



Geotechnical and Geo-Environmental - Triennial Services

Date: June 17, 2020
To: TTC Board
From: Chief Capital Officer

Summary

The purpose of this report is to obtain the Board's authorization for the award of Contract G85-382 for Geotechnical and Geo-Environmental – Triennial Services in the upset limit amount of \$9,600,000.00, inclusive of all taxes, on the basis of highest total weight scores to the following companies:

• Golder Associates Ltd. (Golder)	\$3,200,000.00
• GHD Limited (GHD)	\$3,200,000.00
• Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited (Wood)	\$3,200,000.00
Total overall upset limit:	\$9,600,000.00

The work included in this Request for Proposals (RFP) is for the retention of service providers who will carry out geotechnical and geo-environmental investigations in support of capital projects for the TTC. Geotechnical and geo-environmental investigations are a key component in all large and small capital and operational infrastructure improvement projects. The work will be carried out on an as-required basis on approved capital projects, over a period of three years.

Recommendations

It is recommended that the Board:

1. Authorize the award of Contract G85-382, Geotechnical and Geo-Environmental – Triennial Services, inclusive of all taxes on the basis of highest total weighted scores, to the following companies:

• Golder Associates Ltd. (Golder)	\$3,200,000.00
• GHD Limited (GHD)	\$3,200,000.00
• Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited (Wood)	\$3,200,000.00

Total overall upset limit: \$9,600,000.00

Financial Summary

Sufficient funds are included in the TTC's 2020-2029 approved Capital Budget and Plan for various capital projects including but not limited to Easier Access Elevators, Second Exits, Fire Ventilation Upgrades, On-Grade Paving Rehabilitation, garage and facility expansions and upgrades, Subsurface Garage Remediation Program, etc. Once a project has been approved, a portion of the project budget is used to carry out geotechnical and geo-environmental investigations, as required.

The contract work will be administered on a Work Assignment Release basis. Work will only commence as authorized by TTC staff in the form of a Work Assignment Release and payment for services will be based on the terms included in the Contract Documents.

Contract Year	Consultant			Totals Upset Limit
	Golder	GHD	Wood	
2020 (July - December)	\$ 500,000.00	\$ 500,000.00	\$ 500,000.00	\$ 1,500,000.00
2021	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 3,000,000.00
2022	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 3,000,000.00
2023 (January to June)	\$ 700,000.00	\$ 700,000.00	\$ 700,000.00	\$ 2,100,000.00
Consultant Total Value	\$ 3,200,000.00	\$ 3,200,000.00	\$ 3,200,000.00	\$ 9,600,000.00

Notes:

- 1) The values provided are estimates only and do not reflect the actual values per year per consultant.
- 2) The actual values per year per consultant will be based on tasks assigned to the consultants.

The Interim Chief Financial Officer has reviewed this report and agrees with the financial impact information.

Equity/Accessibility Matters

A cornerstone of the TTC's Corporate Plan 2018-2022 is accessibility, and as a proud leader in providing accessible public transit in the city of Toronto, we are committed to ensuring reliable, safe and inclusive transit services for all our customers. Projects such as Easier Access Elevators, Second Exits, Fire Ventilation Upgrades, On-Grade Paving Rehabilitation, garage and facility expansions and upgrades, Subsurface Garage Remediation Program, etc. (for which this related contract is being awarded) are examples of the TTC's commitment to accessibility and equity.

Decision History

The TTC's Geotechnical and Geo-environmental Design Section of the Engineering Department retains the services of consulting firms to carry out geotechnical and geo-environmental investigations for various capital projects on an as-required basis. The consultants also provide 24-hour, on-call staff to assist the TTC in directing and monitoring emergency clean-up of spills and leaks in accordance with the Corporate Emergency Response Plan and applicable legislation.

A competitive bid process was conducted in February 2016 for the Geotechnical and Geo-Environmental Triennial Services contract. As a result of this competitive bid process, contracts were awarded for a three-year term to May 31, 2019.

http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2016/May_31/Agenda/Agenda_May_31_%202016_V2.pdf

Contract No. G85-343A and G85-343B have been extended to July 31, 2020, while Contract No. G85-343C has been extended to December 31, 2020, in order to maintain continuity of geotechnical and geo-environmental services to the TTC, and continued 24-hour emergency response support, while the new contract is prepared and awarded.

Issue Background

Geotechnical investigations are carried out to determine and assess the soil and groundwater conditions at the location of planned design and construction works. The information obtained through these investigations are interpreted by the geotechnical engineers, and geotechnical recommendations for design are provided.

In conjunction with geotechnical investigations, geo-environmental work is carried out to assess the environmental condition and potential impacts of both soil and groundwater for the planned construction works and infrastructure improvements. This information is used, along with the Ministry of Environmental, Conservation and Parks (MECP) criteria and City By-laws to determine disposal requirements for both soil and groundwater.

Geo-environmental investigations, Phase I and II Environmental Site Assessments, are carried out on an as-needed basis to support Property, Planning and Development activities.

