RE: METROLINX REGIONAL EXPRESS RAIL UPDATE
CITY WIDE

Attached for your information is Item 1, Report No. 19, of the Committee of the Whole (Working Session) regarding the above-noted matter which was adopted, as amended, by the Council of the City of Vaughan at its meeting of May 16, 2017.

I draw your attention to Clause 7. of the recommendation as follows:

7. THAT a copy of this report be forwarded to York Region and Metrolinx."

To assist us in responding to inquiries, please quote the item and report number.

Sincerely,

Barbara A. McEwan
City Clerk
905-832-8504 | clerks@vaughan.ca

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Item 1, Report No. 19, of the Committee of the Whole (Working Session), which was considered at the Council (Closed Session) meeting of May 16, 2017, was adopted, as amended, by the Council of the City of Vaughan on May 16, 2017, as follows:

By receiving the following Communications:

C2 Confidential Communication from the Deputy City Manager, Legal and Human Resources, dated May 15, 2017; and
C3 Deputy City Manager, Planning & Growth Management, Deputy City Manager, Public Works, Deputy City Manager, Community Services, Deputy City Manager, Legal & Human Resources, dated May 15, 2017.

Regional Councillor Di Biase declared an interest with respect to this matter insofar as it relates to Block 27, as his children own land in Block 27 given to them by their maternal Grandfather and did not take part in the discussion or vote on the matter.

1 METROLINX REGIONAL EXPRESS RAIL UPDATE
CITY WIDE

The Committee of the Whole (Working Session) recommends:

1) That the recommendation contained in the following report of the Deputy City Manager of Planning & Growth Management, Deputy City Manager of Public Works, the Director of Development Engineering and Infrastructure Planning, and the Director of Policy Planning and Environmental Sustainability, dated May 8, 2017, be approved; and

2) That the presentation by Mr. Nick Spensieri, Corridor Infrastructure, and Ms. Erin Moroz, Communications and Community Relations, Metrolinx, and Communication C1, presentation material titled “Creating Connections in the City of Vaughan”, dated May 8, 2017, be received.

Recommendation

The Deputy City Manager of Planning & Growth Management, Deputy City Manager of Public Works, the Director of Development Engineering and Infrastructure Planning, and the Director of Policy Planning and Environmental Sustainability, recommend:

1. THAT the presentation from Metrolinx on the Regional Express Rail (RER) Update be received;

2. THAT Metrolinx be requested to integrate the required grade separation of Kirby Road at the Barrie GO Rail Line with the planning, design and Transit Project Assessment Process (TPAP) for the proposed Kirby GO station;

3. That the Mayor and Clerk be authorized to execute the necessary agreements with Metrolinx respecting the funding of the additional cost for the inclusion of the Kirby Road grade separation and related road works into the current Metrolinx Regional Express Rail program, in the form and content satisfactory to the Deputy City Manager, Planning and Growth Management, the Chief Financial Officer and City Treasurer and the Deputy City Manager, Legal and Human Resources / City Solicitor, with funding from Capital Project DT-7112-14;
CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF MAY 16, 2017

Item 1, CW(WS) Report No. 19 – Page 2

4. THAT Metrolinx be requested to consider structured parking for the Kirby GO station in an effort to maximize developable land surrounding the station and to support a people-oriented community;

5. THAT Metrolinx be requested to support the City, Region and stakeholders efforts to advance plans for the Concord GO Centre Station through the planned Mobility Hub Study;

6. THAT staff report to a future Committee of the Whole meeting on the implementation strategy for both the Kirby Road and McNaughton Road grade separations at the Barrie GO Rail Line; and

7. THAT a copy of this report be forwarded to York Region and Metrolinx.

Contribution to Sustainability

The Metrolinx Regional Express Rail (RER) program is part of a larger comprehensive regional network of rapid transit corridors. As part of the RER service expansion, the Barrie GO corridor, which goes through the City, will result in reduced travel times and give people more options to get to where they want to go. This contributes to sustainability by providing commuters with more travel options and reducing auto dependency. This is consistent with the City’s Community Sustainability and Environmental Master Plan – Green Directions, which identified the goal of ensuring the City is easy to get around and has a low environmental impact.

