Environmental Project Report Addendum for Eglinton Crosstown Light Rail Transit (Jane Street to Keelesdales Park)

Date: April 9, 2013

To: Executive Committee

From: Chief Planner & Executive Director, City Planning Division

Wards: All

Reference Number: P:\2013\Cluster B\PLN\Executive Committee\EX13034

SUMMARY

On May 17, 2010, the Ministry of the Environment approved the Environmental Project Report for the Eglinton Crosstown Light Rail Transit project. Subsequent to the approval of the Environmental Project Report, the first phase of this project – the 19-kilometre section between the Mount Dennis neighbourhood (Weston) and Kennedy Station (Scarborough) has received Provincial funding and is currently in the preliminary stages of detailed design and preparation for construction.

However during the design phase, Metrolinx has identified changes to the project that are inconsistent with the project presented in the 2010 Environmental Project Report. Metrolinx is proposing a change to the alignment in the section from Jane Street east to Keelesdale Park. In addition, a maintenance and storage facility has been added to the project. The maintenance and storage facility will be located at 3500 Eglinton Avenue West (former Kodak lands) and will be used to store and maintain light rail vehicles.

These changes to the project have been documented in an Environmental Project Report Addendum, which has been reviewed by City staff.

The purpose of this report is to outline the proposed changes in the Environmental Project Report Addendum and seek approval from City Council for the revised project.
RECOMMENDATIONS

The City Planning Division recommends that:

1. City Council support the Metrolinx Environmental Project Report Addendum (April 2013) for the Eglinton Crosstown Light Rail Transit project (Jane Street to Keelesdale Park).

Financial Impact

There are no direct financial impacts to the City arising from the amendments recommended in this report.

DECISION HISTORY

Eglinton Crosstown LRT

In the spring of 2008, the City of Toronto and Toronto Transit Commission (TTC) initiated preliminary planning for a Transit Project Assessment Study for the Eglinton Crosstown LRT line.

On November 17, 2009, the TTC considered and approved the ‘Request for Approval of the Eglinton Crosstown LRT Transit Project Assessment Study’, including a recommendation to forward the report to the City Manager with a request to submit a report directly to the November 30 and December 1, 2009 meeting of City Council.

The City Manager's November 23, 2009 report to City Council:

City Council Approval of Eglinton Crosstown Light Rail Transit (LRT) Environmental Project on November 30, December 1, 2, 4 and 7, 2009:
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2009.CC42.7

Ontario Minister of the Environment's Notice to Proceed to TTC on May 17, 2010.

Eglinton Crosstown Light Rail Transit (LRT) Environmental Project Report – March 2010 (Updated August 20, 2010):
http://www.toronto.ca/involved/projects/eglinton_crosstown_lrt/epr.htm

Metrolinx-City-TTC Master Agreement for Implementation of the Toronto Light Rail Transit Program

At its meetings on February 8, 2012, and March 21 and 22, 2012, Toronto City Council confirmed support for the implementation of a Finch West LRT, Eglinton Crosstown LRT, Scarborough RT replacement, and a Sheppard East LRT (collectively the "Transit Projects") and
authorized the City Manager to enter into a Master Agreement with Metrolinx and the TTC for these projects.

On October 30, 31 and November 1, 2012, Toronto City Council authorized the City Manager, on behalf of the City, to consent to Metrolinx’s request to the Minister of the Environment that Metrolinx replace both the City and the TTC as the proponent on several on-going transit Environmental Project Reports including the Eglinton Crosstown Light Rail Transit Study (March 2010). The City consented to Metrolinx’s request with the understanding that Metrolinx accepted the scope of the projects as set out in the (previously Council approved) Environmental Project Report. As part of this agreement, it was also acknowledged that whenever there are proposed material amendments to the scope of the projects as set out in an addendum document, Metrolinx would consult with the City in advance, and City staff would report to City Council on the major scope changes to the Program. The report to Council must occur in advance of Metrolinx issuing Notice of Completion for the project.

