



## ADMINISTRATIVE REPORT

Report Date: January 7, 2009  
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RTS No.: 07743  
VanRIMS No.: 08-2000-20  
Meeting Date: February 3, 2009

TO: Vancouver City Council

FROM: General Manager Engineering Services

SUBJECT: Award of Contract for ITT PS08116 - Granville Bridge Shear Capacity Upgrades

### *RECOMMENDATION*

- A. THAT Council approve a budget of \$ 5.0M for the Granville Bridge Shear Capacity Upgrades; source of funding to be:
- \$2.75M to be provided from program A2c3, Special Projects - Granville Bridge Strengthening in advance of the 2009 Streets Basic Capital Budget, with funding provided from the 2009-2011 borrowing authority approved by plebiscite;
  - \$1.0M to be provided from the 2008 Translink Major Road Network Minor Capital Program;
  - \$1.25M anticipated to be provided from the 2009 Translink Major Road Network Minor Capital Program.
- B. THAT in the event that the \$1.25M anticipated funding from the 2009 Translink Major Road Network Minor Capital program is not approved, that the General Manager of Engineering Services report back with alternative funding sources to make up this shortfall from within the Streets Basic Capital Budget through re-allocation of funds from other projects or programs.
- C. THAT, subject to the conditions as set out in Recommendations E, F and G, the General Manager of Engineering Services be authorized to enter into a contract with JJM Construction Ltd. at an estimated cost of \$2,951,920 plus applicable taxes, with funding to be provided by the budget established pursuant to Recommendation A.

- D. THAT, subject to the conditions set out in Recommendations E, F and G, the existing Professional Services Agreement with Buckland and Taylor Ltd. dated July 17<sup>th</sup>, 2008 be amended to include an additional scope of work including services during construction at a cost of \$150,000 plus applicable taxes, with funding to be provided by the budget established pursuant to Recommendation A.
- E. THAT the Director of Legal Services be authorized to execute and deliver on behalf of the City all legal documents required to implement Recommendations C and D.
- F. THAT all such legal documents be on terms and conditions satisfactory to the Director of Legal Services.
- G. THAT no legal rights or obligations will be created or arise by Council's adoption of Recommendations C, D, E and F above unless and until such legal documents are executed and delivered by the Director of Legal Services.

***CITY MANAGER'S COMMENTS***

The City Manager RECOMMENDS approval of A through G.

***COUNCIL POLICY***

Contracts with a value over \$300,000 are referred to Council for approval.

Council approves consulting contracts that exceed \$30,000.

Contracts are to be awarded on the basis of best overall value to the City.

***PURPOSE***

This report seeks:

- Council approval of a project budget of \$5.0M for the Granville Bridge Shear Capacity Upgrades;
- Council approval to award a contract to JJM Construction Ltd. to complete the shear capacity upgrades to the Granville Street Bridge; and
- Council approval to amend the Professional Services Agreement with Buckland and Taylor Ltd. dated July 17<sup>th</sup>, 2008 to expand the scope of consulting services and increase the fees payable to Buckland and Taylor Ltd. to provide services during construction.

## **BACKGROUND**

In 2007, due to the Canada Line construction and impaired access to the Cambie Street Bridge a request was made to the City to allow private coaches (tour buses) to use the Granville Street Bridge. This request triggered a structural evaluation of the load-carrying capacity of the bridge. The structural evaluation was completed by Buckland and Taylor Ltd.. The findings are as follows:

- The deck system (slab and girders) on the steel truss spans were found to be adequate;
- The concrete girder approach spans have deficiencies relative to the current bridge code for loadings imposed by articulated transit buses (31,000kgs) and larger motor coaches (24,000kgs); and
- Some of the concrete girder approach spans are considered deficient relative to the current bridge code for loadings imposed by the existing 2 axle transit buses (18,000kgs).

After reviewing the findings it was determined that the deficiencies should be addressed in a timely manner and that a heightened inspection regime would be implemented until appropriate upgrades to the structure are completed.

On May 13<sup>th</sup>, 2008 (RTS#07159) Council awarded a sole sourced contract to Buckland and Taylor Ltd. to complete the Granville Bridge strengthening design.

On September 16<sup>th</sup>, 2008 Council approved the 2009-2011 Capital Plan: Final Plan which included a provision of \$2.75M for the strengthening of the Granville Street bridge.

