COMMITTEE OF THE WHOLE - MAY 11, 2010

ALL-WAY STOP CONTROL – VIA CAMPANILE AND GRAND VELLORE CRESCENT (SOUTH INTERSECTION) WARD 3

Recommendation

The Commissioner of Engineering and Public Works recommends:

That an all-way stop control not be installed at the south intersection of Via Campanile and Grand Vellore Crescent as the Provincial All-way Stop Warrant is not met.

Contribution to Sustainability

Not applicable.

Economic Impact

None.

Communications Plan

The Ward Councillor will inform the residents of the decision by Council on this matter.

Purpose

To review the feasibility of implementing an all-way stop control at the south intersection of Via Campanile and Grand Vellore Crescent, in response to a request from the area residents.

Background - Analysis and Options

At its meeting on January 26, 2010 Council directed:

- "1. That Traffic Engineering staff review the warrant for installation of an all-way stop at the south intersection of Via Campanile and Grand Vellore Crescent; and
 - 2. That staff report to a future Committee of the Whole meeting with respect to their findings as soon as possible."

Via Campanile is a feeder roadway with a 23.0 metre right-of-way. Grand Vellore Crescent is a local crescent roadway with a 17.5 metre right of way. The existing speed limit on Via Campanile is a statutory 50 km/h. There is an existing stop control located on Grand Vellore Crescent (at Via Campanile). The area is shown in Attachment No.1.

ALL-WAY STOP STUDY

Staff conducted a turning movement count on Tuesday, March 30, 2010 at the south intersection of Via Campanile and Grand Vellore Crescent during the morning and afternoon peak time periods of 7:00 am to 9:00 am, and 4:00 pm to 6:00 pm. The weather on this day was sunny and clear. The data collected was compared to the Provincial All-way Stop Warrant with the following results:

Warrant 1 – Minimum Vehicular Volumes	Warranted	49%
Warrant 2 – Accident Hazard	Warranted	0%
Warrant 3 – Sight Restriction	Warranted	0%

All-way stop controls are recommended when one of the above warrants are satisfied to 100% or more. There have been no reported collisions from June 2007 through to June 2008 at this intersection susceptible to prevention by implementing all-way stop control. There are no sight line restrictions at this intersection. According to the results above, this intersection does not meet the minimum requirements of the warrant.

There are 91 residential homes on Grand Vellore Crescent. Typically, for crescent type roadways, the vehicle split between intersections is 50/50. The recorded traffic volume from the side street is low, with 52 and 15 vehicles exiting during the AM and PM peak hours, respectively. The minimum required vehicles on the warrant is 120.

AUTOMATIC TRAFFIC RECORDER STUDY

Utilizing Automated Traffic Recorders (ATR's) staff conducted speed and volume studies on Via Campanile from March 29, 2010 to April 2, 2010 north of Frassino Drive. The results have been summarized below.

Direction	Average Speed	85 th Percentile Speed	Highest Speed	Average Daily Traffic
Northbound	44 km/h	54 km/h	97	1645
Southbound	45 km/h	55 km/h	86	1579

The recorded average speeds on Via Campanile range between 44 km/h – 45 km/h. The recorded 85^{th} percentile speed (the speed at which 85 percent of the vehicles are travelling at or below) on Via Campanile range between 54 km/h – 55 km/h. The highest speed recorded on this section of Via Campanile is 86 km/h for the southbound traffic and 97 km/h for the northbound traffic, these highest speeds have occurred during the same time periods each day from 12:00 pm. to 2 pm. and from 5:00 pm. to 7:00 pm. Engineering Services staff has sent a request to York Regional Police to increase speed enforcement on this section of Via Campanile of the time periods mentioned above based on the highest recorded speeds.

Typically, a feeder roadway accommodates up to 8,000 vehicles per day (source; Transportation Association of Canada, Geometric Design Guide for Canadian Roads). Our study indicates that Via Campanile has 3,224 vehicles per day which is within a feeder roadway capacity.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan 2020, the recommendations of this report will assist in:

- Pursue Excellence in Service Delivery;
- Enhance and Ensure Community Safety, Health and Wellness; and
- Lead and Promote to Environmental Sustainability.

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

Regional Implications

Not Applicable.

Conclusion

Based on Engineering Services staff's review, it is recommended that an all-way stop control not be installed at the south intersection of Via Campanile and Grand Vellore Crescent.

Attachments

1. Location Map

Report prepared by:

Peter Trinh, Traffic Analyst, Ext. 3120 Mike Dokman, Supervisor, Traffic Engineering, Ext. 3118

Respectfully submitted,

Bill Robinson, P. Eng Commissioner of Engineering and Public Works Jack Graziosi, P. Eng., M. Eng. Director of Engineering Services

PT:mc

ATTACHMENT No. 1