The three parties acknowledged these commitments in the Master Agreement for the implementation of the Toronto Light Rail Transit Program, and signed the agreement on November 28, 2012.

The City Manager’s October 23, 2012 report to City Council:

City Council Decision on October 30, 31 and November 1, 2012:
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.CC27.6

Master Agreement (November 28, 2012) between Metrolinx, City of Toronto and the TTC for the implementation of the Toronto Light Rail Transit Program:

ISSUE BACKGROUND

Transit Project Assessment Process

In the Province of Ontario, large-scale, complex public sector projects that could have the potential for significant environmental effects are required to go through an Environmental Assessment process and receive approval from the Ministry of the Environment before proceeding.

Transit projects such as subways, light rail, new stations etc. generally have more predictable environmental impacts compared to other infrastructure projects. As such, transit projects can follow a special environmental assessment process known as a Transit Project Assessment Process. Ontario Regulation 231/08 governs this process. The Transit Project Assessment Process is approved by the Ministry of Environment and offers a streamlined approach to assessing environmental impacts with an abbreviated timeline compared to typical environmental assessment studies.
The steps in the Transit Project Assessment Process are similar to those of an environmental assessment process, but on an abbreviated timeline (usually in the range of 6 months). There is still the requirement for public and agency consultation, an assessment of potential environmental effects and mitigation measures. During this process, members of the public can get involved by participating in public meetings, open houses and other public forums arranged by the project proponent.

At the end of the Transit Project Assessment Process, the proponent still must prepare and submit an Environmental Project Report document that includes a summary of the planning and evaluation process which typically includes a list of alternatives that were evaluated and their environmental effects, how impacts will be mitigated and managed, and the record of the public consultation process. Proponents do not have to justify the need for transit or look at alternatives (only alternative construction methods) since the need for transit and its net positive impact to communities, the environment and the local economy as a viable transportation mode are already apparent.

**Transit Project Assessment Process Approval for the Eglinton Crosstown LRT**

On March 11, 2010, the TTC submitted the Notice of Completion of the Environmental Project Report for the Eglinton Crosstown Light Rail Transit project to the Ministry of the Environment. The Minister of the Environment gave their notice to proceed on May 17, 2010. The first phase of this project – the 19-kilometre section between the Mount Dennis neighbourhood (Weston) and Kennedy Station (Scarborough) has received Provincial funding and is currently in the preliminary stages of detailed design and preparation for construction.

The approved project includes dedicated light rail transit travelling in both directions along the centerlines of Eglinton Avenue, Commerce Boulevard, Convair Drive and Silver Dart Drive between Pearson International Airport in the west and Kennedy Road in the east (Attachment 1).

As part of the approved 2010 Environmental Project Report, the parts of Eglinton Avenue with at-grade LRT would be narrowed to two lanes of traffic in each direction along Eglinton Avenue with dedicated left-turn lanes at signalized intersections.

Within the Jane Street to Keelesdale Park portion of Eglinton Avenue (Attachment 2), the Eglinton Crosstown LRT is an at-grade facility in the centre roadway median of the Eglinton Avenue right-of-way, between Jane Street and the tunnel portal east of Black Creek Drive. Station stops are located at Jane Street, Weston Road, and Black Creek Drive, and there is an at-grade connection to the proposed Black Creek maintenance and storage facility, which requires LRT vehicles to cross the westbound general traffic lanes when accessing the facility (Attachment 3).
COMMENTS

Environmental Project Report Addendum

Metrolinx has identified changes to the project during the design phase that are inconsistent with the project presented in the 2010 Environmental Project Report. They are proposing a change to the alignment in the section from Jane Street east to Keelesdale Park to address emerging operational requirements. The change in alignment has necessitated a consolidation of LRT stops/stations. In addition, they have also added a maintenance and storage facility to the project. This facility will be located at 3500 Eglinton Avenue West (former Kodak lands) and will be used to store and maintain light rail vehicles. Details of these changes and related elements are set out below.

