

## COMMITTEE OF THE WHOLE – APRIL 4, 2005

### IMPROVING TRAFFIC FLOW IN WEST WOODBRIDGE

#### Recommendation

The Commissioner of Engineering and Public Works recommends:

- 1) That a westbound right turn lane and a southbound right turn lane not be installed at the intersection of Woodbridge Avenue and Forest Drive/Lewis Drive; and
- 2) That no further action is required to improve the traffic flow and operations at the intersection of Woodbridge Avenue and Forest Drive/Lewis Drive.

#### Purpose

To review the feasibility of installing a westbound right turn lane and a southbound right turn lane at the intersection of Woodbridge Avenue and Forest Drive/Lewis Drive, in response to direction from Council.

#### Background - Analysis and Options

At its meeting on November 22, 2004 Council directed:

**“That staff conduct a traffic study of the intersection of Woodbridge Avenue and Forest Drive, to determine (1) if the installation of right turn lanes --- from Woodbridge Avenue onto Forest Drive, and/or from Forest Drive onto Woodbridge Avenue --- is warranted, and (2) if any other actions(s) is in order to improve the flow of traffic at this intersection.”**

Woodbridge Avenue is designed as feeder road with a 24.0 metre right-of-way width and two travel lanes. Forest Drive and Lewis Drive are designed as local roads with a 20.0 metre right-of-way and two travel lanes. There is an existing traffic signal at the intersection. The area is shown on Attachment No. 1.

The existing traffic signal is operating with a 60 second cycle length. A traffic study was conducted at the intersection on November 23, 2004. Based on the existing traffic volumes, it was determined that the intersection is operating at a Level of Service A with a 60 second traffic signal length.

The request for the installation of a westbound right turn lane on Woodbridge Avenue and a southbound right turn lane on Forest Drive was reviewed.

Southbound Right Turn Lane on Forest Drive.

The number of right turn vehicles from Forest Drive to Woodbridge Avenue during the morning, mid-day and afternoon peak periods are 36, 14 and 9, respectively. The southbound right turn lane is not warranted due to the existing low right turn vehicular volume from Forest Drive. There is minimal impact for this movement caused by opposing left turn traffic volumes from Lewis Drive. The Forest Drive volumes are clearing on each given green phase.

Westbound Right Turn Lane on Woodbridge Avenue.

The number of right turning vehicles from Woodbridge Avenue to Forest Drive during the morning, mid-day and afternoon peak periods are 74, 87 and 205, respectively. The typical threshold vehicle value to install a designated right turn lane in a peak hour period is 60. Although the right turning vehicles are over this threshold, there is minimal impact for this

movement caused by the low opposing eastbound left turn traffic volume. The Woodbridge Avenue volumes are clearing on each given green phase.

### **Relationship to Vaughan Vision 2007**

This traffic study is consistent with Vaughan Vision 2007 as to identify and implement innovative traffic management alternatives to improve general traffic safety (1.1.3).

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

### **Conclusion**

Based on staff's review, it is recommended that a westbound right turn lane and a southbound right turn lane not be installed at the intersection of Woodbridge Avenue and Forest Drive/Lewis Drive.

### **Attachments**

1. Location Map

### **Report prepared by**

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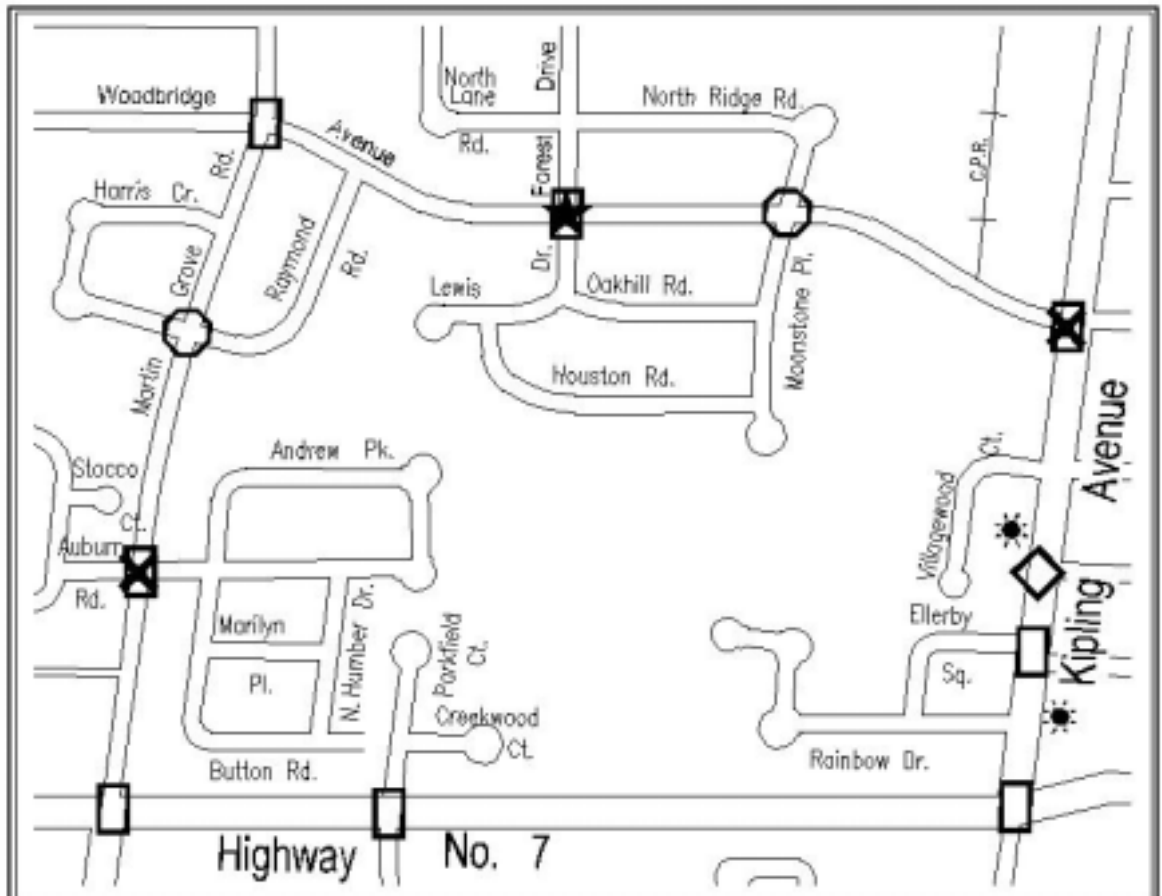
Respectfully submitted,

Bill Robinson, P. Eng.  
Commissioner of Engineering and Public Works

Gary Carroll, P. Eng.  
Director of Engineering Services

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# ATTACHMENT No. 1



## WOODBIDGE AVENUE & FOREST DRIVE PROPOSED SOUTHBOUND & WESTBOUND TURN LANES

### LEGEND

- ★ INTERSECTION UNDER REVIEW
- EXISTING TRAFFIC SIGNALS
- EXISTING ALL-WAY STOP CONTROL
- ✕ EXISTING SUPERVISED SCHOOLCROSSING
- ◇ EXISTING PEDESTRIAN SIGNAL OR HALF SIGNAL
- ☼ EXISTING FLASHING SCHOOL BEACON



NOT TO SCALE