

STAFF REPORT ACTION REQUIRED

Traffic control signals and road alteration - Eastern Avenue and Trinity Street

Date:	January 21, 2009
To:	Toronto and East York Community Council
From:	Director, Transportation Services Toronto and East York District
Wards:	Toronto Centre-Rosedale, Ward 28
Reference Number:	Ts09014te.top.doc

SUMMARY

This staff report is about a matter for which the Toronto and East York Community Council has delegated authority from City Council to make a final decision.

Transportation Services is requesting Toronto and East York Community Council's approval to install traffic signals on Eastern Avenue at Trinity Street; prohibit eastbound right turns from Eastern Avenue to Trinity Street; introduce all-way stop control at the Front Street East and Trinity Street intersection and remove a 10-metre-long median island on Eastern Avenue, east of Trinity Street.

Traffic control signals should be installed at the intersection of Eastern Avenue and Trinity Street to provide safe and efficient access for pedestrians, cyclists and motorists wishing to cross/access Eastern Avenue. The combination of the removal of the median island and introduction of an eastbound right turn prohibition from Eastern Avenue to Trinity Street and all-way stop control at Front Street East and Trinity Street will increase the operational safety of these intersections. There will be some minor loss of on-street parking on Trinity Street resulting from the traffic control signal installation.

RECOMMENDATIONS

Transportation Services recommends that Toronto and East York Community Council:

1. Approve the installation of traffic control signals at the intersection of Eastern Avenue and Trinity Street.

- 2. Contingent upon approval of the traffic control signals in Recommendation 1, prohibit eastbound right turns at all times from Eastern Avenue to Trinity Street.
- 3. Contingent upon approval of the traffic control signals in Recommendation 1, approve the installation of all-way stop control at the intersection of Front Street East and Trinity Street.
- 4. Contingent upon approval of the traffic control signals in Recommendation 1, approve the removal of the 10-metre-long median island on Eastern Avenue, 4 metres east of Trinity Street, as depicted in the attached Drawing No. 421F-9532, dated January 2009.

Financial Impact

Type of funding	Source of funds	Amount
Subject to availability within Capital Budget	Transportation Services Capital Program under Project No. 709-01	\$175,000.00

It is noted that the estimated total cost of installing traffic control signals, signage and removal of the median island at the Eastern Avenue/Trinity Street intersection is \$175,000.00.

Funds associated with the installation of new traffic control signals are approved in the Transportation Services Capital Programme under Project No.709-01. In 2009, \$2.45 million has been allocated for new traffic control signal installations, most of which has been allocated for signal installations already approved by City Council. In addition, the added annual maintenance cost associated with such installations is \$6,000.00, which includes all communications costs. This installation would be subject to available funding and competing priorities.

ISSUE BACKGROUND

Councillor Pam McConnell, on behalf of area residents, has requested that staff of Transportation Services report on the feasibility of installing traffic control signals at Eastern Avenue and Trinity Street to provide a safer crossing environment for pedestrians.

COMMENTS

Existing Conditions

Eastern Avenue is a four-lane east/west arterial roadway. Trinity Street is a north/south local roadway, stop-controlled at its intersection with Eastern Avenue. Both roadways have a 50 km/h speed limit. There is no TTC service on Eastern Avenue. Traffic control signals are located approximately 200 metres to the west at Parliament Street and approximately 200 metres to the east at Cherry Street. There is a horizontal "S" curve in Eastern Avenue at this point and Trinity Street intersects Eastern Avenue midway through this curve. The Distillery District, located to the south, is a popular tourist area and is the source of significant pedestrian traffic in this vicinity. This intersection is also

on the boundary of the West Don Lands which will be undergoing significant change with development by Waterfront Toronto.

A 10-metre-long modular median island exists on Eastern Avenue. This island, which was installed in 2000, provides refuge for pedestrians crossing on the east side of Trinity Street.

Front Street East intersects with Trinity Street, approximately 50 metres south of Eastern Avenue. Only Trinity Street traffic is stop-controlled at this intersection.

Proposed Traffic Control Signals

Transportation Services staff have been monitoring the vehicle and pedestrian volumes using this intersection, and the collision record. In light of the nearby Distillery District and redevelopment of the area, the demands at the intersection have increased. In particular, more pedestrians are crossing Eastern Avenue at Trinity Street to access the TTC streetcar stops on King Street. With continued development of the West Don Lands and Distillery District these demands will continue to increase. As a result, the warrants for the installation of traffic control signals are now satisfied.

Our review of the collision statistics, provided by the Toronto Police Service for the three-year period ending 2008, disclosed that 3 collisions were reported at the intersection. One of the collisions was of the type considered potentially preventable by the installation of traffic control signals. None of the collisions involved a pedestrian.

Eastbound Right-turn Prohibition

The skewed intersection at the junction of Eastern Avenue and Trinity Street results in difficulties for motorists making an eastbound right turn. The acute angle on the southwest corner of the intersection would require an eastbound motorist to encroach into the northbound traffic lane to complete a right turn. This would be problematic if a northbound vehicle is stopped at the intersection. Further, a motorist making an eastbound right turn would need to come to a complete stop to negotiate this awkward turn causing a potential for a rear end collision with a following motorist. It is preferable to prohibit the right turn at all times for eastbound motorists at this intersection for safety reasons. Motorists would continue to use Front Street East to travel to the east.

All-Way Stop Control at Front Street East and Trinity Street

Front Street East, between Eastern Avenue and Trinity Street, operates one-way eastbound for a short distance between Eastern Avenue and Trinity Street. It then operates two-way east of Trinity Street. Presently, only northbound and southbound motorists on Trinity Street are required to stop at Front Street East.

With the installation of traffic control signals at Eastern Avenue and Trinity Street, an all-way stop control should be provided at the intersection of Front Street East and Trinity Street. This will alternate the right-of-way between north/south and east/west traffic, minimizing the potential for queues backing up to Eastern Avenue either on Front Street

or on Trinity Street. It will also assist the pedestrians travelling north/south on Trinity Street to cross Front Street East on their way to and from Eastern Avenue.

Proposed Road Alterations

In conjunction with the installation of traffic control signals on Eastern Avenue at Trinity Street, the existing median island (shown on Drawing No. 421F-9532, dated January 2009) will no longer be required on Eastern Avenue and will be removed. Proper signal displays will be provided to guide pedestrians across Eastern Avenue safely.

CONTACT

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SIGNATURE

Andrew Koropeski, P.Eng. Director, Transportation Services

LIST OF ATTACHMENTS

- (1) Drawing No. 421F-9532, dated January 2009 Proposed Removal of Pedestrian Refuge Island
- (2) Drawing No. 421F-9544, dated January 2009 Location Plan

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