Economic Impact

Kirby Road is under the City's jurisdiction. The City’s Transportation Master Plan (TMP) identifies the need to widen and improve Kirby Road to support the planned growth in the City including the new communities in Blocks 27 and 41. The TMP also concludes that a grade separation is required on Kirby Road at the Barrie GO rail line.

The cost of the Kirby Road improvements was estimated to be approximately $154 million in 2013. The City’s current Development Charge Background Study (2013) includes $67 million for capital improvements to Kirby Road, including a grade separation at the Barrie Rail Line, road widening and extension within the period of the Development Charge By-law. The balance of the road works ($87 million) was considered a post period benefit.

The City has also budgeted $891,980 through capital project DT-7112-14 for the completion of a Municipal Class Environmental Assessment study for the segment of Kirby Road between Jane Street and Bathurst Street. Of the total budget for these works, $325,000 is committed to the completion of the study for the Kirby Road extension between Bathurst Street and Dufferin Street.

The cost associated with a grade separation on McNaughton Road at the Barrie GO Line is not included as a project under the City's current Development Charge By-law.

Communications Plan

The City’s Corporate Communication staff will be collaborating with Metrolinx’s communication team to ensure consistent and timely messaging.

A copy of this report will be forwarded to both the Region of York and Metrolinx
Purpose

The purpose of this report is to augment a presentation from Metrolinx on the status of the Regional Express Rail (RER) program and to seek Council’s endorsement to request Metrolinx:

i) to integrate the required grade separation of Kirby Road at the Barrie GO rail line with the planning, design and TPAP for the proposed Kirby GO station

ii) to consider structured parking for the Kirby GO station; and

iii) to support the City, Region and stakeholders efforts to advance plans for the Concord GO Centre Station through the planned Mobility Hub Study.

Background - Analysis and Options

Regional Express Rail is a 10-year program to expand commuter rail service providing opportunities for people to change how they commute throughout the entire Region

The vision for the Metrolinx GO RER is to provide more frequent train services (two-way, all-day), higher speed electrified trains that are faster and more reliable, manage congestion on the roads, and promote growth and economic development by improving access to destinations. Metrolinx has worked with the Ministry of Transportation, agencies and other levels of government to develop the GO RER program, which is comprised of five key elements:

1. Service Concept - the foundation to determine infrastructure needs and develop a phasing plan
2. Infrastructure Needs – determination of the infrastructure and equipment needed to deliver on the Service Concept
3. Electrification Plan - the extent of electrification across the system
4. Phasing Plan - the optimal sequencing of infrastructure and service, considering factors like ridership growth, congestion benefits, and effective infrastructure delivery
5. Engagement Plan - the work necessary to engage stakeholders that include the public, municipalities, and elected officials

The Barrie Rail Corridor through the City would undergo significant service improvements under the RER program

As part of the Barrie corridor service improvement program, the following infrastructure build has been identified within the City (see Attachment 1):

- Double track - from Steeles through York University, Rutherford, and Maple to Allandale
- Signal improvements
- Bridge structure modification - including bridge expansion at Major Mackenzie Drive and Barrie GO line just south of Maple GO station
- Station modifications/ parking expansion at Rutherford and Maple GO stations
- Grade Separation at Rutherford GO station
- Two new stations on Barrie Corridor – including a new Kirby GO station in the City within Block 27 new community area.
- Corridor Electrification and Substation – require supporting infrastructures such as traction power substations, switching stations, and overhead contact system. This includes switching stations and paralleling stations at Maple and Rutherford. The Maple Paralleling Station is identified in Block 27.
- Customer experience improvements
The Potential Concord GO Rail Station

Both the Regional and City Official Plans and Transportation Master Plans identify the potential for a GO Rail station at Highway 7 in Concord. The City's approved Concord GO Centre Secondary Plan specifically establishes a planning framework to support a potential station. On June 28, 2016 the Metrolinx Board of Directors adopted a resolution advising municipalities that three stations on the Barrie GO Line, including the Highway 7-Concord (Vaughan) station, would not be included in the 10-year plan. The resolution further provided that,

“Metrolinx will continue to collaborate to improve the strategic, economic, financial, and operations cases for these locations and bring them forward for future consideration to the Metrolinx Board. Additional considerations will include additional land use in the area that supports transit-oriented development and optimizes provincial transit infrastructure investments.”

