



Town of
East Gwillimbury

Fernando Lamanna, B.A., Dipl. M. M., CMO

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September 23, 2020

Chris Raynor, Regional Clerk
17250 Yonge Street
Regional Municipality of York

**[SENT VIA EMAIL:
CHRISTOPHER.RAYNOR@YORK.CA]**

Newmarket, ON
L3Y 6Z1

Dear C. Raynor:

RE: Metrolinx GO Expansion Program and the GO Rail Electrification Transit Project Assessment Process Addendum

For your information and records, at its electronic meeting held on September 22, 2020 the Council of the Town of East Gwillimbury enacted as follows:

BE IT RESOLVED THAT Joint Community Infrastructure & Environmental Services and Development Services Report CIES2020-22 dated September 22, 2020, regarding the Metrolinx GO Expansion Program and the GO Rail Electrification Transit Project Assessment Process Addendum, be received; and

THAT Council support Staff's request that Metrolinx proactively advance a 2nd Implementation Phase of the GO Expansion Program and extend all-day, twoway, 15-minute service to East Gwillimbury GO Station; and

THAT Council support Staff's request that the East Gwillimbury GO Station, as an identified Major Transit Station Area (MTSA), be recognized by Metrolinx as a major northern hub and that major rail crossings in East Gwillimbury, specifically the existing Green Lane at-grade rail crossing, be prioritized for grade separation; and

THAT Council authorize the Town Clerk to forward a copy of this report to the Ministry of Transportation and Metrolinx for their consideration; and

THAT Council authorize the Town Clerk to forward a copy of this report to the Regional Clerk for information.

Please find enclosed Joint Community Infrastructure & Environmental Services and Development Services Report CIES2020-22: Metrolinx GO Expansion Program and the GO Rail Electrification Transit Project Assessment Process Addendum.

"Our town, Our future"

19000 Leslie Street, Sharon, Ontario L0G 1V0 Tel: 905-478-4282 Fax: 905-478-2808
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If you have any further questions feel free to contact the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read 'Fernando Lamanna', with a long horizontal flourish extending to the right.

Fernando Lamanna, B.A., Dipl. M. M., CMO
Municipal Clerk

Encl.

cc: Honourable Caroline Mulroney, Minister of Transportation
Mike Molinari, General Manager of Community Infrastructure & Environmental Services



Town of East Gwillimbury

JOINT COMMUNITY INFRASTRUCTURE & ENVIRONMENTAL SERVICES AND DEVELOPMENT SERVICES REPORT CIES2020-22

To: Council

Date: September 22, 2020

Subject: Metrolinx GO Expansion Program and the
GO Rail Electrification Transit Project Assessment Process Addendum

Origin: Community Infrastructure & Environmental Services
Capital Programs & Traffic Engineering Branch
Development Services
Planning Branch

RECOMMENDATIONS

- 1. THAT** Joint Community Infrastructure & Environmental Services and Development Services Report CIES2020-22 dated September 22, 2020, regarding the Metrolinx GO Expansion Program and the GO Rail Electrification Transit Project Assessment Process Addendum be received; and
- 2. THAT** Council support Staff's request that Metrolinx proactively advance a 2nd Implementation Phase of the GO Expansion Program and extend all-day, two-way, 15-minute service to East Gwillimbury GO Station; and
- 3. THAT** Council support Staff's request that the East Gwillimbury GO Station, as an identified Major Transit Station Area (MTSA), be recognized by Metrolinx as a major northern hub and that major rail crossings in East Gwillimbury, specifically the existing Green Lane at-grade rail crossing, be prioritized for grade separation; and
- 4. THAT** Council authorize the Town Clerk to forward a copy of this report to the Ministry of Transportation and Metrolinx for their consideration; and
- 5. THAT** Council authorize the Town Clerk to forward a copy of this report to the Regional Clerk for information.

PURPOSE

The purpose of this report is to seek Council's endorsement of staff recommendations and provide comments back to Metrolinx for the GO Rail Electrification Transit Project Assessment Process (TPAP) Addendum and the overall GO Expansion Program.

BACKGROUND

GO Expansion Program Summary

Metrolinx, an agency of the Province of Ontario, is expanding its services as part of the GO Expansion Program, which will increase services, both in terms of train frequency and availability across its seven rail corridors.

The GO Expansion Program is an investment program that will transform GO Rail into a comprehensive Regional Rapid Transit Network System that provides the expanded mobility that the Greater Toronto and Hamilton Area (GTHA) needs to accommodate growth and maintain a high quality of life and prosperous economy.

