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 Price Increase: 2021 Transportation Infrastructure

Renewal Report

Date: March 29, 2022

Recommendation

That, on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions **BE TAKEN** for the noted three projects; 2020 Arterial Road Rehabilitation Project Contract 2, 2021 Fanshawe Park Road Boulevard Cycling lanes Rehabilitation, and the 2021 Dundas Thames Valley Parkway (TVP) Active Transportation Connection;

- a) the 2020 Arterial Road Rehabilitation Project Contract 2 (Tender T20-100)
 contract value with Coco Paving Inc (Coco) BE INCREASED by \$470,000.00 to
 \$3,038,000.00 (excluding HST), in accordance with Section 20.3 (e) of the
 Procurement of Goods and Services Policy;
- b) the Fanshawe Park Road Boulevard Cycling lanes Rehabilitation Contract (Tender RFT21-83) contract value with Dufferin Construction Company, A division of CRH Canada Group Inc., **BE INCREASED** by \$250,000.00 to \$1,735,102.20 (excluding HST), in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy;
- c) the contract with IBI Group Professional Services (Canada) Inc. for construction inspection and contract administration for the Dundas Street Thames Valley Parkway Active Transportation Connection Project **BE INCREASED** by \$91,800.00 to \$414,990.00 (excluding HST) in accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy;
- d) the financing for these projects **BE APPROVED** as set out in the Sources of Financing Report <u>attached</u> hereto as Appendix 'A', 'B', 'C', respectively.
- e) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project; and,
- the Mayor and City Clerk BE AUTHORIZED to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

The Renew London Infrastructure Construction Program manages the sustainability of city infrastructure through a combination of road, bridge, bicycle, sewer, water, sidewalk and intersection improvements. The program addresses existing lifecycle needs, system improvements, and growth-related priorities.

Three 2021 transportation infrastructure renewal projects require a contract value amendment. The City's Procurement of Goods and Services Policy requires Council approval for these amendments.

Linkage to the Corporate Strategic Plan

The following report supports the 2019–2023 Strategic Plan through the strategic focus areas of Building a Sustainable City, Growing Our Economy and Leading in Customer Service by helping to manage the infrastructure gap and enhancing safety for all road users while creating an efficient, inclusive, and connected active transportation network with a complete street's lens and a focus on climate change mitigation and adaptation.

Renew London is committed to delivering excellent customer service and providing great customer experiences to residents, businesses, and visitors by communicating projects in advance and coordinating all work to help build and deliver efficient infrastructure and minimize delays and inconveniences to the public during construction.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

All three projects qualified for administrative contracts award per delegated authority.

2.0 Discussion and Considerations

The construction industry is experiencing a period of considerable change with new requirements, legislations, market factors and added complications due to pandemic-related challenges including supply chain disruptions and labour pressures. The complexity of transportation projects has also been increasing in recent years with servicing partners seeking to align multiple renewal needs, utility coordination and integration of complete street elements also contributing to budget and schedule pressures.

Renew London managed approximately \$100 million in infrastructure construction project work in 2021. With an annual construction program of this scale, there can be projects that encounter larger budget impacts due to unforeseen challenges not anticipated by the contractor, consultant, or the City. For the 2021 program, three transportation infrastructure renewal projects require an amendment to the contract award.

2.1 RFT20-100 – 2020 Arterial Road Rehabilitation Project Contract 2

The 2020 Arterial Road Rehabilitation Project Contract 2 construction contract (Colborne Street) requires amendments due to locate delays, unforeseen conditions, additional required infrastructure improvement work and an extended construction schedule.

The Colborne Street project, from Dufferin Avenue to approximately 60 meters north of Oxford Street East, provides pavement and signal renewal combined with over a kilometer of active transportation infrastructure to make cycling more accessible for cyclists of all ages and abilities. The new protected lanes extend the previous phase (Colborne Street between Horton Street and Dufferin Avenue) and connect areas north of Oxford Street with Dundas Street, the core, and nearby schools.

The project timeline originally planned to be completed in November 2020 with minor restoration and finishing touches in 2021. The City faced significant challenges in 2020 from the COVID-19 pandemic, from the global supply chain for products and materials to the availability of trades personnel. The following factors contributed to the exceedance of the contract value for this project.

<u>Utility Locates</u>: Locate services in London and throughout Ontario have been significantly impacted by labour shortages, an issue that was exacerbated by the pandemic. The contractor's inability to obtain utility locates in a timely manner delayed the project by about 8 weeks in 2020 leading to the decision to extend the project schedule over two construction seasons to avoid late season construction cost and quality concerns. To compound the situation, the contractor's inability to get utility locates again in 2021 delayed the Year 2 start another 6 weeks.

<u>Two Construction Seasons</u>: Spreading the project schedule over two years created additional cost impacts including extra traffic control signage and mobilization, the need to install temporary asphalt to stabilize the site over winter, and duplicated tree protection fencing. The deferral of paving to 2021 also resulted in an Asphalt Cement (AC) Index charge to the project.

<u>Enwave Impacts</u>: The Enwave high-pressure steam main running north/south under the road within the limits of the project experienced chronic maintenance issues with the main line and maintenance holes that required immediate attention impairing the contractor's ability to perform work in a regimented manner as the constructor for this project. New frames and grates were also required to be installed on the maintenance holes as an added cost to the City's contract. While this cost will be fully recovered from Enwave, it must be paid by the City prior to recovery.

