



Staff Report

Operations – Water & Wastewater Services

Report To: Committee of the Whole
Meeting Date: June 15, 2021
Report Number: CSOPS.21.043
Title: Request Budget Increase for Engineering Services for Peel Street Sewage Pumping Station Upgrades
Prepared by: Allison Kershaw, Manager of Water & Wastewater Services

A. Recommendations

THAT Council receive Staff Report CSOPS.21.043, entitled “Request Budget Increase for Engineering Services for Peel Street Sewage Pumping Station Upgrades”;

AND THAT Council Approve a budget increase of \$15,000 for the Engineering Services to Tatham Engineering Limited for the upgrades of the Peel Street Sewage Pumping Station, to be funded from the Wastewater Asset Replacement Reserve Fund.

B. Overview

The report seeks Council approval to increase the budget for the engineering services for the Peel Street Sewage Pumping Station by \$15,000.

C. Background

The Peel Street Sewage Pumping Station (PSPS) is located in front of The Town of Blue Mountains’ Water Treatment Plant on Bay Street. This pumping station was initially designed to handle the waste stream from the Water Treatment Plant. Over time this station was utilized to handle residential wastewater from the area along Bay Street from the Little Beaver River to Elma Street and as far south as Huron Street, as well as the Royal Harbour Resort, and more recently, the development on Timber Lane. Eventually the PSPS will be required to handle the sanitary flow from Cameron Street when it is serviced with sanitary sewers.

On January 12, 2021, Staff Report CSOPS.21.003 “Peel Street Sewage Pumping Station Upgrades Update” was presented to Committee of the Whole to provide an overview of the project, details on the need for the upgrades and recent history of the project (Attachment 1). The report also discussed significant cost increases since the 30% preliminary design estimate and the resulting 2019 approved budget of \$621,300. Following approval of the 2019 project budget, staff awarded the final design to Tatham Engineering. When Staff received the 60% Design Engineering Estimate of \$1,215,160 (\$593,860 over budget), the project was stopped,

and a significant amount of value engineering was required to address a revised construction concept to reduce project costs. Through dialogue between staff and the Consultant, the Engineering Estimate was reduced to \$765,660 in July of 2020. Further negotiations and investigation reduced this estimate again to \$731,160 in December of 2020. This created a reduction of \$484,000 from the original estimate. See Attachment 1 for further details regarding the specific cost saving measures.

D. Analysis

After receiving the significantly over-budget estimate, Staff met with the consultant to identify potential cost saving measures for the project. The following value engineering exercises were assessed to reduce costs but maintain functionality and operational performance:

- A comprehensive power study of both the water plant and the pumping station were assessed to see if a new generator was truly required. This involved assessing the power usage for a substantial time-period, both on back-up power and main-line power. The outcome of this study determined that the current back-up generator at the water plant could be utilized for not only the water plant, but also to provide power to the pumping station which showed a savings of \$132,500.
- The 30% design report included a small structure to provide protection for the pumping station electrical panel. When it was noted that the project was over budget, the structure was removed from the project, which reduced the cost of the project by \$50,000. Additional engineering was required by the consultant to ensure the panel was adequately protected.
- An additional underground chamber was recommended in the 30% drawings to house a flow meter at a cost of \$37,000. Re-engineering the initial design was required to eliminate the chamber and provide flow monitoring through a MultiSmart Flow Measurement Meter. This is a relatively new technology, that does not require the same length of straight pipe both prior and post meter installation.
- Another cost savings opportunity we have been addressing through the Consultant is directly purchasing the pumping station pumps and free issuing them to the Contractor. This will eliminate the mark-up the Contractor would place on the purchase of the pumps. With the approval of Staff Report CSOPS.21.033 "Single Source Flygt Pumps for Wastewater Services" staff can purchase the pumps directly.

The concept of this project has changed significant to reduce construction costs. The consultant has requested an additional \$15,000 to complete this project. The Consultants work includes 100% design, tendering, contractor administration, commissioning, and warranty. Staff recommend awarding the Consultant the additional funds, as the work completed by the Consultant will result in significant savings in construction.

Although Staff are concerned that the final project costs will exceed the project budget, the efforts put forth by both the Consultant and Staff will outweigh the additional \$15,000 ask of

the Consultant. The initial projected project cost of \$1,215,160 from 2019 has been reduced, through value engineering, to a projected cost \$731,160 in December 2020 which represents a reduction of \$484,000.

E. Strategic Priorities

1. Communication and Engagement

We will enhance communications and engagement between Town Staff, Town residents and stakeholders

2. Organizational Excellence

We will continually seek out ways to improve the internal organization of Town Staff and the management of Town assets.

3. Community

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

4. Quality of Life

We will foster a high quality of life for full-time and part-time residents of all ages and stages, while welcoming visitors.

F. Environmental Impacts

The Peel Street Pumping Station is considered critical wastewater infrastructure. This station requires upgrades in order to protect the health and safety of the public and protection the natural environment. Failure to upgrade this facility in a timely manner could result in sewage backing up in resident's homes or a spill to the natural environment.

G. Financial Impacts

The additional \$15,000 will be funded from the Wastewater Asset Replacement Reserve Fund.

H. In Consultation With

Shawn Carey, Director of Operations

Mark Service, Wastewater Supervisor

Maurice Dempster, Senior Project Coordinator

Sam Dinsmore, Deputy Treasurer / Manager of Accounting and Budgets

I. Public Engagement

The topic of this Staff Report has not been the subject of a Public Meeting and/or a Public Information Centre as neither a Public Meeting nor a Public Information Centre are required. However, any comments regarding this report should be submitted to Allison Kershaw, Manager of Water & Wastewater Services managerwww@thebluemountains.ca.

J. Attached

1. Staff Report CSOPS.21.003 “Peel Street Sewage Pumping Station Upgrades Update”

Respectfully submitted,

Allison Kershaw,
Manager of Water & Wastewater Services

Shawn Carey
Director Operations

For more information, please contact:
Allison Kershaw, Manager of Water & Wastewater Services
managerwww@thebluemountains.ca
519-599-3131 extension 226

Report Approval Details

Document Title:	CSOPS.21.043 Request Budget Increase for Engineering Services for Peel Street Sewage Pumping Station Upgrades.docx
Attachments:	- Att 1.pdf
Final Approval Date:	Jun 7, 2021

This report and all of its attachments were approved and signed as outlined below:

Allison Kershaw - Jun 3, 2021 - 2:44 PM

Shawn Carey - Jun 4, 2021 - 7:34 AM

Shawn Everitt - Jun 7, 2021 - 8:52 AM