



To: Metrolinx Board of Directors

From: **John Jensen**  
*Chief Capital Officer, Capital Projects Group*

Date: February 10, 2016

Re: **Capital Projects Group Quarterly Report – February 2016**

### **RECOMMENDATION**

That this report be received for information.

### **EXECUTIVE SUMMARY**

The Capital Projects Group is advancing a large and growing program, involving signature projects like Regional Express Rail (RER), Eglinton Crosstown LRT, Finch West LRT, Hurontario LRT and Hamilton LRT. Each project has its own profile in terms of schedule, budget and risk management plan. In general, the overall program is advancing as expected. In addition to managing specific projects, work is also underway to enhance overall program management systems, controls and processes in order to improve outcomes, apply consistent and replicable standards, and monitor the entire program in a more comprehensive fashion.

### **RAPID TRANSIT UPDATE**

#### ***Light Rail Transit (LRT)***

##### **Eglinton Crosstown LRT – 19 km**

Crosslinx Transit Solutions (Crosslinx), the consortium delivering the Design-Build-Finance-Maintain (DBFM) contract, will submit a 30% design scheme for each Crosstown station. The first design scheme for Keele Station was submitted in December 2015 and is currently under review by Metrolinx, the TTC and the City of Toronto. The remaining station designs will be submitted by Spring 2016.

Construction on the east and west tunnels is advancing. The tunnel boring machines tunneling the west segment, named Dennis and Lea, have approached Avenue Station. In the east segment, the tunnel boring machines, named Don and Humber, are approaching Sutherland Drive. Tunnel inspections are underway and will continue through Winter 2016 to prepare for the handover of the constructed tunnels from the tunnels contractor to Crosslinx Transit Solutions, so that they may commence laying tracks for the LRT.

##### **Finch West LRT – 11 km**

The RFQ for the Finch West DBFM contract closed in November. The RFQ evaluations are now being finalized.

The Reference Concept Design (RCD) for the LRT between Humber College and Westmore Drive is now complete. The RCD is currently under review and will be incorporated into the Project Specific Output Specifications document and included in the RFP.

### **Hurontario LRT – 20 km**

A draft Memorandum of Agreement outlining roles and responsibilities between Metrolinx and the Cities of Brampton and Mississauga, as well as a draft agreement between Metrolinx and the Region of Peel, was tabled at the Hurontario LRT executive committee meeting in December 2015.

An RFP for technical advisory services was released in December 2015 to advance design and technical specifications in preparation for the AFP process, subject to a value for money assessment.

### **Hamilton LRT– 13 km**

Metrolinx is continuing to work with the City of Hamilton to obtain the required Environmental Assessment (EA) approvals to reflect the revised project scope coming out of the May 2015 provincial announcement. This includes amendments to the original Environmental Project Reports and to seek approval for the Maintenance and Storage Facility.

Metrolinx has established a joint project office with the City of Hamilton at the Hamilton GO Centre. Additionally, Metrolinx is now working with the City of Hamilton to complete a Memorandum of Agreement.

### ***Bus Rapid Transit (BRT)***

#### **Yonge Street – Viva Bundle – Richmond Hill to Newmarket – 8.9 km**

York RapidLINK Constructors, the design-build (DB) team led by Aecon and Dufferin, has completed and submitted the 100% design packages for all segments and design review is underway. Project completion is scheduled for the end of 2018.

#### **Highway 7 West – Vaughan to Richmond Hill Centre (H2) – 12.4 km**

The consortium that will design, build and finance (DBF) this segment of the rapidway is advancing design activities and preliminary field investigations. Construction will commence in Spring 2016 with project completion in late 2019.

#### **Highway 7 – Vaughan Metropolitan Centre (H2 VMC) – 3.6 km**

Construction on the segment east of Jane Street to east of Keele Street is advancing. This segment is currently at 65% completion and is scheduled to be in-service at the end of 2016. The segment west of Jane Street has been delayed by a lack of access to the future subway station on the Toronto-York Spadina Subway Extension (TYSSE), and is now planned to open with the opening of the TYSSE, scheduled for 2017.

