

Amendment to Purchase Order No. 6046018 with WSP Canada Group Limited, for the Rehabilitation of the Bathurst Street Bridge, South of Front Street West

Date: May 21, 2020

To: Toronto City Council

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

Wards: 10

SUMMARY

The purpose of this report is to request authority to amend Purchase Order No. 6046018 with WSP Canada Group Limited for professional services associated with contract administration, site inspection and post-construction services for the rehabilitation of the Bathurst Street Bridge, south of Front Street.

An expanded scope of work combines the rehabilitation of the City portion of the bridge and the rehabilitation work requested by Metrolinx under a single construction contract, thus avoiding traffic disruptions in subsequent years. To further reduce the impact of construction on the travelling public, the construction will be accelerated by extending permitted daily work hours including weekends. This will require an increased number of inspector shifts and increased contract administration services. A significant portion of the additional professional services fee will be recovered from Metrolinx.

The total value of the Purchase Order Amendment being requested is \$630,823 net of all taxes and charges (\$641,925 net of HST recoveries), revising the current purchase order value from \$541,600 net of all taxes and charges (\$551,132 net of HST recoveries) to \$1,172,423 net of all taxes and charges (\$1,193,057 net of HST recoveries).

RECOMMENDATIONS

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

1. City Council, 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. 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 (\$641,925 net of HST recoveries), revising the current purchase order value from \$541,600 net of all taxes and charges (\$551,132 net of HST recoveries) to \$1,172,423 net of all taxes and charges (\$1,193,057 net of HST recoveries).

FINANCIAL IMPACT

The Purchase Order Amendment request included in this report will increase the total value of the professional engineering services assignment by \$630,823 net of all taxes (\$641,925 net of HST recoveries). This revises the current purchase order value from \$541,600 net of all taxes and charges (\$551,132 net of HST recoveries) to \$1,172,423 net of all taxes and charges (\$1,193,057 net of HST recoveries).

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. 6046018

| Year | CTP519-01-36 (Contract Administration) | CTP519-01-38 (Post Construction) |
|--------------|---|---|
| 2020 | \$637,366 | \$0 |
| 2021 | \$0 | \$4,559 |
| Total | \$637,366 | \$4,559 |

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 Grascan 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, Contract 20ECS-TI-02BE (Tender Ariba Doc. No. 2241522807) for Bridge Rehabilitation of the Bathurst Street Bridge was awarded to Grascan Construction Ltd./Torbridge Construction Ltd., in the amount of \$11,252,412 (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=2020.BA79.6>

COMMENTS

Background

The Bathurst Street Bridge, south of Front Street, carries four lanes of traffic (two northbound and two southbound) and two sidewalks 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 the bridge is 175 metres. The bridge was constructed in 1933 and consists of several different structure types. At the north end of the bridge, crossing the Union Station Rail Corridor (USRC), the bridge is owned and maintained by Metrolinx. The steel truss span was originally constructed in 1903 for a rail crossing over Humber River. It was disassembled and reconstructed in 1916 at Bathurst Street 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% of the costs to maintain the City portion of the bridge.

In August 2016, the City retained MMM Group Limited (now WSP Canada Group Limited) through a Request for Proposal for the design, contract administration and post construction services for the Bathurst Street Bridge Rehabilitation and Replacement, south of Front Street. The scope of the rehabilitation work, for an estimated 52 week construction schedule, 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 decided to defer 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 Contract 18ECS-TI-06BE in December 2017 to Grascan Construction Ltd./Torbridge Construction Ltd.

WSP provided 34 weeks of their assigned 52 week contract administration services during construction for the substructure repair work which was completed in August 2018.

In January 2019, during the start up meeting 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 desirable in order to avoid traffic disruptions in subsequent years.

In order to maintain the design and tendering schedule for the project, the City agreed to include the professional services for the rehabilitation of the top side of the Metrolinx truss span as additional scope under the City's consultant agreement with WSP and to prepare a 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 professional engineering services fees and administrative overhead charges associated with the rehabilitation of the truss span.

Previous Purchase Order Amendment for Design Services

Following the decision to combine the Metrolinx truss rehabilitation with the City's superstructure rehabilitation project, WSP requested additional fees to complete the preliminary design, detailed design and preparation of the construction tender documents for the Metrolinx portion of the work in the amount of \$242,050 (excluding taxes). These fees are fully recovered from Metrolinx via a purchase order of \$264,198 (excluding taxes), issued to the City for the full cost of these professional engineering services plus the standard City overhead charges of 9.15%. Correspondingly, a purchase order amendment (POA) in the amount of \$242,050 (excluding taxes) was issued to WSP, which increased the funding for the purchase order for design services from \$483,300 (excluding taxes) to \$725,350 (excluding taxes).

