| TO: | CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 14, 2019 |
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| FROM: | KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER |
| SUBJECT: | CONTRACT AWARD: TENDER NO. 19-27 THAMES VALLEY PARKWAY - NORTH BRANCH CONNECTION (RICHMOND STREET TO ADELAIDE STREET) |

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the Thames Valley Parkway North Branch Connection project:

- (a) the bid submitted by J-AAR Excavating Limited at its submitted tendered price of \$6,277,802.15 (excluding HST), for said project **BE ACCEPTED**; it being noted that the bid submitted by J-AAR Excavating Limited was the lowest of six (6) bids received and meets the City's specifications and requirements in all areas;
- (b) Additional fees for Stage 3 and Stage 4 Archaeological Investigation work to be completed by Dillon Consulting Limited in the amount of \$75,000 (excluding HST) BE APPROVED; it being noted that this work is required under the Ontario Heritage Act;
- (c) Dillon Consulting Limited, **BE AUTHORIZED** to carry out the resident inspection and contract administration in the amount of \$475,635 (excluding HST), in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy;
- (d) the financing for this project **BE APPROVED** as set out in the Sources of Financing Report <u>attached</u> hereto as Appendix A;
- (e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (f) the approval given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract for the material to be supplied and the work to be done relating to this project (Tender 19-27); and,
- (g) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

 Civic Works Committee – February 21, 2018 – Ontario Municipal Commuter Cycling (OMCC) Program Transfer Payment Agreement;

- Civic Works Committee August 29, 2017 Thames Valley Parkway North Branch Connection, Detailed Design and Tendering, Appointment of Consulting Engineer;
- Community and Protective Services Committee July 19, 2016 Thames Valley Parkway North Branch Connection, Class Environmental Assessment;
- Community and Protective Services Committee August 25, 2014 –
 Richmond to Adelaide Street North, Thames Valley Parkway, Environmental Assessment Study, Appointment of Consulting Engineer.

COUNCIL'S 2019-23 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus areas of "Strengthening our Community" and "Building a Sustainable City". The Thames Valley Parkway North Branch Connection (TVP-NBC) will promote well-being, health and safety while enabling Londoners to move around the city safely and easily in a manner that meets their needs. The project recognizes and protects the natural environment consistent with provincial policies and the City's Official Plan.

DISCUSSION

Purpose

This report recommends the award of a construction tender to J-AAR Excavating Limited and the award of contract administration to Dillon Consulting Limited for the TVP-NBC project which will create a new park pathway linkage between Richmond Street North and Adelaide Street North along the North Branch of the Thames River (see Figure 1). Additional fees to meet the archeological investigation requirements of the Ontario Heritage Act are also included in this report.

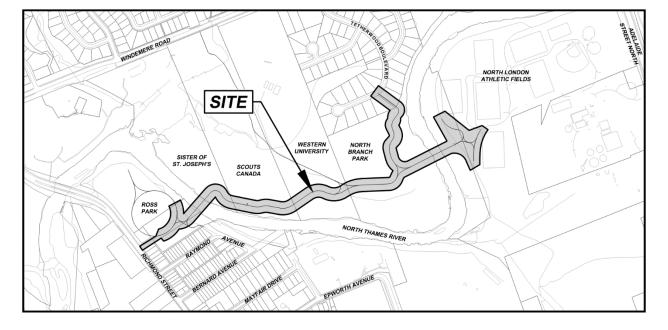


Figure 1: Location Map

Background

The City's Thames Valley Parkway (TVP) is described in London's Official Plan as "one of London's most valuable assets for generating our prosperity" and it is expected to play a "major role in helping London to attract a quality labour force and investment in

our city". The TVP has been developed over the past 30 years providing 42km of recreational pathway along the three branches of the Thames River. There is an additional 120km of secondary pathways connecting neighbourhoods to the TVP. This extensive network of pathways supports a safe, free and fully accessible form of mobility and active living which is consistently identified as a high priority by Londoners. The TVP is a key part of the City's active transportation network with several linkages to the on-road bike system. As extensive as this network has become, we still have gaps which need to be filled, as outlined in the City of London's Bicycle Master Plan, in order to better serve Londoners.

