



## STAFF REPORT ACTION REQUIRED

### Scarborough Subway Extension – Update

<b>Date:</b>	March 23, 2016
<b>To:</b>	TTC Board
<b>From:</b>	Chief Executive Officer

### Summary

At the February 25, 2016 Board Meeting, the Board approved the following motion:

That staff report back to the Board at its meeting of March 23, 2016, with a report that outlines the work TTC staff will be performing in support of revising the scope for the Scarborough Subway Extension.

Once the project scope has been confirmed, a detailed cost estimate will be developed to provide a revised budget. The project schedule will also be recalculated based on the revised plan, factoring in delays to date. The revised budget and schedule will be submitted for Board approval along with the Environmental Assessment report.

### Recommendations

#### **It is recommended that the Board**

1. Receive this report in response to the request from the February 25, 2016 Board Meeting, noting that staff will include a revised project cost and schedule, when the Environmental Assessment report is submitted for Board approval.

### **Financial Summary**

The TTC's 2016-2025 Capital Budget includes an estimated final cost of \$3.56 billion for the Scarborough Subway Extension Program, including the SRT Life Extension and Demolition, as approved by the City of Toronto Council on February 17, 2016. Of the \$3.56 billion, City Council has approved \$110.827 million for the Scarborough Subway Extension Project for 2016, and no work beyond what can be accommodated within the approved funding will be initiated unless additional project approval funds are made available.

Contract work for design concept development will be administered on a Work Assignment Release basis. Work will only commence as authorized by TTC staff in the form of a Work Assignment Release and payment for services will be based on the terms included in the contract documents.

As set out in this report, a revised budget will be presented once the project scope has been confirmed.

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

## **Accessibility/Equity Matters**

All designs associated with the Scarborough Subway Extension will ensure accessibility provisions are developed in accordance with the TTC Design Manual and AODA/Ontario Building Code.

## **Decision History**

At its meeting of October 8, 2013, City Council confirmed support for a Scarborough Subway extending Line 2 (Bloor-Danforth) along the McCowan Corridor to Sheppard Avenue East, subject to approval through an Environmental Assessment.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.CC39.5>

At its meeting of June 24, 2014, the Board received a status report on the Scarborough Subway Extension and approved forwarding the report to the City Planning and Growth Management Committee for its information.

[http://www.ttc.ca/About\\_the\\_TTC/Commission\\_reports\\_and\\_information/Commission\\_meetings/2014/June\\_24/Reports/Scarborough\\_Subway\\_Extension\\_Update.pdf](http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2014/June_24/Reports/Scarborough_Subway_Extension_Update.pdf)

At its meeting of December 9, 2014, the Board approved the award of contract FE85-2 for Tunnel Design Services.

[http://www.ttc.ca/About\\_the\\_TTC/Commission\\_reports\\_and\\_information/Commission\\_meetings/2014/December\\_9/Reports/BR\\_17122\\_Procurement\\_Authorization\\_Tunnel\\_Design\\_Contract\\_FE.pdf](http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2014/December_9/Reports/BR_17122_Procurement_Authorization_Tunnel_Design_Contract_FE.pdf)

At its meeting of February 25, 2015, the Board approved the award of contract FE85-3 for Project Management Services.

[http://www.ttc.ca/About\\_the\\_TTC/Commission\\_reports\\_and\\_information/Commission\\_meetings/2015/February\\_25/Supplementary\\_Reports/Procurement\\_Authorization\\_Project\\_Management\\_Services\\_Contra.pdf](http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2015/February_25/Supplementary_Reports/Procurement_Authorization_Project_Management_Services_Contra.pdf)

At its meeting of May 27, 2015, the Board approved the award of contract FE85-4 for Systems Design and Management Services.

[http://www.ttc.ca/About\\_the\\_TTC/Commission\\_reports\\_and\\_information/Commission\\_meetings/2015/May\\_27/Reports/Decisions/PA\\_SSE\\_Systems\\_Design\\_and\\_Management\\_Services.pdf](http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2015/May_27/Reports/Decisions/PA_SSE_Systems_Design_and_Management_Services.pdf)

At its meeting of May 27, 2015, the Board approved the award of contract FE85-5 for Station Design Services.

