Traffic Control Signals – The East Mall and Yarn Road

| Date:     | March 23, 2012 |
| To:       | Etobicoke York Community Council |
| From:     | Acting Director, Transportation Services - Etobicoke York District |
| Wards:    | Ward 5 – Etobicoke-Lakeshore |
| Reference Number: | p:\2012\Cluster B\TRA\EtobicokeYork\eycc120048-to |

**SUMMARY**

The purpose of this report is to obtain approval for installing traffic control signals at the intersection of The East Mall and Yarn Road.

Although the warrants for the installation of a pedestrian crossover (PXO) in the area of The East Mall and Yard Road are met, based on the failure of this location to meet five of the environmental standards for PXO suitability, staff is instead recommending the installation of traffic control signals.

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

**RECOMMENDATIONS**

Transportation Services recommends that City Council approve:

1. Installing traffic control signals at the intersection of The East Mall and Yarn Road.

**Financial Impact**

The estimated cost of installing traffic control signals at the intersection of The East Mall and Yarn Road is approximately $160,000.00. Funds in the amount of $3.47 million have been approved in the 2012 Transportation Services Capital Budget for installation of traffic control signals. This work would be subject to competing priorities and available funding.
ISSUE BACKGROUND
Transportation Services staff received a petition, forwarded from the office of Councillor Milczyn, to review the feasibility of installing some form of traffic control on The East Mall, in the area of Yarn Road. A map of the area is shown on Attachment 1.

COMMENTS
According to the City of Toronto’s road classification system, The East Mall is classified as a "minor arterial" roadway. Yarn Road is classified as a "Local" roadway. The statutory speed limit is 40 km/h on this section of The East Mall and 50 km/h on Yarn Road. This intersection is controlled by a "Stop" sign on Yarn Road facing westbound traffic. There is a raised centre median at the north approach of the intersection of The East Mall and the driveway access to 225 The East Mall, approximately 28 metres south of Yarn Road, which some pedestrians use as an informal refuge island while crossing The East Mall. Cloverdale Mall is located on the west side of The East Mall, opposite 225 The East Mall. Yarn Road is located approximately 160 metres north of the signalized intersection of The East Mall and East Mall Crescent.

TTC bus stops are located at the south approach of the intersection of The East Mall and Yarn Road, for northbound and southbound traffic.

To assess traffic conditions, an eight-hour turning movement count was conducted at the intersection of The East Mall and Yarn Road. 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 5% compliance
b) Delay to Cross Traffic Warrant 72% compliance

In order to meet the warrants, one hundred per cent compliance is required in one of the categories or a minimum of 80 per cent in both. The warrants for installing traffic control signals are not met at the intersection of The East Mall and Yarn Road.

To determine the need for a pedestrian crossover, an eight-hour study recorded the volume and delays experienced by pedestrians crossing The East Mall, in the area of Yarn Road. Our study results were applied to the Pedestrian Crossover (PXO) Warrant analysis. The study results are as follows:

a) Pedestrian Volume 203% compliance
b) Pedestrian Delays 281% compliance

In order to meet the warrants, one hundred per cent compliance is required in both categories. The warrants for installing pedestrian crossover (PXO) are met at the intersection of The East Mall and Yarn Road.
Although the installation of a PXO is technically warranted, considering the road conditions, staff evaluated this location for traffic control signals according to guidelines developed for the “Audit of Operational and Physical Suitability of Pedestrian Crossovers in Toronto.” This review shows that a number of criteria for installing a PXO are not achieved. The standards and the comparative characteristics at this location are described in more detail in Appendix “A.”

Given the failure of this location to meet five of the environmental standards for PXO suitability, staff feels that traffic control signals would provide the best form of crossing protection and recommend this traffic control device be installed at the intersection of The East Mall and Yard Road.

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Steven T. Kodama, P.Eng.
Acting Director, Transportation Services - Etobicoke York District

ATTACHMENTS

Appendix A
Attachment 1: Map
APPENDIX A

Environmental Standards for PXO Suitability

<table>
<thead>
<tr>
<th>Standards or Criteria to be Met for Physical Suitability of a PXO</th>
<th>Met/Not Met</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Vehicle Operating speed less than 60 km/h</td>
<td>Met</td>
<td>85&lt;sup&gt;th&lt;/sup&gt; percentile speed is 56 km/h</td>
</tr>
<tr>
<td>Not more than four lanes wide on a two-way street, or more than three lanes on a one-way street</td>
<td>Not Met</td>
<td>Five lanes including the T.T.C. bus bay</td>
</tr>
<tr>
<td>Traffic volume less than 35,000 vehicles per day (total both directions)</td>
<td>Met</td>
<td>17,826 vehicles per day</td>
</tr>
<tr>
<td>No driveway entrances within 30 metres</td>
<td>Not Met</td>
<td>Driveway at 225 The East Mall within 30 metres</td>
</tr>
<tr>
<td>No Significant volume of turning movements which interfere with PXO</td>
<td>Not Met</td>
<td>Significant turning movements to and from 225 The East Mall</td>
</tr>
<tr>
<td>No visibility problems exist for either pedestrians or motorists</td>
<td>Met</td>
<td>Safe sight stopping distances are adequate</td>
</tr>
<tr>
<td>No loading zones (including T.T.C.) in the immediate vicinity</td>
<td>Not Met</td>
<td>T.T.C. stops on the south approach of The East Mall and Yarn Road</td>
</tr>
<tr>
<td>Not less than 215 metres to another PXO or traffic device</td>
<td>Not Met</td>
<td>Traffic Control Signals within 120 metres at the intersection of The East Mall and The East Mall Crescent</td>
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