

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** September 30, 2010

**SUBJECT:** PROCUREMENT AUTHORIZATION  
CONSULTANT ENGINEERING SUPPORT –  
LIGHT RAIL VEHICLE ENGINEERING

## **ACTION ITEM**

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### **RECOMMENDATION**

It is recommended that the Commission authorize the award of contract to Booz Allen Hamilton Inc. (BAH) in the upset limit amount of \$1,300,000.00 for Consultant Engineering Support for the Legacy Low Floor Light Rail Vehicle (LFLRV) project for a period of one year.

### **FUNDING**

Sufficient funds are included in an allowance amount as set out in Project 4.18 – Purchase 204 Light Rail Vehicles on pages 1051 to 1054 of the TTC 2010-2014 Capital Program as approved by the City of Toronto Council on December 8, 2009. Full funding for this \$1.252 billion project was approved in June 2009, including 1/3 funding of the total cost (\$417 million) committed by the Province with the remainder committed by the City of Toronto. Provincial funding will be addressed through a contribution agreement to be established with the City of Toronto and the TTC, and City funding will be sourced through a combination of debt and the application of gas tax funding.

### **BACKGROUND**

In 2009 the Commission authorized the award of a contract to Bombardier for design and supply of 204 Low Floor Light Rail Vehicles (LFLRVs). At this point the project is moving into the critical preliminary design, mock-up and prototype vehicle delivery and testing phases. The Rail Cars and Shop department requires support of specialized consulting services until the completion of the preliminary design, mock-up and prototype vehicle delivery and testing phases are completed.

Sole Source approval to issue a Request for Proposal and negotiate with BAH an acceptable agreement for support services of the Rail Vehicle Engineering Section of the Rail Cars and Shops Department for the design review, technical verification, testing, delivery and commissioning of the Commission's Legacy LFLRVs was approved by the Chief General Manager on August 15, 2010.

## DISCUSSION

BAH was approached on a sole source basis as a result of the following:

As a result of a competitive process in 2005, BAH was awarded a contract for a Streetcar Accessibility Study. In 2007, through a competitive process, BAH was also awarded a separate contract to support the Rail Vehicle Engineering Section in the procurement of the TTC Fleet Legacy LFLRVs. As the TTC LFLRV work progressed, additional issues arose requiring the issuance of several contract amendments allowing BAH to continue to assist the Commission with assignments within the original scope of work, resulting in an increase to the upset limit and timeframe. Through these contracts, BAH provided services to the Commission regarding items such as:

- Streetcar Accessibility,
- LRV Canadian Content Evaluation,
- Legacy and Transit City low floor vehicle specification preparation,
- Evaluation of the LRV car builder submissions as part of the assistance during the LFLRV multiphase bid process,
- Technical design reviews and approvals,
- Transit City LRV negotiation with Bombardier as a member of the Metrolinx/TTC team,
- Safety assessment against derailment analysis,
- Infrastructure design reviews and discussions with various Transit City sections including overhead catenary, track geometry, tunnel diameter and clearance envelop study, fire safety, etc.

At this point, the Legacy LFLRV project is moving into the critical preliminary design, mock-up and prototype vehicle delivery and testing phases. It is important to maintain continuity between specification development, design reviews and preliminary design, prototype vehicle testing; and the Commission's specific requirements regarding critical issues such as: safety, hazard control, maintainability and operational compatibility, etc.

With the retention of BAH to support the Light Rail Vehicle Engineering Section of the Rail Cars and Shops Department for the Legacy LFLRV project, the benefits of experience gained and lessons learned during previous work will be maximized. There will be continuity in the time-critical project work with virtually no interruption.

It is anticipated that the support is required for a duration of 1 year, however it is the Commission's intent to have BAH on board until the preliminary design, mock-up and prototype vehicle delivery and testing phases are completed. Therefore any extension or delay in the vehicle delivery will result in a Contract Amendment to BAH with the appropriate approvals obtained.

A Request for Proposal (RFP) was issued to BAH on August 26, 2010 and their proposal was submitted on September 7, 2010. The Proposal received did not state any exceptions or qualifications; however a clarification was made within the cover letter regarding the

structure of the company's ownership and confirming compliance with the conflict of interest provisions. The clarification was reviewed by the legal department and the submission is considered acceptable.

Upon review of the confidential pricing information, staff considers pricing from this consultant to be fair and reasonable.

**JUSTIFICATION**

Consultant assistance is required to support the Light Rail Vehicle Engineering Section on design review, technical verification, testing, delivery and commissioning of the Commission's light rail vehicles. BAH is in the unique position of already having been awarded two separate contracts that related directly to the Legacy LFLRV project and the benefits of experience gained and lessons learned during previous work will be maximized. There will be continuity in the time-critical project work with virtually no interruption.

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August 26, 2010  
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