[http://www.ttc.ca/About\\_the\\_TTC/Commission\\_reports\\_and\\_information/Commission\\_meetings/2015/May\\_27/Reports/Procurement\\_Authorization\\_Station\\_Design\\_Services\\_Contract\\_F.pdf](http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2015/May_27/Reports/Procurement_Authorization_Station_Design_Services_Contract_F.pdf)

On May 5, 2015, City Council directed the City Manager, in consultation with the CEO of the TTC and the Deputy City Manager and Chief Financial Officer, to report to Council by the first quarter of 2016 with a recommendation on whether to proceed with a Design-Bid-Build or Design-Build-Finance option for the Scarborough Subway Extension, and also requested the TTC Board to continue to structure contracts in a way that preserves the ability to proceed with whichever procurement and delivery model is recommended.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.EX5.6>

At its meeting of February 25, 2016, Board approved the following motion:

That staff report back to the Board at its meeting of March 23, 2016, with a report that outlines the work TTC staff will be performing in support of revising the scope for the Scarborough Subway Extension.

## **Issue Background**

At its meeting of January 28, 2016, City Executive Committee received a Scarborough Transit Planning Update from City Planning, after which City Executive directed City Planning, in collaboration with the TTC, to continue technical work for the recommended Scarborough transit network. Integral to the proposed network is an extension of Line 2 that focuses on serving Scarborough Centre.

This represents a change in scope from a three station, Kennedy to Sheppard extension, as approved by Council in 2013.

### Prior to January 28, 2016

In concert with the City and via progress on the Environmental Assessment (EA), McCowan had emerged as the draft preferred alignment, and preferred station locations

at Lawrence, Scarborough Centre and Sheppard had been identified. It was originally intended that these findings be presented at a public meeting in February.

In parallel to the EA, staff had been exploring the concept of a large (approximately 13 metre diameter), single bore tunnel, as a more cost effective solution to the traditional twin tunnel approach. With the draft preferred alignment and station locations emerging from the EA, design work began on the premise of a 13 metre single bore tunnel, with the intent of developing designs to approximately 10%, in order to confirm scope, cost and schedule. This work was expected to be complete by the end of March, 2016. In addition, utility investigations, and geotechnical and survey fieldwork was also expanded.

#### Post-January 28, 2016

Based on the direction from the January 28, 2016 City Executive Committee, staff has adjusted activities to explore the express Kennedy to Scarborough Centre scenario, in support of City Planning.

TTC stopped design work on Sheppard and Lawrence Stations, as well as the tunnel infrastructure north of the 401. Geotechnical and survey field work has also been halted until the alignment is confirmed. Depending on the alignment that is ultimately selected, some, or the majority of the geotechnical and survey work performed to the end of January will be of use.

Work on the 13 metre single bore was also halted, as it would no longer be cost effective based on the potential reduction in scope. The work performed investigating this concept will be beneficial for consideration by the Relief Line Project.

Efforts have been redirected to support the scenario from Kennedy to Scarborough Centre, with the initial focus on a McCowan alignment. Based on the new scenario, key scope issues must be reassessed:

- With fewer stations to construct, a 13 metre single bore is no longer cost effective and as such, the tunnel diameter must be reassessed. Staff are exploring two options, a traditional twin bore (approximately 5.5 metre diameter), as well as an intermediate size single bore (approximately 10.5 metre diameter). The benefit of a single bore is that it will accommodate special track (e.g. cross over locations) within the tunnel bore, whereas cut and cover construction would be required for twin tunnel.
- Revisit Scarborough Centre Station scope, which is impacted by a change in tunnel diameter. Also, bus operations were revisited to determine the size of the bus terminal and access requirements.
- Operational requirements for special track, based on a 6km stretch and the number of trains were also reconfirmed.

In parallel and to explore further potential cost savings, other corridors will be reassessed (SRT, Midland, Brimley) in concert with the City.

Public meetings were co-ordinated by the City in February, with the presentation focusing on the express Kennedy to Scarborough Centre scenario. Other than flagging that McCowan had emerged as the draft preferred alignment for the original scope, no further information was provided.

Approximately \$14 million has been expended on the SSE Project to the end of February and most of the work performed can be applied to the ongoing project.

#### **Moving Forward**

Staff will continue to provide support until a preferred alignment is identified. City Planning, in concert with the TTC, intends to present a preferred alignment to the public in May. Based on feedback from the public, the preferred alignment would then be submitted for Board approval in June.

Once the preferred alignment is identified, TTC will resume design and all supporting work, such as utility investigations, and geotechnical and survey field work.

#### **Contact**

Rick Thompson  
Chief Project Manager – Scarborough Subway Extension  
Phone: 416-590-6870  
Email: [Rick.Thompson@ttc.ca](mailto:Rick.Thompson@ttc.ca)