COMMITTEE OF THE WHOLE – FEBRUARY 28, 2012

KEELE STREET CLASS ENVIRONMENTAL ASSESSMENT
STEELES AVENUE TO RUTHERFORD ROAD
REGION OF YORK
WARD 4

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. THAT this report regarding the Region of York's Class Environmental Assessment (EA) Study be received for information purposes;

2. That York Region be requested to work with the City of Vaughan during the design phase for each road segment identified for improvements in the Keele Street EA so that the appropriate City infrastructure can be implemented concurrently with the road works; and

3. That a copy of this report be forwarded to York Region.

Contribution to Sustainability

The recommendations of the Keele Street EA contribute to sustainability by proposing a multi-modal transportation network. The network will provide for transit/high occupancy vehicles, and bike lanes to encourage cycling.

In addition, the Keele Street EA Study integrates regional sustainability objectives, including preservation and enhancement of the natural environment, economic vitality and healthy communities, while providing safe and efficient services for residents in York Region.

Economic Impact

There are no immediate economic impacts associated with this report.

Communications Plan

York Region will be apprised of any resolution passed by Council relating to this item.

Purpose

The purpose of this report is to provide Council with an overview of the conclusions and recommendations of the Region of York's Environmental Assessment Study for road improvements to Keele Street from Steeles Avenue West to Rutherford Road.

Background - Analysis and Options

York Region initiated the Keele Street Class EA in 2006 to develop, assess and provide transportation improvements on Keele Street from Steeles Avenue West to Rutherford Road to support existing and proposed developments.

The specific study area is bounded by Steeles Avenue West to the south, Rutherford Road to the north, and extends approximately 300 m each side of Keele Street as shown on Attachment No.1. Current land uses in the area are mainly industrial with some commercial and limited office. There are two residential areas adjacent to Keele Street located in the southeast corner of the Keele

Street / Highway 7 intersection, and the southwest corner of Keele Street / Rutherford Road intersection. The subject area is undergoing a transformation with respect to land use and transportation. With significant development proposed in the Vaughan Metropolitan Centre (VMC), Official Plan Amendment (OPA) 620 Lands, and York Region, transportation demand in this corridor is expected to increase.

The Region's Keele Street EA Study builds on the recommendations of previous studies and the Region's Transportation Master Plan (TMP) Update. Also, various Provincial planning studies and policies were utilized to establish the framework to identify solutions to address the anticipated traffic demand, traffic congestion and traffic issues along Keele Street within the study area. Recent and ongoing studies that would have an impact on the road and transit issues in the study area include the following:

- York Region Transportation Master Plan
- Highway 7 Corridor and Vaughan N-S Link Transit Improvements EA
- York Region Rapid Transit Plan
- Spadina Subway Extension EA
- City of Vaughan OPA 620
- City of Vaughan Draft Class EA for East-West Road in OPA 620
- Transitway Corridor Protection Study
- Highway 407 / Parkway Belt West Corridor
- York University Secondary Plan

Public Consultation Process

York Region held two Public Consultation Centres (PCCs) during the study with the first PCC being held on June 18, 2007 and the second PCC held on May 4, 2011.

In addition to formal public meetings, various meetings where held throughout the study process with a variety of stakeholders, including City of Vaughan, City of Toronto, Toronto and Region Conservation Authority, and CN Rail. Several meetings and discussions were also held with various property owners and representatives from rate payers associations, including the Concord West Association. A Technical Advisory Committee was formed at the beginning of the EA study, and meetings were held at key points throughout the study to review findings, discuss the preliminary proposed recommendations and receive input.

Keele Street Class EA– Environmental Assessment Process

The Class EA process requires that all reasonable and feasible solutions be examined to resolve the problems of the project. The following alternative solutions were investigated:

- **Do Nothing** – No improvements to address the project specific problems or opportunities on Keele Street.
- **Implement Travel Demand Management Measures** – Issues typically include trying to spread out the peak period of travel by encouraging people to travel at off peak hours, encouraging car pooling, work at home, and telecommuting.
- **Transportation System Management Measures** – Improvements are usually of an operational nature such as traffic signal phasing / timing improvements.
- **Improvements to Public Transit** – Initiatives normally include adding more buses to reduce the wait time between buses, providing traffic signal priority for buses, queue jump lanes, providing more opportunity to increase capacity and obtain seats on the bus and provide better waiting facilities, such as more shelters.
- **Operational / Intersection Improvements** – Improvements normally include addition of exclusive turning lanes at intersections and / or adding separate traffic signal phases for high left-turning traffic movements, etc.

