



REPORT

Report Date: January 12, 2020
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Meeting Date: February 12, 2020
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TO: Standing Committee on Policy and Strategic Priorities

FROM: General Manager of the Engineering Services Department and
Chief Procurement Officer

SUBJECT: Approval of Change Order to Construction Agreement PS20190021 -
Construction Services for the Granville Bridge Rehabilitation

RECOMMENDATION

- A. THAT Council authorize City staff to negotiate to the satisfaction of the City's General Manager of the Engineering Services Department, City's Director of Legal Services, and the City's Chief Procurement Officer, and to add additional scope to Construction Agreement PS20190021 - Construction Services for the Granville Bridge Rehabilitation with Graham Infrastructure LP. The additional scope of the contemplated Change Orders would not extend the overall term of the contract, with an estimated, cumulative value of \$2,130,692.98 plus applicable taxes, \$1,045,415.98 to be funded through the approved Multi-Year Capital Projects Budget for Granville Bridge project for the cumulative change orders, \$1,085,277.00 and from the 2020 Major Bridges Coating and 2020 Major Bridge Maintenance for the debris netting.
- B. THAT the Director of Legal Services, Chief Procurement Officer and General Manager of the Engineering Services Department be authorized to execute on behalf of the City the Change Orders contemplated by Recommendation A.
- C. THAT no legal rights or obligations will be created by Council's adoption of Recommendations A and B above unless and until such contract is executed by the authorized signatories of the City as set out in these Recommendations.

REPORT SUMMARY

The City issued ITT PS20190021 Construction Services for the Granville Bridge Rehabilitation (the “ITT”) in March, 2019 and awarded a contract to Graham Infrastructure LP as a result. The ITT was advertised on the City of Vancouver website and BC Bid and the work was called in accordance with the terms and conditions of the City’s Procurement Policy ADMIN-008. Through the term of work to date, emergent and additional requirements have been identified that require change orders to the contract with Graham Infrastructure LP as a result.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

The City’s Procurement Policy ADMIN-008 requires that contracts with values over \$2 million must be approved by Council following review and recommendations by the Bid Committee. The Bid Committee has considered and recommended this change order to Construction Agreement - PS20190021 Construction Services for the Granville Bridge Rehabilitation with Graham Infrastructure LP.

CITY MANAGER’S/GENERAL MANAGER’S COMMENTS

The City Manager recommends approval of the foregoing.

REPORT

Background/Context

The Granville Street Bridge (the “Bridge”) is an eight lane bridge spanning False Creek, and opened in 1954. The Bridge is inspected on an annual basis by City staff and by external Consultants. A detailed condition assessment is completed by external Consultants every five years as part of the City’s bridge inspection program.

Recent condition assessments have identified numerous defects, including:

- Corroded bearings
- Aging expansion joints
- Localized deteriorated concrete
- Localized corroded steel

In order to address the identified defects and prevent further accelerated deterioration, Invitation to Tender No PS20190021 Construction Services for the Granville Bridge Rehabilitation was released in the spring of 2019 and Graham Infrastructure LP was contracted to perform the work in the contract which includes the required structural repairs and other work such as:

- Seismic improvements through bearing replacement and strengthening of steel cross bracing, in order to meet target 1/475 earthquake collapse prevention; and
- Installation of cormorant netting.

Graham Infrastructure LP began work on Oct 28, 2019, after fulfilling all contractual requirements including approval of its Traffic Management Plans by the City. Two lanes (each way) of traffic have been maintained on the main bridge span, and one lane of traffic is open at all times on the north/south approaches and on/off ramps.

In addition to above, rates for provisional items below were also called for through Invitation to Tender (ITT):

- Replacement of Aging Drainage Pipes (Granville Bridge – Main span)
- Other Minor Repairs and bridge work

Initially, the above works were not awarded to Graham Infrastructure LP along with original scope of work in order to evaluate the contractor's performance and review available budget. Below is a short summary of these works.

Drainage Pipe Replacement:

The existing drainage pipes are aging and require replacement. This scope of work includes replacement of all drainage pipes at the underside of the Granville Bridge.

Other Minor Repairs:

Other minor repairs include steel and concrete repairs to the Granville Bridge. Work will be done at the approved unit rates received through ITT i.e. competitive bidding price.

Debris Netting:

In the summer of 2019 multiple alleged incidents of fallen debris below the bridge onto Granville Island were reported. Associated Engineering, the City's consultant (the "Consultant") was immediately engaged to investigate the matter.

Due to the age and condition of the bridge infrastructure and because there will be active, ongoing construction work over Granville Island for an extended period of time, it is recommended that debris netting be installed to mitigate the risk of further incidents.

The Consultant prepared design requirements and product specifications for the debris netting.

Strategic Analysis

To expedite netting installation and to avoid a multi-contractor worksite, Graham Infrastructure LP, acting as the prime contractor, was requested to obtain three quotes for the debris netting work from subcontractors. Three potential subcontractors were invited to submit quotes by Graham Infrastructure LP, and two quotes were received. Graham Infrastructure LP also priced the work using its internal forces. The quotes for this work are shown below:

General Contractor Name	Subcontractor Name	Price to the City (excluding GST)
Graham Infrastructure LP	Protec Vertical Solutions	\$1,085,277.00
Graham Infrastructure LP	Pacific Ropes	\$1,191,957.00
Graham Infrastructure LP	Graham Infrastructure LP	\$1,216,338.00

In addition to the debris netting, additional work is required as ancillary to the main work, some of which was contemplated as provisional items within the tender.

<u>Estimated Contract Value</u>	
Original contract value	\$14,294,200.00
Cumulative change orders to date*	\$1,045,415.98, plus applicable taxes.
Recommended change order value for debris netting	\$1,085,277.00, plus applicable taxes.
New contract value	\$16,424,892.98, plus applicable taxes.

* Includes provisional items considered in the tender plus additional work.

Implications/Related Issues/Risk

Financial

Financial Planning & Analysis has reviewed the recommended change order value of \$1,085,277 for debris netting and concurs that this will be funded from the approved Multi-Year Capital Program Budgets for Major Bridge Maintenance and Major Bridge Coating.

Financial Planning & Analysis has reviewed the recommended change order value of \$1,045,415.98 for provisional items and ancillary work and concurs that this will be funded from the approved Multi-Year Capital Projects Budget for the Granville Bridge Project.

Legal

The City's Procurement Policy requires that all contracts that have been awarded by Bid Committee and Council will be signed by the Director of Legal Services.

CONCLUSION

In summary, City staff recommends that the City of Vancouver add the above contemplated, additional scope to Construction Agreement PS20190021 - Construction Services for the Granville Bridge Rehabilitation with Graham Infrastructure LP with an estimated, cumulative value of \$2,130,682.98.

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