Automated Train Control Operation

Since approval of the 2010 Environmental Project Report, Metrolinx has developed initial servicing plans for the Eglinton Crosstown LRT. In order to achieve the recommended service frequencies, Metrolinx have identified a need to implement an automated train control system between the maintenance and storage facility and the mainline LRT. However, an automated train control system can only be used when an LRT is operating in its own protected right-of-way. Therefore, there is now a need to grade-separate the LRT from general traffic at the Black Creek maintenance and storage facility site access.

Black Creek Drive Station Stop

In the 2010 Environmental Project Report, as the Eglinton Crosstown LRT exited the underground portal (east of Black Creek Drive), it was proposed to remain in the surface median of the Eglinton Avenue right-of-way with a station stop at Black Creek Drive.

However, with the need to implement automated control and operate the LRT in its own protected right-of-way, the alignment for the Eglinton Crosstown LRT as it exits the tunnel portal now shifts to an area north of the Eglinton Avenue right-of-way and will cross Black Creek Drive via an elevated structure instead of at-grade. In this case, the vertical and horizontal alignment constraints of the track do not permit a passenger platform which means a stop at Black Creek Drive can no longer be accommodated (Attachment 4).

Maintenance and Storage Facility

As shown in Attachment 5, the study area for the Black Creek maintenance and storage facility includes the former Kodak lands, which are located north of Eglinton Avenue West to Ray Avenue, between the GO and CP railway corridor and Black Creek Drive.

The need for a maintenance and storage facility was initially identified in the 2010 Environmental Project Report, but no assessment of the impacts associated with such a facility were undertaken at that time. Subsequently, in 2011, Metrolinx initiated a study to establish a
functional design and operating plan for such a facility at Black Creek. The design parameters for the facility will ensure it can accommodate vehicle storage requirements for the full build out of the project, considering a small number of LRT vehicles can be accommodated at the existing McCowan Yard in Scarborough.

The proposed Black Creek maintenance and storage facility is located approximately 9 metres above the mainline LRT. The layout of the yard has been configured to accommodate the following functional requirements:

- Development of connecting tracks from the LRT mainline to the storage yard tracks;
- Storage tracks for 162 Light Rail Vehicles (based on the preliminary service plan);
- A maintenance carhouse building (where vehicles will be maintained);
- A component repair and overhaul facility;
- A ‘Maintenance of Way’ building;
- Work vehicles and storage;
- Traction power substation;
- Employee parking; and
- Storm water management ponds.

**Bus Terminal and Passenger Pick-Up and Drop-Off**

The proposed bus terminal will be situated on lands within the Black Creek maintenance and storage facility property and will feature 15 bus platforms (spread over two island bus platforms) to accommodate the forecasted TTC Bus operation requirements (also Attachment 5). The layout of the island platforms allow for buses to circulate in a clockwise direction.

Due to site constraints and the commitment by Metrolinx to retain Kodak Building #9, the existing Photography Drive elevated structure over Eglinton Avenue cannot be used by transit vehicles. Therefore, a new structure over Eglinton Avenue is proposed to accommodate bus circulation to/from the south side of Eglinton Avenue.

Pedestrians can access the bus terminal from the Mount Dennis LRT Station through a pedestrian tunnel.

**Mount Dennis GO Station**

A potential future GO Station is planned on the GO and CP Railway corridor that crosses Eglinton Avenue on an elevated structure. There will be direct pedestrian connections between the GO Station and Mount Dennis LRT Station and customers will be able to access both stations via multiple entrances off of Eglinton Avenue and from the bus terminal and passenger pick-up and drop-off area.

**Eglinton Avenue Cross Section**

During the Transit Project Assessment Process for the 2010 Environmental Assessment, future cross-sections were determined for segments of Eglinton Avenue that would have LRT operating
on the surface at grade. A typical cross-section for Eglinton Avenue (Attachment 6) consisted of a median LRT alignment with two adjacent general purpose traffic lanes and a single curbside bicycle lane in each direction.

