

DATE: September 7, 2011

**REPORT TITLE: CONSULTING SERVICES FOR THE RISK ASSESSMENT OF THE LAKE-BASED WATER SUPPLY SYSTEM
CAPITAL PROJECT 09-1502
DOCUMENT 2011-313P
REGION OF PEEL**

FROM: Dan Labrecque, Commissioner of Public Works

RECOMMENDATION

That the contract (Document 2011-313P) for consulting engineering services for the Risk Assessment of the Lake-Based Water Supply System be awarded to GHD Inc. under Capital Project 09-1502, in the estimated amount of \$579,281 (excluding applicable taxes), in accordance with Purchasing By-law 63-2008.

REPORT HIGHLIGHTS

- The Region intends to complete a risk assessment of the lake-based water supply system to identify high-risk transmission and sub-transmission watermains, and to develop a risk management plan to manage and/or mitigate the risks.
- The Region is committed to maintaining a high level of service to its customers. The risk management plan will provide recommendations on how this level of service can be maintained as the existing infrastructure ages and the lake-based water supply system expands.
- The Region issued Request for Proposal Document 2011-313P to four consulting engineering firms to conduct a risk assessment and develop a risk management plan for the lake-based water supply system.
- The Request for Proposal 2011-313P was issued competitively and GHD Inc. is recommended for award, as its' submission represents the best overall value to the Region.

DISCUSSION

1. Background

The Region of Peel (Region) is responsible for supplying safe, reliable potable water to approximately 2 million customers (residential and employment) through its lake-based water supply system. Planning forecasts indicate that the residential population in the Region will increase to 1.64 million, and the employment population will be 876,000, by 2031. To uphold the Region's commitment to maintain a high level of service to its water

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customers, high-risk transmission and sub-transmission watermains as well as risk management options for these watermains, need to be identified.

The Region's lake-based water supply system is a mixture of both old and new infrastructure, and the system continues to expand to service planned growth within the Region. As such, two different scenarios need to be considered as part of the risk assessment: current and future (2031). This risk assessment project will identify high-risk transmission and sub-transmission watermains in both scenarios. Risk management options, including increased redundancy, condition assessments, and operational measures, will be identified and evaluated for critical watermains. A risk management plan will be developed to identify how the risk management options can be implemented to reduce risks to a level acceptable to the Region.

2. Selection Process for Consulting Engineering Services

The Region issued Request for Proposal Document 2011-313P to obtain consulting engineering services to complete a risk assessment and develop a risk management plan for transmission and sub-transmission watermains in the lake-based water system. The Request for Proposal was issued to four consulting engineering firms: AECOM Canada Ltd., CH2M Hill Canada Limited, GENIVAR Inc., and GHD Inc.

All four consulting firms submitted their proposals on time and the documents were found to be in order. The proposal was submitted in two separate parts: technical and financial. The proposals were reviewed and evaluated independently by an evaluation committee comprised of Public Works and Purchasing staff. The evaluation included the consultant's understanding of the project, compliance with the terms of reference, proposed methodology, qualifications and experience of the proposed staff, previous experience with similar assignments, schedule, estimated cost, and proposed quality and cost controls to complete the assignment. Upon completion of the technical evaluation, the Purchasing representative completed the financial analysis and an overall score was determined.

A summary of the evaluation is provided below.

Consultant	Location	Technical (80%)	Financial (20%)	Price Submitted	Overall Ranking
GHD Inc.	Markham	1	2	\$579,281	1
GENIVAR Inc.	Markham	3	1	\$422,025	2
AECOM Canada Ltd.	Markham	2	3	\$638,245	2
CH2M Hill Canada Limited	Toronto	4	4	\$813,355	4

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All four consulting firms demonstrated a clear understanding of the Region's requirements for this project; however the proposal prepared by GHD Inc. proposed an approach and had the technical expertise most suited to meeting the Region's objectives. GHD Inc. is an international engineering consulting firm that has led numerous infrastructure risk assessments, and has proposed a project team of industry leaders in risk and asset management who will transfer their knowledge and experience to Region of Peel staff. Their proposed approach highlights the importance of incorporating available information and staff knowledge of the Region's water supply system into a transparent, consistent and repeatable risk assessment. Their cost-benefit analysis of risk management options, and their proposed risk management tool, will result in a risk management strategy that will allow Region staff to make informed decisions about capital and operational investments to reduce risk to a level acceptable to the Region.

A separate financial analysis of each of the submissions was completed, and determined that GENIVAR Inc. provided the lowest estimated cost to complete this project. However, although their cost was lower, GENIVAR Inc.'s proposal did not explain their approach to meeting the Region's requirements in detail as the other consulting firms did. In addition, GENIVAR Inc.'s experience with conducting similar scale risk assessment projects was not as extensive as the second and third financially ranked firms, GHD Inc. and AECOM Canada Ltd., respectively.

After combining the results of the technical evaluation and the financial analysis, it is recommended that this project be awarded to GHD Inc. as their experience, clear approach and proposed budget will provide the best value to the Region.

FINANCIAL IMPLICATIONS

Sufficient funding is available in Capital Project 09-1502.

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Dan Labrecque
Commissioner of Public Works

Approved for Submission:



D. Szwarc, Chief Administrative Officer

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