STAFF REPORT
ACTION REQUIRED

Traffic Control Signals: Finch Avenue West, approximately 200 metres east of Chesswood Drive

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<th>Date:</th>
<th>October 29, 2007</th>
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<td>To:</td>
<td>North York Community Council</td>
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<tr>
<td>From:</td>
<td>Director, Transportation Services, North York District</td>
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<td>Wards:</td>
<td>Wards 8 – York West</td>
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<tr>
<td>Reference Number:</td>
<td>p:\2007\ClusterB\TRA\NorthYork\nycc07108tsny (6321)</td>
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**SUMMARY**

To obtain approval for the installation of pedestrian-actuated traffic control signals on Finch Avenue West, approximately 200 metres east of Chesswood Drive.

The installation of pedestrian-actuated traffic control signals at this location is justified and will improve the pedestrian crossing environment on Finch Avenue West.

**RECOMMENDATIONS**

Transportation Services, North York District recommends that:

1. the pedestrian refuge island be removed and that pedestrian-actuated traffic control signals be installed on Finch Avenue West, approximately 200 metres east of Chesswood Drive;

2. the existing bus bays for eastbound and westbound traffic be removed and reconstructed, as detailed in Attachment 2 (Plan NY1657);

3. the City’s Legal Division be directed to introduce in Council the appropriate “Road Alterations By-law” to permit the removal of the pedestrian refuge island and construction of the new bus bays; and

4. the appropriate City officials be authorized and directed to take whatever action is necessary to implement the foregoing, including the introduction in Council of any Bills that are required.
FINANCIAL IMPACT

All costs associated with the installation of pedestrian-actuated traffic control signals on Finch Avenue West, approximately 200 metres east of Chesswood Drive, estimated at $125,000, and all civil work, estimated at $140,000, are included as part of Transportation Services 2008 Capital Works Program estimates.

ISSUE BACKGROUND

Transportation Services Division, North York District, has reviewed a request from Ms. Susan Lynch, Community Living Toronto regarding the feasibility of improving the pedestrian controls on Finch Avenue West between Alness Street/Champagne Drive and Chesswood Drive.

COMMENTS

Finch Avenue West is a four-lane major arterial road, with a two-way centre left turn lane and a daily two-way traffic flow of approximately 44,000 vehicles. The posted speed limit on Finch Avenue West is 60 km/h. A pedestrian refuge island is currently located in front of 1118/1122 Finch Avenue West. As such, “Pedestrian Ahead” signage exists on both sides of Finch Avenue West for eastbound and westbound traffic in advance of the pedestrian refuge island.

Adjacent traffic control signals are located approximately 270 metres to the east at Alness Avenue and 223 metres to the west at Chesswood Drive. The land use adjacent to Finch Avenue West is comprised of numerous commercial and industrial buildings. Toronto Transit Commission transit stops are located on both sides of Finch Avenue West at the pedestrian refuge island.

Pedestrian Crossover

To assess the necessity of providing pedestrian crossing protection, an eight-hour Pedestrian Delay Study was conducted. The technical warrants for the installation of a pedestrian crossover were satisfied to the following extent:

Warrant 1: Pedestrian Volume: 110%
Warrant 2: Pedestrian Delay: 152%

In order for the pedestrian delay warrant to be considered, a minimum of 200 pedestrians must be observed crossing the roadway, of which 120 must be delayed for periods greater than 10 seconds. Additionally, to meet the technical requirements for the installation of a pedestrian crossover, both warrants must be satisfied 100 percent.

Our field study disclosed that 160 pedestrians, of which 54 have an intellectual disability, used the refuge island during the busiest eight-hour period of a typical weekday. At locations where individuals with disabilities are observed to cross, these pedestrian
volumes are factored by two, which at this location, results in a total pedestrian volume of more than 200.

A review of the Toronto Police Service collision data has indicated that there have been zero collisions involving pedestrians crossing at this location.

Given the study results, the installation of a pedestrian crossover at the above location is warranted. However, in order to ensure that the installation of a pedestrian crossover is the most suitable traffic control measure, we subject the proposal to an Environmental Audit.

The Environmental Audit takes into consideration the geometry of the roadway, traffic flow, sight lines, and spacing of adjacent traffic control measures. The following table illustrates the results of the Environmental Audit for this section of Finch Avenue West:

<table>
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<tr>
<th>Standards/Criteria to be met</th>
<th>Yes / No</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Vehicle operating speed must be less than 60 km/hr.</td>
<td>Yes</td>
<td>85th Percentile: 57 km/h (wb), 54 km/h (eb)</td>
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<tr>
<td></td>
<td></td>
<td>Average Speed: 54 km/h (wb, eb)</td>
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<td>Not more than four lanes wide on a two-way street, or more than three lanes wide on a one-way street</td>
<td>No</td>
<td>5 lanes (road width 14.6m)</td>
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<td>Traffic volumes must be less than 35,000 vehicles per day (total both directions)</td>
<td>No</td>
<td>44,000 vehicles per day</td>
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<td>No driveways or entrances must be nearby</td>
<td>No</td>
<td>Numerous commercial/industrial driveways on both sides.</td>
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<tr>
<td>No significant volume of turning movements must occur which interfere with pedestrian crossover</td>
<td>No</td>
<td>Frequent turning movements from driveways.</td>
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<tr>
<td>No visibility problems should exist for either pedestrian or motorists</td>
<td>Yes</td>
<td></td>
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<tr>
<td>No loading zones should exist (including TTC) in the immediate vicinity</td>
<td>No</td>
<td>Eastbound &amp; Westbound TTC stops</td>
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<td>Spacing between traffic control measures should not be less than 215 metres.</td>
<td>Yes</td>
<td>270 m to Alness Avenue</td>
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<td></td>
<td></td>
<td>223 m to Chesswood Drive</td>
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In view of our findings we are unable to support the installation of a pedestrian crossover at this location, as five out of eight standards/criteria have failed. In situations such as this we typically then undertake a review of the feasibility of installing a mid-block pedestrian-actuated traffic control signal to address the pedestrian needs. Our review takes into account the existing pedestrian crossing levels, pedestrian generators, roadway geometry and spacing between existing controls.
In view of the above, our findings have determined that the installation of pedestrian-actuated mid-block traffic control signals on Finch Avenue West, approximately 200 metres east of Chesswood Drive will provide the most appropriate pedestrian and vehicular traffic control measure.

Councillor Anthony Perruzza has indicated his support for the recommendations contained within this report.

CONTACT

Martin D. Maguire, P.Eng.
Manager, Traffic Operations
Transportation Services Division, North York District
Tel: 416-395-7463
Fax: 416-395-7544
Email: mmaguir@toronto.ca

SIGNATURE

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Myles Currie B.A.
Director

ATTACHMENTS

Attachment 1: Map – Finch Avenue West, at approximately 200 metres east of Chesswood Drive (nycc07108tsny_map1)

Attachment 2: Map – Finch Avenue West, at approximately 200 metres east of Chesswood Drive (nycc07108tsny_map2)