Evans Avenue and Treeview Drive – Traffic Control Signals

Date: August 13, 2009
To: Etobicoke York Community Council
From: Director, Transportation Services - Etobicoke York District
Wards: Ward 6 – Etobicoke-Lakeshore
Reference Number: p:\2009\Cluster B\TRA\EtobicokeYork\eycc090111-to

SUMMARY
The purpose of this report is to respond to the directive from Etobicoke York Community Council, at its meeting of July 7, 2008, that staff report in one year on the feasibility of converting the existing pedestrian crossover at the intersection of Evans Avenue and Treeview Drive to traffic control signals.

Although the warrants for the installation of traffic control signals are not met, a safety audit of the existing pedestrian crossover on Evans Avenue at Treeview Drive revealed that this location is no longer environmentally suitable for a pedestrian crossover given the operating speed of vehicular traffic on Evans Avenue. Based on the results of the pedestrian crossover audit, staff is recommending that the pedestrian crossover be replaced with traffic control signals.

Since the Toronto Transit Commission (TTC) operates a transit service on Evans Avenue, City Council approval of this report is required. TTC staff has been consulted on the matter and have not objected to the proposal.

RECOMMENDATIONS
Transportation Services recommends that City Council approve:

1. The removal of the pedestrian crossover on Evans Avenue at Treeview Drive as this location fails the pedestrian crossover safety audit.

2. The installation of traffic control signals at the intersection of Evans Avenue and Treeview Drive.
Financial Impact

<table>
<thead>
<tr>
<th>Type of Funding</th>
<th>Source of Funds</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available within capital works budget</td>
<td>Project No. CTP709-01</td>
<td>$135,000.00</td>
</tr>
</tbody>
</table>

ISSUE BACKGROUND

Etobicoke York Community Council, at its meeting of July 7, 2008, adopted the recommendations contained in a staff report titled “Evans Avenue at Bellman Avenue – Pedestrian Crossing Protection”. Staff recommended that the installation of traffic control signals at the intersection of Evans Avenue and Bellman Avenue not to be approved as the Traffic Control Signal Warrants were not achieved; and similarly, that the installation of a pedestrian crossover not be approved on Evans Avenue at Bellman Avenue as the Pedestrian Crossover Warrants were not achieved. Moreover, Community Council directed staff to report back in one year on the feasibility of converting the existing pedestrian crossover at the intersection of Evans Avenue and Treeview Drive to traffic control signals. Transportation Services staff has completed its investigations and the findings are the subject of this report. A map of the area is shown on Attachment 1.

COMMENTS

Evans Avenue, in the area of Treeview Drive, is a four-lane major arterial road with a recent (June 16, 2009) daily traffic volume of approximately 17,700 vehicles. The width of the road is approximately 14.0 metres from curb to curb. A pedestrian crossover is located at the east approach of the intersection of Evans Avenue and Treeview Drive. Treeview Drive is a two-lane local roadway. A stop control is located on Treeview Drive at Evans Avenue.

The legal speed limit on Evans Avenue, in the area of Treeview Avenue is 50 km/h.

Traffic control signals are located on Evans Avenue approximately 960 metres to the east at Kipling Avenue and 335 metres to the west at Bestobell Road.

Land uses in the area are industrial on the north side of Evans Avenue and residential on the south side.

The Toronto Transit Commission (TTC) operates a transit service on Evans Avenue including an existing eastbound stop at the southwest corner of the intersection of Evans Avenue and Treeview Drive and a westbound stop just east of the intersection.
To assess traffic conditions, an eight-hour turning movement count was conducted on Wednesday, June 17, 2009 at the intersection of Evans Avenue and Treeview Drive. Our turning movement study results were applied to the Traffic Control Signal Warrant analysis. The study results are as follows:

a) Minimum Vehicular Volume Warrant 13% compliance
b) Delay to Cross Traffic Warrant 20% compliance

In order to meet the warrants, 100 percent compliance is required in one of the categories or a minimum of 80 percent in both. The warrants for the installation of traffic control signals are not met at the intersection of Evans Avenue and Treeview Drive.

Given the failure of the intersection to meet the traffic control signal warrants, the safety protocol requires that staff conduct a safety audit of the existing pedestrian crossover. One of the primary safety criteria is the road’s vehicular operating or 85th percentile speed. Pedestrian crossovers are not environmentally suitable if vehicle operating speeds exceed 60 km/h. Our most recent (June, 2009) speed studies on Evans Avenue in the area of Treeview Drive revealed 85th percentile speeds of 64 km/h for westbound traffic, over a 24-hour period. Given the excessive operating speeds on Evans Avenue, the existing pedestrian crossover at Treeview Drive is no longer considered environmentally suitable for safe pedestrian crossings. Since pedestrian crossing assistance is essential at this location, the existing pedestrian crossover should be replaced with traffic control signals.

Based on the findings of the pedestrian crossover safety audit, it is recommended that the existing pedestrian crossover be removed and be replaced by traffic control signals at the intersection of Evans Avenue and Treeview Drive. The installation of traffic control signals will provide for a safer crossing environment at this location and will also assist in providing vehicular gaps on Evans Avenue itself, to assist general traffic accessibility from the side streets, including Bellman Avenue, the street originally investigated for the installation of traffic control signals.
CONTACT

Mark Hargot, Supervisor, Traffic Engineering - Etobicoke York District  
Tel: (416) 394-8453; Fax: (416) 394-8942  
E-mail: mahargot@toronto.ca  
AFS10406

SIGNATURE

_______________________________  
John Niedra, P.Eng.  
Director, Transportation Services - Etobicoke York District

ATTACHMENTS

Attachment 1: Map