



STAFF REPORT ACTION REQUIRED

Traffic Control Signals Not Recommended – Bellamy Road North and Eastpark Boulevard

Date:	May 20, 2010
To:	Scarborough Community Council
From:	Director, Transportation Services, Scarborough District
Wards:	Ward 38 – Scarborough Centre
Reference Number:	P:\2010\Cluster B\TRA\Scarborough\sc1064 D10-3773542, D08-2900813 Bellamy Rd N Eastpark tcs

SUMMARY

This staff report is about a matter for which the Community Council does not have delegated authority from City Council to make a final decision.

The purpose of this report is to review the feasibility of the installation of traffic control signals at Bellamy Road North and Eastpark Boulevard.

Traffic studies reveal that Traffic Control Signals are not warranted at this location.

RECOMMENDATIONS

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

1. Not approve the installation of pedestrian crossing protection in the form of a pedestrian refuge island at the intersection of Bellamy Road North and Eastpark Boulevard since the road is too narrow for such an island.
2. Not approve the installation of pedestrian crossing protection in the form of a pedestrian crossover at the intersection of Bellamy Road North and Eastpark Boulevard since the road has too many lanes to cross.
3. Not approve the installation of pedestrian crossing protection in the form of traffic control signals at the intersection of Bellamy Road North and Eastpark Boulevard.
4. Not pass or amend the appropriate by-law(s) accordingly.

Financial Impact

There is no financial impact associated with this report; however, the financial cost of installing these new traffic control signals would be approximately \$150,000.00 should the installation be approved. The funding for these signals is not available in Transportation Services Division's Capital Works Budget under Project No. CTP710-01 at this time.

ISSUE BACKGROUND

Further to a request from the local Councillor, Transportation Services staff reviewed the feasibility of installing traffic control signals and/or pedestrian crossing protection at Bellamy Road North and Eastpark Boulevard.

Traffic Control Signal and Pedestrian Crossover studies were conducted at this location on Monday, November 3, 2008 and the technical justifications or warrants were not met.

The traffic volumes on Bellamy Road North near Burnview Crescent near Eastpark Boulevard are approximately 13,700 vehicles per day. This traffic volume can result in less than adequate gaps in traffic to successfully cross the road or make a left turn safely, particularly during the morning and afternoon rush hours. At the subject location, motorists and pedestrians were observed waiting for a gap in one direction of traffic, using the centre shared left turn lane on Bellamy Road North and Eastpark Boulevard as refuge, then continuing their crossing or left turn when the other direction of traffic on Bellamy Road North and Eastpark Boulevard cleared.

COMMENTS

The following characteristics describe the intersection of Bellamy Road North and Eastpark Boulevard:

- The subject intersection is located in Woburn Neighbourhood to the south of Lawrence Avenue East.
- Eastpark Boulevard is a two-lane local road.
- Bellamy Road North is a four-lane minor arterial with a centre left turn lane.
- This "T" intersection is presently controlled by a westbound stop sign on Eastpark Boulevard and is further enhanced by a flashing red beacon for westbound traffic and a flashing amber beacon for north/southbound traffic on Bellamy Road North.
- Both sides of Bellamy Road North and Eastpark Boulevard are lined with single family residential homes. Lawrence Avenue East and Bellamy Road North, approximately 250 metres to the north, has an assortment of commercial units.
- Toronto Transit Commission bus stops for both the north/southbound directions along Bellamy Road North are located in direct proximity to the intersection.
- On Bellamy Road North traffic control signals are located approximately 250 metres north at Lawrence Avenue East and 780 metres south at Amarillo Drive.
- Sidewalks are located on both sides of Bellamy Road North and the north side of Eastpark Boulevard.

Pedestrian Refuge Island Warrant Study

Pedestrian volume crossing Bellamy Road North is not sufficient to justify the installation of a Pedestrian Refuge Island. The minimum required eight-hour volume is 100 pedestrians and 89 pedestrians were recorded in our in our eight-hour study period. In addition, Bellamy Road North is not wide enough (15.5 metres) to accommodate this device. The minimum required width is 16.4 metres.

Pedestrian Crossover Warrant Study

In addition a Pedestrian Crossover Warrant Study was conducted. The findings from this study are shown in the following table:

Pedestrian Crossover Warrant	Compliance Level
	Monday, November 3, 2008
Pedestrian Volume	36%
Pedestrian Delays	37%

As outlined in this table, the pedestrian volumes and delays do not satisfy the requirements to install a pedestrian crossover at this Bellamy Road North and Eastpark Boulevard. There are also too many lanes to cross as Bellamy Road North has five lanes while the Provincial PXO standard prescribes a maximum of four lanes.

Traffic Control Signal Warrant Study

A Traffic Control Signal Warrant Study was conducted at the intersection of Bellamy Road North and Eastpark Boulevard. Using traffic volumes recorded over the peak eight hours of a typical weekday, the following results were obtained:

Traffic Control Signal Warrant	Compliance Level
	Monday, November 3, 2008
Minimum Vehicular Volume	25%
Delay To Cross Traffic	56%
Collision Hazard	7%

- For traffic control signals to be numerically justified, one of the “Minimum Vehicular Volume” or “Delay to Cross Traffic” warrants must be 100% satisfied or any two of the three warrants must be at least 80% satisfied.
- Our review of the Collision Hazard is based on the three-year (2006 – 2008) collision history.

As outlined in the above table, the traffic volumes do not satisfy the requirements to install traffic control signals at this intersection at this time.

For traffic control signals to be numerically justified, one of the “Minimum Vehicular Volume” or “Delay to Cross Traffic” warrants must be 100% satisfied or any two of the three warrants must be at least 80% satisfied.

Collision History

A review of the Toronto Police Service collision records for the three-year period from January 1, 2006 to December 31, 2008 is summarised below.

Three-Year Collision Information	Number of Reported Collisions			
	2006	2007	2008	Total
Collisions Potentially Preventable by the installation of Traffic Control Signals	0	0	1	1
Collisions Involving Pedestrians Crossing Bellamy Road North	0	0	0	0
Other Collisions (westbound rear-end collisions)	1	0	0	1
Total	1	0	1	2

- October 2006, on Eastpark Boulevard at Bellamy Road East a motorist passing error resulted in a rear-end collision on Eastpark Boulevard.
- September 2008, within the intersection of Bellamy Road North and Eastpark Boulevard a motorist failed to yield the right of way and collision resulted.

This collision record is not indicative of a significant safety problem at this site.

In summary, traffic control signals are not justified and should not be installed at the subject intersection. The Toronto Transit Commission has been consulted for their opinion regarding traffic control signals.

Sight lines for approaching vehicles are adequate but side street delays for motorists/pedestrians occurred due to vehicle volumes on Bellamy Road North by Eastpark Boulevard. Therefore, should Traffic Control Signals be warranted in the future, this would be a suitable location.

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

Peter J. Noehammer, P.Eng.
Director, Transportation Services, Scarborough District

JAB:ca/lab

ATTACHMENTS

1. Location Plan (Traffic Control Signal Study – Bellamy Road North and Eastpark Boulevard)