



## STAFF REPORT ACTION REQUIRED

### Procurement Authorization

### Greenwood Complex – Track & Structures Building Renovation and DC Pendent Power Supply System Retrofit - Contract GR1-51

<b>Date:</b>	May 31, 2016
<b>To:</b>	TTC Board
<b>From:</b>	Chief Executive Officer

### Summary

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The purpose of this report is to obtain authorization for the award of Contract GR1-51 Greenwood Complex – Track & Structures Building Renovation and DC Pendent Power Supply System Retrofit to Bondfield Construction Company Limited in the amount of \$14,677,570.00, on the basis of lowest Total Bid Price.

The work under Greenwood Complex – Track & Structures Building Renovation and DC Pendent Power Supply System Retrofit includes the supply of all labour, equipment, and materials necessary to expand and renovate the Track & Structures building including: roofing replacement; construction of a parts storage area; new and reconfigured shops, office, washroom and employee areas; and an elevator. The work in Greenwood Carhouse includes the supply and installation of replacement DC power distribution and traction power pendent systems within the Carhouse and Track & Structures building, including the supply and installation of the required structural supporting system for the overhead pendent trolley system and power cables. The new traction power pendent system is required to increase safety for the Carhouse personnel while powering up a subway car or train-set.

### Recommendations

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**It is recommended that the Board authorize:**

1. Award of Contract GR1-51, Greenwood Complex – Track & Structures Building Renovation and DC Pendent Power Supply System Retrofit to Bondfield Construction Company Limited in the amount of \$14,677,570.00 inclusive of all taxes on the basis of lowest total bid price.

## **Financial Summary**

Sufficient funds for this expenditure are included in the TTC's 2016-2025 Capital Budget under the Toronto Rocket/T1 Rail Yard Accommodation Project, as noted on pages 523-529, which was approved by City Council on February 17, 2016.

The Chief Financial & Administration Officer has reviewed this report and agrees with the financial impact information.

## **Accessibility/Equity Matters**

The work of this contract will provide accessibility to the Track & Structures building in Greenwood Yard by providing an elevator to the lower and upper floors.

## **Issue Background**

Greenwood Complex is the primary train storage and maintenance facility for the trains operating on Line 2. This yard is connected to the main line track allowing access both east and west bound. The Greenwood Yard facilities include: a train storage yard; a Carhouse for performing servicing, inspections and repairs; a shop facility for performing heavy repairs and overhaul of subway and SRT fleets; and a Track and Structures building (as illustrated in Appendix A).

The Track and Structures building houses Operations personnel responsible for maintaining existing subway infrastructure including subway track, radio, electrical and communication systems, and their associated materials and inventory. The building is over 50 years old and a renovation and expansion is required to accommodate an increased workforce. This work includes additional office, shop, storage, lunchroom, and locker room spaces and renovations to the washrooms and building services and finishes.

The contract will provide accessibility to the second floor with an elevator, a complete roof replacement, an outdoor storage area, a new radio shop and renovations to the second floor office area.

The existing DC traction power pendent system within the Carhouse and Track & Structures building is used to provide a subway train-set with full traction power or auxiliary power where no third rail power is present, for the purposes of maintenance or testing.

The existing DC traction power pendent system has been in use for over 35 years and has the following safety concerns:

- The traction power is always available at the connection device end which makes the “live” pendent susceptible to accidental contact by personnel, tools, equipment or liquids;
- Upon connector removal or installation, the employees are potentially subjected to an arc flash hazard due to the energized end being installed in an energized state;

- There is no reach handle feature available on the existing system which requires the employee installing or removing the connector to be in very close proximity to the train collector shoe assembly as the pendent end is inserted or removed;
- There is potential for the snagging of the conductor along the rail system which makes the pulling of the pendent difficult; and
- There is no visual status indication to confirm that the power is energized with the current system.

The replacement system will provide an interlock system that ensures power is supplied only when the connection is both installed and commanded to be “on load” by the applicable employee. This system will also provide a visual indication of the energized state of the connector and a controlled separation of the drop leads and tow rope in the event of a train drive-away condition.

The replacement system will eliminate the arc flash potential, and prevent the unintentional energizing of train circuits or accidental contact by personnel, tools, equipment, liquids or other foreign objects, which will improve employee safety in the Carhouse.

## **Comments**

The work of this contract consists of the supply of all labour, equipment and materials to renovate and expand the Track & Structures building at Greenwood Yard to accommodate additional space requirements for Operations personnel and to replace the existing traction power distribution system in the Greenwood Carhouse and Track & Structures building.

Specifications and drawings were prepared for Contract GR1-51 and a Request for Bids (RFB) was posted on the TTC’s website and MERX as of January 29, 2016. Twenty-One companies requested copies of the bid documents out of which seven submitted a bid by the closing date of March 30, 2016 as summarized in Appendix B. The bid validity expires on June 28, 2016.