This project will complete the highest priority gap within the City's TVP, a one kilometer stretch between Richmond Street North and Adelaide Street North and it will link more than 50,000 Londoners in the north-east to the existing TVP, while also fulfilling recommendations made in a number of City Policy and Master Plan documents including, but not limited to:

- The London Plan;
- London ON Bikes Cycling Master Plan EA;
- Smart Moves 2030 Transportation Master Plan EA;
- Age Friendly London Action Plan;
- Thames Valley Corridor Plan;
- · London Strengthening Neighbourhoods Strategy;
- Parks and Recreation Strategic Master Plan

An Environmental Assessment (EA) was completed in July 2016 which reviewed and identified the preferred routing for this connection (See Figure 1). The preferred alignment includes the construction of two new steel bridges to cross the Thames River, and easement agreements across three private properties (ie: Sisters of St. Joseph, Boy Scouts of Canada and University of Western Ontario).

Construction Considerations

There will be three points of construction access. The westerly access point will be through Ross Park, off of Richmond Street North, for the access to the south side of the River at the west end of the project. The easterly access will be through the driveway entrance to the North London Athletic Fields off of Adelaide Street North for access to the south side of the river at the east end of the project. Access to the north side of the Thames River will be through an existing watermain easement that extends southerly from Windermere Road down the east side of the Scouts Canada property and portions will be through the west side of Western's property.

This project will also construct a permanent pedestrian/EMS access along an existing City owned ROW between two residential properties from Tetherwood Boulevard to the TVP on the north side of the river. This access will be constructed in 2020, and it will not be used as construction access.

Easement agreements are in place with the three private property owners impacted on the north side of the Thames River, and they will be kept informed of the progress of the project.

Construction is anticipated to begin on the temporary access road off of Windermere Road in June 2019 to access the area on the north side of the river. Construction on the pathway alignment itself will begin in September 2019 (after the bird nesting windows close). The fabrication and construction of the two pedestrian bridges will occur over the winter, with installation to likely occur in the spring of 2020. Substantial completion of the project is scheduled by end of September 2020.

Natural Heritage

The Environmental Impact Study completed for this project anticipated no net impact and included input from the UTRCA, MNRF, EEPAC and the City Ecologists. The detailed design completed for this project has incorporated all EIS recommendations and contract administration will include monitoring by qualified ecologists during and post construction to ensure successful implementation of all EIS recommendations.

Archeological Investigation

The City of London takes a proactive role in the management of archaeological sites and areas of archaeological potential. As the conservation of archaeological significant features is a matter of Provincial interest, the City, as proponent and approval authority, has a responsibility to ensure the appropriate processes are followed. As a result, the City has implemented an Archaeological Management Plan (2017) to identify areas of archaeological potential requiring assessment by an archaeologist in advance of development or site alteration.

The City included Stage 1 and Stage 2 archaeological assessments within the scope of work for the detailed design assignment of the project. Stage 3 and Stage 4 assessments are not always required, or may only be necessary in localized areas within a projects limits.

The Stage 1 and 2 archaeological assessments completed for the TVP-NBC have identified one potentially significant archaeological site which will require, at minimum, Stage 3 archaeological assessment. A Stage 3 archaeological assessment generally expands on the fieldwork undertaken during Stage 2 to determine the extent and cultural affiliation of an archaeological site. If required, a Stage 4 archaeological assessment would conserve a significant archaeological site either in situ through the implementation of avoidance and protective measures (for example, a buffer zone) or documentation and excavation.

The tendered contract has stipulated that work in Stage 3 and 4 areas cannot commence until after September 1st, 2019 in order to allow sufficient time for these investigations to be completed. The requirement for Stage 3 and Stage 4 assessments were unpredictable and required fees not part of the original detailed design assignment. Civic administration is recommending the detailed design assignment contract with Dillon Consulting Limited be increased by \$75,000 to cover the costs associated with the completion of the required archaeological assessments for this project.

