

Subject: Update on Sulphur Springs Road Design Build Project**Recommendation:**

BE IT RESOLVED THAT Council receive Report #2020-0109; and

THAT Council approve the award of the Sulphur Springs Road Reconstruction Design Build project to Duffin Contracting Inc. in the amount of \$636,745 (excluding HST); and

THAT Council approve a contingency amount of \$60,000 (excluding HST) for the Sulphur Springs Road Reconstruction Design Build Project; and

THAT Council direct staff to bring forward \$146,745 (excluding HST) for the additional funding required to complete the Sulphur Springs Road Reconstruction Project as part of the 2021 Capital Budget.

Background:

Sulphur Springs Drive has been eroding at two locations since it was first reported in February 2016. Site 1 is located 200 meters north of Luffman Drive, and Site 2 is located 200 meters south of Orchard Hill Drive (please see Appendix A for Site Location Map). Since then, conditions have deteriorated and the road has been closed from accepting local traffic from Effingham Street.

Water's Edge Environmental Solutions Team was retained to complete a feasibility study and prepare a report with recommended rehabilitation solutions for both sites.

In the report received from Water's Edge the recommendation was to complete the restoration of both sites using an engineered reinforced slope. The scope of work for both sites included removal and replacement of the

existing roadway and creek bank and reinstatement with a new two lane roadway and stabilizing the banks of the creek using steep bank grades so the roadway remained on its existing footprint. The rehabilitation involved the reconstruction of the creek banks using layers of geo-grid to provide stability, along with a 1:1 mechanically engineered slope. In addition, in order to mitigate negative impacts against species at risk it was contemplated to place river stone at the toe of the slope to provide additional stability while enhancing fish habitat.

The rehabilitation options provided for Site 1 and Site 2 were the preferred reinstatement techniques following consultations and discussions with both the design consultant and Trout Unlimited. The approach was considered as a soft approach which will be environmentally sustainable and provide an engineered solution that will not negatively impact the 12 Mile Creek.

Because there are residents located between the two failure sites it was contemplated that both sites would need to be restored using a staged approach. Site 1 would need to be completed before Site 2 to ensure road access to the existing properties being removed during construction.

The cost to complete the rehabilitation work at both sites was estimated at \$500,000. The approved budget in 2019 was \$250,000. Based on the recommendations in the feasibility report prepared by Water's Edge the budget was increased by \$300,000 in 2020 for a total project budget of \$550,000 (excluding applicable taxes).

In a report to Council on July 15th, 2019, (Report 2019-0031), staff recommended proceeding with the rehabilitation of both sites and restoring the roadway to its original condition. At this meeting Council directed Staff to look into the possibility of permanently closing Sulphur Springs Drive at Site 1. Following-up on the request of Council, Staff prepared a Request for Proposal (RFP) for an engineering assignment to complete a Class EA study on Sulphur Springs Drive. In addition, the terms of reference in the RFP included the development of the preferred solution, completing the detailed design for the rehabilitation project, obtaining the necessary permits from approval and review agencies (such as the NPCA, NEC, MOE, and the DFO) and to prepare the tender documents and assist in the tendering phase.

The Town received one (1) submission with respect to the above RFP from

CIMA+ (Canada Inc.) located in Burlington, Ontario. The cost to complete the Municipal Class EA, complete the detailed design based on the preferred alternative, and obtain the necessary permits and approvals from the approval and review agencies was estimated at \$129,878 (excluding applicable taxes).

In report 2020-0024, staff recommended that the project be awarded to CIMA+ and that the engineering and approval of permits proceed in the summer/fall of 2020 with construction beginning in the summer of 2021.

Following review of this report Council directed staff to undertake an RFP to complete the Sulphur Springs Reconstruction project using a Design/Build delivery model.

Analysis:

In May of 2020 staff issued a design/build RFP which officially closed on May 26th, 2020. The Town of Pelham received one (1) submission by Duffin Contracting Inc. The value of the proposal was \$549,745 (excluding HST). Following review of the submission by staff it became evident that there was not careful consideration given towards the environmental regulations, engineering studies and permits required to successfully complete the project.

