Report to Civic Works Committee

To: Chair and Members

Civic Works Committee

From: Kelly Scherr, P. Eng., MBA, FEC

Deputy City Manager, Environment & Infrastructure

Subject: Contract Award: Tender No. 21-109

Victoria Bridge Replacement

Date: February 1, 2022

Recommendation

That on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the award of contracts for the Victoria Bridge Replacement Project (Tender No. 21-109):

- (a) the bid submitted by McLean Taylor Construction Limited at its tendered price of \$22,771,238.28, excluding HST, for the Victoria Bridge Replacement Project, BE ACCEPTED; it being noted that the bid submitted by McLean Taylor Construction Limited was the lowest of eight bids received and meets the City's specifications and requirements in all areas;
- (b) AECOM Canada Limited **BE AUTHORIZED** to carry out the resident inspection and contract administration for this project at an upset amount of \$1,740,991 excluding HST, in accordance with Section 15.2 (g) of the City of London Procurement of Goods and Services Policy;
- (c) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report <u>attached</u>, hereto, as Appendix A;
- (d) the Civic Administration **BE AUTHORIZED** to undertake all administrative acts that are necessary in connection with this project;
- (e) the approval given, herein, **BE CONDITIONAL** upon the Corporation entering into a formal contract, or issuing a purchase order for the work to be done relating to this project (Tender 21-109); and
- (f) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

This report recommends award of a tender to a contractor, and continuation of consulting and contract administration services for the Victoria Bridge Replacement Project, which will replace the existing bridge over the South Branch of the Thames River on Ridout Street including road improvements from the Horton Street intersection to Ingleside Place. This project will address a key infrastructure renewal need by replacing a bridge that is beyond its service life. The project will also improve the active transportation network at this connection to the downtown by creating wider sidewalks, extending the Ridout Street bike lanes across the bridge and providing an improved connection to Thames Park.

Context

There have been three previous bridges in this location dating back to the year 1848. The current bridge was constructed in 1926 on the abutments and central pier from the previous bridge which was constructed in 1875. The current structure is a steel

modified warren pony truss structure.

The bridge supports two lanes of traffic, with two cantilevered sidewalks located outside of the main truss. A watermain, sanitary sewer and Bell Canada cables are suspended beneath the bridge. At 93 years of age with substructure elements at 144 years of age, this bridge is at the end of its service life. In recent years, emergency repairs were necessary due to full perforations of the steel truss, deck perforations and expansion joint failures. The Schedule "C" Class Municipal Environmental Assessment (EA) for this project was completed and accepted by Council on June 26, 2018 with the recommendation to fully replace this structure.

Linkage to the Corporate Strategic Plan

The following report supports the Strategic Plan through the strategic focus area of "Building a Sustainable City" by implementing and enhancing safe and convenient mobility choices for transit riders, automobile users, pedestrians, and cyclists.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter:

- Strategic Priorities and Policy Committee January 28, 2016 Downtown Infrastructure Planning and Coordination
- Civic Works Committee November 1, 2016 Environmental Assessment Appointment of Consulting Engineer
- Civic Works Committee June 19, 2018 Victoria Bridge Environmental Study Report
- Civic Works Committee July 23, 2019 Victoria Bridge Replacement Detailed Design & Tendering Appointment of Consulting Engineer

2.0 Discussion and Consideration

The Victoria Bridge EA Study was carried out through 2017 and 2018. The bridge location and associated EA Study Area is shown in Figure 1 below. The preferred alternative recommended through the EA was to completely remove the existing structure and replace it with a new through arch type bridge on the existing roadway alignment. The bridge replacement will address the lifecycle renewal needs of the aging structure, and it will provide improved functionality with space to accommodate improved cycling and walking facilities. The recommended design is sympathetic to the design qualities and aesthetics of the original bridge. The bridge design will also provide improved climate resiliency by increasing the clearance of the bridge above the river and removing the centre pier which currently impedes river flows.

