

Amendment to Purchase Order No. 6050585 with Grascan Construction Ltd./Torbridge Construction Ltd., for the Rehabilitation of the Bathurst Street Bridge, South of Front Street West

Date: October 22, 2020

To: Infrastructure and Environment Committee

From: Chief Engineer and Executive Director, Engineering and Construction Services and Chief Procurement Officer, Purchasing and Materials Management

Wards: 10

SUMMARY

The purpose of this report is to request authority to amend Purchase Order No. 6050585 issued to Grascan Construction Ltd./Torbridge Construction Ltd., as a result of Request for Tender (RFT), Ariba Document Number 2241522807 for the provision of construction services for the rehabilitation of the Bathurst Street Bridge, south of Front Street. The total Purchase Order Amendment being requested is for an additional amount of \$1,098,835 net of all taxes and charges (\$1,118,174 net of HST recoveries), revising the current purchase order value from \$11,252,412 net of all taxes and charges (\$11,450,455 net of HST recoveries) to \$12,351,247 net of all taxes and charges (\$12,568,629 net of HST recoveries).

An expanded scope of work combines the rehabilitation of the City portion of the bridge and the bridge rehabilitation work requested by Metrolinx under a single construction contract, thus avoiding traffic and streetcar service disruptions along Bathurst Street in subsequent years. Following the commencement of construction, scaffolding to access the overhead truss components on the Metrolinx span of the bridge was installed and close-up inspection revealed areas of severe deterioration on the overhead steel bracing. Metrolinx requested additional steel work be performed to maintain the structural integrity of the truss and prevent any corrosion or section loss from worsening. The full amount of the additional construction cost related to the above additional scope will be fully recovered from Metrolinx.

RECOMMENDATIONS

The Chief Engineer and Executive Director of Engineering and Construction Services Division and the Chief Procurement Officer recommend that:

1. The Infrastructure and Environment Committee, in accordance with Section 71-11.1.C of the City of Toronto Municipal Code Chapter 71 (Financial Control By-Law), grant authority to amend Purchase Order No. 6050585 with Grascan Construction Ltd./Torbridge Construction Ltd., for the provision of construction services for the rehabilitation of the Bathurst Street Bridge, in the amount of \$1,098,835 net of all taxes and charges (\$1,118,174 net of HST recoveries), revising the current purchase order value from \$11,252,412 net of all taxes and charges (\$11,450,455 net of HST recoveries) to \$12,351,247 net of all taxes and charges (\$12,568,629 net of HST recoveries).

FINANCIAL IMPACT

Funding for the contract amendment is available in the 2020-2029 Approved Capital Budget and Plan for Transportation Services (City Bridge Rehabilitation Program and City Bridge Rehabilitation Critical Program) as summarized in Table 1 below (net of HST recoveries)

Table 1: Financial Impact Summary for Purchase Order No. 6050585

Year	CTP817-01-285 (Work for Metrolinx)
2020	\$1,118,174
Total	\$1,118,174

The full amount of the above additional construction cost will be recovered from Metrolinx.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

On August 10, 2016, by authority of the Bid Committee, the City retained MMM Group Limited (now WSP Canada Group Limited) for the provision of professional engineering services associated with Request for Proposal No. 9117-16-5036 for the design, contract administration and post construction services for the Bathurst Street Bridges Rehabilitation and Replacement South of Front Street. The total fee for this professional engineering services assignment was \$1,028,100 (net of all taxes and charges).

Three purchase orders were subsequently issued to MMM Group Limited/WSP Canada Group Limited under this assignment: Purchase Order No. 6043863 for design services in the amount of \$483,300 (net of all taxes; later replaced by Purchase Order No. 6045084 after the company name change); Purchase Order No. 6046018 for contract administration services in the amount of \$541,600 (net of all taxes); and Purchase Order No. 6050473 for post construction services in the amount of \$3,200 (net of all taxes). A copy of the Bid Committee Decision Document can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.BD95.8>

On December 20, 2017, by authority of the Bid Award Panel, Contract No. 18ECS-TI-06BE (Tender Call No. 291-2017) for Bathurst Street Bridges Rehabilitation and Replacement, south of Front Street, was awarded to Grasca Construction Ltd./Torbridge Construction Ltd., in the amount of \$2,014,750 (net of all taxes and charges). A copy of the Bid Award Panel Decision Document can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.BA55.8>

On May 6, 2020, by authority of the Bid Award Panel, the City retained Grasca Construction Ltd./Torbridge Construction Ltd., for the provision of construction services associated with Contract 20ECS-TI-02BE for the Rehabilitation of Bathurst Street Bridge, South of Front Street. The total fee for this construction services assignment was \$11,252,412 (net of all taxes and charges). Purchase Order No. 6050585 for construction services in the amount of \$11,252,412 (net of all taxes) was subsequently issued to Grasca Construction Ltd./Torbridge Construction Ltd. A copy of the Bid Award Panel Decision Document can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.BA79.6>

On May 28, 2020, by authority of City Council, the City amended Purchase Order 6046018 with WSP Canada Group Limited for the provision of professional services associated with contract administration, site inspection and post construction services for the rehabilitation of the Bathurst Street Bridge in the amount of \$630,823 (net of all taxes and charges), revising the original purchase order value from \$541,600 (net of all taxes and charges) to \$1,172,423 (net of all taxes and charges). A copy of the City Council Decision Document can be found at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.CC21.8>

COMMENTS

The Bathurst Street Bridge, south of Front Street, consists of several different structure types and carries four lanes of traffic (two northbound and two southbound) as well as sidewalks on both sides from Front Street at the north end of the bridge to Fort York Boulevard at the south end of the bridge. The two centre lanes share the right-of-way with Toronto Transit Commission (TTC) streetcar service. The total length of all the bridge spans is 175 metres. At the north end of the bridge, crossing the Union Station Rail Corridor (USRC), the bridge span is owned and maintained by Metrolinx. This bridge span structure is a steel truss bridge which was originally constructed in 1903, for a rail crossing over the Humber River. It was disassembled and reconstructed in 1916, at the Bathurst Street location on a different alignment from the existing crossing.

