

# THE REGIONAL MUNICIPALITY OF YORK

Rapid Transit Public/Private Partnership Steering Committee  
April 16, 2009  
Report of the  
Vice President of the York Region Rapid Transit Corporation

## VIVANEXT CONCEPT DESIGN AWARD YONGE STREET, HIGHWAY 7, AND GREEN LANE

### 1. RECOMMENDATIONS

It is recommended that:

1. Subject to staff determining in conjunction with the Owner's Engineer that York Consortium 2002's bid price is cost competitive and within budget, and confirmed by the Province as being within the Quick Wins funding, that York Consortium 2002 be retained to undertake concept design including identifying property requirements for rapidways on the:
  - H1 segment, on Highway 7 from Highway 50 to Pine Valley Drive.
  - H4 segment, on Kennedy Road from Helen Avenue to Highway 7, and on Highway 7 from Kennedy Road to the Cornell Terminal.
  - Y3 segment, on Yonge Street from 19<sup>th</sup> Avenue/Gamble Road to Mulock Drive, and from Davis Drive to Green Lane.
  - G1 segment, on Green Lane from Davis Drive to the East Gwillimbury GO Station.
2. Council authorize the Regional Chair and Clerk to execute the necessary contracts with the successful proponent for such work in a form acceptable to staff and Legal Services.
3. In the event that York Consortium 2002's bid price to undertake the work is not deemed to be cost competitive, that Council authorize staff to immediately publicly tender and award the work, subject to funding availability and being within budget.
4. The Regional Chair and Clerk be authorized to enter into the Provincial Quick Wins Contribution Agreement subject to review by Legal Services as to form and content.
5. Staff report back to Council on the progress of the work on a regular basis.

## **2. PURPOSE**

This report seeks approval for York Consortium 2002 (YC2002) to undertake concept design and prepare plans identifying property requirements for the H1, H4, Y3 and G1 rapidway segments (see Figure 1). The award would be subject to the successful negotiation of a price for the work, which will be evaluated through a cost competitive process in conjunction with the Owner's Engineer.

This report also seeks authority for the Regional Chair and Clerk to enter into any necessary agreements with YC2002 to undertake such work, and the necessary provincial agreements to secure funding.