- **Widen Other Parallel Roads** – Improvement is to divert traffic that is currently using Keele Street to other parallel roads such as Jane Street and / or Dufferin Street.
- **Widen to Six Lanes to Provide Transit / HOV / Bike Lanes** – Improvements include widening from 4 to 6 lanes for transit / HOV lanes to meet the increasing travel demands, adding bicycle lanes, and improving operations and safety.

Preliminary Preferred Solution

Comments received from the public and agencies were incorporated into the evaluation process. The alternative solutions were re-evaluated based on the assessment criteria. It was confirmed that the preliminary preferred solution is to **widen Keele Street to add transit/HOV lanes and bike lanes**, in accordance with the Region of York Transportation Master Plan.

Generation of Alternative Design Concept

Several constraints were taken into account when developing the alternatives that were evaluated as follows:

- Four watercourse crossings of the Don River Watershed
- Cemetery area and church on the east side of Keele Street, north of Langstaff Road
- Major Enbridge Gas facility located in the southwest corner of the Keele Street / CN Rail Corridor
- Existing bridge over Highway 407
- Concord West residential area located in the southeast corner of the Keele Street / Highway 7 intersection
- Coordination with the VIVA design and construction for installing Bus Rapid lanes along Highway 7
- No improvements to Steeles Avenue or any roads within the City of Toronto are to be widened as part of this project
- Minimize property impacts and acquisitions
- Minimize impacts to the natural and social environment
- Lane widths and median widths as per the Design Guidelines outlined in the Towards Greater Regional Streets report approved by Council
- CN Rail structure condition and location
- Maintenance of driveway accesses

Alternative Road Widening

The design alternatives that were considered and evaluated include:

- Alternative 1 – Symmetrical widening of the roadway
- Alternative 2 – Widen only on the west side of the existing roadway
- Alternative 3 – Widen only on the east side of the existing roadway

After evaluating against each criterion, symmetrical widening of the roadway was recommended.

In addition to the basic road widening to accommodate HOV / transit and bike lanes, each of the major intersections within the study area were analyzed to develop concepts to provide additional capacity and reduce delays. The key recommended improvements are as follows:

Keele Street / Steeles Avenue West

Keele Street southbound at Steeles Avenue currently has two southbound through traffic lanes, and exclusive left-turn lane and exclusive right-turn lane. This configuration is proposed to be maintained in the future as the City of Toronto has a policy of not widening roads within the City. Widening is proposed on the north side of the intersection to add a third northbound traffic lane to improve traffic and transit.

Keele Street / Highway 7 Intersection

The recommended design maintains the eastbound dual left-turn lanes at the Keele Street / Highway 7 intersection. In addition, exclusive right-turn lanes at the Keele Street / Highway 7 intersection will be provided to increase the intersection capacity and reduce delays, where warranted. The VivaNext Bus Rapid transit lane requirements are incorporated in the recommended intersection design.

Keele Street / Rutherford Road Intersection

The Region has commenced a Class Environmental Study for improvements to Rutherford Road from Jane Street to Yonge Street. This study will identify the improvements to Rutherford Road to improve capacity and reduce delays.

Recommended Design Concept

Key elements of the Region's recommended design including the following:

- 6 lane cross-section to provide for transit / HOV lanes as well as on-street bike lanes in each direction
- Minimum 36 metre right-of-way
- Sidewalks on both sides of the roadway
- 2.0 to 4.2 metre landscaped raised centre median
- Streetscaping in the boulevard areas where possible
- Culvert replacements where required
- Access at properties adjacent to intersections revised to right-in, right-out only. Where a property has more than one access, then the second access is revised to right-in, right-out only
- U-turns at intersections
- CN Rail structure replacement
- Storm water quality facilities

The Region's typical cross-section proposed for the project is illustrated on Appendix 2A and 2B. The roadway section consists of four 3.3 metre traffic lanes, two 3.5 metre HOV lanes + 2 lanes and two 1.5 metre bike lanes. The Region will confirm the exact lane configuration details and design of the median landscaping during detail design. In addition, the recommended design concept identifies the need to restrict existing access to some properties along Keele Street to right-in, right-out movements only due to the proposed raised centre medians.

