

**The Corporation of the City of Kawartha Lakes**  
**Council Report**

**Report Number ENG2018-002**

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**Date:** January 30, 2018

**Time:** 2:00 p.m.

**Place:** Council Chambers

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**Ward Community Identifier:** Ward 11

**Subject:** River Road Bridge Reconstruction Update

**Author Name and Title:** Juan Rojas, Director of Engineering & Corporate Assets

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**Recommendation(s):**

That Report ENG2018-002, **River Road Bridge Reconstruction Update**, be received.

**Department Head:**\_\_\_\_\_

**Financial/Legal/HR/Other:**\_\_\_\_\_

**Chief Administrative Officer:**\_\_\_\_\_

## **Background:**

At the Council Meeting of March 21, 2017, Council adopted the following resolution:

### **10.3.7 PUR2017-025**

#### **CR2017-239**

**Moved By** Councillor James

**Seconded By** Councillor Dunn

**RESOLVED THAT** Report PUR2017-025, **Tender 2017-20-CT River Road Bridge Reconstruction**, be received;

**THAT** 2220742 Ontario Ltd. o/a Bronte Construction of Milton, be selected for the award of Tender 2017-20-CT for River Road Bridge Reconstruction for the tender price of \$2,124,875.00, plus HST;

**THAT** MMM Group be selected for the single source award for contract administration and inspection in the amount of \$148,491.00 plus HST;

**THAT** subject to receipt of the required documents, the Mayor and Clerk be authorized to execute the agreements to award these tenders; and

**THAT** Purchasing Division be authorized to issue a Purchase Order.

**CARRIED**

This report provides an update to the River Road Reconstruction Project.

## **Rationale:**

The East Cross Creek Bridge (River Road Bridge) is located approx. 3.2km South West of Hwy 35. The existing bridge is a 12m span, T-beam structure. The overall width of 6.7m provides a roadway width of 5.5m between concrete barrier walls.

In 2014 a Municipal Structure Inspection was conducted by D.M. Wills Associates Ltd. See Appendix A. It was recommended that due to the poor condition of the concrete substructure and superstructure that the structure should be replaced.

The soil making up the subgrade of the north approach is proved to be extremely soft. The condition has made it almost impossible to satisfactorily build the approaches. Mud mats were required to traverse the subgrade with equipment, and additional geotechnical design components have been incorporated.

On November 1 2017 CKL was informed that Forte Solutions - the supplier of EPS foam blocks has terminated operations due to bankruptcy. Bronte was able to find a replacement supplier with a 3 week production and delivery time assuming no further approvals were required. See Appendix B

CKL – Communications Press Release issued Dec 7, 2017

*Construction on the River Road bridge has been delayed. It is expected to be complete in the spring of 2018.*

*Delays to construction have been caused by a disruption in the supply of specialty material for the project. The City has secured a new supplier, but must wait for warmer weather to complete construction.*

*“Safety is our top priority. The bridge was built on an old logging road and must be re-built using specialty light weight foam in order to maintain its structural integrity,” explained Juan Rojas, Director of Engineering and Corporate Assets. “We are doing everything possible to complete the bridge as early as the weather will allow.”*

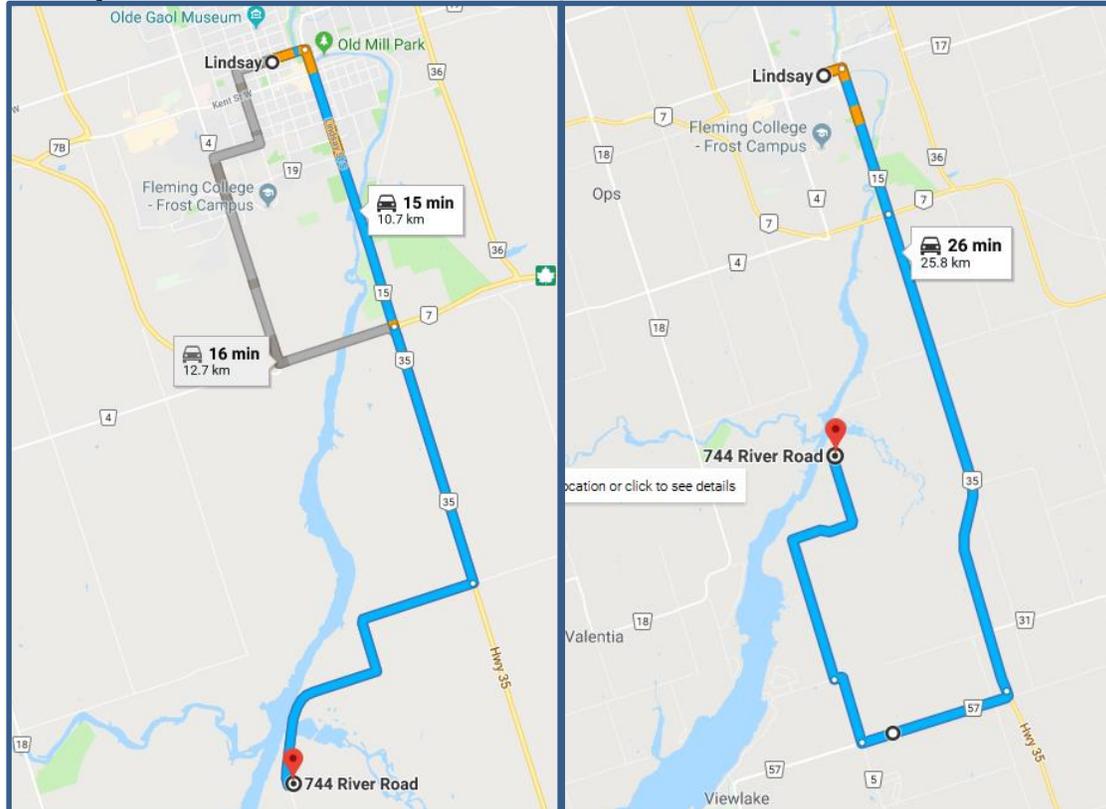
*Highway 35 south will continue to be used as the detour route.*