The long-term goal and vision of the GO Expansion Program is to provide all-day, two-way, 15-minute electrified service along several rail corridors. With the Province investing in GO Rail infrastructure, Metrolinx will be quadrupling GO Rail service and nearly doubling GO Rail ridership. By 2055, annual ridership will exceed 200 million, compared to 105 million without GO Expansion.

The following table highlights the Program's major objectives:

Program Objective	Description	Performance Objective	Reference Concept Design Feature
More all-day Service	Provide service throughout the day and on weekends, not just on weekday peak periods	6,000 weekly services and specifically for the Barrie Rail Corridor, two-way all-day between Allandale and Union, fifteen-minute service or better between Aurora and Union	Expanded track and on-corridor works to accommodate more frequent service in both directions: <ul style="list-style-type: none"> • Eleven new rail/road and two rail/ rail grade separations • 205 km of new track • Eleven new Pedestrian bridges
Service in both directions	Provide two-way service on more of the GO Rail network		
Trains every 15 minutes	Increase frequencies to a train every fifteen minutes or better where possible on the GO Rail network		
Faster and more efficient trains	Make use of fleet that are more cost effective to operate and have faster acceleration and stopping	Making use of trains that are up to 29% faster and up to 50% cheaper to operate per train kilometer	Combination of Electric Multiple Units (EMUs) or Electric Hauled Locomotives Over 680 km of GO Rail track is electrified
More accessible Stations	Provide improved stations, allowing for easier access to GO Rail	Customers can board and alight faster, reducing trip times by 2-5 minutes	Level boarding included at 42 stations to decrease boarding, alighting, and platform clearance time, which will decrease train dwell times

Program Objective	Description	Performance Objective	Reference Concept Design Feature
An expanded Union Station	Improve Union Station's capacity and passenger facilities, improving train operations and passenger experience	Ability to accommodate reference frequencies on each GO Rail Line	Widened platform and improved vertical circulation (stairs, elevators)

As part of the 1st Phase of the GO Expansion Program's implementation and over the next 10 years, service levels are expected to increase to:

- All-day, two-way, 15-minute service between Aurora GO Station and Union Station
- Peak period, peak direction 30-minute or better service between Allandale Waterfront GO Station and Union Station
- Off-peak, two-way 60-minute service or better service between Allandale Waterfront GO Station and Union Station

ANALYSIS

Further Refinements to Previous Studies are Being Undertaken

The GO Expansion Program consists of many different projects. The largest piece represents all the work that is required to enable service levels identified in the GO Expansion Full Business Case including new trains, signals, systems, track, as well as the maintenance and operation of the system for years to come.

The following five GO Expansion Program projects follow the Transit Project Assessment Process (TPAP) or TPAP Addendum and are regulated by the Province of Ontario through Ontario Regulation 231/08. They are being undertaken to assess impacts not addressed in the previously approved 2017 Environmental Study Reports supporting the GO Expansion Program. These five projects include:

- Three (3) TPAP's:
 - New Track and Facilities TPAP
 - Scarborough Junction Grade Separation TPAP
 - Stouffville Rail Corridor Grade Separations TPAP

- Two (2) TPAP Addenda:
 - GO Rail Network Electrification TPAP (an Addendum to the 2017 GO Rail Network Electrification Environmental Project Report that covers all rail lines)
 - Network-Wide Structures Project (an Addendum to the 2017 Barrie Rail Corridor Expansion TPAP)

Proposed new infrastructure includes new track and facilities (such as layover facilities, storage yards, etc.) throughout the network and a number of grade separations (places where the rail network is separated from the road network or other rail lines).

The general Project milestone dates are as follows:

- | | |
|--|----------------------------|
| • Impact Assessment Studies | November 2019 to July 2020 |
| • Public Meeting Round #1 | February 2020 |
| • Draft EPR Addendum Preparation | March 2020 to July 2020 |
| • Public Meeting Round #2 | Summer/Fall 2020 |
| • Public Meeting Round #3 | Fall 2020 |
| • Notice of EPR Addendum/30-Day Review | Winter 2021 |
| • TPAPs Project Completion | Spring 2021 |
| • Detailed Design and Construction | 2021 and beyond |

The remaining analysis covers the Projects that are relevant to East Gwillimbury and the Barrie Rail Corridor.

