

The Regional Municipality of York

Committee of the Whole
Environmental Services
June 11, 2020

Report of the Commissioner of Environmental Services

Engineering Services for 16th Avenue Phase 2 Sanitary Sewer Rehabilitation in the City of Markham

1. Recommendations

1. Council approve award of the contract for engineering services during construction of 16th Avenue Phase 2 Sanitary Sewer Rehabilitation to Aldea Engineering Services Limited, pursuant to Request for Proposal P-19-306, at a total cost of \$2,672,699.00, excluding HST, and authorize execution of the contract on behalf of York Region.
2. The Commissioner of Environmental Services be authorized to execute the contract on behalf of the Region.

2. Summary

This report seeks Council authorization to retain engineering services during construction of 16th Avenue Phase 2 Sanitary Sewer Rehabilitation.

The Region's Purchasing Bylaw requires Council authorization to award Request for Proposals where the total cost of the contract exceeds \$2,000,000. In the case of 16th Avenue Phase 2 Sanitary Sewer Rehabilitation, the recommended proponent's bid is greater than \$2,000,000.

Key Points:

- The Region has identified the York Durham Sewage System along 16th Avenue for rehabilitation based on its current condition
- Sewer sections for rehabilitation were selected through the Region's Trunk Sewer Management Program that manages risks associated with the Region's critical sewer infrastructure
- The 16th Avenue Sanitary Sewer Rehabilitation work was planned in two construction phases: Phase 1 work was completed in October 2019 while the Phase 2 contract is planned to commence in Q3 2020 (See Attachment 1)

3. Background

York Durham Sewage System Rehabilitation planned along 16th Avenue in the City of Markham

As part of the Trunk Sewer Management Program, the Region completes asset inspections to identify rehabilitation needs for critical sewer infrastructure. Based on closed circuit television inspections, the Region identified three kilometres of 16th Avenue Trunk Sewer to be rehabilitated. This work was required to mitigate infiltration and restore sewer structural integrity throughout the pipe. A high groundwater table along with high groundwater pressures in the area are suspected to contribute to ongoing sewer degradation.

The first 1.5 kilometres of the planned three kilometres of sewer rehabilitation on 16th Avenue was completed in October 2019. The remaining 1.5 kilometres of planned sewer rehabilitation is scheduled to commence construction in Q3 2020.

4. Analysis

Request for Proposal issued in November 2019

In November 2019, Request for Proposal P-19-306 for engineering services during construction of 16th Avenue Phase 2 Sanitary Sewer Rehabilitation was advertised on the Region's Bids and Tenders notification system. Three proposals were received on January 21, 2020 as follows:

- Aldea Engineering Services Limited
- Cole Engineering Group Ltd.
- EXP Services Inc.

Proposals were evaluated using the two-envelope system

Proposals were evaluated using a two-envelope system with technical and financial information submitted in separate envelopes. Overall proposal score was evaluated based on a weighting of 80 points for the technical proposal and 20 points for the financial proposal. Technical proposals were evaluated prior to any knowledge of financial information. The Region's proposal evaluation team reviewed technical proposals based on evaluation criteria listed in P-19-306.

Proponents were required to achieve a minimum technical score of 60% (48 points out of 80 points) to have their financial proposal considered. If a proponent does not achieve this minimum technical score, their financial proposal is returned unopened.

Proposals were evaluated in accordance with the Region's Purchasing Bylaw. Technical and financial results are summarized in Table 1.

Table 1
P-19-306 Evaluation Summary

Consulting Engineering Firm	Technical Score (out of 80)	Financial Score (out of 20)	Total Score (out of 100)	Total Fee (\$) (excluding HST)
Aldea Engineering Services Limited	59.40	20.00	79.40	\$2,672,699

One proposal demonstrated a thorough understanding of the work

Evaluation of proposals determined that Aldea Engineering Services Limited was the sole proponent to pass the technical evaluation with the other two proposals failed to meet the minimum required technical score of 60% under the Request for Proposals.

The proposal submitted by Aldea Engineering Services Limited demonstrated a thorough understanding of project requirements with comprehensive experience and knowledge of the rehabilitation work. Aldea Engineering Services Limited provided an experienced team with adequate staff hours to deliver required services.

Technical proposals received from the other two proponents failed to demonstrate a good understanding of project requirements. Proposed project team members lacked specialized experience in design and site inspection of geopolymer lining and waterproofing on deep sewers. The proposals also included inadequate levels of effort to deliver the required services.

The Procurement Office facilitated the evaluation process and issued its report confirming that Aldea Engineering Services Limited be recommended as the successful proponent to undertake the assignment.

16th Avenue Phase 2 Sewer Rehabilitation supports objectives of the Region’s Strategic Plan

Managing the Region’s assets for current and future generations through continuous delivery and sustainability of critical infrastructure is a priority of the Region’s 2019 to 2023 Strategic Plan. York Durham Sewage System is considered critical infrastructure providing sanitary sewer services to residents and businesses.

The 16th Avenue Phase 2 Sewer Rehabilitation project will also optimize system capacity through reduced quantity of inflow and infiltration on Regional wastewater systems in accordance with the goals of Council’s 2019 to 2023 Strategic Plan: From Vision to Results.

5. Financial

The upset limit fee submitted by Aldea Engineering Services Limited for consulting engineering services is \$2,672,699.00, excluding HST. The financial proposal submitted by Aldea Engineering Services Limited for the assignment is in line with effort and unit prices for the 16th Avenue Sewer Rehabilitation Phase 1 work and staff believes the proposal represents good value to the Region.

The estimated construction cost for the work is approximately \$50 million, excluding HST, and the engineering service fees proposed by Aldea Engineering Services Limited are approximately 5.3% of the estimated total construction cost, which is within the typical industry range for projects of a similar nature.

There is sufficient Capital Spending Authority for this project in the approved 2020 10-Year Capital Plan.

6. Local Impact

Rehabilitation of the York Durham Sewage System in the City of Markham provides enhanced serviceability and reliability. This project benefits upstream local municipalities (Towns of Aurora, East Gwillimbury and Newmarket, Cities of Richmond Hill and Markham) as the existing sewer collects and conveys sanitary flows for treatment to our Duffin Creek Plant in the City of Pickering.

16th Avenue Phase 2 Sanitary Sewer Rehabilitation project is located within the City of Markham. City staff will be engaged in project implementation and construction. A construction risk management strategy will be developed to minimize impacts to local residents and businesses.

7. Conclusion

Three proposals were received and evaluated for the 16th Avenue Phase 2 Sewer Rehabilitation Project in accordance with the Region's Purchasing Bylaw. The proposal submitted by Aldea Engineering Services Limited demonstrates a thorough understanding of the work and represents good value to the Region.

It is recommended that Aldea Engineering Services Limited be engaged to undertake engineering services for construction of 16th Avenue Phase 2 Sanitary Sewer Rehabilitation for an upset limit fee of \$2,672,699.00, excluding HST.

For more information on this report, please contact Mike Rabeau, Director, Capital Planning and Delivery at 1-877-464-9675 ext. 75157. Accessible formats or communication supports are available upon request.

Recommended by: **Erin Mahoney, M. Eng.**
Commissioner of Environmental Services

Approved for Submission: **Bruce Macgregor**
Chief Administrative Officer

May 22, 2020
Attachment (1)
#10739339