Geo-environmental work is also carried out for the Environmental Programs, which include the Garage Subsurface Remediation Program and the Storage Tank Replacement Program. The results of these investigations are reported to the MECP or the Technical Standards and Safety Authority (TSSA), or both, as required by law or MECP Orders. Geo-environmental work is also required during construction to comply with the new MECP O. Reg. 406/19 – On-site Excess Soil Management.

In addition to the services outlined above, the consultants provide 24-hour, on-call services to assist the TTC in directing and monitoring emergency clean-up of spills and leaks in accordance with the Corporate Emergency Response Plan and applicable legislation.

Comments

A Request for Proposal (RFP) was publically advertised on Merx website as well as the TTC's website on November 26, 2019. Thirty companies downloaded copies of the proposal documents, out of which 11 submitted a proposal by the closing date of January 9, 2020. The RFP stated that the TTC intended to award up to three contracts for a three-year period. It was also pre-determined that any proposal that scored a qualitative rating of 80% or better would be considered qualified.

Evaluation of the Submissions

All proposals received were reviewed for commercial compliancy and those that were compliant were reviewed by the evaluation team.

The evaluation team, consisting of three members from the Geotechnical and Geo-environmental Design Section of the Engineering Department, conducted the formal review and rating in accordance with the requirements outlined in the RFP, and attached as Appendix A. Staff from the Procurement and Category Management Department acted as the facilitator during the evaluation process.

The recommendation for the award is based on the three highest total weighted scoring submissions. The evaluation of the proposals was based on a two-envelope process and consisted of qualitative and pricing components; 80 points allocated to qualitative merit and 20 points allocated to pricing. Proposals were first scored based on the qualitative criteria at the associated weightings as set out in the proposal documents.

The proposals achieving a total minimum of 64 points out of the maximum 80 points available for the qualitative evaluation would be considered qualified. The total weighted score was calculated as a sum of the weighted qualitative score and the weighted pricing score.

Six companies passed the qualitative evaluation bar and had their pricing component evaluated.

The following three companies had the highest total weighted scores and are recommended for award of contracts:

- GHD Limited;
- Golder Associates Ltd.; and
- Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited.

The three recommended companies have satisfactorily performed previous work for the TTC. (Refer to Appendix B for the Proposal Evaluation Summary).

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Signature

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APPENDIX A

Geotechnical and Geo-Environmental - Triennial Services

Evaluation Criteria

A. Pass/Fail Requirements

- Project Manager a licensed engineer or geoscientist in good standing with the Professional Engineers of Ontario (P. Eng.) or the Professional Geologist of Ontario (P. Geo.)?
- Geotechnical Engineering Specialist a registered member in good standing with Professional Engineers of Ontario (P. Eng.)?
- Geo-Environmental Specialist a registered member in good standing with Professional Engineers of Ontario (P. Eng.) or the Professional Geologist of Ontario (P. Geo.)?
- Senior Geotechnical Engineer a registered member in good standing with Professional Engineers of Ontario (P. Eng.)?
- Senior Hydrogeologist/Geo-Scientist a registered member in good standing with Professional Engineers of Ontario (P. Eng.) or the Professional Geologist of Ontario (P. Geo.)?
- Intermediate Geotechnical Engineer a registered member in good standing with Professional Engineers of Ontario (P. Eng.)?
- Intermediate Hydrogeologist/Geo-Scientist a registered member in good standing with Professional Engineers of Ontario (P. Eng.) or the Professional Geologist of Ontario (P. Geo.)?

B. Corporate Qualifications

- Background and Capabilities
- Number of Years in Business
- Depth of Available Resources
- Local In-House Geotechnical Laboratory Facilities
- CADD Facilities, TTC CADD Standards
- Relevant Corporate Experience

C. Project Team Qualifications

- Technical Qualifications
- Number of Years of Direct Experience
- Number of Years of Related Experience
- Relevant Experience by Project

D. Pricing

APPENDIX B

Geotechnical and Geo-Environmental - Triennial Services

Proposal Evaluation Summary

Proposal No.: P11PB19789

Contract No.: G85-382

COMPANY NAME	GRAND TOTAL WEIGHTED SCORE	RANKING
QUALIFIED PROPONENTS ACHIEVING A SCORE OF 80% (64) POINTS OR MORE BASED ON QUALITATIVE EVALUATION		
GHD Limited	89.58	1
Golder Associates Ltd.	88.50	2
Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited	87.65	3
WSP Canada Inc.	85.00	4
Englobe Corp.	84.70	5
Stantec Consulting Ltd.	81.96	6
NON-QUALIFIED PROPONENTS ACHIEVING A SCORE OF LESS THAN 80% (64) POINTS BASED ON QUALITATIVE EVALUATION (listed alphabetically)		
DS Consultants Ltd.	N/A	N/A
EXP Services Inc.	N/A	N/A
Hatch Ltd.	N/A	N/A
Sirati & Partners Consultants Ltd.	N/A	N/A
Thurber Engineering Ltd.	N/A	N/A