Tender Summary

Tenders for the Thames Valley Parkway – North Branch Connection project (T19-27) were opened on Wednesday, March 20, 2019. Six (6) contractors submitted tender prices as listed below (excluding HST).

| CONTRACTOR | | SUBMITTED TENDER PRICE (\$) | CORRECTED TENDER PRICE (\$) |
|------------|-----------------------------------|-----------------------------------|-----------------------------------|
| 1. | J-AAR Excavating Limited | \$6,277,802.15 | |
| 2. | L82 Construction Ltd | \$6,472,705.38 | |
| 3. | Frank Van Bussel and Sons Ltd. | \$6,757,674.32 | |

| 4. | Sierra Bridge Inc. | \$7,026,604.25 | |
|----|------------------------------------|----------------|--|
| 5. | McLean Taylor Construction Limited | \$7,098,866.53 | |
| 6. | Dufferin Construction Company | \$7,597,473.30 | |

All tenders have been checked by Dillon Consulting Limited and the Environmental and Engineering Services Department and include a \$600,000 contingency. The results of the tendering process indicates a competitive process. The tender estimate prior to tender opening was \$6,539,000 (excluding HST).

Contract Administration

The City previously procured Dillon Consulting Limited as the consultant to undertake the Class 'C' Environmental Assessment (EA) and detailed design of this project in accordance with the Procurement of Goods and Services Policy.

With the consultant's knowledge of the project, Dillon Consulting Limited was invited to submit a proposal to carry out the contract administration and resident supervision. Staff have reviewed the fee submission in detail considering the various activities and related hourly rates provided. The amount of time allocated to each project task is consistent with prior projects of a similar nature that have been awarded through a competitive process.

The continued use of Dillon Consulting Limited on this project for contract administration is of financial advantage to the City due to the fact the firm has specific knowledge of the project and has undertaken work for which duplication would be required if another firm were to be selected.

In accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy, Civic Administration is recommending that Dillon Consulting Limited be authorized to carry out the remainder of engineering services as construction administrators to complete this project for a fee estimate of \$475,635 (excluding HST). These fees are associated with the inspection services necessary to ensure the City receives the construction product specified.

The City's requirement for the creation of record drawings following construction requires the reviewing engineer to seal them on the basis of field verification and ongoing involvement. This requirement triggers consultant accountability for the design. Consequently, the continued use of Dillon Consulting Limited who created and sealed the design drawings is required in order to maintain this accountability process. The approval of this work will bring the value of the overall consulting assignment to \$1,288,329.50 (excluding HST) including the environmental assessment, detailed design, archeological assessments and construction administration services.

Financial Considerations

The Thames Valley Parkway-North Branch Connection project is receiving contributions from provincial government and other sources through the following programs:

| Ontario Municipal Cycling Infrastructure Program (OMCIP) | | \$ 3,303,752 |
|--|--------|--------------|
| Contribution from London Community Foundation (LCF) | | \$ 25,000 |
| | Total: | \$ 3,328,752 |

The February 21, 2018 report to Civic Works Committee estimated the updated total cost for this project at \$6.6 million including detailed design, construction and contract administration costs. As part of the report, it was recommended that the \$3,303,752 from the Ontario Municipal Commuter Cycling (OMCC) Program be allocated to this project. Council agreed and this money was added to the \$3,273,868 million in funds already available for the project. It should be noted, OMCC funding must be used by the end of December 2020. Therefore the award of this contract at this time provides an opportunity for the City to construct this priority infrastructure with less City funding required. With the reallocated OMCC funding, available funds budgeted for this project are \$6,577,620.

Inclusive of detailed design, contract administration, Stage 3 and Stage 4 archaeological investigations and construction costs, the total project cost is \$7,479,433 (including HST and excluding EA costs of \$234,372). This exceeds the February 2018 estimate by \$901,813. (including HST).