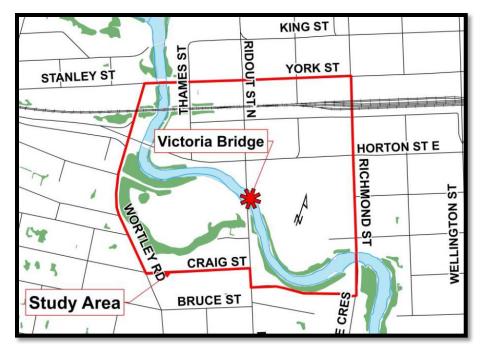


Figure 1: Victoria Bridge Location and Environmental Assessment Study Area

The removal and replacement of the existing Victoria Bridge will require Ridout Street South to be closed from Horton Street to the Thames Park entrance for approximately fourteen months. Vehicle traffic will be detoured around the area. This detour has been coordinated with the scheduling of upcoming works on the Wharncliffe/CN Rail Underpass and the Wellington Gateway projects which are also scheduled in the near term.

Victoria Bridge serves as a connecting link for pedestrian, cyclist and vehicle traffic while providing a support mechanism for City services and Bell Canada cables on Ridout Street South over the south branch of the Thames River. To maintain a link for pedestrians and cyclists during the closure, a temporary bridge will be provided on the west side of Ridout Street. The temporary river crossing will be accessed on the west side of Victoria Bridge and will connect to Thames Park. This temporary bridge will be introduced before the removal of Victoria Bridge and remain in place until the new bridge can accommodate travel. The construction of the temporary bridge will necessitate the closure of the Thames Park tennis facilities as well as reroute a portion of the pathway. This work has been coordinated with Parks Planning and the aging tennis courts will be replaced completely with new lighting, asphalt surface, nets and fencing.

The new bridge will require a raise in profile for Ridout Street of about one metre to account for improved level of safety associated with the design flows in the Thames River. The new profile will match back into existing grades at Horton Street at the north limit and Ingleside Place at the south limit. This provides the opportunity for coordinated lifecycle renewal of the signalized Ridout/Horton Street intersection and extension of corridor cycling facilities. This grade raise will result in modifications to the entrances of the London Hydro property on the north side of the river and Thames Park on the south side of the river.

This project will provide long-term measures to improve the stormwater quality being discharged into the Thames River. During the construction, the project includes extensive measures to address environmental concerns and species at risk. Special measures and constraints for working in and adjacent to the river, protection of birds, fish, turtles and other species at risk have been included in this project. Beyond the construction costs of these environmental measures, there are also impacts to the timing and construction schedule that need to be addressed.

This project will require the temporary closure of the Thames Park and London Hydro entrances for a period of time. At Thames Park, the entrance will need to be regraded and repaved to accommodate the grade change. This work will be timed to occur during the off-season associated with activities at the pool to minimize access disturbance. Revised grading and retaining walls will be required at the London Hydro entrance to maintain this access while transitioning down to the existing building and parking levels. Emergency access will be maintained at all times at the London Hydro access, but general ingress and egress may be impacted for the duration of the construction project. The main access point into the London Hydro property from Talbot Street will be open at all times. London Hydro will continue to be involved as construction progresses.

2.1 Public Engagement and Consultation

The earlier EA process included a comprehensive public consultation process with input from relevant agencies, affected landowners, First Nations communities and members of the public.

At the time of report writing, a Public Update Meeting (PUM) is planned for January 27, 2022. The meeting will provide the opportunity for the project team to provide design and construction details to property owners within the study area and interested residents.

3.0 Financial Impact/Considerations

3.1 Tender Summary

Tenders for the Victoria Bridge Replacement Project were opened on December 17, 2021. Eight contractors submitted tender prices as listed below, excluding HST.

Contractor	Company Name	Tender Price Submitted
1	McLean Taylor	\$22,771,238.28
	Construction Limited	\$22,771,230.20
2	2220742 Ontario Ltd o/a	¢22 244 024 05
	Bronte Construction	\$23,344,936.05
3	Looby Builders (Dublin)	¢25 424 412 22
	Limited	\$25,624,413.23
4	Toronto Zenith Contracting	\$26,161,829.40
	Limited	\$20,101,829.40
5	Graham Construction and	\$26,700,733.80
	Engineering LP	\$20,700,733.60
6	Eiffage Innovative Canada	\$27,226,887.20
	Inc.	\$21,220,001.20
7	Facca Incorporated	\$29,284,489.00
8	Aecon Construction and	\$37,220,543.90
	Materials Limited	\$37,ZZU,D43. Y U

All tenders have been assessed and checked by the Transportation Planning and Design Division and AECOM Canada Limited. No mathematical errors were found, and the results of the tendering process indicate a competitive process.

