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CONSULTANT SELECTION FOR ENGINEERING SERVICES CLASS ENVIRONMENTAL ASSESSMENT AND WATER RESOURCE EXPLORATION FOR WATER SUPPLY BALLANTRAE-MUSSELMAN LAKE AND BLOOMINGTON COMMUNITIES

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, April 28, 2006, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. The consulting engineering firm of Hatch Mott MacDonald Ltd. be engaged to undertake the Class Environmental Assessment, water resource exploration, detailed design and contract administration for the water supply in the communities of Ballantrae-Musselman Lake and Bloomington at an upset limit of \$1,741,452 excluding GST.
2. The Regional Chair and Regional Clerk be authorized to sign an engineering agreement with Hatch Mott MacDonald Ltd. for the completion of these services, subject to review by Legal Services.

2. PURPOSE

This report seeks authorization to retain consulting engineering services related to the water supply in the communities of Ballantrae-Musselman Lake and Bloomington. The Purchasing By-Law requires Council approval for award of consulting assignments when the amount is greater than \$500,000.

3. BACKGROUND

The Long Term Water Supply Master Plan (2004) and the Groundwater Investigation for Water Supply to the Community of Ballantrae-Musselman Lake has identified the requirement for additional water supply to provide additional capacity and satisfy the growth requirements of the community of Ballantrae-Musselman Lake in the Town of Whitchurch-Stouffville.

Water supply to the community of Ballantrae-Musselman Lake is currently provided by two municipal production wells and a 2.76 ML elevated tank (*See Attachment 1*). The

current Permit to Take Water stipulates that the maximum combined daily amount of water takings from wells 1 and 2 shall not exceed the volumes specified as follows:

- a) 2,618 cubic metres per day during the period from October 1st to May 31st, and
- b) 4,380 cubic metres per day during the period from June 1st to September 30th.

York Region is in the process of finalizing an application to renew the Permit to Take Water. The technical documentation in this application is being developed to support removal of the permit restrictions so that the maximum taking of 4,380 cubic metres per day will be allowed on a year-round basis.

There is currently no municipal water service to Bloomington. The Region completed a Class EA study for the Water Supply for Community of Bloomington in 1998. An Addendum to the Class EA was filed in April 2004. The Class EA identified that connection to the Ballantrae-Musselman Lake water supply system is the preferred solution for servicing the community of Bloomington. As part of this project the consultant is to provide technical information to the Ministry of Environment to confirm there is adequate water supply to allow for the connection of Bloomington to the Ballantrae-Musselman Lake system.

3.1 Proposed Scope of Work

The purpose of this undertaking is to identify a preferred solution and site to augment the water supply capacity to:

- Meet the planned growth of the Ballantrae-Musselman Lake and Bloomington communities
- Provide firm capacity to the existing supply system.

This assignment includes the following activities:

- Class Environmental Assessment Study (Class EA Study) to provide additional water supply capacity to the communities of Ballantrae-Musselman Lake and Bloomington, including a watermain connection from the supply to the existing Ballantrae-Musselman Lake system.
- Groundwater Resource Exploration as part of the Class EA to evaluate the feasibility and potential effects of the groundwater option. Work will be incorporated in the exploration process to further evaluate hydrogeological conditions around the existing wells and the installation of additional monitoring stations consistent with current expectations of the MOE Permit to Take Water process.
- Detailed design, construction supervision and construction administration of approximately 1000m of 400mm diameter watermain (route, length and diameter to be determined from the EA) to connect the water supply to the Town of Ballantrae-Musselman Lake.
- Detailed design, construction supervision and construction administration of approximately 1300m of 300mm diameter watermain (size to be confirmed by the

Consultant) from the Ballantrae-Musselman Lake elevated tank to the Community of Bloomington. (The preferred watermain route was determined in the addendum to the Class Environmental Assessment Study for the Water Supply for Community of Bloomington filed in 2004).

4. ANALYSIS AND OPTIONS

In accordance with the Purchasing By-law, Request for Proposal (RFP) P-06-26 invited engineering consultant firms to submit proposals for this project. This RFP closed on March 21, 2006, and acceptable proposals were received from 6 firms.

The proposals were evaluated using the two-envelope system with technical and financial information kept in separate envelopes. The technical proposal is judged prior to any knowledge of financial bids. Technical content was weighted at 60%. This allocation of technical and financial weighting ensures the financial scoring is commensurate with the technical points awarded with the evaluation matrix. Based on a 60% allocation each technical point was valued at about \$25,000 and the technical points within the evaluation matrix was allocated to reflect this value in relation to the individual criterion. The technical evaluation is based on the following criteria:

- Project Team Qualification and Experience.
- Project Implementation.
- Project Management.

All of the submitted technical proposals received at least 36 out of 60 on the technical evaluation; therefore, six financial proposals were opened. After compliance of the financial proposals was established, financial scores were assigned comprising the remaining 40% weight of the total evaluation. The best proposal was deemed to be the proposal with the highest total score.

This allocation of technical/management and financial weighting ensures that the assignment is awarded based on an appropriate, value-based evaluation system and that the financial scoring is commensurate with the technical scoring.

A summary of the evaluations of the consultants' proposals is presented in Table 1. The summary includes the technical score, the upset limit fee (excluding GST), the corresponding financial score, and the total score for each proponent.

Table 1
Request for Proposal Evaluation Results

Firm	Technical Score (Out of 60)	Upset Fee (No GST)	Financial Score (Out of 40)	Total Score (Out of 100)
Hatch Mott MacDonald Ltd.	41.3	\$1,741,452	40	81.3
Simcoe Engineering Group Ltd.	43.1	\$1,952,240	35.7	78.8
MacViro Consultants Ltd.	43.0	\$2,064,345	33.7	76.7
Marshall Macklin Monaghan Ltd.	43.3	\$2,222,710	31.3	74.6
Golder Associates Ltd.	44.0	\$2,499,542	27.9	71.9
XCG Consultants Ltd.	36.1	\$2,107,320	33.1	69.2

The firm with the best overall score was Hatch Mott MacDonald Ltd. with an upset limit of \$1,741,452 excluding GST.

5. FINANCIAL IMPLICATIONS

The upset limit provided in the highest rated proposal is \$1,741,452 excluding GST. There are sufficient funds identified in the capital budget for this assignment.

The fees for contract administration and site inspection were based on an estimated working period of 60 days. If the actual contract duration varies from the estimate, the fees for contract administration and site inspection will be adjusted based on the working day fee provided in the proposal.

The fees for watermain design were based on an estimated 1000 metres to connect the water supply to the existing Ballantrae-Musselman Lake system and 1300 metres to connect Bloomington, respectively. If the actual watermain design varies from the estimate, the fees for watermain design will be adjusted based on every additional 100 metres of watermain design and the fee provided in the proposal.

6. LOCAL MUNICIPAL IMPACT

The additional water supply will provide firm capacity to the communities of Ballantrae-Musselman Lake and Bloomington. The existing system does not meet firm capacity requirements, meaning that if one of the two wells were not in operation, there would not be enough water to supply the system.

There is currently no municipal water service to Bloomington and residents require a private on-site well and septic system. Municipal water service would alleviate health risks associated with this type of system.

7. CONCLUSION

Regional staff selected the proposal by Hatch Mott MacDonald Ltd. as the preferred proposal. The proposal represents the best overall value to York Region.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause was included in the agenda for the May 10, 2006 Committee meeting.)