The remainder of the bridge, south of the truss span, is maintained by the City and consists of two steel through-plate girder spans, five concrete slab spans and one concrete encased steel girder span. The TTC is responsible for 23 percent of the costs to maintain the City portion of the bridge with the City being responsible for the remainder of the cost maintenance.

In August 2016, the City retained MMM Group Limited (now WSP Canada Group Limited) through a Request for Proposal for the professional engineering services for the Bathurst Street Bridge Rehabilitation and Replacement, south of Front Street. The scope of the rehabilitation work included the superstructure and substructure rehabilitation of the City's bridge spans and the TTC track and expansion joint replacement work within a single construction contract planned for 2018.

In March 2017, TTC deferred the track replacement work until 2020 and asked the City to consider deferring the superstructure rehabilitation work to 2020. WSP confirmed that the superstructure rehabilitation work could be deferred without compromising public safety. In order to minimize public disruption and avoid consecutive years of construction, the City agreed to defer the superstructure rehabilitation to 2020 and combine the City and TTC work in a single contract. The poor condition of the substructure and the risk of structural failure on the pedestrian ramp from the west side of the bridge to Fort York did not allow for deferral of this portion of the work. Accordingly, the City proceeded with the substructure repair and awarded the Contract 18ECS-TI-06BE in December 2017, to Grascan Construction Ltd./Torbridge Construction Ltd.

In January 2019, during design phase for the superstructure rehabilitation scheduled for 2020, Metrolinx noted that the truss span was scheduled for rehabilitation in 2023. Since both the City and the Metrolinx portions of the bridge rehabilitation works require closure of Bathurst Street, the City and Metrolinx agreed that advancing the rehabilitation work of the top side of the Metrolinx truss span to 2020, to coincide with the City planned bridge rehabilitation work in 2020, would be beneficial in order to avoid further traffic disruptions in subsequent years.

In order to maintain the design and tendering schedule for the project, the City agreed to include the rehabilitation of the top side of the Metrolinx truss span under one single construction contract that included the scope of work for the City, TTC and Metrolinx in the 2020 construction contract. Metrolinx is fully responsible for the construction costs and administrative overhead charges associated with the rehabilitation of the truss span.

During the design phase inspection, WSP was not able to perform an up-close investigation of the overhead bracing due to the presence of live TTC overhead cables. Using binoculars from ground level, WSP determined that the steel elements on the top of the truss were in good to fair condition. Based on this assessment, cleaning and re-coating the overhead steel truss components was included in the contract. Once construction commenced on site, and following the removal of TTC overhead cables, scaffolding was installed by the contractor to reach the overhead truss. Upon up-close inspection, severe corrosion and section loss was identified on some of the overhead bracing with additional areas found after the old paint coating was

removed from the steel elements. WSP identified that approximately half of the overhead elements had been replaced in 1997 under a previous construction contract, and the remaining elements have now experienced significant section loss due to corrosion. To address and prevent any potential corrosion or section loss from worsening, WSP recommended replacement of some of the most severely deteriorated steel elements on the overhead bracing. Metrolinx requested that the additional work proceed as part of the current City contract, as remobilizing and closing the bridge under a separate contract, in the future, would require an additional disruption to TTC service, and would incur higher costs with a corresponding need to shut down Bathurst Street for a second time.

As soon as the deterioration was identified, a quote for the additional repair work on the steel truss was requested from Grascan Construction Ltd./Torbridge Construction Ltd., through the City of Toronto's Request for Quotation (RFQ) process. After extensive negotiations with the contractor as well as discussions between Metrolinx, the City and WSP, the cost for the additional repair work was finalized at \$1,255,275 (excluding all taxes), and considered to be fair and reasonable for the effort required.

The quote provides for completion of work within the current schedule (i.e. no impact to the current construction schedule) and does not delay the planned schedule for reinstatement of the TTC tracks. A delay in the project schedule would result in significant additional costs associated with weekly rental of the installed scaffolding, claims related to extending the resources to maintain the overall construction schedule, and costs associated with extending the number of weeks the TTC needs to operate alternate bus service.

It is proposed that funding for the extra work will be provided through a draw of \$156,440 (excluding taxes) from the contract contingency allowance and the balance of \$1,098,835 net of all taxes and charges (\$1,118,174 net of HST recoveries) will require an amendment to Purchase Order No. 6050585 with Grascan Construction Ltd./Torbridge Construction Ltd. This will result in an increase in the current purchase order value from \$11,252,412 net of all taxes and charges (\$11,450,455 net of HST recoveries) to \$12,351,247 net of all taxes and charges (\$12,568,629 net of HST recoveries).

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SIGNATURE

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