The Region's general landscaping requirements are identified in the Toward Greater Regional Street guidelines and are incorporated into this project. The City is undertaking a Streetscape Plan along Keele Street from Highway 7 to Highway 407, and along Highway 7 from Keele Street to Centre Street in the area of the Concord West Community. The recommendations of the approved Concord West Streetscape Plan could be incorporated into the detailed design and construction of the Region's Keele Street capital project. The initial recommendations of the City's Concord West Streetscape Plan proposes the use of concrete pavers within the public road allowance at gateway locations into the Concord West community, as well as pedestrian lighting. The details of these streetscape measures will be finalized during the Concord West Study.

Implementation

The Region's Class EA is recommending that the Keele Street improvements be implemented in phases. The first phase will extend from Steeles Avenue to the south side of Highway 7. In May 2011, Regional Council approved the consulting assignment for the detailed design of this segment of Keele Street.

Phase 2 of the project will include the intersection improvements at Highway 7 as part of VivaNext bus rapid transit project along Highway 7. The phase 2 works are currently programmed between 2015 and 2020.

The remaining section of Keele Street from north of Highway 7 northerly to Rutherford Road is scheduled for later construction to be determined by monitoring the condition of the pavement structure and the increase in traffic volumes. The anticipated timing for any work within this portion of the corridor is currently 2017, at the earliest.

Staff Comments

Staff from various City departments attended the TAC meetings and provided input that guided the study in developing recommended alternative. In addition, a number of focused meetings were held between Regional and City staff to discuss certain aspects of the study including the provisions of sidewalks and streetlighting, the existing municipal services located within the Keele Street road allowance and the proposed road network in the OPA 620 Lands. Accordingly, staff is generally satisfied with the findings and recommendations of the Keele Street Environmental Assessment Study Report (ESR).

Public Review Period

The planning and design process has been documented in an Environmental Assessment Study Report (ESR) and was submitted to the Ministry of Environment in January 2012. The ESR is available for public review for 30 days, beginning January 23, 2012.

Regional Implications

York Region is the proponent of the Class Environmental Assessment Study for road improvements to Keele Street from Steeles Avenue West to Rutherford Road.

Relationship to Vaughan Vision 2020/Strategic Plan

This report is consistent with the priorities previously set by Council Vaughan Vision 2020 strategic initiatives:

- To enhance and ensure community safety, health and wellness;
- To pursue excellence in service delivery;
- To lead and promote environmental sustainability; and
- To plan and manage growth and economic vitality.

This report is therefore consistent with the priorities previously set by Council.

Conclusion

York Region has completed the Class Environmental Assessment Study for road improvements to Keele Street from Steeles Avenue West to Rutherford Road. The Street Class EA was initiated in 2006 to develop, assess and provide transportation improvements on Keele Street from Steeles Avenue West to Rutherford Road to support existing and proposed developments. The planning and design process has been documented in an Environmental Assessment Study Report (ESR), which was submitted to the Ministry of Environment in January 2012.

Staff has reviewed the technical aspects of the Keele Street EA and is generally satisfied with its recommendations.