The new proposed alignment for the Eglinton Crosstown LRT as it exits the west portal (east of Black Creek Drive) has shifted north of the Eglinton Avenue right-of-way. As such, there is no longer a need to modify and reconstruct the Eglinton Avenue cross-section for a median LRT facility through the Mount Dennis study area.

**Summary of Environmental Project Report Addendum's Recommended Changes**

The following summarizes the above-noted changes to the original Environmental Project Report, as contained in the 2013 Eglinton Crosstown LRT Environmental Project Report Addendum:

- Implement an automated train control system on the LRT between the maintenance and storage facility and the underground portion of the LRT;
- Shift the LRT alignment (combined elevated, at-grade, underground) between the west portal (Keelesdale Park launch shaft) and a point east of Jane Street;
- Build a 15 bay bus terminal and 45 vehicle passenger pick-up and drop-off area on lands in the maintenance and storage facility with pedestrian connections to the Mount Dennis LRT and GO Train stations;
- Build a new bridge crossing over Eglinton Avenue to connect Photography Drive with the bus terminal and the passenger pick-up and drop-off area;
- Construct passenger tunnel connections under the GO Kitchener Rail and Canadian Pacific Railway (CPR) corridors;
- Remove the Black Creek Drive station stop;
- Build the Black Creek maintenance and storage facility (capacity for 162 light rail vehicles) at the former Kodak Lands in Mount Dennis. The need for this facility was initially identified in the 2010 Environmental Project Report, but no assessments of the impacts associated with such a facility were undertaken at that time; and
- Revise the connecting track alignment between the LRT and the proposed Black Creek maintenance and storage facility.
Environmental Project Report Addendum Review Process

Pursuant to Clause 3.1 (c) in the City-Metrolinx Master Agreement, the Environmental Project Report Addendum is considered a major scope change to the Program and must be reported to City Council. The report to Council must occur in advance of Metrolinx issuing Notice of Completion for this project.

In the fall of 2012 at the start of the Transit Project Assessment Process for the addendum process, Metrolinx set up a technical advisory committee group that met regularly to discuss the various components of the addendum document. The technical advisory committee is comprised of representatives from various local and provincial agencies and stakeholder groups including the TTC, Toronto Region and Conservation Authority and the City of Toronto (City Planning, Transportation Services, Technical Services, Parks, Forestry & Recreation, etc.).

Metrolinx subsequently released the first draft of the addendum in January 2013, addressing major scope changes in the west (the subject of this report) and the east. It is noted the East Section (Laird Station to Don Valley Parkway) will be the subject of a separate Metrolinx addendum document which will be reported to City Council when it becomes available in the near future.

For the sections of the project report addendum that focused on the Mount Dennis neighbourhood (the West Section), there was an extensive review by the various City divisions, with City Planning coordinating the consolidated response to Metrolinx. City Divisions that reviewed the addendum (West Section) and provided comments include City Planning, Fire Services, Parks, Forestry & Recreation, Technical Services, Toronto Water and Transportation Services. All reviewing City Divisions support the addendum (West Section) conditionally, subject to revision of the January 2013 addendum document to address their comments and concerns.

City’s Key Concerns, and Metrolinx’s Response

The City’s comments on the first draft of the project addendum were forwarded to Metrolinx on February 1, 2013. On March 1, 2013, Metrolinx provided formal responses to the City’s comments including a draft revised addendum document. Each key concern, and Metrolinx's response, is summarized below. Metrolinx’s Draft Environmental Project Report Addendum (April 2013) for the Eglinton Crosstown Light Rail Transit Project (Jane Street to Keelesdale Park) is included as Attachment 7.

(As noted, the original addendum document has now been reorganized to separate the major scope changes for the West Section and East Section. The latest submission deals only with the West Section. The East Section will be the subject of a separate addendum document and report to City Council.)
Public Realm

City Concern: The City requested a review of the opportunity to introduce future building frontages along the north side of Eglinton Avenue west of Black Creek Drive, to improve public realm conditions including the pedestrian environment. This would require shifting the LRT structure alignment further north to achieve a minimum depth of approximately 12 metres for future buildings.

