



for Action

Yonge Subway Extension - Station Design

Date: July 10, 2018
To: TTC Board
From: Chief Capital Officer

Summary

The purpose of this report is to obtain authorization for the award of Contract Y85-14 for station design consulting services for the Yonge Subway Extension (YSE). This work is required to prepare the preliminary design of the new stations, modifications to Finch Station and associated structures.

The TTC entered into a Memorandum of Understanding (MOU) with Metrolinx, York Region and the City of Toronto to define roles and responsibilities for the TTC to recover the full costs from Metrolinx and York Region for the planning and design work. The work of this contract will advance the preliminary design of the YSE, based on the approved alignment, to a Class 3 cost estimate and schedule. At completion of this stage, a report will be presented to the Board and City Council.

Recommendations

It is recommended that:

1. The Board authorize the award of Contract Y85-14 for Station Design - Yonge Subway Extension to the following four firms, in the noted upset limit amounts on the basis of highest total weighted scores:

| | |
|-----------------------------|-------------|
| • IBI/LEA/HHA Joint Venture | \$4,800,000 |
| • TYLink | \$4,500,000 |
| • Hatch Corporation | \$5,100,000 |
| • WSP Canada Group Limited | \$5,100,000 |

Financial Summary

Metrolinx and York Region are responsible for all costs associated with the preliminary design of the YSE. Metrolinx, City of Toronto, TTC, York Region and York Region Rapid Transit Corporation (YRRTC) have entered into a Memorandum of Understanding, which will ensure the TTC recovers the full costs from Metrolinx and York Region.

The project budget includes \$55 million from Metrolinx and \$36.3 million from York Region, which is its Federal Phase 1 Public Transportation Infrastructure Fund (PTIF) allocation.

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

Equity/Accessibility Matters

The YSE will be designed and constructed to be accessible.

Decision History

Refer to Attachment 2

Issue Background

City of Toronto, Metrolinx, YRRTC and TTC staff are collaborating to advance the preliminary design for the YSE project. The TTC entered into a Memorandum of Understanding with Metrolinx, York Region and the City of Toronto to define roles and responsibilities for the TTC to recover the full costs from Metrolinx and York Region for the planning and design work.

The subway extension will be approximately 7.4 km in length, and is expected to be underground for most of its entire length, with the possibility of a bridge structure over the Don River. It is expected that the YSE project will add five new stations and will require modifications to Finch Station.

The five new stations currently planned are:

- Cummer/Drewry
- Steeles
- Clark
- Langstaff
- Richmond Hill Centre

The consultants' work will require a multi-discipline effort with inputs from architectural, civil, structural, geotechnical, mechanical, electrical, communications, fire/life safety, project management, property and other disciplines.

Contract work will be administered on a work assignment release basis. As each required task is identified, a work plan is prepared with an estimate. Work will only begin as authorized by TTC staff in the form of a work plan release, and payment for services will be based on the actual work performed at the approved billing rates.

The work of this contract will advance the preliminary design of the YSE, based on the approved alignment and station locations, to a Class 3 cost estimate and schedule. At

completion of this stage gate, a report is scheduled to be presented to the Board and City Council.

Comments

A Request for Proposals was publicly advertised on the Merx Website as well as the TTC's Website as of March 23, 2018. Copies of the proposal documents were downloaded by 50 companies, of which 11 submitted a proposal by the closing date of May 15, 2018. During the bid period, three addenda were issued.

The evaluation of proposals was based on a two envelope process and consisted of qualitative and pricing components, with 75 points allocated to the qualitative merit and 25 points allocated to the pricing. Proposals were first scored based on qualitative criteria, with the associated weightings described in the proposal documents. It was pre-determined that proposals achieving a total minimum of 56.25 points out of the maximum 75 points available (75%) for the qualitative evaluation would be considered qualified.

The pricing component of all qualified proponents was then evaluated with 20 points allocated to the proposed key consultant staff list and five points allocated to the unit rates by position list. The all-inclusive hourly billing rates were multiplied by the percentage dedication for the pre-defined key staff positions, and the unit rate by position list to determine the total composite all-inclusive hourly billing rate. The evaluation criteria is described in Attachment 1.

