



STAFF REPORT ACTION REQUIRED

Proposed All-Way Stop Control with Raised Intersection Blantyre Avenue and Parkland Road

Date:	January 20, 2010
To:	Scarborough Community Council
From:	Acting Director, Transportation Services, Scarborough District
Wards:	Ward 36 – Scarborough Southwest
Reference Number:	P:\2010\Cluster B\TRA\Scarborough\sc1018 D09-3523401 Blantyre Parkland awsc

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 provides the results of an All-Way Stop Control study conducted at the intersection of Blantyre Avenue and Parkland Road.

Traffic studies reveal that an All-Way Stop Control, including a flashing beacon is warranted at the noted intersection.

In addition, staff are recommending that the intersection be raised during the reconstruction of Blantyre Avenue.

RECOMMENDATIONS

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

1. Approve the installation of an All-Way Stop Control at the intersection of Blantyre Avenue and Parkland Road while removing the existing Pedestrian Crossover (PXO).
2. Rescind the through street regulation(s), as identified in the Appendix 1 of this report.
3. Enact the compulsory stops and through street regulation(s), as identified in the Appendix 2 of this report.

4. Approve the roadway alteration for constructing a raised intersection at Blantyre Avenue and Parkland Road.
5. Pursuant to the city of Toronto Act 2006, authorize the appropriate City Officials to prepare the necessary Road Alteration by-law.
6. Pass or amend the appropriate by-law(s) accordingly.

Financial Impact

The financial cost of installing these stop controls and pavement markings is approximately \$1,500.00. The funding for these stop controls is available in the Transportation Services 2009 Operating Budget, within Cost Centre TP0397.

The financial cost of the beacon is approximately \$6,000.00, this funding is contained in the Capital Funding for Traffic Control Signals CTP 709-0101.

The funding for the raised intersection treatment is to be contained within the Infrastructure Capital Operating Budget for 2010. The approximate cost is \$45,000.00. The raised intersection will be coordinated with the pending road reconstruction of Blantyre Avenue, resulting in a substantial cost savings.

ISSUE BACKGROUND

Further to a request from the local residents to improve traffic safety, Transportation Services staff reviewed the feasibility of installing an All-Way Stop Control at the intersection of Blantyre Avenue and Parkland Road. In addition, in order to enhance the pedestrian environment in particular for school children crossing at this intersection, an overhead flashing beacon and a raised intersection are recommended. The flashing beacon and raised intersection will increase traffic safety by improving the visibility of the pedestrians to motorists.

The justification for the installation of an All-Way Stop Control is based on a technical warrant adopted by Council for use in the City of Toronto. Using the existing traffic volumes consistent with local roadway volumes, the technical justification for an All-Way Stop Control has been met.

COMMENTS

The following characteristics describe the intersection of Blantyre Avenue and Parkland Road, located at the approximate mid-point of Blantyre Avenue between Kingston Road and Gerrard Street:

- This three-way intersection or “T” type intersection is located on Blantyre Avenue at Parkland Road directly in front of a public school.
- Blantyre Avenue is classified a collector road while the traffic volumes are consistent with local roadway traffic volumes. Collector roadway traffic volumes are usually between 2,500 to 8,000 vehicles per day. Blantyre Avenue is functioning slightly below the vehicle volume range of a collector roadway.

- The daily traffic volume on Blantyre Avenue between Gerrard Street and Kingston Road is approximately 1,500 to 2,400 vehicles per day as recorded at several locations on this segment of Blantyre Avenue.
- Blantyre Avenue is a two-lane north/south residential roadway with a posted speed limit of 40 kilometres per hour and an operating speed of approximately 47 Km/h.
- Sidewalks are in place on both sides of Blantyre Avenue and currently not provided on Parkland Road with the exception of a short section of paved boulevard on south east corner of Parkland Road proceeding east from Blantyre Avenue for approximately 20 metres.

All-Way Stop Control Warrant Study

A traffic study conducted at the intersection of Blantyre Avenue and Parkland Road during the morning and afternoon peak hours of a typical weekday (Thursday, January 31, 2008) produced the following results:

All-Way Stop Control Warrant	A Total Approach Vehicle Volume	B Vehicle/Pedestrian Volume Crossing Major Road	C Unit Volume Split* Major/Minor Roads
Four-Hour Study Period Average	182	119	52/48
Warrant Requirements For Study Period Average	≥ 250	≥ 100	≥ 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 either of the following two combinations of the above:

Combination 1: “Total Approach Vehicle Volume” and “Unit Volume Split – Major/Minor Roads”

or

Combination 2: “Vehicle/Pedestrian Volume Crossing Major Road” and “Unit Volume Split-Major/Minor Roads”

As outlined in the above table, Combination 2 is met. Therefore, an All-Way Stop Control is warranted and should be installed at this intersection.

Collision History

A review of the Toronto Police Service collision records for the five-year period ending December 31, 2008 revealed that no collisions has been reported at the subject intersection.

CONTACT

Marko A. Oinonen, P.Eng.
Manager, Traffic Operations, Scarborough District
Tel: 416-396-7148
Fax: 416-396-5641
E-Mail: moinone@toronto.ca

SIGNATURE

Steven T. Kodama, P. Eng.
Acting Director, Transportation Services, Scarborough District

FJB:ca

ATTACHMENTS

1. Appendix 1 – By-law Amendment (rescind)
2. Appendix 2 – By-law Amendment (enact)
3. Location Plan (Proposed All-Way Stop Control with Raised Intersection - Blantyre Avenue at Parkland Road)

Appendix 1

“Through Streets”
Regulations to be Rescinded

(In
Column 1)
Highway

(In
Column 2)
From

To

Blantyre Avenue

North Limit of
Kingston Road

South Limit of
Gerrard Street

Appendix 2

“Compulsory Stops”
Regulation to be Enacted

(In
Column 1)
Intersection

(In
Column 2)
Stop Street

Blantyre Avenue and Parkland Road

Blantyre Avenue

Parkland Road and Blantyre Avenue

Parkland Road

“Through Streets”
Regulation to be Enacted

(In
Column 1)
Highway

(In
Column 2)
From

To

Blantyre Avenue

Kingston Road

Parkland Road

Blantyre Avenue

Parkland Road

Gerrard Street East