GO Rail Electrification TPAP Addendum and New Track & Facilities TPAP

On December 11, 2017 the Minister of the Environment and Climate Change (now referred to as Minister of the Environment, Conservation and Parks) issued a Notice to Proceed to Metrolinx and Hydro One for the 2017 GO Rail Network Electrification TPAP to convert six GO owned rail corridors from diesel to electric propulsion. Metrolinx subsequently issued a Statement of Completion on December 15, 2017.

An Addendum to this work is currently underway to assess additional electrification infrastructure required for new/upgraded tracks and layover facilities, of which are being studied as part of a separate Metrolinx project called New Track and Facilities TPAP, proposed across various portions of the GO Rail Network that were not previously examined as part of the 2017 GO Rail Network Electrification TPAP. A map of the Study Area for the GO Rail Electrification TPAP Addendum is shown in Appendix 1.

Based on the Electromagnetic Interference / Electromagnetic Fields assessment completed as part of the 2017 GO Rail Network Electrification TPAP, no adverse EMI effects are anticipated due to the installation/operation of the electrified GO Transit system. This will be confirmed during design and construction.

Mitigation measures to be considered are:

- Further testing and verification will be carried out during the detailed design phase once the rolling stock is established
- Confirm background EMF/EMI measurements during detailed design
- Implement an Electromagnetic Compatibility (EMC) Control Plan
- Employ grounding and shielding measures

An example of the proposed electrification infrastructure, specifically an Overhead Contact System (OCS), is shown in Appendix 2.

The following table highlights new track twinning and infrastructure upgrades as outlined in the Addendum:

Barrie Rail Corridor (BR) Segment	Segment Limits	Proposed Infrastructure	Municipality
Segment BR-3	Downsview Park to Rutherford Station	New track (twinning) from Mile 12.19 to 12.53.	City of Toronto
Segment BR-6	Bathurst Street to Aurora Station	Track upgrade from Mile 29.50 to 29.60	Town of Aurora
Segment BR-7	Aurora Station to East Gwillimbury Station	New track (twinning) from Mile 29.54 to 34.62, Aurora into Newmarket New platform at Aurora GO Station	Town of Aurora / Town of Newmarket
Segment BR-12	Barrie South Station to Allandale Waterfront Station	New track (twinning) from Mile 61.40 to 63.40	City of Barrie

A map of where these improvements are proposed is shown in Appendix 3.

Network-Wide Structures TPAP Addendum

On the Barrie Rail Corridor, Metrolinx has identified the need to reduce the number of road and rail at-grade crossings along the corridors to enhance safety, on time performance, operational flexibility/reliability and reduce traffic conflicts. Through the Network-Wide Structures Project, road-rail grade separations and crossing improvements are being assessed for:

- Wellington Street East Grade Separation in the Town of Aurora
- McNaughton Road Grade Separation in the City of Vaughan

These projects will address the at-grade crossings, accommodate rail line expansion including construction of new track and assess proposed options for road-rail grade separation at these locations.

This project represents a change that was not examined in the previously approved 2017 Barrie Rail Corridor Expansion Project Environmental Project Report and requires a Significant Addendum under the Transit Project Assessment Process.

Town Impacts and Input to the TPAP and TPAP Addendums

For the overall GO Expansion Program and specifically the Barrie Rail Corridor, Phase 1 expansion includes electrification of the trains and track throughout its entirety with track twinning between Union Station to north of Aurora Go Station into the Town of Newmarket. Future phase(s) will twin the remaining track between the previously noted terminus and Allandale Waterfront GO Station in City of Barrie to achieve the long-term goal and vision for a 15-minute, two-way, all-day, electrified service.

In this regard, as the East Gwillimbury GO Station is already identified as a Major Transit Station Area (MTSA), staff recommend that the Station be recognized by Metrolinx as a major northern hub and further, that major rail crossings in East Gwillimbury such as the existing Green Lane at grade rail crossing, be prioritized for grade separation.

Request Metrolinx to extend two-way, all-day service to East Gwillimbury GO Station to support the growing population of over 150,000 residents and 75,000 jobs

With the amendments to the Provincial Growth Plan, both the Region of York and the Town are comprehensively updating the Official Plan, Infrastructure related Master Plans and other guiding documents to accommodate anticipated population growth of over 150,000 residents and 75,000 jobs by 2051.

Although the Town of Newmarket currently does not have an approved secondary plan surrounding a proposed Mulock GO Station area, the implementation phasing of the GO Expansion Program and specifically, all-day, two-way 15-minute service, as it stands today, will stop at the Aurora GO Station and will not be extended to the Town of East Gwillimbury.

