

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: February 23, 2021

Subject: Tender Award: Contract T20-359 Dauphin Road Bridge over
Dauphin Internal Drain – Bridge Rehabilitation, Community of
Tilbury East

Recommendations

It is recommended that:

1. The tender in the amount of \$538,784.00 (including HST) for the work associated with contract T20-359 - Dauphin Road Bridge over Dauphin Internal Drain Bridge Rehabilitation, Community of Tilbury East, be awarded to Clarke Construction Inc. of Blenheim, Ontario.
2. The Mayor and Clerk be authorized to enter into the recommended agreements.

Background

The Dauphin Road Bridge was built in 1965, has a north-south orientation, and is located on Dauphin Road 0.02 km South of Kantor Line in the Community of Tilbury East. This slab on I girder bridge carries two lanes of predominantly vehicular traffic across the Dauphin Internal Drain in 1 continuous span with a total crossing length of 10 m and a maximum clearance of 3.5 m. The deck has a travelled width of 7.3 m and an overall width of 7.95 m. This road has an Average Annual Daily Traffic volume (AADT) of 100 and the speed limit at this location is 60 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.

On October 11, 2016, as part of the annual load posting review, a large perforated hole was found in one of the center span steel support girders. To ensure public safety, the

bridge was closed on October 13, 2016. A contractor was retained immediately, the repairs were completed, and the bridge re-opened within 4 weeks of the closure, in a load posted state.

The bridge has been load posted for a number of years and is currently load posted at 8 / 15 / 20 tonnes.

There are deterioration issues that need to be addressed in order to maintain public safety and extend the life of this structure. These include:

- Deteriorated steel girders supporting the concrete deck
- Deteriorated concrete deck and concrete abutments.



Figure 1. Dauphin Road Bridge over Dauphin Internal Drain

Comments

This contract consists of the following work;

- Remove and replace the existing steel girders with new galvanized steel girders
- Remove and replace the existing concrete deck
- Concrete repairs to the concrete abutments and wing walls
- Install new pre-cast concrete retaining walls in order to improve road widths to accommodate the new guiderail
- Install new guiderail on both sides of the structure

This rehabilitation will provide approximately 30-40 years of service.

This tender was let December 4, 2020 and the Purchasing Officer received and opened tenders for the work on February 18, 2021.

The tender results are as follows:

Bidder	Location	Bid (including HST)
Clarke Construction Inc.	Blenheim, ON	\$ 538,784.00
Intrepid General Limited	Belle River, ON	\$ 552,513.95
Front Construction Industries Inc.	Windsor, ON	\$ 624,700.00
Facca Incorporated	Ruscom, ON	\$ 727,155.00 *
2585284 Ontario Inc. operating as Beton	North York, ON	\$ 751,291.80
Sterling Ridge Infrastructure Inc.	LaSalle, ON	\$ 899,085.63
Clearwater Structures Inc.	Ajax, ON	\$ 938,301.15

*Denotes a clerical error that 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 November 30, 2022.

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

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 tenders were opened by the Purchasing Officer and reviewed by the Engineering and Transportation Division and by Stantec 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
Dauphin Road Bridge over Dauphin Internal Drain – Bridge Rehabilitation
Project Costs

Recommended Tender ^A (Including HST)	\$ 538,784.00
Less HST Rebate 11.24%	-\$ 53,592.32
Total Current Project Costs	\$ 485,191.68
Total Current Project Funding	\$ 485,191.68

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 \$75,000 and is accounted for in the recommended tender.

The lowest tender price submitted by Clarke Construction Inc. is within the budget estimate.

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 Federal Gas Tax Funding Agreement.

Prepared by:

Jason Cikatricis, C.E.T.
Engineering Technologist
Engineering and Transportation

Reviewed by:

Brendan Falkner, P.Eng.
Manager, Engineering
Engineering and Transportation

Reviewed by:

Chris Thibert, P.Eng.
Director
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\2020\4348 – Contract Award T20-359-
Dauphin Road Bridge over Dauphin Internal Drain – Bridge Rehabilitation)



Stantec Consulting Ltd.
2555 Ouellette Ave. Suite 100, Windsor ON N8X 1L9

February 22, 2021
File: 165620210

Attention: Jason Cikatricis, C.E.T
Municipality of Chatham-Kent
Infrastructure and Engineering Services
315 King Street W.
Chatham ON, N7M 5K8

Dear Mr. Cikatricis,

**Reference: REHABILITATION OF DAUPHIN ROAD BRIDGE OVER DAUPHIN INTERNAL DRAIN
Contract No. T20-359**

Seven tenders were received and opened by the Corporation of the Municipality of Chatham-Kent (Chatham-Kent) Purchasing Division on Thursday, February 18, 2021 for the above noted project.