The Vaughan Term of Council Priorities for 2018 has identified the Concord GO station as a priority project. The City has budgeted for a Mobility Hub (Official Plan) Study and Comprehensive Transportation Study to identify both the land use and transportation measures that will support a multi-modal transit node consistent with the land use and density requirements of the Metrolinx Mobility Hub Guidelines and the Region and City Official Plans. Work has commenced on the procurement process for a consultant for the Mobility Hub and Comprehensive Transportation Study; and it is expected that the Hub study will take approximately one year to complete. This work will provide a solid basis for the reconsideration of this station by the Metrolinx Board. Staff will continue to work with Metrolinx to develop the case as per the Board’s resolution.

Planning for the new Kirby GO station is well underway

On June 28, 2016, the Metrolinx Board approved the selection of additional GO stations on the Barrie GO Rail line in support of the RER expansion program including the new Kirby GO Station in the northeast quadrant of Block 27 within the new community areas.

Regional Council endorsed the new Kirby GO station at its October 2016 meeting. Subsequently, on November 15, 2016, the City’s Council also confirmed the location and the City’s commitment for the new Kirby GO station through the passing of the following resolution:

“Agreeing that the Kirby GO Rail Station be located on the Barrie GO Rail line near the intersection of Kirby Road and Keele Street, in the northeast quadrant of Block 27.”

Since then, City Staff have been working with the transit agencies, Metrolinx and the Region to review and coordinate input on the key elements and deliverables pertaining to the development of the Block 27 Secondary Plan and the Kirby GO station study. Staff were advised by Metrolinx that they will be starting background work this summer for the new Kirby GO station in preparation for the Transit Project Assessment Process (TPAP) to begin in Q1 2018.

As such, Staff has requested Metrolinx to integrate the grade separation of Kirby Road at the Barrie GO rail line with the planning, design and TPAP for the proposed Kirby GO station. Metrolinx agrees with this integrated approach upon City’s agreement that the City’s approval process will not delay the overall station TPAP process, and that the City will be responsible for the incremental cost of including this work into the TPAP process. The incremental cost to include this Kirby grade separation can be facilitated through capital project DT-7112-14 and staff will make every effort to ensure integration occurs efficiently without delay.
Staff will continue to work with Metrolinx, York Region and key stakeholders as the planning of the new station proceeds into the TPAP and report back to Council with status updates at key milestones.

City staff are also in support of the Strategic Parking Management guideline included in Metrolinx’s Mobility Hub Guidelines (September 2011) Section 4.6: Minimize surface parking and integrate parking within surrounding development and parking structures. As a result, stakeholders in the Block 27 planning process have also shared their concerns with surface parking (currently estimated at 1,000 spaces) at the station site. Stakeholders are concerned that large tracts of surface parking would negatively impact the ability to achieve a mixed use node around Kirby Station and planned densities. As such, structured parking should be considered as part of the Kirby GO station. Recommendation to this effect is included in this report.

Expansion works to the existing GO Stations in Vaughan will begin in 2018

Both Rutherford and Maple GO stations have been identified for station modification and parking expansion with 1200 net new parking spaces at each station. An overview of the status and timeline for Barrie GO corridor programed improvements in the City is shown in Attachment 2.

Rutherford GO Station Status

The detailed design for the Rutherford Road grade separation will be completed in Q2 of 2017 and construction is anticipated between 2018 and 2022. The grade separation work includes building a detour road south of existing Rutherford Road to divert traffic for about 2 years while constructing the permanent Rutherford Road underpass and the railway bridge over Rutherford. As part of the grade separation project, a pedestrian bridge will also be constructed on the east side of the railway bridge. City staff have been working closely with York Region and Metrolinx staff in coordinating the grade separation and station construction work. In addition, the Metrolinx Project Team presented the aesthetic design proposed for the pedestrian bridge and station building to the City’s Design Review Panel on January 26, 2017.

