

Municipality of Chatham-Kent
Infrastructure and Engineering Services
Engineering and Transportation Division

To: Mayor and Members of Council

From: Jason Cikatricis, C.E.T.,
Engineering Technologist

Date: December 2, 2021

Subject: Tender Award: Contract T21-316 Heron Line Bridge over the
Rivard Drain – Bridge Rehabilitation, Community of Dover

Recommendations

It is recommended that:

1. The tender in the amount of \$1,225,025.88 (including HST) for the work associated with contract T21-316 – Heron Line Bridge over the Rivard Drain – Bridge Rehabilitation, Community of Dover, be awarded to Intrepid General Limited of Belle River Ontario.
2. The Mayor and Clerk be authorized to enter into the recommended agreements.

Background

This structure was built in 1966, has an east-west orientation, and is located on Heron Line 0.85 km east of Town Line Road. This slab on I girder bridge carries 2 lanes of predominantly vehicular traffic across the Rivard Drain in 1 continuous span with a crossing length of 20.05 m and a maximum clearance of 3.0 m. The deck has a travel width of 8.65 m and an overall width of 10.15 m.

This road has an Average Annual Daily Traffic volume (AADT) of 400 and the posted speed limit at this location is 80 km/hr.

Bi-annual inspections have been conducted by the Municipality of Chatham-Kent (as legislated under the *Public Transportation and Highway Improvement Act*) to continually monitor the condition of the structures and to ensure public safety. All structures form part of the comprehensive 20 Year Plan managed by the Engineering and Transportation Division.

Based on the 2020 Ontario Structure Inspection Manual (OSIM) Inspection, and the site inspections completed by Dillon Consulting Limited, this structure was identified to have a number of conditional issues that needed to be addressed in order to maintain public safety and extend the life of this structure. These include:

- Severe delamination of the existing concrete deck, fascia and concrete abutments.
- Heavy leaking joints and heavy leakage on the underside of the existing concrete deck.
- Severe corrosion of existing steel I girders, abutment bearings and girder bearing seats.
- The absence of approach guiderails.
- Erosion of the existing drain slopes.



Figure 1. Photo of the existing Heron Line Bridge over the Rivard Drain

Comments

This contract consists of the following work:

- Removal of the bridge superstructure, including: the Steel I Girders, deck, and barriers.
- Supply and install new galvanized Steel I Girders.
- Supply and install new cast-in-place concrete deck.
- Supply and install new galvanized steel tube barriers on the bridge.
- Supply and install new deck drains.
- Repairs to the existing concrete abutments.
- Installation of guiderails on all four (4) corners of the bridge.
- Installation of rip rap erosion protection on all four (4) corners of the bridge.

This tender was let September 29, 2021 and the Purchasing Officer received the digital tenders for the work on December 1, 2021.

The tender results for are as follows:

Bidder	Location	Bid (including HST)
Intrepid General Limited	Belle River, ON	\$ 1,225,025.88 *
Front Construction Industries	Windsor, ON	\$ 1,259,700.00
Clarke Construction Inc.	Blenheim, ON	\$ 1,389,674.00 *
Facca Incorporated	Ruscom, ON	\$ 1,415,890.00
Sterling Ridge Infrastructure Inc.	LaSalle, ON	\$ 1,529,859.54
UrbanLink Civil Ltd.	Grimsby, ON	\$ 1,695,000.00
Amico Design Build Inc.	Oldcastle, ON	\$ 1,848,468.38 *
Aecon Construction and Materials Limited	Toronto, ON	\$ 2,226,031.64

*Denotes a clerical error; but it did not affect the ranking.

Per the terms of the tendered contract, work may commence any time after Council Award, with a completion date of December 1, 2023. The recommended tender is within the Engineer's estimate.

The bridge will be closed to vehicular and pedestrian traffic for the duration of the project and a detour will be in place.

The estimated duration of construction is 60 working days (12 weeks).