#### **Davis Drive – Newmarket (D1) – 2.6 km**

The Davis Drive rapidway has been in revenue service since November 2015. Some remaining work, including sidewalk and boulevard enhancements, are targeted for completion in mid-2016.

### ***Bus Infrastructure***

The Hamilton Bus Service & Storage Facility reached substantial completion in January 2016. This new GO Transit bus facility will enable GO Bus Services to store, fuel and wash/service more than 40 buses, operating in the western section of the GTHA. In addition, the Aberfoyle Bus Service & Storage Facility expansion project reached substantial completion in February 2016. Bus Services started to store an additional eight buses at the recently expanded bus storage facility, which features a new fueling bay and wash-bay.

The Davis Drive & Highway 404 Park & Ride lot opened on January 2, 2016 (York Region began vivaNext bus service from this lot in November 2015). This facility features over 200 parking

spaces, six bus platforms (three for vivaNext and three for GO Transit); complete with heated shelters, a bike shelter, pay phone, information boards, benches and other customer amenities. In addition, the Brock Road & Highway 407 Park & Ride lot also opened in January 2016. The Park & Ride lot features 334 parking spaces, heated shelter, six bus platforms (four for GO and two earmarked for future Durham Rapid Transit bus service), bike storage, display boards and benches.

## **REGIONAL EXPRESS RAIL UPDATE**

### ***Corridor Infrastructure***

#### **Barrie Corridor**

New track installation from Steeles Avenue to Rutherford GO station is ongoing and will be completed by Spring 2016. Additional signal upgrades to enable proper operation of the new passing tracks will be completed by the end of 2016. Work on the centralized traffic control signals system from Aurora to Barrie is also underway.

An EA for the Davenport Diamond Rail overpass commenced in January 2016. In addition, the EA and detailed design for the second track north of the Davenport Diamond to East Gwillimbury is 25% complete.

Station designs for new platforms at Rutherford, Maple, King, Aurora and East Gwillimbury GO stations are 25% complete.

Feasibility studies for parking structures at Rutherford, Maple and King GO stations are complete. Procurement for consulting assignments will commence in early 2016 to develop preliminary design works. The parking structures will also be incorporated into the overall station rework.

#### **Kitchener Corridor**

The pedestrian bridge for John Street in Weston arrived on site and was lifted into place in December 2015. This is the last major piece of infrastructure at the Weston Tunnel project and will allow for pedestrian flow from the residential area north of the tracks to the new Weston GO station and business area south of the tracks. The bridge will form an important link to the future community centre that will be built by the City of Toronto on the site of the current John Street parking lot. The bridge design was selected with community engagement and will be open to pedestrian traffic in Spring 2016. The new east lot at the Weston GO station was opened in December 2015, increasing parking capacity at that station by 126 spots which are accessed from Weston Road.

The design for the twinning of the tunnel under Highway 401 is underway and design completion is expected by mid-2016. A review of the Etobicoke North GO station, which is integral to the 401 tunnel work, is also underway. An EA for the Heritage Road layover has also commenced. Construction continues through the winter on the Shirley Ave Layover in Kitchener and the John Street/McNabb Street Bridge in Georgetown. These two projects support the provision of two additional morning and evening rush hour trains to Kitchener later this year.

#### **Lakeshore West Corridor**

Construction at Exhibition GO station continues with completion of the north building elevator and commencement of the TTC retaining wall replacement in early 2016.

The Clarkson GO station pedestrian bridge over Sheridan Creek is now open for public use and 300 new parking spaces are open in the northwest parking lot. A tender will be released in early 2016 for installation works on the roof and exterior cladding of the parking structure building.

