

STAFF REPORT ACTION REQUIRED

Freeman Road and Westacres Drive – All-Way STOP Control

Date:	May 20, 2010				
То:	Etobicoke York Community Council				
From:	Director, Transportation Services - Etobicoke York District				
Wards:	Ward 12 – York South-Weston				
Reference Number:	p:\2010\Cluster B\TRA\EtobicokeYork\eycc100093-to				

SUMMARY

This staff report is about a matter that Community Council has delegated authority from City Council to make a final decision.

The purpose of this report is to present the results of a study regarding the installation of an all-way STOP control at the intersection of Freeman Road and Westacres Drive. A staff assessment concludes that the criteria for installing an all-way STOP at this location are not achieved.

RECOMMENDATIONS

Transportation Services recommends to Etobicoke York Community Council that:

1. An all-way STOP control not be installed at the intersection of Freeman Road and Westacres Drive as the warrant requirements have not been met.

Financial Impact

There are no financial implications resulting from the adoption of this report.

ISSUE BACKGROUND

Councillor Frank Di Giorgio, on behalf of area residents, requested that Transportation Services staff review the possible installation of an all-way STOP control at the intersection of Freeman Road and Westacres Drive. A map of the area is Attachment 1.

COMMENTS

According to the City of Toronto's road classification system, Freeman Road and Westacres Drive are classified as local roads with 40 km/h speed limits. Westacres Drive meets Freeman Road, forming a three-way intersection, with the STOP control on the Westacres Road approach.

Sidewalks are located on both sides of Westacres Road. There are no sidewalks on either side of Freeman Drive. Adjacent STOP controls on Freeman Road are located about 62 metres to the north at King George Drive, and approximately 90 metres to the south at Clearview Heights.

Of significant concern to area residents is the potential conflict between motorists turning left from Freeman Road to Westacres Road who do not observe pedestrians crossing the intersection. Although the pedestrian and vehicular volumes are extremely low, we can address the pedestrian concerns by installing pavement marking centre lines and stop bars on Freeman Road and Westacres Drive, as well as modifying the sidewalk curb depressions and the location of the westbound STOP control on Westacres Drive. The current location of the curb depression is set back about 8 metres from Freeman Road, and the STOP control is located approximately 12 metres from Freeman Road. By relocating the curb depression and the STOP control closer to the intersection, pedestrians can cross closer to the corner, allowing motorists on Freeman Road to more effectively observe intersection pedestrian activity.

The justification for installing an all-way STOP control is based on a technical warrant adopted by Toronto City Council. The warrant is based on crash history and traffic volume. Our study results are summarized in Appendix A. The technical warrants for all-way STOP controls are not met at this location, and no vehicle or pedestrian conflicts were observed during our study.

A review of the Toronto Police Service crash records for this intersection show one reported crash over the five-year period ending on December 31, 2009, which the driver failed to stop his vehicle as a result of icy road conditions.

Count Date: December 3, 2008							
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Location	Freeman Road, between King		Freeman Road, between King				
	George Drive and Westacres Drive		George Drive and Westacres Drive				
	Road, Southbound.			Road, Northbound.			
Time Period	Traffic	85 th %-tile	10 km/h	Traffic	85 th %-tile	10 km/h	
	Volume	Speed	Pace	Volume	Speed	Pace	
	(Veh/Hour)	(km/h)	(km/h)	(Veh/Hour)	(km/h)	(km/h)	
a.m. Peak Hour	26	33	31-40	41	32	31-40	
p.m. Peak Hour	19	30	31-40	37	32	26-35	
Total 24 Hour	228	30	31-40	196	27	31-40	

Speed and volume, studies were previously conducted on Freeman Road. The results of these studies are described in the following tables:

The 85th percentile speed and 10 km/h pace speed are statistical measures of free-flow vehicular operating speed. The 85th percentile speed is the vehicle operating speed at or below which 85 percent of all traffic is moving. Studies show that crash rates are lowest at, or around, the 85th percentile speed. The 10 km/h pace speed represents the speed range containing the highest number of speed observations.

We wish to emphasise that STOP controls define right-of-way. Empirical evidence shows that all-way STOP controls, especially when installed at low volume locations such as this, have little significant impact on vehicle operating speeds or traffic volume, encourage non-compliance, waste fuel and increase vehicle noise and emissions.

Based on the foregoing, we do not recommend installing all-way STOP controls at this intersection.

CONTACT

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SIGNATURE

Allan Smithies, Acting Director Transportation Services - Etobicoke York District

ATTACHMENTS

Appendix AAttachment 1:MapAttachment 2:Aerial PhotoAttachment 3:Existing Curb Depression and "STOP" sign

APPENDIX A

Warrants for All-way "STOP" Sign Control

Study location: Freeman Road (local) and Westacres Drive (local)

Date: Wednesday, May 20, 2010

Four-Hour Study Period 7:30 a.m. to 9:30 a.m. 3:00 p.m. to 5:00 p.m.	Total Approach Vehicle Volume	Vehicle/Pedestrian Volume Crossing Major Road	Unit Volume Split Major/Minor Roads
Study Period Average	44	16	64/36
Warrant Requirements for Study Period Average	<u>></u> 250	<u>≥</u> 100	<u>></u> 30/70 or <u><</u> 70/30

To warrant the installation of an all-way STOP control, the traffic volume requirements for the "Study Period Average" must be completely satisfied in either of the following two combinations:

1. "Total Approach Vehicle Volume" & "Unit Volume Split – Major/Minor Roads"

or

2. "Vehicle/Pedestrian Volume Crossing Major Road" & "Unit Volume Split-Major/Minor Roads". Attachment #2







Existing Curb Depression and location of STOP sign.