## **3. BACKGROUND**

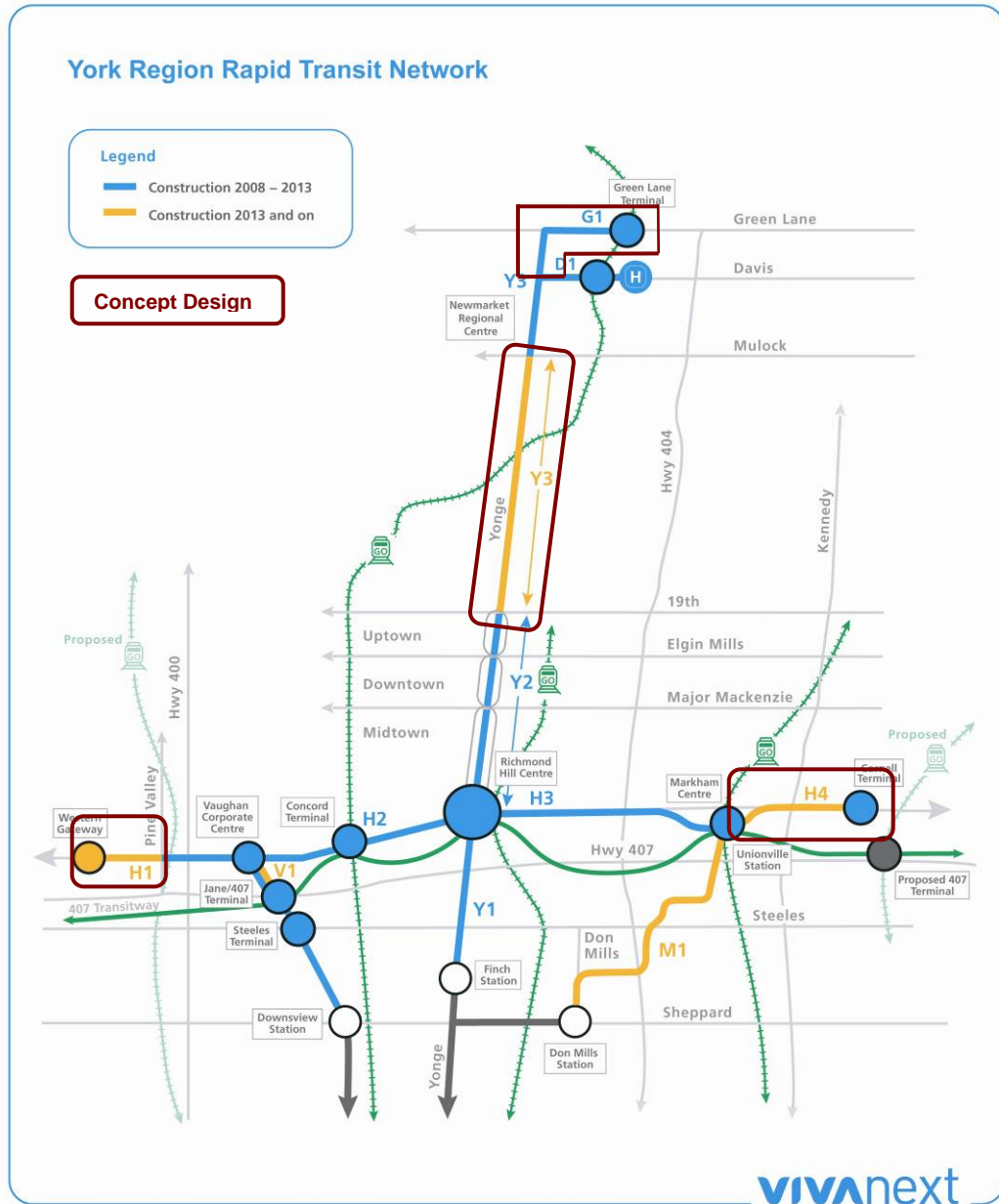
Viva Phase 1 rapid transit runs today in mixed traffic in four key corridors as shown in Figure 1. VivaNext includes the construction of 67 kilometres of surface rapid transit in these same corridors, integrated with the extension of the Yonge Street and Spadina subway lines north to the Richmond Hill Centre and Vaughan Corporate Centre, respectively.

In June 2007, the Province announced an aggressive transportation investment program, MoveOntario 2020. During October 2007, the York Region Rapid Transit Corporation prepared a detailed submission of all rapid transit Quick Win Projects that could be delivered in the next five years (by 2013), as well as post-2013 projects which would expand on the core of the Viva system connecting the Regional growth centres and enhance inter-regional connections with the adjacent Regional Municipalities of Peel and Durham.

The Quick Wins Tranche 2 project list for York Region was approved in the Provincial Spring Budget on March 25, 2008. Total project funding of \$100,000,000 was provided for preliminary engineering, intelligent transportation systems and buses.

On November 28, 2008, Metrolinx issued the Viva Benefits Case, which recognized the benefits of the entire vivaNext programme and recommended constructing the programme in stages as a result of available funding. At that same meeting, confirming the commitment to the vivaNext programme, the Metrolinx Board approved the five-year Capital Plan for the five fiscal years commencing April 1, 2009. For the 2009/10 provincial budget submission, \$77 million was identified for Viva, with a total expenditure profile of \$1,093.8 million to 2013/14 for that project. The aggregate of projects being recommended for Provincial budget approval amounted to \$495.5 million of expenditures for the 2009/10 fiscal year, with a total capital programme over the five year period being \$6,996.2 million.

**Figure 1**  
York Region Rapid Transit Network – vivaNext



Staff continues to work with the Federal Government, Ministry of Transportation Ontario, Metrolinx and Infrastructure Ontario to best allocate funding to eligible projects so that work may progress in a timely manner.

## 4. ANALYSIS AND OPTIONS

### **Environmental assessments are complete**

Environmental assessments have been completed for all segments of the vivaNext rapidways.

