

COMMITTEE OF THE WHOLE – JUNE 2, 2009

ZENWAY BOULEVARD AND NEW HUNTINGTON ROAD TRAFFIC REVIEW WARD 2

Recommendation

The Commissioner of Engineering and Public Works in consultation with the Director of Reserves and Investments recommends:

1. That the installation of a traffic signal at the intersection of Zenway Boulevard and New Huntington Road at an estimated cost of \$130,000 funded from City Wide Development Charges – Engineering be added to the approved 2009 Capital Budget;
2. That staff be directed to provide notice of an intention to adopt an amendment to the 2009 Capital Budget pursuant to By-law 394-2002; and
3. That this report be brought forward to the Council meeting at which this amendment is to be considered.

Economic Impact

The cost to install the traffic signal control would be an initial impact on the 2009 Capital Budget, with a funding source identified from City Wide Development Charges, Engineering Services. There will be on-going costs associated with the maintenance of the traffic signals that will be incorporated in future Operating Budgets.

Communications Plan

If the project is approved for installation in 2009, Engineering Services staff will advise interested parties and area businesses of the planned signal installation and the timing of the work. Staff will follow with construction notices at time of construction.

Purpose

To report on the feasibility of installing traffic signals at the intersection of Zenway Boulevard and New Huntington Road.

Background - Analysis and Options

Engineering Services staff reviewed the traffic activity at the intersection of Zenway Boulevard and New Huntington Road both in response to an inquiry from area businesses and to review traffic operations at the intersection. Zenway Boulevard is a collector roadway with a 26.0 metre right-of-way and a 14.0 metre pavement width. New Huntington Road is a collector roadway with a 26.0 metre right-of-way and a 14.0 metre pavement width. The existing stop controls are located on New Huntington Road and the existing speed limit on both roadways is a statutory 50 km/h. The area is shown in Attachment No.1.

Traffic Warrants

Engineering Services staff conducted an intersection turning movement count at the intersection on Tuesday, April 21, 2009. The studied time periods were 7:00 am to 9:00 am, 11:00 am to 2:00 pm and 3:00 pm to 6:00 pm. On the day of the study the weather was cloudy with rain. The results of the study are summarized below.

Traffic volume data collected at the intersection and a comparison to the Provincial Warrant for traffic signal installation on a two lane roadway operating under restricted flow conditions is summarized below.

Warrant #1 – Minimum Vehicular Volumes		
Part A – All Approaches	-	98%
Part B – Minor Street Both Approaches	-	80%
Warrant #2 – Delay to Cross Traffic		
Part A – Major Street Both Approaches	-	92%
Part B – Traffic Crossing Major Street	-	98%
Warrant #3 – Accident Experience		
Part A – Reportable Accidents Correction by a Traffic Signal	-	0%
Part B – Adequate trial of less restrictive remedies	-	No
Part C – Warrant 1 or Warrant 2 satisfied 80% or more	-	Yes
Warrant #4 – Combination Warrant		
Two Warrants Satisfied 80% for Traffic Signals	-	Yes

For a traffic signal control to be warranted on the basis of individual warrants, one or more of the first three warrants must be satisfied 100% or more in both part A and part B.

There is a Warrant 4 – Combination Warrant which may be used if no individual warrants are satisfied 100%, in which two warrants being satisfied 80% or more could warrant the installation of a traffic signal. Based on the study results, this intersection does meet the Warrant 4 requirements of the Provincial Warrant, as Warrant 1 and Warrant 2 are indicated over the minimum 80% requirement.

The proposed signal will be a semi-actuated signal design. The major street is considered to be Zenway Boulevard with New Huntington Road being the minor street. In a semi-actuated design, the minor street will be fitted with loop presence detectors. The green signal preference will be assigned to Zenway Boulevard and the green phase on New Huntington Road will be initiated when the loop detectors are triggered. In this set up, the traffic on Zenway will have a green signal, unless traffic on New Huntington Road is detected and is stopped at the intersection for a period of time programmed in to the signal controller. This signal installation will be a significant improvement over the existing stop controls on New Huntington Road and, through the installation of pedestrian signal heads with push button controls, will provide for safer pedestrian crossing of the intersection to occur.

It is noted that the construction of the arterial road connection of Zenway Boulevard to Highway 427 and the reconstruction of Zenway Boulevard and Fogal Road to Highway 50 has recently been completed and the roadways opened. Traffic is building in this area and will continue to increase with development. Traffic conditions at the Zenway Boulevard and New Huntington Road intersection are expected to more fully satisfy the individual warrants with time.

The approximate cost for the installation of traffic signals is \$130,000, with funding from City Wide Development Charges - Engineering.

Relationship to Vaughan Vision 2020 / Strategic Plan

Enhance and Ensure Community Safety, Health & Wellness – To advocate for, protect and enhance community safety, health and wellness through education, design and enforcement.

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

Regional Implications

Not Applicable.

Conclusion

Based on staff's review, it is recommended that a traffic signal be installed at the intersection of Zenway Boulevard and New Huntington Road. Should Council approve the installation, the design and installation of the signal would be undertaken in the 2009 construction season.

Should Council concur with this proposed increase in expenditure, this action would be considered as an amendment to the Capital Budget. Before amending a budget, a municipality shall give notice of its intention to amend the budget at the Council meeting. In accordance with By-law 394-2002, notice of intention to adopt an amendment to a budget consists of publication of notice in a newspaper of a public meeting to consider the proposed amendment at least seven (7) days prior to the date of the Council meeting, at which this proposed amendment is to be considered. Therefore, if Council increases the expenditures to the Capital Budget, staff be directed to provide notice of an intention to adopt an amendment to the Capital Budget pursuant to By-law 394-2002.

Attachments

1. Location Map

Report prepared by

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Respectfully submitted,

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Commissioner of Engineering and Public Works

Jack Graziosi, P. Eng.
Director of Engineering Services

LP:mc

ATTACHMENT No. 1