Demolition of the existing station building at Burlington GO station is now complete. Foundation and superstructure works for the new station building are now underway. Forty new parking spaces at the top level parking area will be completed at West Harbour GO station in early 2016. In the interim, a temporary passenger pick-up and drop-off will be available in the bus loop vicinity.

### **Lakeshore East Corridor**

The EA for corridor expansion between Guildwood and Pickering GO stations continues with completion expected in Summer 2016. As part of the EA, both the Highland Creek and Rouge River bridges must be widened to accommodate a third track and future fourth track. Design for the bridge widenings is underway and an enabling works contract for fiber optic and signal cables in the rail corridor is scheduled to start in the Spring of 2016.

The EA for corridor expansion between the Union Station Rail Corridor (USRC) and Scarborough GO station commenced in December 2015. The expansion requires a fourth mainline track, bridge modifications and expansions along the corridor.

Station improvements, including new pedestrian tunnels and walkways and improved accessibility are now complete at the Scarborough GO station. Similar work is currently underway at Oshawa and Eglinton GO stations.

### **Stouffville Corridor**

Design work for the temporary Lincolnville Expansion was awarded to MMM Group Limited at the end of 2015.

Pre-qualification of the construction contractors for the second stage of double tracking from south of Agincourt GO station to the Scarborough GO station and north of Milliken GO station to Unionville GO station are tracking for early 2016.

### **Richmond Hill Corridor**

Construction at the new Gormley GO station is underway and progressing according to schedule with expected completion in Fall 2016.

The design for the new Bloomington GO station is progressing and is now more than 75% complete. A tender is planned for Spring 2016. The station is anticipated to be in service by late 2018. Bloomington GO station will be the new northern terminus of the corridor. Grade separation and track work that is being undertaken by CN on behalf of Metrolinx is progressing.

The Richmond Hill GO station existing platform expansion is ongoing and is to be completed in early 2016. The design for a new expanded station building has passed the 25% design stage and targeted for a tender to market later in 2016 with anticipated start to construction by late 2016.

### **Union Station Rail Corridor (USRC)**

The construction manager prequalification for the Union Station Trainshed Enhancement Project was issued in October 2015 and the design consultant tender was posted in November 2015. This is the first project that Metrolinx will procure with the Construction Manager General Contractor delivery model. The \$600 million project includes expansion and renovations of the Union Station Trainshed to allow for electrification and increased train service as part of GO Transit's RER. The consultant tender for Quality Based Selection RFP was released to market in December 2015.

### **Network Infrastructure**

#### **Network Signals**

The three Power Distribution Modules that are being installed in support of the USRC Signalling System Project are now on site and are undergoing connection and testing work.

The Contract Schedule for the GO Transit Train Control System project was accepted by Metrolinx and now forms the Baseline Contract Schedule. The contractor is working towards submitting additional design documents for acceptance as part of the preliminary design package which is scheduled for completion in Spring 2016.

An industry presentation on Metrolinx's plans for the future Enhanced Train Control was held in January 2016 and was attended by consultants and contractors interested in the project. A Request to Qualify and Quote for consulting services relating to Enhanced Train Control has been released to market.

### **Network Electrification**

The Electrification Technical Advisor is continuing to work on the Environmental Project Report, which is tracking for a notice of completion in Fall 2016. Electrification will be delivered as an AFP contract, subject to a value for money assessment. Engineering and design work continues on the Project Specific Output Specification as well as design criteria and standards for electrification in preparation for the procurement of the AFP.

### **Network Facilities**

Track improvements and construction of a new sanding station at the Willowbrook Rail Maintenance Facility yard were completed in December 2015. Construction of the new Mimico Train Layover Facility, located across from Willowbrook, is also underway and is scheduled for completion later this year. The design of a new Rail Operations and Train Crew Facility commenced in December 2015.

Respectfully submitted,

John Jensen  
*Chief Capital Officer , Capital Projects Group*