The station building rehabilitation, second track and platform and a new multi-level parking structure will also be constructed along the same timeframe as the grade separation from 2018 to 2022. However, the pedestrian tunneling installation that connects the two platforms is expected to be completed by August 2017. The proposed modified station layout and the associated milestone schedule is shown on Attachment 3.

Maple GO Station Status

The Metrolinx Project Team has been working with City staff on reviewing and providing input to the detailed design for Maple GO station modification, proposed parking expansion and rail bridge expansion options over Major Mackenzie Drive south of Maple GO. Effort has been made to coordinate and collaborate as much as possible to minimize disruption to the surrounding areas and construction costs. An example of such effort is the City’s recommendation to include the substructure of a future pedestrian bridge along with the Major Mackenzie rail bridge expansion project. Staff are exploring opportunities to accommodate a future pedestrian bridge.

Construction for the station and parking expansion is anticipated to begin in April 2019 and be completed by 2022. The existing rail bridge just south of the Maple GO station is planned to be widened to accommodate the additional tracks. The detailed design of this bridge expansion is underway and construction is expected to begin in 2018. The proposed modified station layout with milestone schedule is shown on Attachment 4.
The Metrolinx Rail Level Crossings Strategy has assessed all 50 existing level crossings in York Region and identified two grade separations in the City that are necessary to support the RER program.

In conjunction with the RER program, Metrolinx undertook an assessment of the existing level crossings along Barrie GO corridor to determine if grade separations are required to support the RER program. The existing level crossings in Vaughan include:

- Rutherford Road
- Langstaff Road
- Rivermede Road
- McNaughton Road
- Kirby Road
- Teston Road just east of Keele Street
- King-Vaughan Road west of Keele Street

All the above mentioned level crossings were assessed by Metrolinx, however, only the McNaughton Road and Rutherford Road were prioritized by Metrolinx to be grade separated as part of the RER program.

The City will be assessing the Rivermede Road crossing further in conjunction with the Comprehensive Transportation Study associated with the Concord GO Centre Mobility Hub Study and previously approved Concord GO Centre Secondary Plan.

The Draft North-Vaughan and New Communities Transportation Master Plan (NVNCTMP) identifies the need to grade separate Kirby Road to support the new Kirby GO station.

The Draft NVNCTMP confirms that a grade separation at the Kirby Road/GO Rail line is required based on the projected road and rail traffic. Given that the grade separation will also facilitate the necessary access to the proposed Kirby GO Station, there is a compelling case that the grade separation needs to be designed and constructed in conjunction with Kirby GO Station.

The Kirby Road grade-separation should be incorporated with the Transit Project Assessment Process for the new Kirby GO Station to expedite approvals.

Metrolinx will need to undertake a Transit Project Assessment Process (TPAP) for the new Kirby GO Station. Given that the Kirby Road grade separation is integral to the design and operation of the Kirby Go Station, staff are recommending that the grade separation together with the associated road improvements be integrated in the TPAP for the new Kirby GO Station. This proposed integration will ensure a coordinated approach to approvals and will serve to expedite the delivery of the Kirby GO Station.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

This report is consistent with the Term of Council Service Excellence Strategy objectives to:

- Develop transit, cycling and pedestrian options to get around the City
- Invest, renew and manage infrastructure and assets
- Continue to ensure the safety and well-being of citizens, and
- Continue to cultivate an environmentally sustainable City
Regional Implications

The introduction of RER will transform transit in the GTHA and in the Region. The increase in north south capacity along the Barrie, Stouffville and Richmond Hill rail corridors will complement existing YRT/Viva services and improve the utilization and performance of the Viva bus rapid system. It will also reduce crowding and increase the operational efficiency of other transit systems, encouraging more efficient urban development and making it more feasible to travel around the Region without a car. Furthermore, advancing grade separation and associated road improvements on Kirby Road will provide far more continuous uninterrupted east-west corridor movement in the North Vaughan area.