Attachments

1. Study Area
2. Proposed Keele Street Cross Section (Option 1 and 2)

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Respectfully submitted,

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Commissioner of Engineering and Public Works

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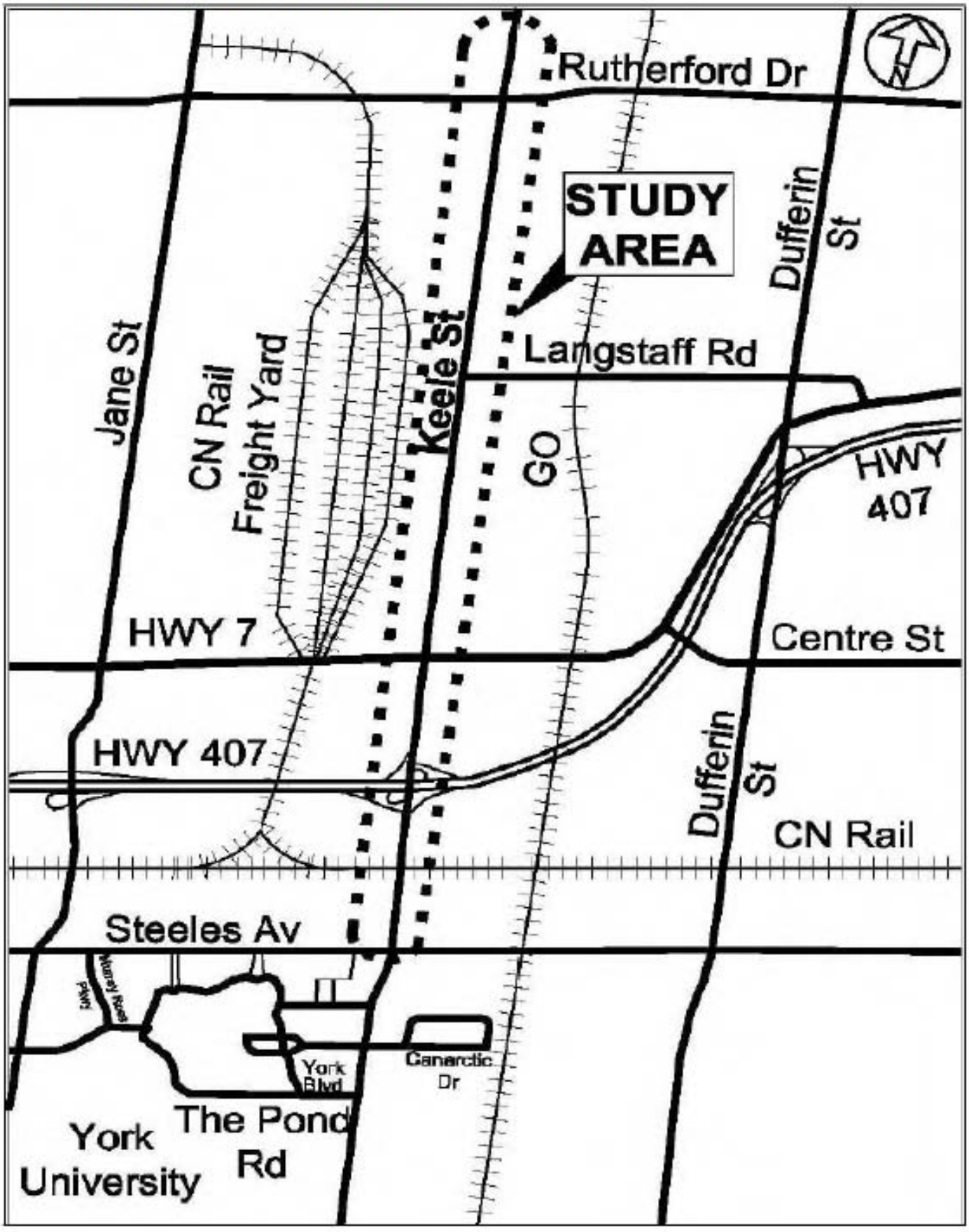
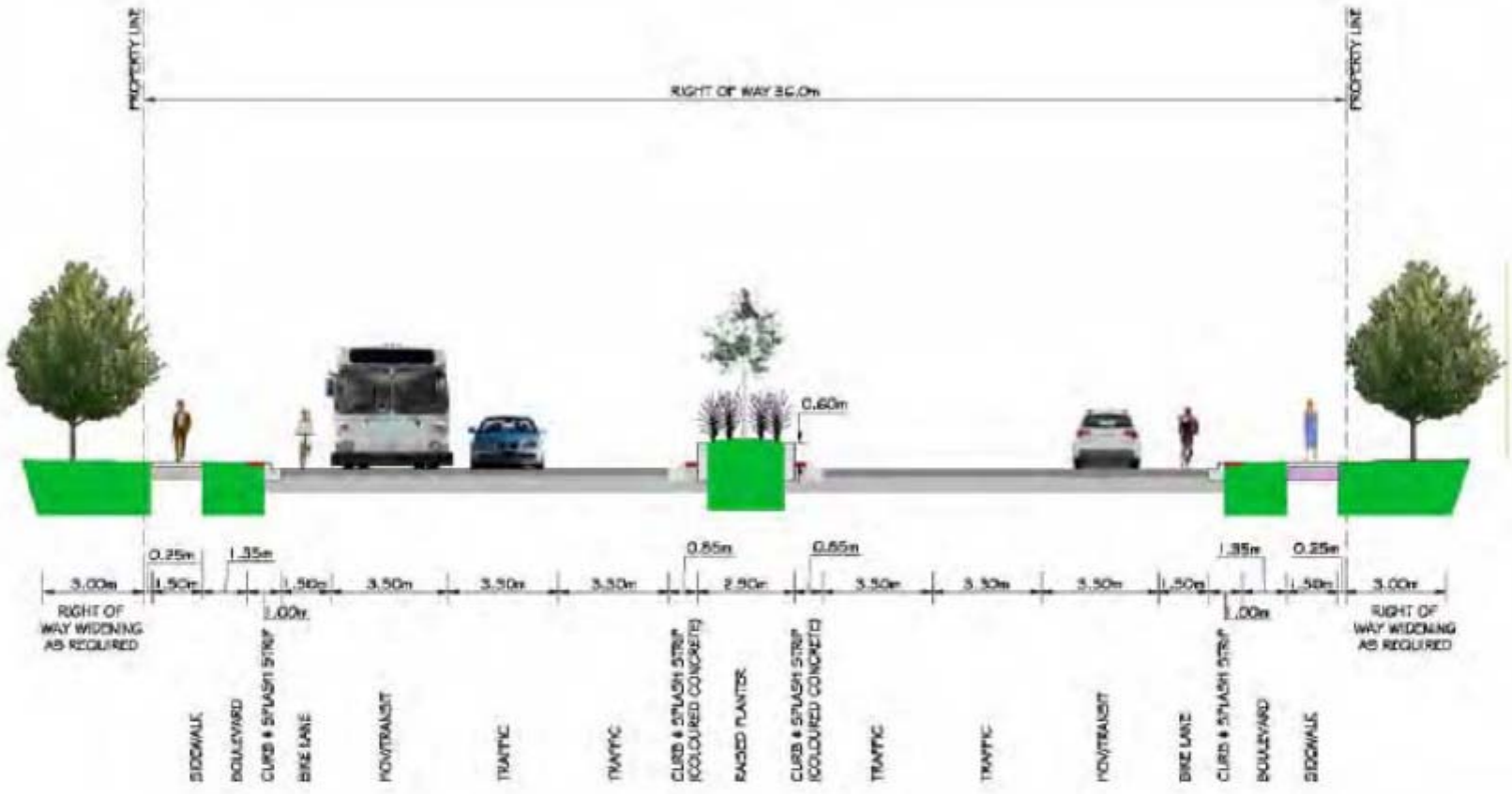
Attachment 1: Study Area



Attachment 2: Proposed Keele Street Cross Section Option 1



NOTES:
1. ALL SECTIONS ARE GENERIC AND ARE FOR CONCEPTUAL DESIGN PURPOSES ONLY. ACTUAL LAYOUTS MAY VARY AND ARE DEPENDENT UPON SPECIFIC SITE CONDITIONS.
2. PROPOSED TREES LOCATED BEYOND THE PROPERTY LIMIT OF THE ROW TO BE INSTALLED WHERE FEASIBLE IN CONSULTATION WITH PROPERTY OWNERS

KEELE STREET CROSS SECTION (4.6m MEDIAN STRIP)

Option 1: Median Planting Bed in Raised Planter	Date	Scale	Dwg. No.
	AUGUST 2008	N.T.S.	Figure 6.2

Attachment 2: Proposed Keele Street Cross Section Option 2