

Clause 6 in Report No. 1 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on January 21, 2016.

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Valve Chamber Inspection and Condition Assessment Project

Committee of the Whole recommends adoption of the following recommendation contained in the report dated December 15, 2015 from the Commissioner of Environmental Services:

1. Recommendation

It is recommended that:

1. Council approve the award of contract for a three year valve chamber inspection and condition assessment project to Ontario Clean Water Agency (OCWA), pursuant to Request for Proposal (RFP) P-15-85 at a total cost of \$2,532,712 excluding HST, and authorize the Commissioner of Environmental Services to execute the contract on behalf of the Region.

2. Purpose

This report seeks Council authorization to retain services for a three-year project to inspect and undertake a condition assessment of water and wastewater valve chambers within the Region.

York Region's Purchasing Bylaw requires Council authorization to award RFPs over \$2,000,000 or when the recommended proponent does not have the lowest cost.

In regards to RFP P-15-85, it was determined that while the successful proponent has the lowest cost, the total cost is greater than \$2,000,000 and therefore Council's authorization for award is required.

3. Background

Inspection and condition assessment is a vital component of an infrastructure renewal planning process as detailed in the Region's Corporate Asset Management policy

In November 2013, Council adopted a Corporate Asset Management Policy that details principles for a consistent and systematic approach for managing Regional assets. This project follows these principles, with the goal to implement a consistent and systematic approach to condition assessment of the Region's water and wastewater valve chambers.

The Region owns and operates 1,292 underground water and wastewater valve chambers. These valve chambers house valves that play a key function in isolating pipe sections during repair and maintenance. The chamber where the valves are housed should be proactively maintained to ensure that valves can be easily accessed at all times.

Currently, valve chambers are periodically visually inspected by Operations, Maintenance and Monitoring staff. This project will expand upon the existing process by including monitoring the condition of these assets through a systematic inspection program. This project also includes the provision of specialized expertise on structural condition assessment to provide information needed to identify repairs and prioritize chamber rehabilitation projects. This is a key process in asset management as it provides for a consistent and coordinated approach for the management of Regional assets to ensure long term sustainability and fiscal stewardship, as detailed in the Region's Corporate Asset Management policy.

4. Analysis and Options

Request for Proposal was issued in September 2015

In accordance with the Purchasing Bylaw, RFP P-15-85 was released in September 2015 to obtain services for the inspection and condition assessment of valve chambers. The following is a summary of the scope of services detailed in the RFP over a three year term:

- Inspection and structural condition assessment of all 1,292 valve chambers within the Regional system over the contract period
- Project management and control

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- Site coordination, access and permits
- Quality assurance and quality control
- Preparation of a comprehensive condition assessment report and long-term infrastructure improvement plan
- Minor repairs that can be addressed during inspection

The Region's computerized maintenance management system for water and wastewater assets (Maximo) is currently being updated to include templates and attributes to receive the valve chamber condition assessment data.

Proposals were evaluated using the two envelope system

Eight proponents obtained the bid document and four proponents submitted proposals in response.

Proposals were evaluated using the two-envelope system with technical and financial information submitted in two separate envelopes. The overall proposal score was evaluated based on a weighting of 80 points for technical proposals and 20 points for financial proposals.

The Region's proposal evaluation team reviewed four technical proposals based on the following criteria:

- Corporate and project team experience
- Understanding of the scope of work and required deliverables
- Project management approach and resource effort
- Implementation of quality assurance and control processes
- Value added and innovative concepts

Technical components of the proposal must achieve a minimum technical score of 60 per cent (48 points of the potential 80) to have the financial portion of their proposal considered. If a proponent does not achieve this minimum technical score, the proponent's financial proposal is returned unopened. Technical and financial results are summarized in Table 1.

**Table 1
Proposal Evaluation Summary**

Firm	Technical Score (out of 80)	Total Fee (excluding taxes)	Financial Score (out of 20)	Total Score (out of 100)
Ontario Clean Water Agency	61.50	\$ 2,532,712.00	20.00	81.50
Hatch Mott MacDonald	57.85	\$ 2,955,432.57	17.14	74.99
Cole Engineering Group Ltd.	51.85	\$ 2,995,557.46	16.91	68.76
Andrews Infrastructure	*41.25	N/A	N/A	N/A

*Financial proposal returned unopened

OCWA's proposal received the highest technical score coupled with the best financial value for the Region

The firm with the highest score was determined to be OCWA. Their proposal demonstrated a clear understanding of the scope of work and provided an experienced team with specialized expertise in assessing the structural integrity of such assets. OCWA's proposal had the lowest cost among the proponents at \$2,532,712 while allocating the most personnel hours to this project.

OCWA's proposal demonstrated notable experience on projects related to valve chambers

OCWA has been involved in several valve chamber inspection projects and condition assessments for municipalities and utilities across Ontario. OCWA has previously conducted similar projects for Region of Peel, City of London and the Lambton Area Water Supply System.

Link to key Council-approved plans

Valve chambers are key components of the water and wastewater system. Proactive management of valve chambers aligns with the Region's 2015 to 2019 Strategic Plan objective of continuing to deliver and sustain critical infrastructure.

5. Financial Implications

The fee for the proposed work is \$2,532,712 excluding HST, expended over a three year period. Adequate Capital Spending Authority is in the approved 2016 budget as part of the Region’s Water and Wastewater Asset Management Program.

6. Local Municipal Impact

One of the key objectives of this project is to ensure that the Region’s assets are in sound working condition. The project will benefit local municipalities by ensuring reliable and sustainable Regional water and wastewater servicing today and into the future to meet growing demand within the Region.

The number of valve chambers located in each local municipality is summarized in Table 2.

Table 2
Location of Regional Valve Chambers by Local Municipality

Municipality	Water Valve Chambers	Wastewater Valve Chambers	Total
City of Vaughan	344	34	378
City of Markham	240	15	255
Town of Richmond Hill	211	3	214
Town of Aurora	82	36	118
Town of Newmarket	66	17	83
Town of East Gwillimbury	66	11	77
Town of Georgina	53	21	74
Township of King	37	22	59
Town of Whitchurch-Stouffville	34	0	34
Total	1133	159	1292

7. Conclusion

Four proposals were received and evaluated for this project in accordance with the Region's Purchasing Bylaw. The proposal from OCWA represents best value to the Region. It is recommended that OCWA be engaged to undertake an inspection and condition assessment program of water and wastewater valve chambers at a total cost of \$2,532,712 excluding HST.

This project enhances the valve chamber structural condition assessment process, which is carried out currently on an ad hoc basis. Specialized expertise will be utilized to further quantify the inspection results. Completion of this project will provide a consistent condition baseline across all valve chambers to enable a more systematic approach to asset condition monitoring.

For more information on this report, please contact Stephen Fung, Director, Infrastructure Asset Management, Environmental Services at ext. 73025.

The Senior Management Group has reviewed this report.

December 15, 2015

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Accessible formats or communication supports are available upon request.