Metrolinx Response: Through further consultation with Metrolinx staff, it was determined the centreline details shown on the drawing referenced by City staff was incorrect and misinterpreted. It is not possible to shift the LRT structure alignment north by the required amount to achieve the depth required due to impacts to Kodak Building #9, other impacts on private property in the Mount Dennis neighbourhood, and potentially to the baseball diamond in Coronation Park.

Metrolinx has made a commitment to instead animate the boulevard on the north side of the street through various design treatments determined in consultation with City staff to improve the pedestrian environment. For example, a transparent barrier wall that allows pedestrians on the sidewalk area to view trains entering and leaving Mount Dennis station is one design solution to provide street animation. Through their on-going Mount Dennis Mobility Hub Study, Metrolinx has also committed to collaborate closely with the City to enhance the public realm in this area and promote connectivity between the station and the surrounding neighbourhood.

Given the constraints to achieving a minimum building frontage depth along this section of the street, the commitment to animate this area through design treatment which is to be developed in consultation with the City is acceptable.

Pedestrian/Bicycle Network

City Concern: Consolidating the Black Creek Station and the Weston Station into one station at Mount Dennis makes the LRT less accessible to the community. In particular, pedestrian connections to the York Community Centre (currently under construction) now require a 350m walk to the secondary entrance. This is at the upper limit of acceptable walking distance to/from transit facilities and will be less than ideal for seniors, children, and for pedestrians during inclement weather conditions. As well, the proposed secondary entrance appears to be situated within the Eglinton Avenue road allowance.

Metrolinx Response: In response to this issue, Metrolinx has committed to include a number of bicycle and pedestrian network elements in the Environmental Project Report Addendum design to address these modes such as:

- Provide continuous cycling infrastructure (bicycle lanes or multi-use path) along Eglinton Avenue from Jane Street to the West Portal;
• Provide seamless connections to existing and planned cycling infrastructure from Eglinton Avenue including: existing multi-use path along Eglinton Avenue west of Jane Street; planned multi-use path along Black Creek Drive or Keelesdale Park; proposed bicycle lanes on Eglinton Avenue east of West Portal (by City’s Eglinton Connects project);

• In recognition of its role as a terminal station, facilitate and design for easy access to the proposed bicycle station at Mount Dennis Station from surrounding cycling infrastructure;

• Improved pedestrian connection and public realm from Mount Dennis Station to the York Community Centre currently under construction at Eglinton Avenue & Black Creek Drive;

• Widened sidewalks along Eglinton Avenue toward Weston Road;

• Possible implementation of a pedestrian crosswalk at the new bus-only signal to improve pedestrian access to development sites on south side of Eglinton, subject to City/TTC review;

• Provide sidewalks and access to Mount Dennis Station on new bridge across Eglinton Avenue connecting Photography Drive with the bus terminal;

• Protect for future inclusion of a below-grade south entrance connection to Mount Dennis Station in the design of the station, and;

• Lighting and/or aesthetic improvements to pedestrian environment under rail bridges.

Metrolinx has committed to continuing to work with City staff as the project progresses to establish these requirements within the project description.

A further detailed review of the proposed secondary station entrance location by City and Metrolinx staff did not reveal a reasonable alternative. This entrance will be situated on the northern edge of the City’s right-of-way.

**Eglinton Avenue Cross-section**

City Concern: The previously approved LRT at-grade alignment included a reduced pavement width on Eglinton Avenue from six to four lanes and the introduction of bicycle lanes. With the revised LRT alignment to the north of Eglinton, the January, 2013 Environmental Project Report addendum reverted back to the existing six lane cross-section. This is a particular concern given the need to address public realm and pedestrian conditions with the consolidation and relocation of station facilities in this design.
Metrolinx Response: This concern has been addressed by reinstating the Eglinton Avenue lane narrowing reflected in the original addendum document in the latest addendum document. Geometric design details will be confirmed by City staff. The lane narrowing will result in wider sidewalks and new cycling facilities on Eglinton Avenue.