To accommodate the growing demand and population increase, Staff recommends that Metrolinx proactively advance a 2nd Implementation Phase and extend all-day, two-way 15-minute service from Aurora GO Station to East Gwillimbury GO Station. The extension of service is warranted for the following reasons:

- The Town of East Gwillimbury has an approved secondary plan surrounding the existing East Gwillimbury GO station.
- The East Gwillimbury GO Station is a recognized Major Transit Station Area (MTSA) for the Region of York and is within the approved Green Lane Secondary Plan, which encourages high density and transit supportive developments.
- The Green Lane Secondary Plan will accommodate approximately 28,750 residents and 4,340 jobs at full build-out, leading to an overall density of over 70 persons and jobs per hectare.
- The Green Lane corridor is recognized for future bus rapid transit and will be utilized as a key regional mobility connection as part of the high-density planning for the area.
- The Town recently adopted the Highway 404 Employment Corridor Secondary Plan, which anticipates the creation of over 5,000 new jobs across a variety of sectors around the intersection of Green Lane and Highway 404.
- Expanding rapid transit to East Gwillimbury GO Station completes the service for York Region and the Greater Toronto Area (GTA) and is also a logical transition point between the GTA and Simcoe County.

Infrastructure required to support extending rapid transit service to East Gwillimbury GO Station may include and not necessarily be limited to:

- Track twinning from Aurora/Newmarket to some transitional point north of the East Gwillimbury GO Station
- East Gwillimbury GO Station improvements including a new platform, associated civil and structural works and site improvements to make use of the second track and rapid transit service
- Advance road grade separations with railway crossings, potentially at St John's Sideroad, Mulock Drive, Davis Drive and Green Lane

- Newmarket GO Station improvements and/or advancing the proposed Mulock GO Station

Through the coordinated updating of the Town's guiding principles and master documents, staff will be working with Metrolinx and can advocate for the extension of rapid transit service to East Gwillimbury GO Station.

Grade Separation of Existing At-Grade Rail Crossings

Currently there are seven rail crossings on the Barrie Rail Corridor through the Town of East Gwillimbury at the following locations:

Crossing Location	Description
Green Lane	East of 2 nd Concession
2 nd Concession	North of Rogers Road
Chapman Street	East of Yonge Street
Yonge Street	South of Chapman Street
Bradford Street	East of Holland Landing Road
Oriole Drive	East of Holland Landing Road
Bathurst Street	North of Holland Landing Road

Grade separation works related to the 2nd Concession rail crossing north of Rogers Road was carried out as part of the significant re-construction of 2nd Concession completed in 2017. Of the remaining crossings, only the Green Lane rail crossing located east of 2nd Concession is considered to be a major crossing and Staff recommend prioritization of grade separation works at the Green Lane crossing.

Further, Staff note that beyond the Green Lane and 2nd Concession crossings, achieving grade separation at the remaining crossings on the Barrie Rail Corridor would prove challenging given the proximity of the crossings to existing homes and businesses. It is anticipated that the status of these crossings and the benefit of future grade separation will continue to be evaluated in conjunction with planning for future growth.

FINANCIAL IMPLICATIONS

There are no financial implications to the Town associated with this report.

The infrastructure improvements required to proactively advance a 2nd Implementation Phase and extend all-day, two-way, 15-minute service from Aurora GO Station to East Gwillimbury GO Station are significant. Of those improvements previously noted, most would be the responsibility of the Province of Ontario.

The grade separations of railway and road are a shared responsibility and cost exclusively between the Province and York Region.

NEED FOR PUBLIC CONSULTATION

No public consultation is required for this report.

ALIGNMENT TO STRATEGIC PLAN

The recommendations of this report align with the following Strategic Priorities:



Responsible
Growth &
Environmental
Protection

Attract and support business development and job creation in East Gwillimbury

Ensure that communities are built in a respectful manner, with resident and business quality of life protected

Advocate for a variety of housing and employment options for residents in every stage of life



Build
Complete
Communities

Enhance the Town's core infrastructure network including roads, sidewalks, water, sewer, and broadband



Culture of
Municipal
Excellence

Build an engaged and strategically aligned staff team to deliver high quality programs

CONCLUSION

Providing comments on both the GO Expansion Program and the GO Rail Electrification Transit Project Assessment Process (TPAP) ultimately support increased rapid transit service levels which supports a prosperous economy.

