Map of Proposed 2019 Geotechnical Investigation Sites within City of

Toronto