**Traffic Operations**

City Concern: No traffic analysis is contained in the Environmental Project Report Addendum or technical appendices for the Eglinton Avenue corridor, including analysis of the additional new signalized intersection (west of Black Creek Drive) with bus priority.

Metrolinx Response: Metrolinx has included the requested analysis as an Appendix to the latest draft addendum document.

**LRT Structural Span**

City Concern: The structural span of the LRT alignment over Black Creek Drive has the potential to block views and create an undesirable visual element within the City’s public right-of-way. This structure should be designed to minimize impacts to view corridors from columns, etc., to the extent possible. The structure should also incorporate design treatments/public art.

Metrolinx Response: Metrolinx has committed to ensuring a design of the entire elevated structure as clear span across the Black Creek Drive right-of-way (as a minimum standard, in the project specific output specification document), with potential further definition for treatments and public art on the structure to be developed in further consultation with the City.
CONCLUSIONS

MetroLinx has identified changes to the project during the design phases that are inconsistent with the project presented in the approved 2010 Environmental Project Report. This has triggered the need for an addendum.

Pursuant to the City-MetroLinx Master Agreement, the Environmental Project Report Addendum is considered a major scope change to the Program and must be reported to City Council. The report to Council must occur in advance of MetroLinx issuing Notice of Completion for this project.

The City identified a number of key concerns with the initial addendum document. MetroLinx has responded to those concerns, and where possible, has made commitments to address the key concerns. City staff concur with the measures proposed by MetroLinx to fulfill these commitments and will continue to work closely with MetroLinx to ensure success of the Eglinton Crosstown Light Rail Transit project.

CONTACT

Tim Laspa
Director, Transportation Planning
Tel. No.  416-392-8100
Fax No.  416-392-3821
E-mail:  tlaspa@toronto.ca

Richard Beck
Program Manager, Transportation Planning, Etobicoke York
Tel. No.  416-394-8235
Fax No.  416-394-6063
E-mail:  rbeck@toronto.ca

SIGNATURE

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Jennifer Keesmaat, MES, MCIP, RPP
Chief Planner & Executive Director
City Planning Division

ATTACHMENTS
Attachment 1: 2010 Approved Eglinton Crosstown LRT Key Plan
Attachment 2: West Section and Maintenance and Storage Facility Study Area
Attachment 3: 2010 Approved Environmental Project Report – Proposed LRT Stops at Weston Rd. and Black Creek Dr.
Attachment 4: Proposed Plan of LRT Through West Section
Attachment 5: Proposed Maintenance and Storage Facility
Attachment 6: Eglinton Ave. mid-block Cross Section - 2010 Transit Project Assessment Report
Attachment 7: Metrolinx's Draft Environmental Project Report Addendum (April 2013) for the Eglinton Crosstown Light Rail Transit project (Jane Street to Keelesdale Park)
Attachment 1: 2010 Approved Eglinton Crosstown Station Stops
Attachment 2: West Section and Maintenance and Storage Facility Study Area
Attachment 3:
2010 Approved Environmental Project Report – Proposed LRT Stops at Weston Road and Black Creek Drive
Attachment 4: Proposed Plan of LRT Through West Section
Attachment 5: Proposed Maintenance and Storage Facility
Attachment 6:
Eglinton Avenue mid-block Cross Section - 2010 Transit Project Assessment Report

Eglinton Crosstown Light Rail Transit

Source: Eglinton Crosstown Light Rail Transit
Transit Project Assessment Process
Environmental Project Report Addendum
March 2013 Draft
Attachment 7:
Metrolinx's Draft Environmental Project Report Addendum (April 2013) for the Eglinton Crosstown Light Rail Transit project (Jane Street to Keelesdale Park)

Attached separately as a PDF. Available on the on-line Agenda for Executive Committee's April 23, 2013 meeting.