

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** September 30, 2010

**SUBJECT:** PROCUREMENT AUTHORIZATION AMENDMENT  
PROGRAM OF REQUIREMENTS AND CONCEPTUAL DESIGN  
LOW FLOOR LIGHT RAIL VEHICLE MAINTENANCE AND  
STORAGE FACILITIES  
CONTRACT TC85-6

## **ACTION ITEM**

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### **RECOMMENDATION**

It is recommended that the Commission authorize Contract Amendment No. 9 to AECOM Canada Ltd. (AECOM), in the amount of \$23,080,000 for detail design and construction support for civil preparatory contract, including design-build technical reviews and construction support for the Sheppard East Maintenance and Storage Facility (MSF), and for detail design and construction support for the Replacement Fleet (Ashbridges Bay) MSF. This amount is comprised of \$8,580,000 for the Sheppard East MSF and \$14,500,000 for the Replacement Fleet (Ashbridges Bay) MSF.

### **FUNDING**

Funding for the Sheppard East LRT project was included under Transit City approved priority projects in the TTC 2010-2014 Capital Program as amended by the Commission on October 29, 2009 and adopted by the City of Toronto Council on December 8, 2009. Project commitment approval of \$190,232,000 was included for the Sheppard East LRT line to cover incurred expenditures to the end of 2010. This project is approved by Metrolinx and with Metrolinx as owner of the assets, these expenditures are receivable through the City of Toronto from Metrolinx under the existing Memorandum of Agreement. There are sufficient funds for this expenditure on this upset limit contract in the current funding.

Funding of \$345,000,000 for the Fleet Replacement project is included under Project 3.9 LRT Replacement Maintenance & Storage Facility, as outlined on pages 839-841 in the TTC 2010-2014 Capital Program which was approved by City Council on December 8, 2009. There are sufficient funds for this expenditure in the current funding.

Payment will be on actual time basis and the Contract work will be managed on a Work Assignment Release basis.

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**BACKGROUND**

In May 2008, the Commission approved the recommendations identified in the Streetcar Maintenance and Storage Master Plan which concluded that the existing facilities were not capable of providing service for the incoming Low Floor Light Rail Vehicles (LRV) fleet required for the Transit City lines and the new LRV fleet required to replace the existing downtown streetcars (Legacy Fleet). The master plan recommended that four (4) new, strategically located, maintenance and storage facilities be constructed for the Transit City lines (Sheppard East, Eglinton Crosstown, Finch West and Don Mills) and that one MSF be constructed for the new LRV Legacy Fleet.

At its meeting of October 23, 2008, the Commission approved the award of Contract TC85-6 to AECOM to complete the Program of Requirements and Conceptual Design for the required five MSFs. The contract includes the provision that the Commission may, at its discretion, amend the contract to include Environmental Assessment, Preliminary and Detailed Design services, as well as support services during construction for the required facilities. Contract TC85-6 also includes the provision for consulting services should an Alternate Financing and Procurement approach be pursued for the delivery of the MSFs.

In June 2009, the Commission awarded Bombardier with the contract to begin delivery of 204 new LRVs to replace the existing streetcar fleet commencing in 2013, with prototype vehicles arriving in 2011. In May 2010, Metrolinx awarded a contract to Bombardier for the supply of 182 Transit City LRT vehicles which will be deployed on Sheppard East (35), Eglinton Crosstown (76), Finch West (23) and SRT (48) lines and are scheduled to begin delivery in 2013.

In accordance with the optional provisions of Contract TC85-6, the contract was previously amended to include Environmental Assessment and Preliminary Design services for both the Replacement Fleet and Sheppard East MSFs.

Contract TC85-6 details are as follows:

Original Contract Upset Limit Amount (including GST):	\$ 3,100,000.00
Previous Amendments (including GST):	
Sheppard MSF	\$ 2,837,025.45
Replacement Fleet MSF	\$ 2,810,288.80
This Contract Amendment (including HST): (For Sheppard and Replacement Fleet MSFs)	\$23,080,000.00
Total Revised Upset Limit Amount:	<u>\$31,827,314.25</u>

## **DISCUSSION**

To date, staff is satisfied with the service provided by AECOM in this contract. As such, staff wish to exercise the contract provisions to include the recommended work. As AECOM is fully versed with the requirements, this is the most cost effective approach, while also satisfying the schedule requirements to enable timely completion of the two facilities.

### **Transit City Sheppard MSF**

The contract delivery strategy for the Sheppard East MSF will follow the Alternative Financing and Procurement (AFP) model and will use the Design-Build-Finance-Maintain (DBFM) approach. The first step of the DBFM is to prequalify proponents. At the time of writing, a Request for Qualifications process was nearing completion, the result of which is to select 3 prequalified proponents.

In the DBFM approach, the preliminary design is developed by TTC's consultant (AECOM), which forms the basis of the Request for Proposal (RFP) that will be issued to the prequalified proponents. During the proposal stage, the detail design is progressed to approximately 60% by each of the prequalified proponents and ultimately submitted as part of their proposals. At the completion of the RFP, one of these proponents will be selected to complete the design, construct and maintain the MSF.

Throughout the detail design and construction process, the TTC's consultant (AECOM) will be required to perform a technical compliance role to support the project. The compliance role consists of performing technical reviews of design submissions to ensure the designs are in accordance with TTC standards and operational requirements.

The recommended amendment to Contract TC85-6 also includes design and construction support to undertake a civil works preparatory contract as well as final track design and the compliance role during the detail design and construction phases of the Sheppard East MSF.

### **Replacement Fleet MSF at Ashbridges Bay**

The Replacement Fleet (Ashbridges Bay) MSF and its connection track will follow the typical Design-Bid-Build contract delivery strategy, which requires the design consultant to develop the complete design, including contract drawings and tender documents, and provide support services during construction.

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The recommended amendment to Contract TC85-6 includes design from the 30% to 100% completion, as well as construction support services for the MSF and its connection track.

**JUSTIFICATION**

This Contract Amendment is required to enable the consultant to continue with design services for both the Sheppard East and Replacement Fleet (Ashbridges Bay) MSFs, to enable both facilities to be completed in time for delivery of the new vehicles. Awarding this work to AECOM is cost effective and provides the best approach to maintain the project schedule.

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September 13, 2010  
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