It was pre-determined and stated in the proposal documents that the TTC intended to award up to four contracts. The proposal documents also stated that the four awards would have different contract values due to the station pairings being issued.

Determination of packages is in descending order of complexity:

| | | |
|-----------|--|-------------|
| Package 1 | Richmond Hill Centre Station with Bus Terminal, Train Storage and Maintenance Facility | \$4,800,000 |
| Package 2 | Steeles Station with YRT Bus Terminal | \$4,500,000 |
| Package 3 | Cummer/Drewry Station & Finch Station Modifications | \$5,100,000 |
| Package 4 | Clark Station (including a bus loop) & Langstaff Station with Commuter Parking Lot and Passenger Pick-Up/Drop-Off Facility | \$5,100,000 |

The following four firms or Joint Ventures achieved a score of 75% or more, based on the qualitative evaluation, and had their pricing components evaluated:

- IBI/LEA/HHA Joint Venture:
 - IBI Group Architects (Canada) Inc. (Participant in Charge)
 - LEA Consulting Ltd.
 - HH Angus & Associates Ltd.
- TYLink:
 - WZMH Architects (Participant in Charge)
 - Read Jones Christoffersen Ltd.
- Hatch Corporation
- WSP Canada Group Limited

All four proponents are recommended for award of contract, based in descending order of total weighted scores, with the proponent with the highest weighted score being awarded Package 1:

- IBI/LEA/HHA Joint Venture Package 1
- TYLink Package 2
- Hatch Corporation Package 3
- WSP Canada Group Limited Package 4

Hatch Corporation, WSP Canada Group Limited and the individual consultants that make up the IBI/LEA/HHA Joint Venture and TYLink, have all satisfactorily performed work of a similar nature in the past.

By awarding Contract Y85-14, the station designs will proceed in order to support the preliminary design for the Yonge Subway Extension.

Contact

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Signature

Dan Wright
Chief Financial Officer

Attachments

Attachment 1 – Evaluation Criteria
Attachment 2 – Decision History

03080-104-86

ATTACHMENT 1
YONGE SUBWAY EXTENSION – STATION DESIGN
EVALUATION CRITERIA

A. Corporate Qualifications

- Background and capabilities
- Number of years in business
- Depth of available resources
- CADD facilities and compliance to TTC CADD standards
- Relevant corporate experience

B. Staff Qualifications/Experience

- Number of years of direct and relevant experience
- Technical qualifications
- Capsule CV description/relevant experience by project

C. Methodology

- Project Understanding using Steeles Station with YRT Bus Terminal as the example
- The Proponent shall outline the administrative systems in place for estimating and invoicing for work performed as well as reconciling estimates with actual costs using Steeles Station with YRT Bus Terminal as the example
- Contract challenges using Steeles Station with YRT Bus Terminal as the example
- Statement regarding the advantages and benefits that the Proponent provides that other Proponents may not be able to provide, taking into consideration the operating business and political environment in which TTC operates using Steeles Station with YRT Bus Terminal as the example
- Preliminary resource plan – Detailed responsibility/functions of the Proponent and proposed Sub-Consultants (if applicable) in order to complete all Work described in Division 1 – Scope of Services using Steeles Station with YRT Bus Terminal as the example
- Preliminary resource plan – High-level list of tasks, resources required and estimated hours required to complete all Work described in Division 1 – Scope of Services using Steeles Station with YRT Bus Terminal as the example

D. Pricing Evaluation

- Proposed Key Consultant Staff
- Unit Rate by Position

ATTACHMENT 2

YONGE SUBWAY EXTENSION – STATION DESIGN

DECISION HISTORY

In 2009, City Council approved the submission of the Environmental Project Report for a 7.4 kilometre extension of the YSE from the current terminus at Finch Station to the Richmond Hill Centre at Highway 7 in York Region. Council also approved several key principles, including:

- The City of Toronto expects the Province of Ontario will be responsible for all capital costs, including property acquisition costs, necessary to implement the YSE;
- The City of Toronto is not responsible for net operating costing resulting from operations of the YSE;
- TTC is responsible for project management and delivery of the YSE;
- TTC will operate and maintain the subway infrastructure (including commuter parking lots) but excluding passenger pick up and drop off and bus terminals located in York Region;
- TTC will own the property, assets and subway facilities within York Region except for bus terminal and passenger pick-up and drop-off facilities/bus terminals located in York Region;
- The cost of measures to address potential capacity constraints at the Yonge-Bloor Station and North York Service Road arising from the project be included as project costs; and
- Metrolinx be requested to prioritize the Relief Line noting that it is the first priority for the TTC and City of Toronto and in advance of the YSE in order to accommodate capacity issues resulting from YSE.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2009.EX28.1>

In 2013, City Council reiterated that it would not proceed with the proposed YSE until improvements are made to reduce demand on Line 1:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX31.3>

In June 2016, the Province committed \$55 million to Metrolinx to advance the detailed planning, engineering and design work for the YSE project. Subject to York Region Council and Federal Government approvals, York Region will commit its \$36.3 million allocation under the Federal Phase 1 Public Transit Infrastructure Fund (PTIF) to the project:

http://www.metrolinx.com/en/news/announcements/201610_Yonge_North_Subway.aspx
http://www.vivanext.com/project_YongeSubway

In May 2017, City Council approved the following:

- The City Manager and the TTC, in partnership with Metrolinx and York Region to advance the planning and design of YSE at no financial cost to the City of Toronto, and report to City Council at the next decision gate with a Class 3 cost estimate and schedule, anticipated to be in the fourth quarter of 2019, subject to the following:
 - a. City of Toronto/TTC will own, operate, and maintain the future YSE, recognizing it is an extension of Line 1 service, subject to satisfactory cost-sharing agreements with York Region and/or the Province of Ontario;
 - b. TTC will be responsible for project management of project planning and design;
 - c. York Region and/or Metrolinx will be responsible for the costs associated with the planning and design of the project and provide funding to the TTC;
 - d. All parties will agree to a procurement options analysis to assess the best project delivery model for the YSE project; and
 - e. TTC will be responsible for future delivery of the YSE project.
- The City Manager to enter into a Memorandum of Understanding with TTC, Metrolinx and York Region, to define roles and responsibilities, and ensure the TTC recover the full costs from Metrolinx and York Region of undertaking work required to develop a Class 3 cost estimate and schedule for the YSE.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.EX25.1>

At its meeting of May 18, 2017, the Board authorized the CEO to enter into an MOU with Metrolinx, York Region, and City of Toronto to define roles and responsibilities, for the TTC to recover the full costs from Metrolinx and York Region of completing the planning and design work required to develop a Class 3 cost estimate and schedule for the YSE:

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2017/May 18/Reports/Decisions/13 Advancing Planning and Design for the Relief Line Decisio.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2017/May%2018/Reports/Decisions/13%20Advancing%20Planning%20and%20Design%20for%20the%20Relief%20Line%20Decisio.pdf)

At its meeting of April 11, 2018, the TTC's Audit and Risk Management Committee received an update on the details of the MOU for YSE, prior to final execution of the MOU:

[http://www.ttc.ca/About the TTC/Commission reports and information/Committee meetings/Audit Risk Management/2018/April 11/Reports/1 Yonge Subway Extension and Relief Line MOU.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Committee%20meetings/Audit%20Risk%20Management/2018/April%2011/Reports/1%20Yonge%20Subway%20Extension%20and%20Relief%20Line%20MOU.pdf)

At its meeting of May 8, 2018, the Board approved the award of Contract Y85-12 for Geotechnical and Hydrogeological Consultant Services for the YSE project:

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2018/May 8/Reports/12 Yonge Subway Extension Geotechnical and Hydrogeological C.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2018/May%208/Reports/12%20Yonge%20Subway%20Extension%20Geotechnical%20and%20Hydrogeological%20C.pdf)

At its meeting of June 12, 2018, the Board approved the award of Contract Y85-14 for Tunnel Design for the YSE project:

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2018/June 12/Reports/20 Yonge Subway Extension Tunnel Design.pdf](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2018/June%2012/Reports/20%20Yonge%20Subway%20Extension%20Tunnel%20Design.pdf)