

COMMITTEE OF THE WHOLE – JANUARY 17, 2005

DRUMMOND DRIVE PROPOSED ALL-WAY STOP CONTROLS

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That an all-way stop control not be installed at the intersection of Drummond Drive and Tayside Avenue.
2. That an all-way stop control not be installed at the intersection of Drummond Drive and Regal Pine Court.
3. That York Regional Police be requested to provide enforcement of the existing 40 km/h speed limit on Drummond Drive.

Purpose

To review the feasibility of implementing an all-way stop control at the intersections of Drummond Drive and Tayside Avenue, and Drummond Drive and Regal Pine Court, in response to a letter and petition submitted by an area resident.

Background - Analysis and Options

A letter and petition was received by the Local Councillor from area residents requesting that stop signs be installed on Drummond Drive, one at Tayside Drive on the northeast corner and one at Regal Pine Court on the southwest corner. Refer to Attachment No. 2.

Tayside Avenue and Regal Pine Court do not intersect to create an intersection. The offset between the two roadways is approximately 20 metres. As suggested by the resident, it is not possible to implement stop signs at two separate intersections in such close proximity under the Highway Traffic Act. The installation of an all-way stop can only be installed at one intersection. Staff conducted separate all-way stop studies for both intersections with Drummond Drive.

Drummond Drive is a collector road with an existing posted 40 km/h speed limit. Tayside Avenue is a local through road and Regal Pine Court is a local cul-de-sac road, both with a statutory 50 km/h speed limit. Existing stop controls are located on Tayside Avenue and on Regal Pine Court at Drummond Drive, respectively. The area is shown on Attachment No. 1.

At the intersection of Drummond Drive and Tayside Avenue, staff conducted a turning movement count on October 5, 2004 during peak travel periods. The times that the counts were conducted were from 7:00am to 9:00am and 3:00pm to 6:00pm. The collected traffic volumes compared to the Provincial Warrant for All-way Stop Control are as shown below.

- | | |
|---|--------------|
| • Warrant 1 – Minimum Vehicular Volumes | Warranted 5% |
| • Warrant 2 – Accident Hazard | Warranted 0% |
| • Warrant 3 – Sight Restriction | Warranted 0% |

For an all-way stop 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 All-Way Stop Control. The above results reflect the highest peak traffic hour at this intersection.

At the intersection of Drummond Drive and Regal Pine Court, staff compared the number of housing units on Regal Pine Court that have vehicular access to the intersection with the Provincial Warrant for All-Way Stop Control. Part 1 of the Warrant requires a minimum of 120

vehicles entering the intersection from the minor street(s) during the highest peak traffic hour. Staff used an estimate of one vehicle per unit (as per the Institute of Transportation Engineers – Trip Generation) entering the intersection during the highest peak traffic hour. As the total of housing units is only 24 housing units on this street, Part 1 of the Warrant is not met.

The deputation details a concern for children crossing Drummond Drive. Subsequent to the deputation, a supervised school crossing guard location was reinstated at the intersection of Drummond Drive and Montieth Crescent/Logwood Drive, which will provide a safe environment for children to cross Drummond Drive.

There are no sight distance restrictions noted at either intersection. Sidewalks are available on Melville Avenue and Tayside Avenue. There were also no reported vehicle collisions at either intersection.

In addition, radar speed studies were conducted on October 6, 2004 from 7:00am to 8:00am and from 4:00pm to 6:00pm on Drummond Drive near Tayside Avenue. The following table summarizes the results of this investigation.

DATE	TIME	LOCATION	DIRECTION	AVERAGE SPEED
October 6, 2004	7:00am – 8:00am	Near Tayside Avenue	Eastbound	45.5
	7:00am – 8:00am	Near Tayside Avenue	Westbound	46.6
October 6, 2004	4:00pm – 6:00pm	Near Tayside Avenue	Eastbound	43.4
	4:00pm – 6:00pm	Near Tayside Avenue	Westbound	46.1

The average speeds on Drummond Drive range from 43 to 46 km/h, which are similar to other collector type roads in the City.

Traffic calming measures have been recently built on Drummond Drive as per the Maple Springs Phase II Traffic Committee plan approved by Council. There are two curb extensions west of Regal Pine Court, a centre median between Regal Pine Court and Tayside Avenue, and two curb extensions east of Tayside Avenue. Refer to Attachment No. 3.

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 an all-way stop control not be installed at the intersection of Drummond Drive and Tayside Avenue, nor at the intersection of Drummond Drive and Regal Pine Court.

Attachments

1. Location Map
2. Letter/Petition – Members of Council only
3. Maple Springs Phase II – Traffic Calming Map

Report prepared by

Mark Ranstoller, Senior Transportation Technologist, ext. 8251
Mike Dokman, Supervisor, Traffic Engineering, ext. 8031

Respectfully submitted,

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

Gary Carroll, P. Eng.
Director of Engineering Services

MR

