

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** December 15, 2010

**SUBJECT:** PROCUREMENT AUTHORIZATION – YUS SINGLE MODE  
FIBRE OPTIC CABLE SUPPLY

## **ACTION ITEM**

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### **RECOMMENDATION**

It is recommended that the Commission authorize the award of a contract to Noramco Wire and Cable, in the amount of \$6,892,193.18, for the supply of single mode fibre optic cables for use throughout the Yonge/University/Spadina Automatic Train Control (YUS ATC) Resignalling Project.

### **FUNDING**

Sufficient funds for this expenditure are included in Project 2.4, Resignalling of YUS in the State-of-Good Repair/Safety Category, as set out on pages 433-437, of the 2010-2014 TTC Capital Program, as approved by City Council on December 08, 2009.

### **BACKGROUND**

The new Auxiliary Wayside System (AWS) and Automatic Train Control System (ATC) are currently under development so as to improve the passenger throughput capacity on the subway system.

Both the AWS and ATC systems will utilize fibre optic cabling to transmit information through trackside radio equipment with the new TR Subway Trains. Dedicated fibre optic (FO) networks are integral to the implementation of the AWS and ATC signalling systems on the YUS, and are necessary for provision of a reliable, high speed communication link. The **functionality** of AWS and ATC systems is based on the deployment of this fibre optic cabling system.

### **DISCUSSION**

The work of this Contract includes the detailed design, manufacture, testing and delivery of single mode FO cable for installation by TTC forces along the YUS Subway Line. The single mode FO cable will be installed in both tunnels of the YUS, forming a ring that will provide redundant communication pathways to all stations on the YUS. The ATC system will

further utilize this ring to communicate through radio transceivers at trackside to the ATC-equipped trains on the line.

Specifications and drawings were prepared for Proposal No. P31PV10861 and a Request for Proposals (RFP) was posted on the Commission's website as of July 29, 2010. Five prospective proponents were issued copies of the Proposal, of which two submitted a formal proposal. The Proposal documents required submission of technical information to be used in the evaluation process to ensure that the technical requirements of the Proposal were being met.

Anixter Canada Inc. submitted the lowest priced proposal; however, their pricing was incomplete as they did not provide pricing for the specified cable connectors. Their proposal also included major technical exceptions to the performance requirements of the Specification, and was considered unacceptable because the exceptions failed to meet the specified performance requirements on a number of critical items as well as excluding critical materials in the work scope. Therefore, their proposal is considered both commercially and technically unacceptable.

Noramco Wire and Cable submitted the second lowest priced proposal and did not state any technical exceptions or qualifications. Their proposal is considered both commercially and technically acceptable and is recommended for award.

**JUSTIFICATION**

The RFP required provision of FO cable that meets the requirements of both signalling systems, as well as a design and material construction suitable for deployment in the subway tunnel environment. The proposal submitted by Noramco Wire and Cable is the only proposal compliant with the performance specifications outlined in the Request for Proposals.

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October 19, 2010  
6-61-61

Attachment: Appendix A

APPENDIX "A"

PROCUREMENT AUTHORIZATION  
YUS SINGLE MODE FIBRE OPTIC CABLE SUPPLY  
PROPOSAL NO. P31PV10861

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LIST OF PROPONENTS

- 1) Anixter Canada Inc. – \$2,009,812.80\*\*
- 2) Noramco Wire and Cable – 6,892,193.18 \*

- \* Recommended for award
- \*\* Considered non-compliant