Added Scope: Necessary infrastructure renewal work not identified in the tender was incorporated during construction as it is more cost-effective to implement these contract changes while the contractor is engaged at competitive unit prices. The project discovered underground infrastructure structures in need of repair. Limited survey and existing conditions information resulted in tender quantity item increases not identified during the preparation of the design and contract drawings. Non-typical supplies and specialized sub-trades took additional time to secure, coordinate and install mobility components, which were important for safety reasons.

This project was challenging to deliver and required extra effort to communicate updates to the public, transit and cycling community. Despite these challenges, City staff and contractor were able to complete the project in November 2021. As the construction work needed to proceed in an expeditious manner to avoid further carryover work to 2022, it was not possible to seek an earlier approval for this contract amendment. The additional costs were thoroughly reviewed as the work progressed, contract unit prices have been applied where possible and other negotiated items are considered to be reasonable and consistent with other city projects.

A contract increase is to address the above budget pressures and additional infrastructure not identified in the tender. No additional funds are requested to cover additional engineering, site supervision and contract administration costs as this was an in-house engineering project using City staff. The contractor, Coco Paving, worked cooperatively with the team considering the extended project duration and through unanticipated conditions.

2.2 RFT21-83 – Fanshawe Park Road Boulevard Cycling Lanes Rehabilitation

The 2021 Fanshawe Park Road Boulevard Cycling Lanes Rehabilitation construction contract requires an amendment due to locate delays, unforeseen conditions, additional required infrastructure improvement work and an extended construction schedule.

This project is rehabilitating and improving the existing boulevard cycling lanes on Fanshawe Park Road between Wonderland Road and Adelaide Street. It includes

accessibility measures to support AODA requirements and improves waiting areas at bus stops.

The contract increase is required to address additional infrastructure renewal work for traffic signals and pavement that was not identified in the tender and is cost-effective to implement while the contractor is engaged at competitive unit prices. No additional funds are requested to cover additional engineering, site supervision and contract administration costs as this was an in-house engineering project using City staff. The contractor, Dufferin Construction, worked cooperatively with the team to address delays and changes to scope.

2.3 Consultant Assignment: Dundas Street Thames Valley Parkway (TVP) Active Transportation Connection

The Dundas TVP Active Transportation Connection contract is a consultant assignment that requires an amendment due to extra supervision costs to manage an extended construction schedule.

The second phase of the Dundas Street-TVP Connection was completed in 2021. The location is along Dundas Street from the west end of the Kensington Bridge to the intersection of Ridout and Dundas Streets and included a portion of Harris Park Gate. The scope included introduction of new bike lanes, pedestrian walkways, new street and traffic lights and underground infrastructure renewal. The project creates a new, two-way protected bike lane on Dundas Street. The Dundas Street-TVP Connection is designed to improve the link for pedestrians and cyclists between the <a href="https://doi.org/10.1001/jhar.2001/jhar

The project was scheduled to be completed by July 31, 2021, however, didn't reach substantial completion until December 17, 2021. The schedule extension is the result of a combination of contractor delays and unforeseeable circumstances.

The City is currently working with the consultant and contractor to determine a fair and appropriate value of liquidated damages that the City will collect from the construction contractor. These liquidated damages will partially address the costs of this change. The remainder will be addressed by unspent funds within the project budget.

3.0 Financial Impact/Considerations

2020 Arterial Road Rehabilitation Project Contract 2

An additional \$470,000.00 is requested for the contract with Coco Paving to cover the additional costs which were required to complete this important infrastructure project.

Fanshawe Park Road Boulevard Cycling Lanes Rehabilitation

An additional \$250,000.00 is requested for the contract with Dufferin Construction Company, A division of CRH Canada Group Inc. (Dufferin), to cover the additional costs which are required to complete this important infrastructure project.

<u>Dundas Street Thames Valley Parkway Active Transportation Connection</u>

An additional \$91,800.00 is requested for the contract with IBI Group Professional Services (Canada) Inc. to cover additional coordination site supervision costs as this project has extended well beyond the originally contemplated timeframe. It is anticipated that the increased consulting costs will be at least partially offset using liquidated damages from the contractor.

This funding is available in the approved transportation capital budgets per the Sources of Financing attached as Appendices A, B and C.

Conclusion

In accordance with Section 20.3 (e) of the Procurement of Goods and Services Policy, it is recommended that the contract value limit be amended for three transportation infrastructure renewal projects. These projects require additional funds primarily associated with added required infrastructure improvements and schedule challenges.

City staff continue to monitor industry trends and actively develop measures to minimize risks, disruptions and financial pressures during the pandemic including utility locates, construction cost escalation, industry-wide labour shortages and supply chain issues. Additionally, applying the lessons-learned to design phases of future projects to mitigate the risks is an important part of the continuous improvement loop in place for infrastructure programs. This is particularly true for the evolving design of cycling infrastructure and is being assisted by the utilization of new dedicated staff resources that have been added recently.

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Submitted by: Jennie Dann, P.Eng., Director, Construction

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

City Manager, Environment and

Infrastructure

Attach: Appendix 'A' – Sources of Financing, 2020 Arterial Road Rehabilitation

Project Contract 2 (RFT20-100)

Appendix 'B' - Sources of Financing, Fanshawe Park Road Boulevard

Cycling lanes Rehabilitation Contract (RFT21-83)

Appendix 'C' - Sources of Financing, contract for construction inspection and contract administration for the Dundas Street Thames Valley Parkway

Active Transportation Connection Project

cc: Daniel Hall, Program Manager, Active Transportation

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