### **The Y2 (Yonge Street from Richmond Hill Centre to 19<sup>th</sup> Avenue) and H2 (Highway 7 from Richmond Hill Centre to Pine Valley Drive) segments are to be awarded as part of the alternative finance work programme with Infrastructure Ontario**

It has been agreed through discussions with Infrastructure Ontario and Metrolinx that the Y2 and H2 segments of work will proceed as part of a work programme with Infrastructure Ontario. Staff has been working with Infrastructure Ontario to determine the business arrangements amongst ourselves, Infrastructure Ontario, Metrolinx and the Province. A fulsome report regarding these arrangements will be the subject of a future report to Committee. It is contemplated that in addition to the design and construction of the Y2 and H2 segments, that the work will proceed as a DBFOM (Design, Build, Finance, Maintain and Operate) and will include a fifteen year operating concession for the Viva system commencing in 2015.

In order to ensure that the project is ready to award by 2010, we are advancing the H2 work to the same level of readiness as the Y2 work, which is nearing completion of preliminary engineering.

### **The H1, H4, Y3 and G1 rapidways are the only remaining segments to be developed**

Preliminary engineering is now underway or complete on all rapidway segments except for:

- H1, which is the western limit of rapidways on Highway 7, extending from the western terminus at Highway 50 to just west of Pine Valley Drive (adjoining the H2 segment).
- H4, which is the eastern limit of rapidways on Highway 7, extending from the Unionville GO Station west of Kennedy Road (adjoining the H3 segment) to the Cornell Terminal. Viva service will ultimately continue east of the Cornell Terminal to the York-Durham Line in mixed traffic, with a turn-back loop provided to facilitate repositioning of the buses.
- Y3, which extends the rapidways on Yonge Street northerly from Uptown Richmond Hill at 19<sup>th</sup> Avenue (adjoining the Y2 segment), through Aurora, to Mulock Road in Newmarket, and from Davis Drive northerly to Green Lane. The section through the historic downtown of Aurora will continue to operate in mixed traffic due to the limited roadway width and existing development. North of Davis Drive, Viva will operate in high occupancy vehicle lanes as an interim stage and ultimately in rapidways. Concept design and preliminary engineering work on the Y3 segment from Mulock Road to Davis Drive, and on Davis Drive, is about to commence under a separate work programme.

- G1, which includes rapidways as an ultimate stage from Yonge Street to the East Gwillimbury GO Station, and is the northern terminus of the Viva network.

Concept level design will be completed for the ultimate rapidway configurations and stations on all segments, in order to fully identify the property requirements and to prepare the segments for moving forward to construction.

**Funding for concept level design has been accommodated in the Quick Wins Tranche 2 funding envelope**

Staff has been working with the Ministry of Transportation Ontario to realign Quick Wins funding with immediate needs. The Province has agreed, in principle, to allow for the advancement of concept level design work for the outer segments of the network to define land requirements. The concept level design work for H1, H4, G1 and the remainder of Y3 has been budgeted at \$15.3 million in total.

**Concept level design will establish the design basis and property requirements for future implementation of rapidways in these corridors**

Concept design is typically the level of design development required to confirm property requirements. Concept design is often the first step of preliminary engineering, but can also be done as an independent work programme. Concept design activities typically include:

- Confirming the design criteria and design basis, including an assessment of the cross-section, alignment, station layouts and intersections for consistency with the approved vivaNext design standards and operational requirements.
- Investigating terminal or turn-back requirements at the limits of the project, including interfaces with transit services in the adjacent municipalities.
- Developing interfaces between rapidways and mixed traffic sections, where required.
- Conducting a high-level analysis of existing drainage areas/features and the impact of the changes to the road cross-section to accommodate the rapidway, particularly drainage improvements potentially requiring additional property.
- Identifying existing and planned utilities potentially impacted by the project to assess utility relocations, or assist the utility companies with the design of new installations such that they would not be impacted by the future rapidway works.
- Preparing 1:500 scale concept design plans for the rapidway, stations, intersections, and realigned roadways.
- Preparing property plans which identify all permanent property requirements and permanent and temporary easements, to assist with the review of site plans and other development proposals so that future rapidway needs are protected, and for the commencement of property acquisition when appropriate.
- Liaison with approval authorities, local municipalities and transit service providers to collect information, discuss issues, identify permit/approval requirements, and review the concept design plans.