Staff conducted an interview with the low bidder to review the environmental and regulatory requirements required from the approval agencies. It was determined that the contractor requires an additional \$87,000 (excluding HST) to undertake the necessary engineering and environmental studies and obtain the necessary permits.

Sulphur Springs Road has been closed to traffic and pedestrians at Site 1 since 2016. Based on the deteriorating condition of the roadway (specifically at Site 2) staff is recommending to move forward with the project. Further, staff have issued RFP's for engineering assignments and reconstruction on two separate occasions and received only one submission for each of the bid opportunities. Staff have reviewed the submission by Duffin Contracting Inc. and recommend awarding the project as a lump sum fixed contract price of \$636,745 (excluding HST).

Financial Considerations:

The current approved project budget for the rehabilitation of Sulphur Spring Drive is \$550,000. The design/build project to complete the required engineering, environmental studies, and obtain the necessary permits to reconstruct the roadway is \$636,745 (excluding applicable taxes).

In addition, due to the uncertainty regarding a project with such environmental sensitivity and because of the coordination work with the various approval agencies staff are recommending a project contingency allowance of \$60,000 (approx. 10 percent).

The total estimated project costs are as follows:

1) Design / Build Contract	\$636,745.00
2) Project Contingency (10%)	\$60,000.00
3) Non-rebated HST (1.76%)	<u>\$12,262.00</u>
 TOTAL Estimated Project Cost	 \$709,007.00

The current budget for the project is \$550,000 (excluding HST). There are insufficient funds available in the current approved budget to complete this project. This anticipated project budget shortfall is \$159,007.

It is anticipated that the engineering, environmental studies and permitting portion of the project is approximately \$120,000, with the construction value being approximately \$589,007.

Staff's recommendation is to award the first phase of the project in 2020 at a value of \$120,000 and bring forward a budget increase of \$159,007 for a total construction budget of \$587,007. Phase 2 of the project will be awarded in 2021 (pending Council budget approval) to allow construction in the summer of 2021.

Alternatives Reviewed:

Council may choose not to approve the works, and Sulphur Springs Drive would remain closed to through traffic. The condition of the roadway will continue to be monitored by Public Works Staff.

In addition, Council may direct staff to complete a public RFP for the design of the reconstruction project (including performing the required environmental studies and obtaining the required permitting). This was already completed by staff in early 2020 which resulted in one (1) bid submission at an estimated value of \$129,878 (excluding HST). If the Municipal Class EA process was abandoned cost savings of approximately \$30,000 may be realized (based on the CIMA+ submission). This alternative would most likely delay the reconstruction of Sulphur Springs Road to July of 2022. In this alternative Staff would complete the design work and consultation with the environmental approval agencies through a third party consultant and would deliver the project using a traditional design-bid-build approach. Council could direct staff to negotiate with CIMA+ based on the RFP submission received earlier this year.

Strategic Plan Relationship: Strong Organization

Providing an environmentally friendly engineering solution to address the roadway failure on Sulphur Spring Drive will ensure that the risk associated with negatively impacting the 12 Mile Creek and the risk associated with not providing safe access to private properties is minimized.

Other Pertinent Reports/Attachments:

Appendix A – Project Location Map (attached)

2019-0031 Report Regarding the Rehabilitation of Sulphur Springs Road.

2020-0024 Management Options for the Reconstruction and Roadway Improvements of Sulphur Springs Road between Luffman Drive and Orchard Hill Road.

Consultation:

Consultation with the low bidder (Duffin Contracting Inc.) was completed in the preparation of this report.

Legal Consultation, If Applicable:

There was no consultation with legal in the preparation of this report.

Prepared and Recommended by:

Jason Marr, P. Eng., Director of Public Works

Approved and Submitted by:

David Cribbs, Chief Administrative Officer