Areas of Strategic Focus and Critical Success Factors

The recommendations in this report support the following areas of strategic focus:

- ☐ Economic Prosperity:
Chatham-Kent is an innovative and thriving community with a diversified economy
- ☐ A Healthy and Safe Community: Chatham-Kent is a healthy and safe community with sustainable population growth
- ☐ People and Culture:
Chatham-Kent is recognized as a culturally vibrant, dynamic, and creative community
- ☐ Environmental Sustainability:
Chatham-Kent is a community that is environmentally sustainable and promotes stewardship of our natural resources

The recommendations in this report support the following critical success factors:

- ☐ Financial Sustainability:
The Corporation of the Municipality of Chatham-Kent is financially sustainable
- ☐ Open, Transparent and Effective Governance:
The Corporation of the Municipality of Chatham-Kent is open, transparent and effectively governed with efficient and bold, visionary leadership
- ☐ Has the potential to support all areas of strategic focus & critical success factors
- ☒ Neutral issues (does not support negatively or positively)

Consultation

The digital tenders were received by the Purchasing Officer and reviewed by the Engineering and Transportation Division and by Dillon Consulting Limited. (Letter of Recommendation attached as Appendix A).

Financial Implications

Project fees associated with this contract will be funded as summarized in the following table:

Financial Implications
Heron Line Bridge over the Rivard Drain – Bridge Rehabilitation
Project Costs

Recommended Tender ^A (Including HST)	\$ 1,225,025.88
Less HST Rebate 11.24%	-\$ 121,852.13
Total Current Project Costs	\$ 1,103,173.75
Total Current Project Funding	\$ 1,103,173.75

Note A: Material Testing Allowance is carried in this contract as a total of \$10,000 and is accounted for in the recommended tender. Contingency Allowance is carried in this contract as a total of \$200,000.00 and is accounted for in the recommended tender.

The total current project costs listed above will be funded from the Bridge Lifecycle Reserve, which includes funds under the Association of Municipalities of Ontario (AMO) Federal Transfers of the Canada Community-Building Fund (CCBF) Agreement.

Prepared by:

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Engineering Technologist
Engineering and Transportation

Reviewed by:

Brendan Falkner, P.Eng.
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Reviewed by:

Chris Thibert, P.Eng.
Director, Engineering
Engineering and Transportation

Reviewed by:

Thomas Kelly, P.Eng., MBA
General Manager
Infrastructure and Engineering Services

Consulted and confirmed the content of the consultation section of the report by:

Jennifer Scherle
Purchasing Officer

Attachments: Appendix A – Consultant's Letter of Recommendation

(RTC:\Infrastructure & Engineering\I&ES\2021\4454 – Contract Award T21-316: Heron Line Bridge over the Rivard Drain – Bridge Rehabilitation)

December 3, 2021

Sent via email

Municipality of Chatham-Kent
435 Grand Avenue West
P.O. Box 1296
Chatham, ON N7M 5R9

Attention: Jason Cikatricis, CET
Engineering Technologist

Rehabilitation of Heron Line Bridge over Rivard Drain
Community of Dover
Contract No. T21-316

Dear Sir:

We have reviewed the eight (8) tenders received for the above captioned project.

The bid results are as follows:

Contractor	Recorded Price (Includes HST & Contingency)	Actual Contract Price (Includes HST & Contingency)
Intrepid General Limited	\$1,241,798.02*	\$1,225,025.88
Front Construction Industries Inc.	\$1,259,700.00	\$1,259,700.00
Clarke Construction Inc.	\$1,389,900.00*	\$1,389,674.00
Facca Incorporated	\$1,415,890.00	\$1,415,890.00
Sterling Ridge Infrastructure Inc.	\$1,529,859.54	\$1,529,859.54
UrbanLink Civil Ltd.	\$1,695,000.00	\$1,695,000.00
Amico Design Build Inc.	Pg 1: \$1,435,812.73 Pg. 9: \$1,848,468.38	\$1,848,468.38
Aecon Construction and Materials Limited	\$2,226,031.64	\$2,226,031.64

*Mathematical errors noted

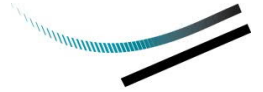
While reviewing the tender submissions, the following should be noted:

- Mathematical errors were noted by Intrepid General Limited and Clarke Construction Inc. as shown above and in the attached summary sheet.
- Amico Design Build Inc. transferred their pretax and contingency total onto page 1 of the Form of Tender (\$1,435,812.73), rather than the grand total including tax (\$1,848,468.38), however the grand total on page 9 of the Form of Tender does show the correct amount.



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We are satisfied that Intrepid General Limited has the required equipment and labour expertise to undertake this project.

If you have any further questions or comments, please contact our office.

Yours sincerely,

DILLON CONSULTING LIMITED

Larry Oulds, CET, B.A.
Project Manager

LRO:lld

Encl. Tender Comparison Spreadsheet

Our file: 19-1492