

## **8**

### **UNDERGROUNDING OF HYDRO LINES ON HIGHWAY 7 TOWN CENTRE BOULEVARD TO SCIBERRAS ROAD TOWN OF MARKHAM**

**The Transportation Services Committee recommends the adoption of the recommendation contained in the following report dated April 19, 2012, from the Commissioner of Transportation and Community Planning.**

#### **1. RECOMMENDATION**

It is recommended that:

1. The Regional Clerk circulate this report to the Clerk of the Town of Markham.

#### **2. PURPOSE**

This report provides a status update on the widening and reconstruction of Highway 7 from Town Centre Boulevard to Sciberras Road and advises that staff are deferring the design and construction of the work until the Town of Markham has made a decision on whether to proceed with the hydro undergrounding pilot project.

#### **3. BACKGROUND**

**The Council of the Town of Markham requested York Region, PowerStream and the Town of Markham undertake a pilot project for undergrounding of power and utility lines along Highway 7 in Markham Centre corridor**

At its meeting on January 24, 2012, the Council for the Town of Markham passed a resolution requesting York Region, Powerstream and the Town to work together on a pilot project for undergrounding of power and utility lines in Markham Centre along Highway 7 from west of Rodick Road to Sciberras Road.

The Transportation Services Committee at its meeting of February 29, 2012 received correspondence from the Town of Markham (Town) regarding the possible undergrounding of overhead hydro distribution lines on Highway 7 between Rodick Road and Sciberras Road. The Committee made no other resolution regarding this correspondence.

### **York Region has programmed improvements to Highway 7 between west of Rodick Road and Sciberras Road in two distinct sections**

York Region and York Region Rapid Transit Corporation (YRRTC) are planning to widen Highway 7 between west of Rodick Road to Sciberras Road in two distinct sections:

- Section 1 – West of Rodick Road to Town Centre Boulevard
- Section 2 – Town Centre Boulevard to Sciberras Road

### **York Region Rapid Transit Corporation is responsible for the design and construction of Section 1, which forms part of the Vivanext H3 project**

The York Region Rapid Transit Corporation (YRRTC) is responsible for the design and construction of Section 1, which includes widening the roadway from 5-lanes to 7-lanes for conventional transit and general purpose traffic. This project also includes widening the roadway to accommodate Bus Rapid Transit, which is being delivered as part of the Vivanext H3 project.

Construction has begun on Section 1. Much of the utility relocations are complete and road work is scheduled to continue through 2012 and 2013. As a result, it is not possible for York Region to consider a pilot project for this section of Highway 7 because the utility relocations are substantially completed and construction activity has commenced.

### **York Region is responsible for the design and construction of Section 2 which has been divided into two parts**

York Region is responsible for the design and construction of Section 2, which includes widening the roadway from 5-lanes to 7-lanes for conventional transit and general purpose traffic. The road is being urbanized and significant streetscaping to be implemented, to match what is going to be constructed immediately to the west as part of the Vivanext project (H3 Section). The Section 2 road widening project is being implemented in two parts:

- Section 2 (Part 1) - Town Centre Boulevard to Verclaire Gate, is being delivered through the York Region Rapid Transit Corporation's Vivanext project. The detailed design for Part 1 is approximately 30% complete and the construction of this section is scheduled to commence in the summer of 2012.
- Section 2 (Part 2) - Verclaire Gate to Sciberras Road, is being delivered by the Roads Branch as a normal capital road reconstruction project. The detailed design for Part 2 is approximately 50% complete and the construction for this section is scheduled to commence in 2013.

A map showing the project location is included as *Attachment 1*.

**The Town of Markham has requested York Region delay authorizing the utility relocations on Section 2 until the Town makes a decision on the hydro underground pilot project**

In a letter dated March 1, 2012 from Alan Brown, Director of Engineering at the Town (*See Attachment 2*), the Town requests the Region wait to authorize the relocation of overhead hydro lines on Highway 7 between Town Centre Boulevard and Sciberras Road until such time as the Town's Council makes a decision on whether or not to proceed with a pilot project to underground the adjacent hydro lines.