The pre-tender construction estimate was \$18,400,000, excluding HST. The competitive nature of the tender results including the large number of submitted bids and grouping of bid costs indicate that the low bid provides value. The tender analysis

suggests several reasons including industry wide risk factors for this higher than anticipated cost including:

- Uncertainty and risk with respect to material fabrication and potential impacts to
 project timelines, particularly for the structural steel. High demand and increasing
 material costs have substantially increased steel and fabrication costs over the
 past few years. Given the rapid rise in costs, it has been challenging to estimate
 supply chain impacts on schedule and cost.
- Recent high construction escallation rates and projected further increases over the two-year project duration.
- Labour shortages and increasing costs for skilled labour and increased risk.
- High environmental abatement costs and disposal rates associated with new
 provincial regulations, with respect to coal tar contamination on this project. This
 type of abatement is unique and challenging and likely led to the incorporation of
 added risk costs. This item will be managed carefully and the full item costs may
 not be required depending on the quantity of contaminated material encountered.
- Various project environmental constraints and associated risks, including species at risk relocation and protection.
- Accelerated works for foundation construction and risk mitigation for in-water works.
- Overall aggressive project schedule and some winter work requirements.
- Rapidly increasing project insurance costs over the past few years.
- Rapid emergence of new COVID-19 Omicron variant and the uncertainty of further restrictions and anticipated continued pandemic related project risks.

As this bridge has reached the end of its service life and would continue to require extensive repairs to remain operational, the tender is recommended to proceed in accordance with the detailed financing provided in the Source of Financing Report attached as Appendix 'A'.

The project is being funded through approved capital accounts including primarily the Victoria Bridge Replacement and Victoria Bridge Bike Lane accounts with components of Road Improvements, Bridge Renewal, Traffic Signal Renewal and Parks Planning accounts.

3.2 Consulting Services

AECOM Canada Limited was awarded the detailed design of the Victoria Bridge Replacement by Council on July 30, 2019. With the consultant's knowledge and performance on the EA and detailed design phases of the project, a proposal for construction contract administration and resident inspection was requested with the scope and fees negotiated. Staff have reviewed the fee submission for the Contract Administration phase of this project, including the time allocated to each project task, along with hourly rates provided by consultant. The review of the submission confirmed that the time allocations were appropriate and hourly rates consistent with those submitted through the competitive process.

The continued use of AECOM Canada Limited on this project for contract administration is of financial advantage to the City because this firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected. Therefore, in accordance with Section 15.2 (g) of the City of London's Procurement of Goods and Services Policy, Civic Administration is recommending that AECOM Canada Limited be authorized to carry out the remainder of engineering services, as contract administrators, and complete this project for a fee estimate of \$1,740,991, excluding HST. These fees are associated with the contract administration and resident supervision services to ensure that the City receives the

product specified and associated value. The approval of this final phase of work will bring the total engineering services for this project to \$2,903,285 excluding HST.

3.3 Operating Budget Impacts

This project will provide additional measures to improve the stormwater quality being discharged into the Thames River. These measures will result in additional operating impacts for Sewer Operations in the order of \$1,000 per year. Additionally, the project will include improved bike lanes on the roadway and bridge resulting in additional operating impacts estimated at \$1,000 per year for Road Operations.

The operational budget impacts for the Sewer & Road Operations will be captured through annual assessment growth business cases.

Conclusion

Civic Administration has reviewed the tender bids and recommends McLean Taylor Construction Limited be awarded the construction contract for the Victoria Bridge Replacement Project at the submitted tender price of \$22,771,238.28, excluding HST.

AECOM Canada Limited has demonstrated an understanding of the City's requirements for this project, and it is recommended that this firm continue as the consulting engineer for the purpose of contract administration and resident supervision services, as it is in the best financial and technical interests of the City. The contract administration assignment is valued at an upset amount of \$1,740,991, excluding HST.

Prepared by: Garfield Dales, P.Eng., Division Manager, Transportation

Planning and Design

Submitted by: Doug MacRae, P. Eng., MPA, Director, Transportation

and Mobility

Recommended by: Kelly Scherr, P.Eng., MBA, FEC, Deputy City Manager,

Environment & Infrastructure

Appendix A – Sources of Financing Report