Staff contacted all bidders to the RFB call prior to the RFB closing to inquire if they were going to submit a bid and the following is a summary of the responses received for those companies that did not submit a bid:

- will be submitting a bid as a subcontractor;
- unable to bid due to commitments to bid other tenders at that time;
- downloaded the documents for information purposes and therefore not bidding;
- this work is not in their scope and downloaded documents in error.

Bondfield Construction Company Limited (Bondfield) submitted the lowest priced bid and did not state any exceptions or qualifications. Bondfield has satisfactorily completed work of a similar size and nature for the TTC in the past and their bid is considered commercially acceptable and they are recommended for award of the contract.

Buttcon Limited submitted the second lowest priced bid and also did not state any exceptions or qualifications and their bid is considered commercially acceptable.

Kenaidan Contracting Ltd. submitted the third lowest priced bid and also did not state any exceptions or qualifications and their bid is considered commercially acceptable.

The Agreement to Bond submitted by Bondfield covers both a Labour and Materials Payment Bond and a Performance Bond and was submitted by Zurich Insurance Company Ltd., who has been verified as a Surety Company licensed to transact business under the Insurance Act of Ontario. As such they are considered financially capable of performing the work.

The successful bidder will be required to execute a Performance Bond and Labour and Material Payment Bond each in the amount of 50% of the contract value.

Awarding this contract to Bondfield Construction Company Limited will allow the renovation and expansion of the Track and Structures building as well as the replacement of the DC pendent power supply system within the Greenwood Carhouse and the Track & Structure building in the TTC's Greenwood Yard Complex.

## **Contact**

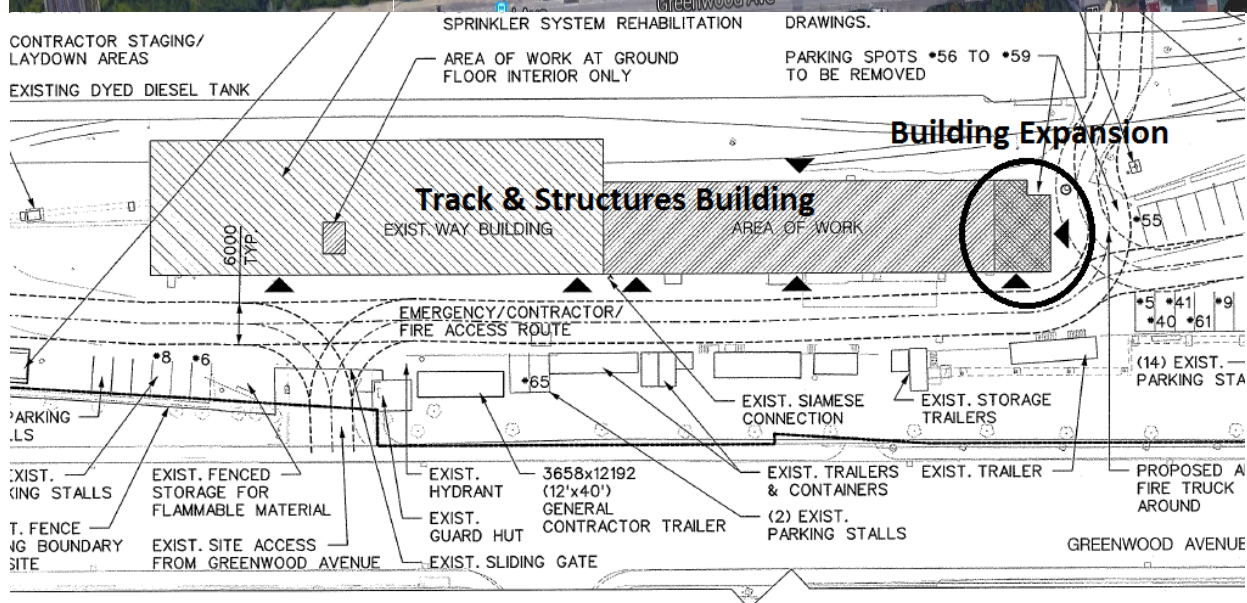
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03075-3183-3

## **Attachments**

- Appendix A
- Appendix B

# APPENDIX A



## APPENDIX B

PROCUREMENT AUTHORIZATION  
GREENWOOD COMPLEX – TRUCK & STRUCTURES BUILDING RENOVATION AND  
DC PENDENT POWER SUPPLY SYSTEM RETROFIT - CONTRACT GR1-51

### SUMMARY OF BIDS

COMPANY	TOTAL BID PRICE
Bondfield Construction Company Limited*	\$14,677,570.00
Buttcon Limited	\$14,961,200.00
Kenaidan Contracting Ltd.	\$15,820,000.00
J.J. McGuire General Contractors Inc.	\$16,102,500.00
APlus General Contractors Corp.	\$17,703,710.00
Martinway Contracting Ltd.	\$18,842,977.13
Black & McDonald	\$18,984,000.00

\* Recommended company