COMMITTEE OF THE WHOLE - DECEMBER 11, 2006

TRAFFIC CONTROL SIGNAL REVIEW AT ABERDEEN AVENUE AND TORII STREET/NIMBUS PLACE

Recommendation

The Commissioner of Engineering and Public Works recommends:

That a traffic control signal <u>not</u> be installed at the intersection of Aberdeen Avenue and Torii Street/Nimbus Place.

Economic Impact

Not Applicable.

Purpose

To review the feasibility of implementing a traffic control signal at the intersection of Aberdeen Avenue and Torii Street/Nimbus Place, in response to direction from Council.

Background - Analysis and Options

At its meeting on September 11, 2006 Council directed:

- "1. That the City of Vaughan Engineering Department be requested to conduct a review of the need and possible installation of a traffic signal at the intersection of Aberdeen Avenue and Torii Street consistent with the City of Vaughan standards and policies; and
- 2. That the review and recommendations be brought forward to a future Committee of the Whole in time for consideration for the 2007 Capital Budget."

Aberdeen Avenue is a collector roadway with an existing posted speed limit of 40 km/h. Torii Street and Nimbus Place are local roadways. Torii Street has an existing posted speed limit of 40 km/h and Nimbus Place is a statutory 50 km/h. This intersection has an existing all-way stop control. The area is shown on Attachment No. 1.

A turning movement count was conducted on Wednesday, November 15, 2006 at the subject intersection during peak travel periods. The traffic count was conducted from 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 traffic study the weather was clear and the roads were dry. The collected traffic volumes compared to the Provincial Warrant for Traffic Signal Installation are as shown below.

Aberdeen Avenue and Torii Street/Nimbus Place

Warrant 1 – Minimum Vehicular Volumes
 Warrant 2 – Delay to Cross Traffic
 Warrant 3 – Accident Experience
 Warranted 52%
 Warranted 6%

For a traffic signal control to be warranted, one or more of the 3 warrants must be satisfied 100% or more. The results of the turning movement counts do not meet the requirements of the Provincial Warrant for Traffic Signal Installation. The above results reflect the highest eight peak traffic hours at the intersection.

There is also Warrant 4 – Combination Warrant which may be used if no individual warrants are satisfied 100%, in which two warrants satisfying 80% or more could warrant the installation of a traffic signal. Based on the study results, Warrant 4 does not meet requirements.

Relationship to Vaughan Vision 2007

This traffic study is consistent with Vaughan Vision 2007 as to ensure enhanced safety standards are incorporated in community designs (1.1.2).

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

Conclusion

Based on staff's review, it is recommended that a traffic control signal not be installed at the intersection of Aberdeen Avenue and Torii Street/Nimbus Place.

Attachments

1. Location Map

Report prepared by:

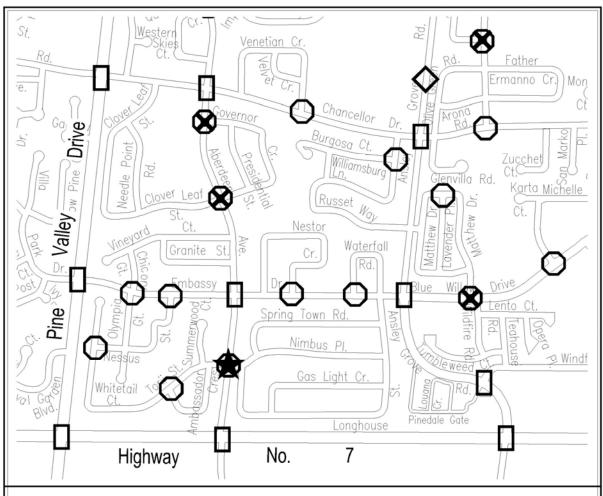
Mark Ranstoller, Senior Traffic Technologist, ext. 3141 Mike Dokman, Supervisor, Traffic Engineering, ext. 3118

Respectfully submitted,

Bill Robinson, P. Eng. Commissioner of Engineering and Public Works Gary Carroll, P. Eng.
Director of Engineering Services

MR:mc

ATTACHMENT No. 1



ABERDEEN AVENUE & TORII STREET/NIMBUS PLACE PROPOSED TRAFFIC CONTROL SIGNAL

LEGEND



INTERSECTION UNDER REVIEW



EXISTING TRAFFIC SIGNALS



EXISTING ALL-WAY STOP CONTROL



EXISTING SCHOOL CROSSING GUARD



EXISTING PEDESTRIAN SIGNAL



NOT TO SCALE

CITY OF VAUGHAN - ENGINEERING DEPARTMENT

DRAFTSPERSON: SMM