A second POA was issued to WSP for minor design changes on the City portion of the bridge in the amount of \$24,388 (excluding taxes) which increased the funding for the purchase order for design services from \$725,350 (excluding taxes) to \$749,738 (excluding taxes).

Additional Contract Administration Services and Post Construction Services Required to Complete Construction

In November 2017, Purchase Order No. 6046018, in the amount of \$541,600 (excluding taxes), was issued to WSP for the provision of contract administration services for an estimated 52 weeks of construction, based on the original project scope for a single construction contract for the rehabilitation of the superstructure and substructure, which excluded work on the Metrolinx truss.

The City tendered the superstructure and Metrolinx truss rehabilitation (Contract 20ECS-TI-02BE) in February 2020, with a duration of 33 weeks from May to December, 2020. In addition to 18 weeks of contract administration services remaining from the original budget (referenced above), WSP has submitted a request for an additional 15 weeks of contract administration services to match this new construction contract schedule. The increase in construction duration is attributed to the additional scope of work for the rehabilitation of the top side of the Metrolinx truss span, including recoating of the steel truss and reconstruction of the ballast wall at the north abutment.

With the addition of the recoating of the Metrolinx truss span, specialty coating inspectors will be required for the duration of this portion of the work. As WSP has limited coating inspection staff, the work has been subcontracted to a re-coating specialist sub-consultant, G. L. Stone Consulting Ltd., (GLS). WSP has included a standard 5% mark-up on the sub-consultant's fees to cover administration and insurance costs.

Additionally, to reduce the impact of construction on the travelling public, the construction will be accelerated by extending permitted daily work hours to 16 hours per day including weekends. With construction performed under extended working hours, WSP has increased the number of shifts of inspectors required and applied a premium hourly rate for all night and weekend shifts.

The contract to WSP included \$3,200 for post construction 2-year warranty inspection and WSP will be mobilizing for this work on the previously referenced substructure rehabilitation contract before the new 2020 construction contract commences. Additional funding in the amount of \$4,480 is required to provide the post construction inspection associated with the new superstructure construction contract.

With the additional contract administration services and post-construction services, the additional sub-consultant's fees, the premium rates for nightly and weekend shifts and an increase of professional services labour rates from the original 2016 bid, the additional cost for professional services required to provide contract administration and post construction services for the rehabilitation of the Bathurst Street Bridge is \$630,823 (net of HST), as summarized in Table 2 below.

Table 2: Breakdown of Costs for Additional Professional Services

| Tasks | Remaining Budget | Proposed Budget | Additional Funds Required |
|---|-------------------------|------------------------|----------------------------------|
| Project Management and Engineering/Office Services Labour | \$21,181 | \$164,700 | \$143,519 |
| Full Time Site Inspection Labour | \$32,023 | \$132,000 | \$99,978 |
| Weekend/Night Site Inspection Labour | \$53,975 | \$292,248 | \$238,273 |
| Construction Disbursements | \$5,304 | \$29,450 | \$24,146 |
| Public Consultation | \$3,000 | \$0 | -\$3,000 |
| Sub-Surface Level A Investigation (Provisional) | \$20,000 | \$0 | -\$20,000 |
| Contingency Allowance | \$150,000 | \$150,000 | \$0 |
| Subconsultant's Fees (including 5% markup) | \$0 | \$143,428 | \$143,428 |
| Post Construction Fees | \$0 | \$4,265 | \$4,265 |
| Post Construction Disbursements | \$0 | \$215 | \$215 |
| Total | \$285,483 | \$916,306 | \$630,823 |

For the Metrolinx and TTC portions of the work, the City recovers a standard 9.15% of the final construction costs from Metrolinx and TTC to cover the contract administration fees and other City overhead costs associated with the delivery of this Contract.

The City has reviewed WSP's estimates for the additional professional services for the provision of contract administration services and post construction services for the rehabilitation construction of the Bathurst Street Bridge and found them to be fair and reasonable for the effort required.

The amendment to PO No. 6046018 with WSP Canada Group Limited, for the additional professional services required to complete the rehabilitation construction of the Bathurst Street Bridge, by an amount of \$630,823 net of all taxes and charges (\$641,925 net of HST recoveries) will revise the PO value from \$541,600 net of all taxes and charges (\$551,132 net of HST recoveries) to \$1,172,423 net of all taxes and charges (\$1,193,057 net of HST recoveries).

CONTACT

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SIGNATURE

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