Notices

A hard copy of the press release was hand delivered to residents within the immediate impacted area. Notices were delivered on December 15/18, 2017. A notice was posted at the Janetville Community Centre.

### Detour Route

Property owners south of River Road Bridge have been impacted by a detour route consisting of an additional 15.1km (maximum) or 11min drive to downtown Lindsay.



### **Project Status:**

Project work has been suspended due to temperature constraints, quality of work and warranty issues as of December 7, 2017

### **Other Alternatives Considered:**

#### Work through winter to completion

The project could continue through the winter months, however there are costs associated with that in the amount of approx. \$250,000. A major concern is the quality of the product due to cold temperatures. Majority of the work remaining requires temperatures of 5 degrees +. To achieve this, a temperature controlled enclosure would have to be constructed around north and south approaches as well as the bridge structure. Items that require temperature control are:

- The EPS is covered with a 40mm membrane that requires the seams to be welded. 10 degrees + are required for the welding.
- The waterproofing on the bridge deck requires 10 degrees + to be placed.

- The north and south concrete approaches require heated concrete and 5+ degrees during curing period, must be heated and protected for 7 days.
- Shotcrete treatment on the embankment requires 10+ degrees and be in a controlled environment while curing.
- Base asphalt requires a temperature of 2 degrees and rising in order to be placed.
- Lower production due to temperatures and shorter working days.
- Winter fuel to continually heat the enclosure for 2-3 months.
- Concrete and asphalt repairs likely in the spring due to being placed in sub-zero temperatures.

Bronte Construction and WSP consultants did not recommend winter work based on overall quality and reduced warranty.

### Financial/Operation Impacts:

Funds for River Road Bridge Reconstruction were approved in the 2017 Capital Budget 983170101 under Capital Bridge Program Number RD1701.

The financial table below lists all projects under the RD1701 Program

Capital Project RD1703	Capital Project Budget	Other Committed Funds	Capital Project Balance	Tender Amount (incl. HST)	HST Rebate	Project Contingency	Total Tender Cost	Capital Project Balance
River Road Bridge (PUR2017-025)	\$2,181,230	\$151,104 *	\$2,030,126	\$2,384,441	(\$237,178)	\$105,506	\$2,252,769	(\$222,643)
Centennial Park Road Bridge (PUR2017-029)	\$486,400	\$35,365	\$451,035	\$247,349.09	(\$24,603)	\$21,889	\$244,635	\$206,400
Fairbairn Road Bridge – design (award via pre-qual)	\$60,000	\$5,000	\$55,000	\$44,668.90	(\$4,443.14)	\$5,000	\$45,226	\$9,774
Mill Pond Bridge – design	\$278,584	\$1,853	\$276,731	\$66,308	(\$6,596)	n/a	\$59,712	\$217,019
<b>TOTAL</b>	<b>\$3,006,214</b>	<b>\$193,322</b>	<b>\$2,812,892</b>	<b>\$2,742,767</b>	<b>(\$272,820)</b>	<b>\$132,395</b>	<b>\$2,602,342</b>	<b>\$210,550</b>

\* Other Committed Funds include engineering costs for contract administration and inspection to be performed by MMM Group in the amount of \$148,491.00, excluding HST and material testing. Also included is staff time and disbursements.

The Contractor estimates approximately 8 weeks of outstanding work remains. Bronte Construction is fully prepared to mobilize as soon as weather and water levels permit.

### **Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:**

River Road Bridge Reconstruction aligns with the Corporate Strategic Goals "A Vibrant and Growing Economy", "An Exceptional Quality of Life", and "A Healthy Environment".

This Capital Project directly aligns with these strategic goals by:

- Enabling efficient infrastructure and asset management;
- Update and execute Municipal Master Plans by implementing improvements to the road network
- Strategic Priority of creating connections within the community and externally by expanding and enhancing active transportation systems.

### **Review of Accessibility Implications of Any Development or Policy:**

Not applicable

### **Servicing Implications:**

Road detour has been extended until bridge project is completed.

### **Consultations:**

Supervisor, Infrastructure, Design, Construction – CKL Engineering  
Junior Accountant – CKL Corporate Services, Finance  
Project Manager - 2220742 Ontario Ltd. o/a Bronte Construction Ltd.  
Project Engineer - WSP Consultants, formerly MMM Group

## **Attachments:**

Appendix A – OSIM Report



OSIM Report 2011

Appendix B – Bankruptcy Documents – Supplier



Letter to the City of  
Kawartha\_ EPS Forte



Notice of  
Bankruptcy.pdf

**Department Head E-Mail: [jrojas@city.kawarthalakes.on.ca](mailto:jrojas@city.kawarthalakes.on.ca)**

**Department Head: Juan Rojas, Director of Engineering & Corporate Assets**

**Department File: Engineering**