



**STAFF REPORT
ACTION REQUIRED**

**Proposed Speed Limit Reduction on Placentia
Boulevard and Area Minor Street Stop Signs**

Date:	December 18, 2007
To:	Scarborough Community Council
From:	Director, Transportation Services, Scarborough District
Wards:	Ward 41 – Scarborough-Rouge River
Reference Number:	P:\2007\Cluster B\TRA\Scarborough\sc08003 D06-353 Placentia Boulevard Speed Reduction and Stop Controls

SUMMARY

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

This report responds to a request to install All-Way Stop Controls at both Rooksnest Trail and Placentia Boulevard and the west intersection of Shootfield Crescent and Placentia Boulevard. The report shows that these intersections failed to meet the required technical warrants for these types of traffic controls.

It is recommended that minor street stop signs be installed at five other uncontrolled three-way intersections in the area to clearly define the right-of-way and to regulate traffic flow.

In addition, this report provides the results of traffic studies conducted on Placentia Boulevard, where a 40 kilometre per hour (km/h) speed limit is technically justified and recommended for implementation over its entire length.

RECOMMENDATIONS

Transportation Services, Scarborough District, recommends that Scarborough Community Council:

1. Not approve the installation of All-Way Stop Controls at Rooksnest Trail and Placentia Boulevard,
2. Not approve the installation of All-Way Stop Controls at the west intersection of Shootfield Crescent and Placentia Boulevard,

3. Adopt the “Compulsory Stops” regulation, as identified in Appendix 1 of this report,
4. Adopt the “Maximum Rate of Speed – 40 Kilometres Per Hour” speed limit on Placentia Boulevard, as identified in Appendix 1 of this report, and
5. Amend the appropriate by-laws accordingly.

Financial Impact

The financial cost of installing these five recommended stop controls and the speed limit reduction signage is approximately \$1,500.00. The funding for these signage is available in the Transportation Services 2008 Operating Budget, within Cost Centre TP0226.

ISSUE BACKGROUND

Further to a request from the previous ward Councillor, Transportation Services staff reviewed the feasibility of installing All-Way Stop Controls at Rooksnest Trail and Placentia Boulevard, and the west intersection of Shootfield Crescent and Placentia Boulevard. The speed limit on Placentia Boulevard was subsequently reviewed.

The justification for the installation of an All-Way Stop Control and posted speed limits are based on technical warrants adopted by Council for use in the City of Toronto.

COMMENTS

The following characteristics describe the Placentia Boulevard area and the intersections of Rooksnest Trail and Placentia Boulevard and Shootfield Crescent and Placentia Boulevard (west intersection):

- The noted three-way intersections are located in the community east of McCowan Road, south of Finch Avenue East, and are presently controlled by northbound stop signs on Placentia Boulevard.
- Placentia Boulevard is a two-lane collector roadway with a speed limit of 50 kilometres per hour (not signed) and a daily traffic volume of approximately 1,500 vehicles.
- Sidewalks are located on both sides of Placentia Boulevard and both sides of the other area streets identified in this report.

All-Way Stop Control Warrant Study

A traffic study conducted at the intersections of Placentia Boulevard and Rooksnest Trail and at Placentia Boulevard and Shootfield Crescent (west intersection) during the morning and afternoon peak hours of a typical weekday (Tuesday, March 28, 2006) produced the following results:

Four-Hour All-Way Stop Control Warrant Study Period Average	A Total Approach Vehicle Volume	B Vehicle/Pedestrian Volume Crossing Major Road	C Unit Volume Split* Major/Minor Roads
Placentia Boulevard at Rooksnest Trail	124	44	72/28
Placentia Boulevard at Shootfield Crescent, West Intersection	125	45	71/29
Warrant Requirements For Study Period Average For Collector Roads	≥ 375	≥ 150	≥ 30/70 or ≤ 70/30

* “Unit Volume Split”: Major Road Volume – Vehicles only.
 Minor Road Volume – Vehicles plus pedestrians crossing the major road.

For an All-Way Stop Control to be numerically justified, the traffic volume requirements for the “Study Period Average” must be completely satisfied in Categories A and C, or Categories B and C.

As outlined in the above table, the traffic volumes do not meet the requirements to install an All-Way Stop Control at the subject intersections at this time.

A review of the collision records revealed that no collisions were reported at this intersection during the five-year period ending December 31, 2006.

Accordingly, based on the above-mentioned traffic study results, these intersections are operating in a safe and efficient manner with the existing northbound stop signs on Rooksnest Trail and at Shootfield Crescent.

During these reviews, staff identified five three-way uncontrolled intersections in the immediate area. Accordingly, to provide stop sign uniformity and to encourage motorists to stop before the sidewalk to enhance pedestrian safety, minor street stop signs are recommended at the following five locations:

1. Bushcroft Grove at Rooksnest Trail
2. Craketts Avenue at Rooksnest Trail (south intersection)
3. Craketts Avenue at Rooksnest Trail (north intersection)
4. Statesman Square at Statesman Square (east intersection)
5. Statesman Square at Statesman Square (north intersection)

When installed, the subject stop signs will help to clarify road right-of-way, regulate traffic flow and enhance public safety.

40 Km/h Speed Limit Warrant

Application of this warrant reveals that a 40 km/h speed limit is appropriate on Placentia Boulevard. Specifically, the “Pedestrian Environment” category of the 40 Km/h Speed Limit Warrant is satisfied based on an elementary school (Anson S. Taylor Junior Public School) which abuts Placentia Boulevard. In addition, the road width of 9.8 metres meets the requirement for the adoption of a 40 km/h speed limit.

When installed, the 40 km/h speed limit will be consistent with the traffic environment of Placentia Boulevard.

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ATTACHMENTS

1. Appendix 1 – By-law Amendment (enact)
2. Location Plan (Proposed Stop Controls and 40 Km/h Speed Limit – Placentia Boulevard and Area)

Appendix 1

“Compulsory Stops”
Regulation to be Enacted

<u>Column 1</u> <u>Intersection</u>	<u>Column 2</u> <u>Stop Street</u>
Bushcroft Grove and Rooksnest Trail	Bushcroft Grove
Craketts Avenue and Rooksnest Trail, South Intersection	Craketts Avenue
Craketts Avenue and Rooksnest Trail, North Intersection	Craketts Avenue
Statesman Square and Statesman Square, East Intersection	Statesman Square Westbound
Statesman Square and Statesman Square, North Intersection	Statesman Square Southbound

“Maximum Rate of Speed – 40 Kilometres Per Hour”
Regulation to be Enacted

<u>Highway</u>	<u>From</u>	<u>To</u>
Placentia Boulevard	Kenhatch Boulevard	Sandhurst Circle