

November 9, 2017

To: Members
Public Works and Infrastructure Committee

Re: Increase in Engineering Services Fees for the Design and Construction of the 5th Avenue North Stormwater Trunk Project Within Drainage Area 13

RECOMMENDATION

1. That City Council delegate authority to the Executive Director of Transportation & Utilities to extend the commission to Associated Engineering Ltd. (AE), to exceed \$500,000 to complete the design and construction supervision of the 5th Avenue North Stormwater Trunk Project within Drainage Area 13 (Area 13).
2. That this report be forwarded to the November 27, 2017 meeting of City Council for approval.

CONCLUSION

The City of Regina (City) is constructing the 5th Avenue North Stormwater Trunk Project to address flooding located between Albert Street and Scarth Street from 5th Avenue North to 6th Avenue North. The scope of work was divided into two phases to allow the City the option of not committing to Phase II until the City was completely satisfied with the construction scope, schedule and costs at the end of Phase I.

As construction progressed in 2017, it was determined that additional design and construction services would be required. In order to provide reliable infrastructure, Angus Road between 5th Avenue North and 6th Avenue North, was rebuilt and the water main was replaced.

The overall construction project will be completed in 2018 and further design work will occur to determine if additional water mains should be replaced, along with rebuilding additional roads. To support this expanded project, the costs associated with engineering services also require an increase from the current upset fee of \$473,518 to approximately \$800,000. AE's overall fees remain reasonable and in line with construction projects of similar size and complexity.

The Regina Administration Bylaw, No. 2003-69, Schedule D, Section 8, permits the City Manager to extend established professional and consulting service fees that exceed \$500,000, but does not provide authority for the City Manager to delegate that authority to another member of the Administration. For efficiency purposes, the Administration requests that City Council delegates authority to the Executive Director of Transportation & Utilities to extend the commission to AE to complete the design, tender preparation and construction supervision of the 5th Avenue North Stormwater Trunk Project.

BACKGROUND

Area 13 is located in north central Regina and consists of mainly residential and commercial areas along major arterial roads. From the *Pre-design of Master Drainage Plan Area 13* (2013 Stantec Study), several areas with higher incidences of flooding were identified. One of these areas is located between 5th Avenue North and 6th Avenue North, from Albert Street to Scarth Street (Study Area). This area is low-lying and highly susceptible to flooding.

To improve the level of service in the Study Area, the 2013 Stantec Study proposed installing a new storm trunk along 6th Avenue North, from Scarth Street to the north arm of the North Storm Channel near Angus Road. The City agreed with Stantec's recommendation of improving the level of service in the Study Area, but preferred that further analysis be undertaken. As a result, the 5th Avenue North Stormwater Trunk Project was advanced to detailed design and construction, but the scope of work in the Request for Proposals (RFP) was in two phases.

The City issued an RFP to engage a professional consulting firm to deliver this project. After a thorough evaluation, AE was the highest ranked proponent; therefore, the City awarded a contract for the 5th Avenue North Stormwater Trunk Project to AE on December 22, 2015 with an upset fee in the amount of \$181,018 (excluding taxes) for Phase I work only. The Phase I work included reviewing the upgrade options and detail design. The contract required the City and AE to negotiate and establish the fee for Phase II which included tendering, construction and post-construction services. This negotiation was completed at the end of Phase I, after confirmation of construction scope, schedules, cost estimates, and upon receiving positive performance review and funding approval.

DISCUSSION

As noted above, the 2013 Stantec Study proposed installing a new storm trunk on 6th Avenue North. During Phase I of the project, AE performed field investigation and further analysis of upgrade options. From the results, it was determined that installing the new storm trunk on 5th Avenue North was more preferable, feasible, and effective than on 6th Avenue North, due to the amount of underground utility relocations that would be required along 6th Avenue North. As this option had never been investigated, additional field and design work were incurred by AE to complete a thorough evaluation and development of this option. Although this option was preferred, it brought its own set of challenges which included navigating utility conflicts, crossing water mains, and redesigning of the storm channel outlet structure.

Following the completion of Phase I, the City requested a fee proposal from AE to complete Phase II of the project, which included tendering, construction and post-construction services. On November 8, 2016, the City and AE established a Phase II fee of \$237,181 (excluding taxes).

The engineering services upset fee for AE is currently at \$473,518 (excluding taxes) based on the following:

Phase I – review of proposed upgrades and detailed design	\$181,018
Additional design – stormwater model updates	\$4,352
Additional design – field investigation and design of the 5 th Avenue North option	\$50,967
Phase II – tendering, construction, and post-construction services	\$237,181
Total (excluding taxes)	\$473,518

Construction commenced on August 2, 2017 and is due for completion in fall 2018. After the first two months of construction, the following issues were discovered, which required adjustments to the engineering services upset fee:

1. During installation of the new storm trunk on Angus Road, between 5th Avenue North and 6th Avenue North, Roadways Preservation determined this block of road required a full rebuild to ensure an adequate level of service to residents. In addition, the water main was replaced to reduce the likelihood of re-excavating Angus Road in the future.
2. Based on the findings on Angus Road, further design work will occur in early 2018 to determine if additional water mains should be replaced, along with rebuilding additional roads impacted by 2018 construction work.

Based on the construction progress over the first two months, it became apparent that AE’s Phase II fee will be inadequate to complete this project. The existing Phase II fee of \$237,181 is sufficient for AE to complete 2017 construction work, but will be insufficient to complete 2018 construction work.

The Administration requests City Council’s approval to delegate the authority from the City Manager to the Executive Director of Transportation & Utilities to approve the revised AE fee. The City expects AE’s fees for completing additional detailed design, construction and post-construction services to be approximately \$325,000. The addition of this project fee will increase the total upset fee of the Engineering Services Agreement with AE to approximately \$800,000. AE’s overall fees remain reasonable and in line with construction projects of similar size and complexity.

RECOMMENDATION IMPLICATIONS

Financial Implications

The initial engineering services upset fee with AE was \$181,018 (excluding taxes) for Phase 1. This amount was increased to \$473,518 to include Phase II engineering services. These fees are in line with the anticipated fees for the original scope of work. The City expects AE’s engineering services upset fee to increase by approximately \$325,000 to a new total upset fee of approximately \$800,000 to accommodate additional detailed design, construction and post-construction services. There is currently approximately \$7,000,000 in the existing budget to complete this work and sufficient money in the project’s budget to cover AE’s fees.

In addition, this project has been provided funding by the provincial and federal government through the Clean Water and Wastewater Fund. This project, along with another drainage project, is eligible to receive up to 75% of \$7.4 million in grant funding.

Environmental Implications

None with respect to this report.

Policy and/or Strategic Implications

This project is consistent with the *Design Regina, Official Community Plan (OCP)* as it will “Support runoff infiltration and retention by continuing to reduce the incidence of water runoff being directed to the sanitary system.” Additionally, improvements to our financial viability will be made through collaboration with the underground infrastructure and the road program, and will ultimately reduce cost from a whole life cycle perspective.

Other Implications

None with respect to this report.

Accessibility Implications

None with respect to this report.

COMMUNICATIONS

None with respect to this report.

DELEGATED AUTHORITY

The recommendation contained in this report requires City Council approval.

Respectfully submitted,



Pat Wilson, Director
Water Works

Respectfully submitted,



Karen Gasmu, Executive Director
Transportation & Utilities

Report prepared by:
Water & Sewer Engineering