



STAFF REPORT ACTION REQUIRED

Redcliff Boulevard and Clearbrooke Circle – All-way Stop

Date:	October 11, 2007
To:	Etobicoke York Community Council
From:	Director, Transportation Services - Etobicoke York District
Wards:	Ward 2 – Etobicoke North
Reference Number:	p:\2007\Cluster B\TRA\EtobicokeYork\eycc070160-to – AFS6081

SUMMARY

This staff report is about a matter for which the community council has delegated authority from City Council to make a final decision.

The purpose of this report is to obtain approval for the installation of an all-way stop control at the intersection of Redcliff Boulevard and Clearbrooke Circle and to obtain approval to reduce the speed limit on Redcliff Drive between Kipling Avenue and Barrhead Crescent to 40 km/h.

Although the traffic volumes at the intersection do not satisfy the minimum warrant requirements at this intersection due to insufficient traffic volumes from Clearbrooke Circle, the traffic volumes are very close to meeting the requirements and daily fluctuations could result in satisfying the warrant. In addition, there have been several collisions at this intersection over the past five years which would be considered preventable with the installation of an all-way stop.

As speeding on Redcliff Boulevard was also expressed as a concern, speed studies were conducted and the results indicate that installing a 40 km/h speed limit on Redcliff Boulevard is consistent with the 40 km/h Speed Limit Warrant. Approval of this report will result in an all-way stop being installed at the intersection of Redcliff Boulevard and Clearbrooke Circle. In addition, a 40 km/h speed limit being posted on Redcliff Boulevard.

RECOMMENDATIONS

Transportation Services recommends that Etobicoke York Community Council approve:

1. The installation of an all-way stop control at the intersection of Redcliff Boulevard and Clearbrooke Circle; and

2. A 40 km/h speed limit on Redcliff Boulevard between Kipling Avenue and Barrhead Crescent, as the requirements of the 40 km/h Speed Limit Warrant are achieved.

Financial Impact

Type of Funding	Source of Funding	Amount
Available within current budget	Transportation Services Operating Budget	\$1,000.00

ISSUE BACKGROUND

Councillor Rob Ford, Ward 2, Etobicoke North, on behalf of area residents, requested Transportation Services staff to investigate the feasibility of implementing an all-way stop control at the intersection of Redcliff Boulevard and Clearbrooke Circle and report the study results to Etobicoke York Community Council. A map of the area is Attachment No. 1.

COMMENTS

Redcliff Boulevard and Clearbrooke Circle are local residential roads located in the community north of Rexdale Boulevard and east of Kipling Avenue. Redcliff Boulevard is the through street with stop controls on Clearbrooke Circle. Both streets have sidewalk on both sides. Clearbrooke Circle has a painted centreline on the road, and a centreline on Redcliff Boulevard has recently been recommended for installation.

The justification for the installation of an all-way stop control is based on a technical warrant adopted by Toronto City Council based on collision history and traffic volume. Our study results are summarized in Appendix A – Table 2. Although the technical warrants for the installation of an all-way stop control are not met in this instance, they are very close to meeting the minimum requirements.

The traffic volume portion of the all-way stop warrant is based on two criteria, “Total Vehicle Volume” and Volume Split”. In this case, the criteria for the “Total Vehicle Volume” portion of the warrant is achieved. However, to fully satisfy the “Volume Split” portion of the warrant the split should not exceed 70/30. In this case the volume split was recorded to be 73/27. Based on observations and traffic volumes it is anticipated that compliance with an all-way stop would be good and would assist in assigning right-of-way.

A review of the Toronto Police Service collision records over a five-year period ending December 31, 2006, has shown that there have been five reportable collisions at Redcliff Boulevard and Clearbrooke Circle which would be considered preventable with the installation of all-way stop controls.

Although the all-way stop is not technically warranted, the “Volume Split” is close to the minimum requirements and daily fluctuations in traffic may result in sufficient traffic to fully satisfy the warrant. In addition, there has been a pattern of collisions at the intersection of Redcliff Boulevard and Clearbrooke Circle which are considered preventable with the installation of an all-way stop.

Therefore, based on the traffic volumes, collision history and observations, it is recommended that additional stop controls be installed at the intersection of Redcliff Boulevard and Clearbrooke Circle.

As speeding was also expressed as a concern, speed studies were conducted and applied to the City of Toronto, 40 km/h Speed Limit Warrant. Under the current Council policy, 40 km/h speed limits may be implemented on streets where Road Width and either Pedestrian or Road and Traffic Environment criteria are met. Redcliff Boulevard satisfies the Road Width and Pedestrian Environment criteria as set in Appendix A – Table 1 attached, since the easterly terminus of Redcliff Boulevards abuts the Mississauga Private School. It is prudent to reduce the speed limit to reflect these conditions.

CONTACT

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SIGNATURE

John Niedra, P.Eng.

Director, Transportation Services - Etobicoke York District

ATTACHMENTS

Attachment No. 1: Map

Appendix A - Table 1

Appendix A – Table 2

APPENDIX A – TABLE 1

40 Km/h Speed Limit Warrant – Redcliff Boulevard and Clearbrooke Circle

A. ROAD WIDTH		
1.	(i) Pavement width equal to or greater than 10.5 metres and the 85 th percentile speed is equal to or less than 50 km/h	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
OR		
	(ii) Pavement width less than 10.5 metres	
PAVEMENT WIDTH: 8.5 to 9.8 metres 85TH PERCENTILE SPEED: 46 km/h		
AND		
B. PEDESTRIAN ENVIRONMENT		
1.	(i) Elementary or junior high school abuts the road Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
OR		
	(ii) Parkland abuts the road which is contiguous to and used to gain access to an elementary or junior high school Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
OR		
	(iii) Absence of sidewalk on both sides of the road or a major portion of the road Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
OR		
C. ROAD AND TRAFFIC ENVIRONMENT		
1.	(i) Two or more locations where grades are greater than 5%; and/or safe speed on curves is less than 50 km/h Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
OR		
	(ii) 2 or more locations where there is lack of sufficient distance to stop safely traveling at 50 km/h Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
OR		
	(iii) Pattern of collisions where vehicle speed was identified as a factor Local streets – 3 or more over 3 years Other streets – 5 or more over 3 years Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

APPENDIX A – Table 2

Warrants for All-way “Stop” Sign Control

Study location: Redcliff Boulevard and Clearbrooke Circle

Four-Hour Study Period	Total Approach Vehicle Volume	Vehicle/Pedestrian Volume Crossing Major Road	Unit Volume Split Major/Minor Roads
Study Period Average	254	74	73/27
Warrant Requirements for Study Period Average	≥ 250	≥ 100	$\geq 30/70$ or $\leq 70/30$

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”