It should be noted that the Council of the Town of Markham passed a resolution at its meeting on June 28, 2011, requesting York Region advance the construction of Highway 7 between Town Centre Boulevard and Sciberras Road.

**4. ANALYSIS AND OPTIONS**

**York Region could proceed with implementing the Section 2 Highway 7 improvements based on the 2012 10-Year Roads Construction Program**

Detailed design and other preconstruction activities are well underway for Highway 7 from Town Centre Boulevard to Sciberras Road.

The complete relocation of the existing overhead hydro lines is required for the road widening. The design for the utility relocation work is already underway for both Parts 1 and 2, in coordination with the designs for the relocations for the other utilities in the corridor (Enbridge, Rogers, Town watermain and Bell). The designs for all the utilities form part of the overall coordinated utility relocation for the corridor.

Utility companies have been working diligently on the design of their relocation requirements and could be in a position to start the physical relocation in summer 2012. This relocation would be an aerial relocation, which would result in hydro distribution lines being affixed to poles above ground.

**Proceeding with the design and construction ahead of a decision on the undergrounding of the hydro lines will encumber any future initiative to relocate the aerial cables underground**

Should the Town determine that they want to pursue the undergrounding of the hydro distribution lines along this section of Highway 7, Powerstream has indicated that they would require a 2m unobstructed corridor in the boulevard. Based on the road and utility relocation design work currently underway, there is not enough unobstructed space in either boulevard for such a corridor. Significant changes will therefore be required to the utility relocation designs, and perhaps also to the road, street lighting, and streetscape designs, to allow for future undergrounding.

**Agreeing to defer the project until after the Town of Markham has made a decision will result in a minimum one-year delay in the implementation of the Highway 7 improvements**

If the Region was to agree to delay authorizing the relocation of the hydro lines, the impact would be a delay of at least one year on each section of Highway 7. Part 1 would not start until the summer of 2013, and Part 2 would not start until the summer of 2014.

The delay could be even longer if the decision is made to underground the hydro lines prior to the road construction. It is not known at this time how long it will take Powerstream to design and construct a relocation of the aerial distribution cables underground.

**The Town of Markham is a key partner in this project and having their full support to proceed with the design and construction is necessary to deliver a successful project**

The Town of Markham is a partner in the widening of Highway 7. Should the Region decide to proceed without the Town's support, the project will still likely experience delays. For instance, a partnership that is not fully supportive could affect planned utility work, creating issues and timing concerns regarding the completion of work (i.e. Utility companies have large workloads and may move on to other projects in the event of delays).

**York Region and the Town of Markham are collaborating on a shared storm sewer in the Highway 7 corridor**

York Region and the Town of Markham are collaborating on the design, construction and operation of a shared storm sewer and storm water management facility in the Highway 7 corridor within these project limits. Regardless of the direction taken on the hydro undergrounding, the shared storm sewer is proceeding, with design nearing completion and construction expected to start in fall 2012.

Staff will be reporting on the shared storm sewer project in June 2012, pending discussion with the Town of Markham regarding cost sharing and design information.

**Link to Key Council-approved Plans**

The recommendation of this report has a direct linkage to *Vision 2026 - Towards a Sustainable Region*. Specifically, Developing an Integrated Transportation Network, Quality Communities, and Being a Region that involves its Citizens. The recommendation of this report has a direct linkage to the 2011 to 2015 Strategic Plan, specifically continue to deliver and sustain critical infrastructure.

## **5. FINANCIAL IMPLICATIONS**

The approved 2012 10-Year Roads Construction Program has allocated approximately \$13.9M for the pre-construction and construction related improvements on Highway 7 between Town Centre Boulevard and Sciberras Road.

Approximately \$1.1M of this has been allocated for work in 2012. Approximately \$700K of the 2012 budget will be unspent in 2012 should the Highway 7 improvements be delayed until after Markham has made a decision on the hydro undergrounding.

## **6. LOCAL MUNICIPAL IMPACT**

The Town of Markham will benefit from the additional transportation capacity and community improvements provided through the Highway 7 project.

