If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540



The Regional Municipality of Durham Report

To:	Works Committee
From:	Commissioner of Works
Report:	#2025-W-17
Date:	May 7, 2025

Subject:

Sole Source Procurement of Engineering Consulting Services for the Corbett Creek WPCP – Digestion Remediation and Upgrade Works Project in the Town of Whitby

Recommendation:

That the Works Committee recommends to Regional Council:

- A) That Regional staff be authorized to award a sole source contract to AECOM Canada ULC (AECOM) for engineering consulting services for the design and construction administration of upgrades to the aeration and phosphorus removal systems at the Corbett Creek Water Pollution Control Plant (WPCP) for the amount of \$1,827,176*, to be financed from the approved project budget; and
- B) That the Commissioner of Finance be authorized to execute the necessary sole source agreement.

Report:

1. Purpose

- 1.1 The purpose of this report is to obtain Regional Municipality of Durham (Region) Council approval to award a sole source contract to AECOM for engineering consulting services for the design and contract administration of upgrades to the aeration and phosphorus removal systems at the Corbett Creek WPCP in the Town of Whitby.
- 1.2 Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 The Region is undertaking the Digester Upgrades and Remediation Works project at the Corbett Creek WPCP in the Town of Whitby.
- 2.2 The engineering consulting services assignment for this project was originally scoped within RFP-1035-2022, which was issued for competitive bidding by the Region on June 22, 2022. Proposal submissions from three (3) Consultants were evaluated and AECOM was awarded the assignment for \$2,177,197*.
- 2.3 The scope of work for RFP-1035-2022 included a condition assessment of the existing aeration system at the Corbett Creek WPCP and the preparation of recommendations for replacement and future improvements.
- 2.4 Influent is sanitary sewage that flows into a WPCP from sanitary sewers. The Corbett Creek WPCP receives influent from catchment areas in both the City of Oshawa as well as the Town of Whitby.
- 2.5 Effluent is the treated wastewater that is discharged from a WPCP to the designated discharge outlet. The Corbett Creek WPCP discharges to Lake Ontario through a lakebed diffuser located approximately 600 metres from the shoreline of Lake Ontario.
- 2.6 Following the award of RFP-1035-2022 to AECOM, the Corbett Creek WPCP has experienced operational challenges in achieving consistent treated effluent quality being discharged to Lake Ontario, particularly regarding total suspended solids (TSS) and total phosphorus (TP). This has resulted in exceedances of the current Ministry of the Environment, Conservation and Parks (MECP) Environmental Compliance Approval (ECA) treated effluent objectives and limit concentrations. AECOM's scope of work was amended under a previous Contract amendment to include a study and analysis of the capacity of the aeration systems and to evaluate the ability of the WPCP to meet the ECA objectives and limits, considering the composition of the sanitary sewage influent arriving at the WPCP.
- 2.7 In addition to AECOM's assessment, the Region retained Blue Sky, a consultant to conduct an independent compliance study and to provide operational and capital upgrade recommendations to optimize treatment performance and improve effluent quality, ensuring the WPCP discharge complies with the parameters of the MECP ECA.

- 2.8 Both the AECOM and Blue Sky studies recommended the same upgrades to the existing aeration system and phosphorus removal system.
- 2.9 The Region identified that influent from an industrial user in the Town of Whitby would exceed the parameters as stipulated in the Region's Sewer Use By-Law for sanitary sewers, and as such a Surcharge Agreement between the Region and industrial user was negotiated and executed on January 7, 2025. The Surcharge Agreement with the industrial user includes an upset limit for a one-time payment to the Region for accelerating aeration design improvements and other site works at the Corbett Creek WPCP that will help to address current treatment deficiencies at the WPCP.

3. Justification for the Sole Source

- 3.1 AECOM has completed the condition assessment and is currently undertaking the design of digester upgrades and other remedial works at the Corbett Creek WPCP. As such, AECOM has a thorough understanding of the site as well as the operational problems that the Region is experiencing. AECOM's familiarity with the site and its specific issues positions them to complete the required design tasks efficiently.
- 3.2 Additionally, the aeration system upgrade is critical to maintaining compliance with the MECP ECA for the Corbett Creek WPCP. Delays in advancing corrective actions could result in potential orders and/or fines or other enforcement measures issued by the MECP against the Region. As these actions are timesensitive, AECOM's continued involvement will ensure timely project implementation.

4. Proposed Engineering Services

- a. The engineering services are scoped for the following design and contract administration work: Aeration System Upgrade:
- The existing aeration blowers servicing the WPCP are to be replaced.
- b. Phosphorous Removal System Upgrades
- The existing ferrous chloride dosing system is to be replaced with either a new ferric chloride or aluminum sulphate system. During detailed design, laboratory testing of influent will be undertaken to compare the effectiveness of the dosing chemicals and to select a preferred alternative for influent treatment.

5. Financial Implications

- 5.1 Section 7.2 of the Region's Purchasing By-law, Appendix "C" permits the sole sourcing of goods and services under specific circumstances, including where additional deliverables were not included in the initial procurement and where a change of supplier is not recommended due to compatibility/continuity concerns and cost impacts. The by-law also requires approval by the appropriate standing committee and council for the award of sole source contracts that exceed \$100,00 in value.
- 5.2 Financing for the sole source procurement of the engineering services estimated at \$1,827,176* will be from the approved project budget (Project ID: D2525).
- 5.3 Staff will seek compensation of approximately \$300,000 from the industrial user under the existing Surcharge Agreement for the detailed design work that the Region is undertaking. This payment will be applied to Project ID D2525 to offset the cost of the engineering consulting services.

6. Previous Reports and Decisions

6.1 There are no previous reports and/or decisions.

7. Relationship to Strategic Plan

- 7.1 This report aligns with the following Strategic Direction(s) and Pathway(s) in Durham Region's 2025-2035 Strategic Plan:
 - a. Connected and Vibrant Communities
 - C1. Align Regional infrastructure and asset management with projected growth, climate impacts, and community needs.
 - b. Environmental Sustainability and Climate Action
 - E5. Respect the natural environment, including greenspaces, waterways, and agricultural lands.
 - c. Strong Relationships
 - S5. Ensure accountable and transparent decision-making to serve community needs, while responsibly managing available resources.

- 7.2 This report aligns with/addresses the following Foundation(s) in Durham Region's 2025-2035 Strategic Plan:
 - a. Technology: Keeping pace with technological change to ensure efficient and effective service delivery.

8. Conclusion

- 8.1 It is recommended that Regional Municipality of Durham Council approve the award of a sole source contract to AECOM Canada ULC (AECOM) for engineering consulting services for the design and construction administration of upgrades to the aeration and phosphorus removal systems at the Corbett Creek Water Pollution Control Plant (WPCP) for the amount of \$1,827,176*, to be financed from the approved project budget.
- 8.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the recommendation.
- 8.3 For additional information, contact: Dan Waechter, P.Eng., Director of Capital Projects Delivery Branch, at 905-668-4113, extension 3550 and Mike Hubble, P. Eng., Director of Environmental Services at 905-668-4113 extension 3460.

Respectfully Submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair Chief Administrative Officer