Conclusion

The Regional Express Rail improvement program involves many elements and each involves extensive planning, detailed design, and coordination work from multiple levels of government, agencies and stakeholders. Staff will continue to be engaged and involved in the RER initiatives and report back to Council with updates and for direction and required approvals as more information becomes available.

Staff are recommending that Metrolinx be requested to integrate the required grade separation of Kirby Road at the Barrie GO rail line with the planning, design, approval and construction of the proposed Kirby GO station and to support structured parking at the new Kirby GO Station. Staff are also requesting Metrolinx to be actively involved in the planning for the Concord Go Mobility Hub Study.

Staff will continue to work with Metrolinx to further develop the business case for the potential Concord GO station as per the Metrolinx Board’s resolution.

Attachments

1. Barrie Corridor Improvements Overview
2. Barrie Corridor Improvements Status
3. Rutherford Station Modified Layout and Milestone Schedule
4. Maple Station Modified Layout and Milestone Schedule

Report prepared by:

Selma Hubjer, Manager, Transportation Planning, ext. 8674
Winnie Lai, Project Manager/Transportation Engineer, ext. 8192

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

Regional Councillor Di Biase declared an interest with respect to the foregoing insofar as it relates to Block 27, as his children own land in Block 27 given to them by their maternal Grandfather and did not take part in the discussion or vote on the matter.
BARRIE SERVICE IMPROVEMENTS

ATTACHMENT 1

3 Parking Structures
Upgrades to 6 Stations (new platforms, accessibility, active transportation, etc.)
Corridor Electrification and Substation
Bridge Widenings
Rutherford Grade Separation
2 New Stations
Davenport Diamond Grade Separation
Proposed Stations

Grading and signal improvements are already underway on a six-kilometer stretch of the line between the York University and Rutherford GO Stations.

Trips/Day

14
36
168

Current 5 yrs 10 yrs
BARRIE CORRIDOR PROGRAM OVERVIEW: YORK REGION

- **Mulock GO**
  - Design: 2016-2019
  - Construction: 2019-2022
- **Kirby GO**
  - Design: <5% Complete
  - Construction: 2017
- **Maple GO**
  - Design: 2017
  - % Complete
  - Construction: 2018-2022
- **Rutherford Road Grade Separation**
  - Design/Phase I Construction: 2017
  - Phase II Construction: 2018-2022
- **Rutherford GO**
  - Design: 2017
  - % Complete
  - Construction: 2017
- **Rutherford GO Tunneling Works**

* Dates Subject to Change
## BARRIE: RUTHERFORD GO STATION

### Scope

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<thead>
<tr>
<th>Phase</th>
<th>Description</th>
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<tbody>
<tr>
<td>Phase I</td>
<td>Pedestrian Tunnel Installation</td>
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<tr>
<td>Phase II</td>
<td>Grade Separation&lt;br&gt;Station Building Rehabilitation&lt;br&gt;2nd Track &amp; Platform&lt;br&gt;New Multi-Level Parking Structure&lt;br&gt;1200 Net New Parking Spaces</td>
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### Milestone Schedule

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<th>Timeline</th>
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<tr>
<td>Phase II Construction (DBF)</td>
<td>Jun 2018 - Dec 2022</td>
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## BARRIE: MAPLE GO STATION

### Scope

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<th>Phase</th>
<th>Description</th>
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<tbody>
<tr>
<td>Phase I</td>
<td>2 Pedestrian Tunnels</td>
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<tr>
<td>Phase II</td>
<td>Multi-Level Parking Structure, New Kiss &amp; Ride, Bus-Loop with 4 Bus Bays, Bicycle Facilities, <strong>1200 Net Parking Spaces</strong></td>
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### Milestone Schedule

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<tr>
<th>Event</th>
<th>Dates</th>
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<tr>
<td>Tender Documents Issued</td>
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<tr>
<td>Design Period &amp; Procurement</td>
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<tr>
<td>Construction Period (DBF)</td>
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[Diagram of BARRIE: MAPLE GO STATION showing Pedestrian Bridge/Tunnel, Bus Loop, New Platform & 2nd Track, Kiss & Ride, and Parking Structure.]