Significant discussion has been ongoing with Town staff throughout the planning and design of the Highway 7 improvements. The Region is constructing landscaping, illumination and other pedestrian amenities as part of the road improvements that will provide significant benefit to Markham and their residents and businesses.

## **7. CONCLUSION**

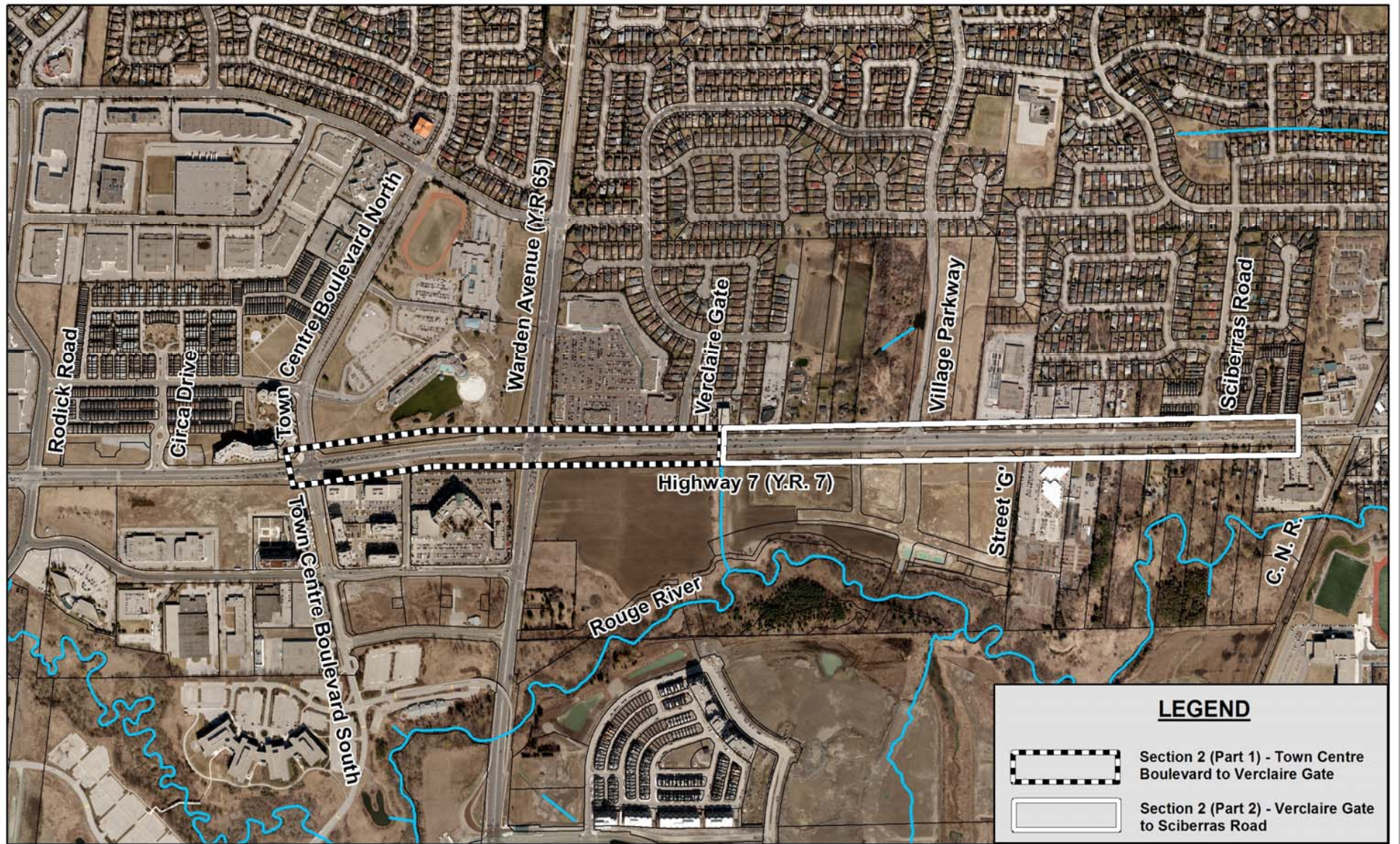
The Town of Markham has asked York Region and Powerstream to join them in a pilot project for undergrounding the hydro lines on Highway 7 between Town Centre Boulevard and Sciberras Road. York Region has been asked to delay portions of the road improvement project, specifically the utility relocations, until such time as the Town of Markham has made a decision on whether to proceed with the pilot project.