APPENDICES

- Appendix 1 - Electrification TPAP Project Map
- Appendix 2 - Electrification Infrastructure Example
- Appendix 3 - New Track & Facilities TPAP Project Map

Prepared by:
<i>Original Signed By</i>
Denny S. Boskovski, C.E.T. Asset Management & Capital Projects Manager

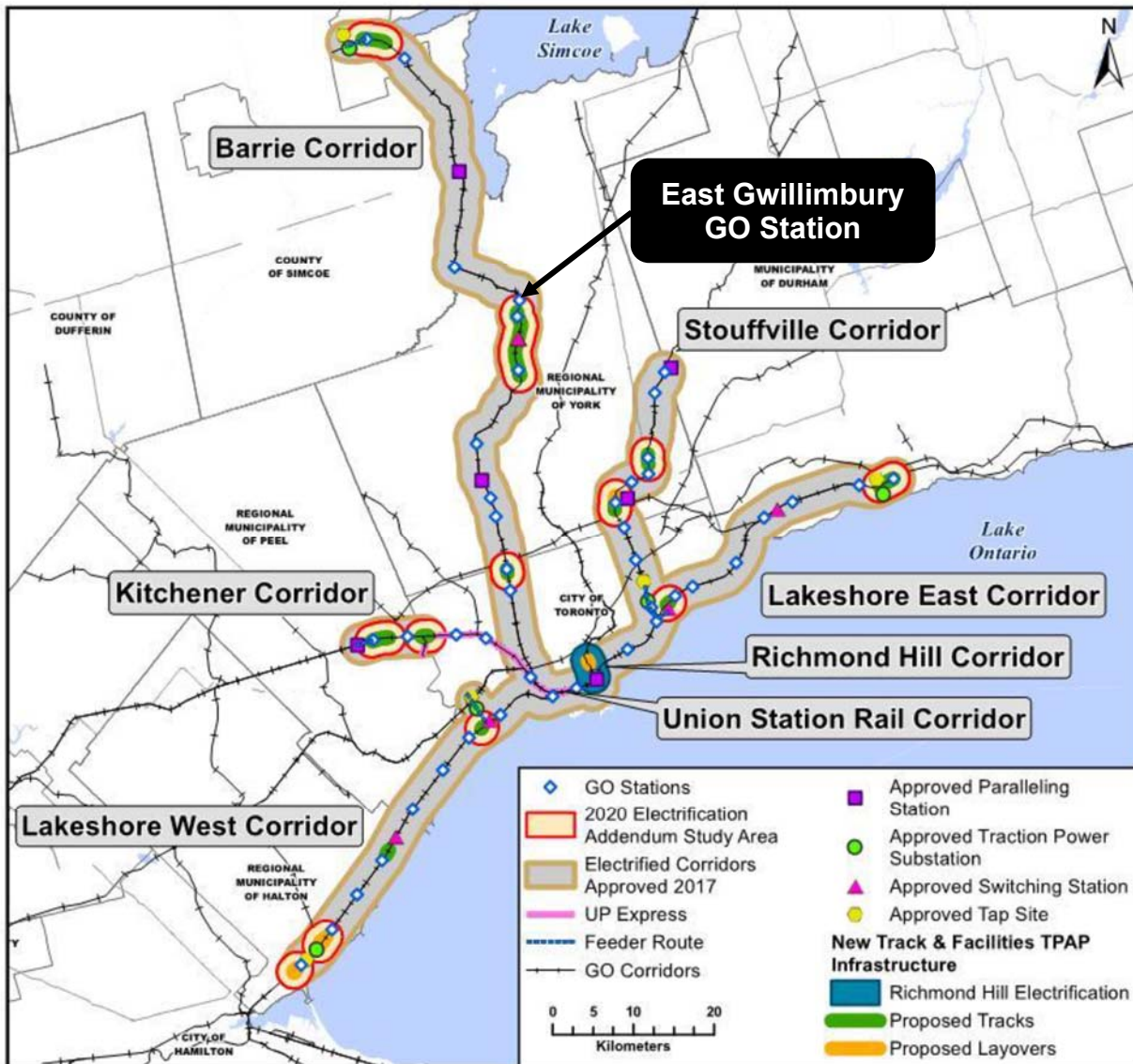
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Approved for Submission by:
<i>Original Signed By</i>
Thomas R. Webster Chief Administrative Officer

APPENDIX 1



APPENDIX 2



APPENDIX 3