## **DISCUSSION**

The Invitation to Tender (ITT PS 08116) for the Granville Bridge Shear Capacity Upgrades was posted on BC BID and the City's website on November 18<sup>th</sup>, 2008. The tenders were received on December 18<sup>th</sup>, 2008 and referred to the General Manager of Engineering Services for evaluation. Tenders were received from seven bidders. Prices are listed in Table 1 and exclude applicable taxes and are based on a lump sum for the preparation and installation of the shear capacity upgrades to the Granville Street Bridge as specified in the tender.

Table 1. Tender Pricing

Proponent	Tender Price
Bidder 1	\$2,951,920
Bidder 2	\$2,998,539
Bidder 3	\$4,568,185
Bidder 4	\$5,359,772
Bidder 5	\$5,992,360
Bidder 6	\$7,916,487
Bidder 7	\$9,089,836

This is a lump sum Contract with unit prices for additions and deletions. Each bidder has submitted a Total Tender Price for all work under the Contract. Also, as requested, the bidders have submitted a breakdown of the Total Tender Price which will be used for computation of interim payments. The final cost of the contract may vary as a result of any additions and deletions, and extra or "force account" work, if required.

The budget for this project is \$5.0M which includes the Total Tender Price of \$2,951,920 (labour and materials), utility costs (BC Hydro, Coast Mountain Bus), contingency, overhead, consulting fees and other project related costs.

The tender submitted by bidder #1, JJM Construction Ltd., is the low bid, is in accordance with the specifications in the Contract documents and is deemed reasonable. As well, the company has years of experience in related construction work, and their qualifications are considered acceptable for this Contract. Therefore, on the basis of best value, staff recommend that the Granville Bridge Shear Capacity Upgrades construction contract be awarded to JJM Construction Ltd. for the estimated amount of \$2,951,920 plus applicable taxes.

Once the construction contract is awarded, construction will start shortly thereafter with substantial completion by early fall 2009. By the end of the construction contract, the strength deficiencies in the bridge will be remedied and the Granville Street Bridge posted load limit of 27 tonnes (27,000kgs) will comply with the current Canadian Highway Bridge Design Code (CHBDC) CAN/CSA S6-06. The upgrades will still not provide the bridge with the capacity to carry unrestricted highway loading but will allow the bridge to carry legal single unit vehicles including Translink buses (regular and articulated).

### *FINANCIAL IMPLICATIONS*

A total budget of \$5.0M is required to fund the strengthening of the Granville Street Bridge: source of funding to be:

- \$2.75M to be provided from program A2c3, Special Projects - Granville Bridge Strengthening in advance of the 2009 Streets Basic Capital Budget, with funding provided from the 2009-2011 borrowing authority approved by plebiscite;
- \$1.0M to be provided from the 2008 Translink Major Road Network Minor Capital Program;
- \$1.25M anticipated to be provided from the 2009 Translink Major Road Network Minor Capital Program.

The advance request of funding from the Streets Basic Capital Budget is to allow for construction to start as soon as possible, with substantial completion by early fall 2009 in order to address the code related deficiencies in a timely manner.

This budget includes the construction contract of \$2,951,920 with JJM Construction Ltd., an increase/extension to the existing consultant contract of \$150,000 with Buckland and Taylor Ltd., utility fees/permits (Coast Mountain Bus, BC Hydro), contingency, applicable taxes, overhead costs and other project related costs. The 2009-2011 Capital Plan provides a total of \$5.0M including cost sharing recoveries from the Translink Major Road Network (MRN) Minor Capital Program.

Translink has approved \$1.0M in funding as part of the 2008 MRN Minor Capital Program. An application for the remaining \$1.25M has been submitted by the City and is pending review by Translink, with approval expected early spring 2009.

In order to be in a position to award the tender in a timely manner, this report requests Council approval of the project budget in advance of Translink's approval of the 2009 application. In the event that the 2009 application is not approved, as anticipated, staff would still recommend that the project proceed and would report back on alternative funding to make up for the shortfall as part of the report on the 2009 Engineering Capital Budget.

### *CONCLUSION*

Staff recommend that Council allocate a budget of \$5.0M for the Granville Bridge Shear Capacity Upgrades, award a contract to JJM Construction Ltd. to complete the installation of the shear capacity upgrades and, that Council approve amendments to Professional Services Agreement with Buckland and Taylor Ltd. to include services during construction.

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