Staff are deferring further work on the design and pre-construction activities for the Highway 7 project between Town Centre Boulevard and Sciberras Road until after the Town of Markham has made a decision on the pilot project and Regional staff have had an opportunity to assess what impact, if any, the Town's decision has on the Highway 7 improvements.

For more information on this report, please contact Mr. Brian Titherington, Director, Roads at Ext. 5901.

The Senior Management Group has reviewed this report.

*(The two attachments referred to in this clause are attached to this report.)*



# LOCATION PLAN

Project 98180 Undergrounding of Hydro Lines  
 Highway 7 (Y.R. 7) from Town Centre Boulevard to Sciberras Road  
 Town of Markham

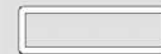
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ROADS BRANCH - CAPITAL DELIVERY

## LEGEND

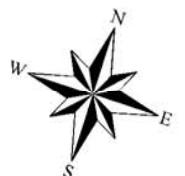


Section 2 (Part 1) - Town Centre Boulevard to Verclaire Gate



Section 2 (Part 2) - Verclaire Gate to Sciberras Road

Produced By: Roads Branch - Capital Delivery  
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Engineering Department

March 1, 2012

York Region  
17250 Yonge Street,  
Newmarket, ON L3Y 6Z1

**Attention: Mr. Brian Titherington, P.Eng., Director of Roads**

Dear Sir:

**SUBJECT: VIVA / York Region Transit Rapidway – Hwy 7 from Town Centre to Verclaire**

At its meeting of January 24, 2012, Council for the Town of Markham passed a resolution requesting that the Region of York, PowerStream and the Town undertake a pilot project for the undergrounding of power and utility lines in Markham Centre from the Rouge River west of Rodick Road to Sciberras Road along Highway 7 in 2012-2013.

PowerStream has indicated its openness to consider funding a percentage of the project costs, subject to approval by the Ontario Energy Board (OEB). PowerStream's Board of Directors will be making a decision in the near future as to whether it will make an application to the OEB for approval and to what percentage it will propose to fund the pilot project. We understand that submission of an application to the OEB does not guarantee approval, as the OEB needs to gather information and review the application prior to ruling on a decision.

Simultaneously, Town staff is exploring funding alternatives for the section of Hwy 7 from Town Centre Blvd to Sciberras Road. Staff will be returning to Council on April 24<sup>th</sup> to provide a report on its findings and to seek a commitment from Council to proceed at least with the funding of the detailed design.

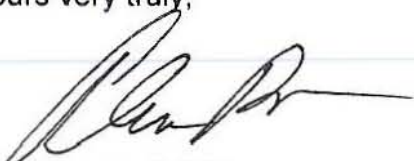
We understand that the Region is considering proceeding with construction of the section between Town Centre Blvd and Verclaire Gate this spring. In view of our Council's desire to find the means to proceed with this pilot project, we would respectfully request that York Region not authorize the relocation of the overhead hydro lines between Town Centre Blvd and Sciberras Road until our Council makes a decision on whether or not it will proceed with the undergrounding Pilot Project.

I would appreciate your advice as to the potential impact on your overall construction schedule for Hwy 7 so we can advise Council in our April 24, 2012 report.

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Please feel free to contact me should you need to discuss this further.

Yours very truly,



Alan Brown, C.E.T.,  
Director of Engineering

cc: Irv Klajman, P.Eng., Director, Distribution Design, PowerStream  
Patrick Leung, P.Eng., MBA, Manager, Capital, PowerStream  
David Atkins, P.Eng., PMP, Senior Project Manager, York Region  
Rachel Prudhomme, M.Sc., P.Eng., Manager, Special Projects, Town of Markham