

**To:** Mayor and Council  
**Submitted by:** Jon Eppell, Director Engineering and Public Works  
**Date:** November 1, 2023  
**Subject:** 2022-09 Lorne Street Storm Water Mitigation Phase III  
New Retention Pond No. 3 and Culvert Crossings

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## **PROPOSAL**

Present information on project overages and recommendation.

## **BACKGROUND**

Lorne Street Storm Water Mitigation Phase III includes the Pickard Quarry Dyke and Control Structure (complete) and New Retention Pond No. 3 and Culvert Crossings. The scope includes an outlet structure at Retention Pond Phase II, ditching and culvert crossings of roads, culverts under CN rail, and new retention pond no. 3 such that storm water can drain from Retention Pond Phase II to Aboiteau AB-01.

A reduced scope (to fit budget) was awarded February 2023 to Beale & Inch at \$5,041,596.99 incl. HST.

## **DISCUSSION**

The project has experienced a few challenges which have been overcome, these include the following.

Higher than anticipated tender prices requiring the scope of the project be reduced.

Wet summer, which is not ideal for mass excavation work due to softening of soils. Requires additional dewatering and mitigation measures to avoid bogging down of equipment.

Several Watercourse and Wetland Alteration (WAWA) permits and a CN permit. The WAWA permits have placed constraints on when the work can be conducted and have arrived just in time. The CN crossing work is dependent on a CN permit yet to be received. The CN work has been delayed twice pending the permit.

Soft materials that would not maintain the 3H:1V ditch side slopes. The existing soft material could not maintain the slope stability and repeatedly failed with the soft material sliding into the excavation. As a result the soft material had to be replaced with competent material that would provide a stable slope. This has resulted in overages that exceed the budget. Staff have in the past discussed with RDC the possibility of increased funding and the response has been there are no available funds, all funds have been allocated.

Significant progress has been made with ditching and culvert crossings completed between Retention Pond Phase III and Aboiteau AB-01, Charles Street culvert crossing, and Retention Pond Phase III. The project is slightly ahead of schedule and on track to be completed in December 2023.

Work remaining includes the following:

- Service road construction and ditching Charles Street to culvert crossing under CN
- Bore and jack culverts under CN
- Outlet structure at Retention Pond Phase II
- Service road construction and ditching Retention Pond Phase II to Charles Street
- Surfacing (stone dust) of service roads from Sloan Drive to Retention Pond Phase II

## **LEGISLATION/POLICY**

N/A

## FINANCIAL CONSIDERATIONS

Funding of the project at \$5.496 million was obtained through the IBA Funding Program. Of this amount the construction budget is \$4,383,998.10 plus HST, or \$5,041,597.82 including 15% HST. Includes \$50,400 contingency.

The project funding includes the Pickard Quarry Dyke and Control Structure (\$401,516.90 plus HST) and engineering, which is completed. There is remaining \$47,400 contingency.

The budget for Retention Pond No. 3 and Culvert Crossings is \$4,383,998.10 plus HST, or \$5,041,597.82 including 15% HST.

Amount paid to beginning of October is \$2,731,061.49 including HST less holdback.

Change Orders	\$18,800	Filter fabric, C50 cover and riser, fire hydrant extension
Net overages		
• Crescent Street	\$97,217	Rip rap, crushed rock, borrow A
• Sloan Drive	\$56,726	Rip rap, 450 culvert, borrow A
• Retention pond	\$47,741	Borrow A
• Charles Street	\$18,958	Borrow A
Subtotal	\$239,442	
Less	\$18,800	COs from contingency
Overage (current)	\$220,642	

Remaining \$31,600 contingency intended to address unforeseen items in the work to be completed.

The Pickard Quarry remaining contingency of \$47,400 can be used to offset the overage current, reducing the overage to \$173,242 plus HST. This is about a 4% increase over the construction budget.

## COMMUNICATIONS/PUBLIC ENGAGEMENT

N/A

## COMMUNITY IMPACT

N/A

## OPTIONS

The following options are available to Council.

1. Adjust the budget to account for the overage.
2. Reduce scope without impacting intent of project – eliminate stone dust on service roads (Sloan to Retention Pond Phase II) and eliminate smaller sandstone at culverts (not required for erosion control) – approx. \$82,500 savings. Service roads would have surface of 31.5 mm gravel (1 ¼”).
3. Reduce scope to stay within budget – eliminate outlet control structure at Retention Pond Phase II, eliminate ditching and service road Retention Pond Phase II to Charles Street – approx. \$180,000 savings. Project intent would not be met.

## RECOMMENDATION

Staff recommends that the tender award for 2022-09 Lorne Street Storm Water Mitigation Phase III New Retention Pond No. 3 and Culvert Crossings to be Beale and Inch be increased by \$173,242 plus 15% HST to \$5,240,825.29 including HST.

## ATTACHMENTS

N/A