These tenders are submitted by Clarke Construction Inc. (Clark), Intrepid General Limited (Intrepid), Front Construction Industries (Front), Facca Incorporated (Facca), , 2585284 Ontario Inc. (Beton), Sterling Ridge Industries Inc. (Sterling) and Clearwater Structure Inc. (Clearwater). They also submitted the bid bonds for the value specified in the Tender Documents. The bonds have been retained by the Municipality. We have reviewed the tender results and our comments are noted below:

A. Tender Prices (Including H.S.T)

Tenderers	Total Tender Price (HST included)	HST (13%)
Clarke Construction	\$ 538,784.00	\$ 61,984.00
Intrepid General Limited	\$ 552,513.95	\$ 63,563.55
Front Construction	\$ 624,700.00	\$ 71,868.14
Facca Incorporated	\$ 727,155.00*	\$ 83,655.00*
2585284 Ontario Inc. (Beton)	\$ 751,291.80	\$ 86,431.80
Sterling Ridge Industries	\$ 899,085.63	\$ 103,434.63
Clearwater Structure Inc.	\$ 938,301.15	\$ 107,946.15

* Denotes adjusted total tender price.

B. Tender Forms

a) Clarke Construction Inc.

- Statements A, B and C are complete with satisfactory information
- Sub-contractors as listed are satisfactory except the precast concrete tie-back retaining wall is to be supplied by Underground Specialties Windsor instead of IECS (Internal Erosion Control Systems). After discussion with Clarke, it is confirmed that



February 22, 2021
Mr. Jason Cikatricis

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**Reference: REHABILITATION OF DAUPHIN ROAD BRIDGE OVER DAUPHIN INTERNALDRAIN
Contract No. T20-359**

precast concrete tie-back retaining wall from IECS can be used at the same prices as the product from Underground Specialties Windsor if the latter is not approved by the Municipality of Chatham-Kent.

- Prices for Tender items 16, 17 and 24 were comparatively low.

b) Intrepid General Limited

- No informalities were noted in the Form of Tender.
- Statements A, B and C are complete with satisfactory information. The proposed sub-contractors are satisfactory.

c) Front Construction Industries

- No informalities were noted in the Form of Tender.
- Statements A, B and C are complete with satisfactory information.
- The proposed sub-contractors are satisfactory except the precast concrete tie-back retaining wall is to be supplied by DNM which is not an acceptable supplier as their precast concrete blocks are made of recycled cement. As for the Ready-Mix Concrete supplier, Dresden Ready Mix should be the same as Chatham-Kent Ready Mix.

d) Facca Incorporated Inc.

- Sub-contractors as listed are satisfactory.
- Statements A, B and C are complete with satisfactory information.
- Instead of list Sub-contractors, they put their "own force" for the supplier of "Precast Concrete Block Retaining Wall", "Structural Steel Work", "Bearing Pads/strip Bearing" and Thrie Beam/Steel Beam Guide Rails".
- An arithmetic error is noted in the tender schedule and the total tender price was adjusted including subtotal and HST amount.

e) 2585284 Ontario Inc. (Beton)

- No informalities were noted in the Form of Tender.
- Statements A, B and C are complete with satisfactory information. The proposed sub-contractors are satisfactory.

f) Sterling Ridge Industries Inc.

- Statements A, B and C are complete with satisfactory information. However, it looks this company does not have enough experience for this type of bridge superstructure of HPC concrete deck and structural steel girders.
- Sub-contractors as listed are satisfactory.
- The unit price for Tender items 18 was noted and adjusted.

g) Clearwater Structure Inc.



February 22, 2021
Mr. Jason Cikatricis

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**Reference: REHABILITATION OF DAUPHIN ROAD BRIDGE OVER DAUPHIN INTERNALDRAIN
Contract No. T20-359**

- No informalities were noted in the Form of Tender. Statements A, B and C are complete with satisfactory information.
- Most of the sub-contractors listed are satisfactory. Instead of listing Sub-contractors, they put their "own force" for the supplier of "Precast Concrete Block Retaining Wall" and "Structural Steel Work".

We received the Form of Tender information in PDF format. Therefore, we are not able to verify whether all tender forms are sealed with the proper Corporation Seal.

A summary of tender results is attached for your reference.

C. Comments and Recommendation

1. The lowest tender price of **\$538,784.00** (Including H.S.T.) was submitted by Clarke Construction Inc. The second lowest tender price of **\$552,513.95** (Including H.S.T.) was submitted by Intrepid General Limited. The cost difference between those two tenders is **2.5%** which is considered excellent bidding for the type of construction involved.
2. We have worked with Clarke Construction Inc on a few bridge projects in the Municipality of Chatham-Kent before, their workmanship and experience are satisfactory. The second lowest bidder, Intrepid General Limited, has the experience and ability to complete the present contract.
3. The contractors' response to the tender call and the number of tender submissions is satisfactory. Most of the tender prices (Including H.S.T.) submitted are close to the Engineer's estimate and the qualified low bidder's price is **4.8%** low than Engineer's estimated of **\$566,130.00** (Including H.S.T.). There is no need to re-tender this project.
4. It is our recommendation to award the contract to Clarke Construction Inc. for a total tender price of **\$538,784.00**(Including H.S.T.).

We trust you will find the above tender evaluation satisfactory. Please contact the undersigned if you have any questions.

Regards,

STANTEC CONSULTING LTD.

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Attachment: Summary of Tender Results