### **A work programme is currently under development**

The Owner's Engineer is presently finalizing a work programme encompassing concept design for the remaining segments. The scope of work is being developed in consultation with York Consortium 2002 (YC2002) based on the previously completed environmental assessments. This work programme will form the basis of the business proposal from YC2002 to carry out this work.

The Master Agreement and Go-Forward Business Arrangements Agreement provide guidance and direction on the process to be followed for negotiating and awarding work to YC2002 to ensure accountability, transparency and cost confidence. The bid price submitted by YC2002 for this work will be assessed within the terms of these agreements, in conjunction with the Owner's Engineer. Based on the Owner's Engineer's recommendation, either a contract will be awarded to YC2002 for their bid price, or negotiations will commence to determine a price acceptable to the Region. In the event that YC2002's bid price to undertake the work is not deemed to be cost competitive, the Region may proceed to publicly tender the project.

### **The Owner's Engineer will oversee the work**

Under the arrangements of their current contract, the Owner's Engineer will oversee the delivery of services by York Consortium 2002 for this work programme.

### **An implementation schedule for the H1, H4, Y3 and G1 segments will be developed**

The construction of the H1, H4, Y3 and G1 segments is not anticipated before 2013 on the basis of the approved October 2008 benefits case for vivaNext. Staff is committed to continuing to work with Metrolinx with respect to the timing to determine if opportunities related to growth and new development, network planning, inter-regional connectivity, and funding availability can trigger an earlier construction start on these segments. In any event, the completed concept design will enable a smooth transition into property acquisition and preliminary engineering activities, when required.

## **5. FINANCIAL IMPLICATIONS**

The approved 2009 rapid transit capital budget anticipated work programmes and undertakings that had Provincial and/or Federal funding associated with them. Although the total dollars available have not changed, the programmes against which the funding dollars have been applied have adjusted as a result of outcomes of contribution agreements, eligible dates for expenses, emerging priorities, the state of readiness of projects, and agreement by Provincial and/or Federal funding partners.

Costs for advancing the concept level design work on the outer segments of the system (H1, H4, G1, Y3) have been accommodated in the Quick Wins approved funding of \$100 million.

## **6. LOCAL MUNICIPAL IMPACT**

The benefits of constructing rapidways to take rapid transit vehicles out of mixed traffic will result in travel time savings for rapid transit passengers and truly put the “rapid” into the York Region rapid transit system.

Moving forward with concept design on these post-2013 projects will ensure a state of readiness when implementation is scheduled and enable the Region to identify and procure the necessary properties to advance to an Alternative Finance and Procurement delivery strategy.

## **7. CONCLUSION**

This report seeks authorization to award a contract to York Consortium 2002 for concept design of the H1, H4, Y3 and G1 rapidways, including stations, intersections, local transit interfaces and terminal/turn-back facilities, for the ultimate rapidway and station configurations. This work will bring all segments of the vivaNext network to a concept design level.

The work will be awarded, provided that either YC2002’s business proposal falls within the parameters established in the Master and Go-Forward Business Arrangements Agreements, or that staff is able to negotiate a satisfactory price for this work based on the recommendations of the Owner’s Engineer. If this is not possible, this report recommends immediately tendering the work publicly.

A total budget of \$15.3 million was provided for in the 2009 10-Year Capital programme. The cost of this work is fully recoverable from MoveOntario 2020 Quick Wins Tranche 2 funding.

For additional information, please contact Mary-Frances Turner, Vice-President, York Region Rapid Transit Corporation at (905) 886-6767 ext. 2226.

The Senior Management Group has reviewed this report.

Recommended by:

Approved for Submission:

Mary-Frances Turner, MCIP, RPP  
Vice President,  
York Region Rapid Transit Corporation

Bruce Macgregor  
Chief Administrative Officer

April 2, 2009

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