Some design changes were encountered following the EA including widening the two bridge structures from 3.0m to 4.0m to better accommodate the clearance for maintenance and emergency vehicles along the parkway. Additionally, the project includes many unique components such as multiple access locations, temporary access to facilitate construction through private properties (with permission), restricted work areas in some locations due to environmental constraints, tree and scour protection. Allowances were made for these at the EA phase, but through the detailed design process as the design, analysis and approvals were completed the actual costs were higher than allowed for in the EA.

The overall design team has worked collaboratively to review and economize the design as much as possible. The approach to the bridge design has emphasized repetition and simplicity, to allow economies of scale to be realized in the bid price for the two bridges. Cost effective design elements have been favoured over enhanced design elements.

A factor beyond the City's control is that the price of steel is quite volatile. The cost of steel has risen considerably since the EA was finalized in 2016 accounting for most of this cost increase. Over a two year period, between July 2016 and October 2018, the commodity price more than doubled. Note, this increase in steel is a straight material cost, but often influences bid prices for labour and equipment as a representation of market demand.

The price increase of steel is based on world markets and may be influenced by tariffs and trade discussions in the media, as well as economic growth around the world.

Figure 2: Steel Commodity Price Trend

Source: https://tradingeconomics.com/commodity/steel (accessed March 25, 2019)

In general, City staff have noticed considerable increases in construction costs on infrastructure projects, indicating an overall upward trend in construction costs. This increase may be due to the amount of infrastructure work currently available regionally, thus creating a less competitive market.

Financial Planning and Business Support have worked with Parks Planning to secure the additional funds from appropriate sources to proceed with construction. To accommodate this high priority and much needed project within the existing capital funding envelope for park pathways and bridges, the following projects have been adjusted: defer a boardwalk upgrade in Lambeth Centennial Park and reprioritize this project for 2020, and; utilize existing funding from the future TVP pathway link from Byron to Riverbend, as the EA has not been completed. Upon completion of the EA, this funding may need to be re-budgeted, depending on the preferred solution.

Anticipated annual operating cost to budgets in 2021 and subsequent years, associated with the additional infrastructure is summarized below:

| Service Area | Increase in Annual Operating Costs | |
|---------------------|------------------------------------|--|
| Roadside Operations | \$ 4,000 | |
| Parks Operations | \$29,000 | |

Anticipated additional annual parks operating costs associated with this Park infrastructure is estimated at \$29,000/year and Roadside Operations at \$4,000/year. These operating costs may be eligible for assessment growth funding in the future.

A detailed source of financing accompanies this award report in Appendix A.

CONCLUSION

Civic Administration has reviewed the tender bids and recommends J-AAR Excavating Limited be awarded the contract for the Thames Valley Parkway, North Branch Connection project.

Additional funds are required to complete the Stage 3 and Stage 4 Archeological Investigations in compliance with the Ontario Heritage Act.

Dillon Consulting Limited has demonstrated an understanding of the City requirements for this project, and it is recommended this firm be the consulting engineer for the purposes of 2019-2020 contract administration and inspection services as it is in the best financial and technical interests of the City.

Anticipated additional annual parks operating costs associated with this Park infrastructure is estimated at \$29,000/year and Roadside Operations at \$4,000/year.

Acknowledgements

This report was prepared with assistance from Stephanie Wilson, Jeff Bruin and Andrew Macpherson of Parks Planning and Operations, Alan Dunbar and Janice Brown of Financial Planning and Business Support, Kyle Gonyou, Heritage Planner, Jane Fullick C.E.T., Senior Technologist and Karl Grabowski, Transportation Design Engineer of the Transportation Planning and Design Division.

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| REVIEWED AND CONCURRED BY: | RECOMMENDED BY: | |
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| TRANSPORTATION | ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER | |

Attachment: Appendix A – Source of Financing

cc: Andrew Macpherson, Parks Planning and Operations
Jeff Bruin, Parks Planning
Alan Dunbar, Financial Planning and Business Support
Janice Brown, Financial Planning and Business Support
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