

## **Traffic Control Signals Review – McCowan Road and Bridlegrove Drive**

**Date:** September 21, 2016  
**To:** Scarborough Community Council  
**From:** Director, Transportation Services, Scarborough District  
**Wards:** Ward 36 – Scarborough Southwest

### **SUMMARY**

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This report recommends that traffic control signals not be approved at the intersection of McCowan Road and Bridlegrove Drive. The assessment concludes that based on current peak vehicular and pedestrian volumes and delays and conflicts at this intersection, traffic control signals are neither justified nor warranted at this time.

### **RECOMMENDATIONS**

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The Director, Transportation Services, Scarborough District recommends that:

1. City Council not approve the installation of traffic control signals at the intersection of McCowan Road and Bridlegrove Drive.

### **FINANCIAL IMPACT**

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There is no financial impact associated with this report. However, should City Council approve the installation of traffic control signals, the cost would be approximately \$180,000.00. Funding for such traffic control signals is not included in the Transportation Services 2016 Capital Budget.

### **DECISION HISTORY**

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This report addresses a new initiative.

## COMMENTS

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As a result of public requests through 3-1-1, Transportation Services staff conducted a pedestrian crossing protection review at the intersection of McCowan Road and Bridlegrove Drive. The field study was conducted on Tuesday, June 2, 2015. The pedestrian crossover study covered an area of approximately 100 metres in length: 50 metres either side of the intersection.

The following characteristics describe the intersection of McCowan Road and Bridlegrove Drive:

- This intersection is located on McCowan Road and south of Eglinton Avenue East.
- McCowan Road is a four-lane minor arterial roadway with a posted speed limit of 50 kilometres per hour and a daily traffic volume of approximately 8,100 vehicles per day.
- The land uses on this roadway are primarily multi-family residential homes and parkland.
- There are sidewalks along both sides of McCowan Road.
- The McCowan District Park entrance and paved walk/bicycle path are located opposite Bridlegrove Drive. This park is undergoing an expansion at this time.
- There are "Playground Advisory" signs posted on McCowan Road in advance of the park in both directions.

### **Pedestrian Crossing Protection Warrant Studies**

Transportation Services staff conducted a Pedestrian Crossing Protection Warrant Study at this intersection. The study provides an assessment of the need for traffic control signals or a pedestrian crossover based on crossing pedestrian volumes and delays and are expressed in terms of percent compliance with accepted thresholds. The 100% threshold is approximately 200 pedestrian crossings in an eight-hour period.

### *Traffic Control Signal Justification Study*

Using traffic volumes recorded over the peak eight hours of a typical weekday the following results were obtained.

Traffic Control Signal Warrant	Compliance Level -Tuesday, June 2, 2015
Minimum Vehicular Volume	27%
Delay To Cross Traffic	34%
Collision Hazard	0%

For traffic control signals to be numerically justified, one of the "Minimum Vehicular Volume" or "Delay to Cross Traffic" or Collision Hazard" warrants must be 100% satisfied, or both "Minimum Vehicle Volume" and "Delay to Cross Traffic" must be at least 80% satisfied. Our review of the Collision Hazard is based on the previous five-year (2009 - 2013) collision history based on available data.

As outlined in the above tables, the traffic volumes do not satisfy the requirements to install traffic control signals.

### *Pedestrian Crossover Warrant Study*

The following Pedestrian Crossover Warrant Study results were obtained.

Pedestrian Crossover Warrant	Compliance Level -Tuesday, June 2, 2015
Pedestrian Volume	27%
Pedestrian Delays	28%

For a pedestrian crossover to be numerically justified, the required "Pedestrian Volume" must exceed 328 pedestrians in the peak eight-hour period in the case. There were 79 pedestrians observed crossing during the study period.

In addition, the 85th percentile traffic speed of 70 km/h along McCowan Road exceeds the provincial standard of 60 km/h or less for which a pedestrian crossover is considered safe to use. If a crossover had been warranted, staff would have recommended the installation of Traffic Control Signals instead in order to address the speed issue.

## Collision History

A review of the available Toronto Police Service collision records for the five-year period ending October 31, 2013 is summarised below:

Five-Year Collision	2009	2010	2011	2012	2013	Total
Vehicle-Only Collisions potentially Preventable by Traffic Control Signals	1	0	0	0	0	1
Collisions involving Pedestrian Crossings of McCowan Road (at intersection)	0	0	0	0	0	0

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

On the basis of the foregoing studies and analyses, it is recommended that Traffic Control Signals not be installed at the intersection of McCowan Road and Bridlegrove Drive at this time. However, should such signals be justified in the future, this would be a suitable location from a traffic signal spacing and operations perspective.

In addition, staff can be requested to update the study once the park facility upgrades west of this location are completed and in use. The TTC has been consulted regarding this matter.

## **CONTACT**

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## **SIGNATURE**

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John Mende, P.Eng.  
Director, Transportation Services, Scarborough District

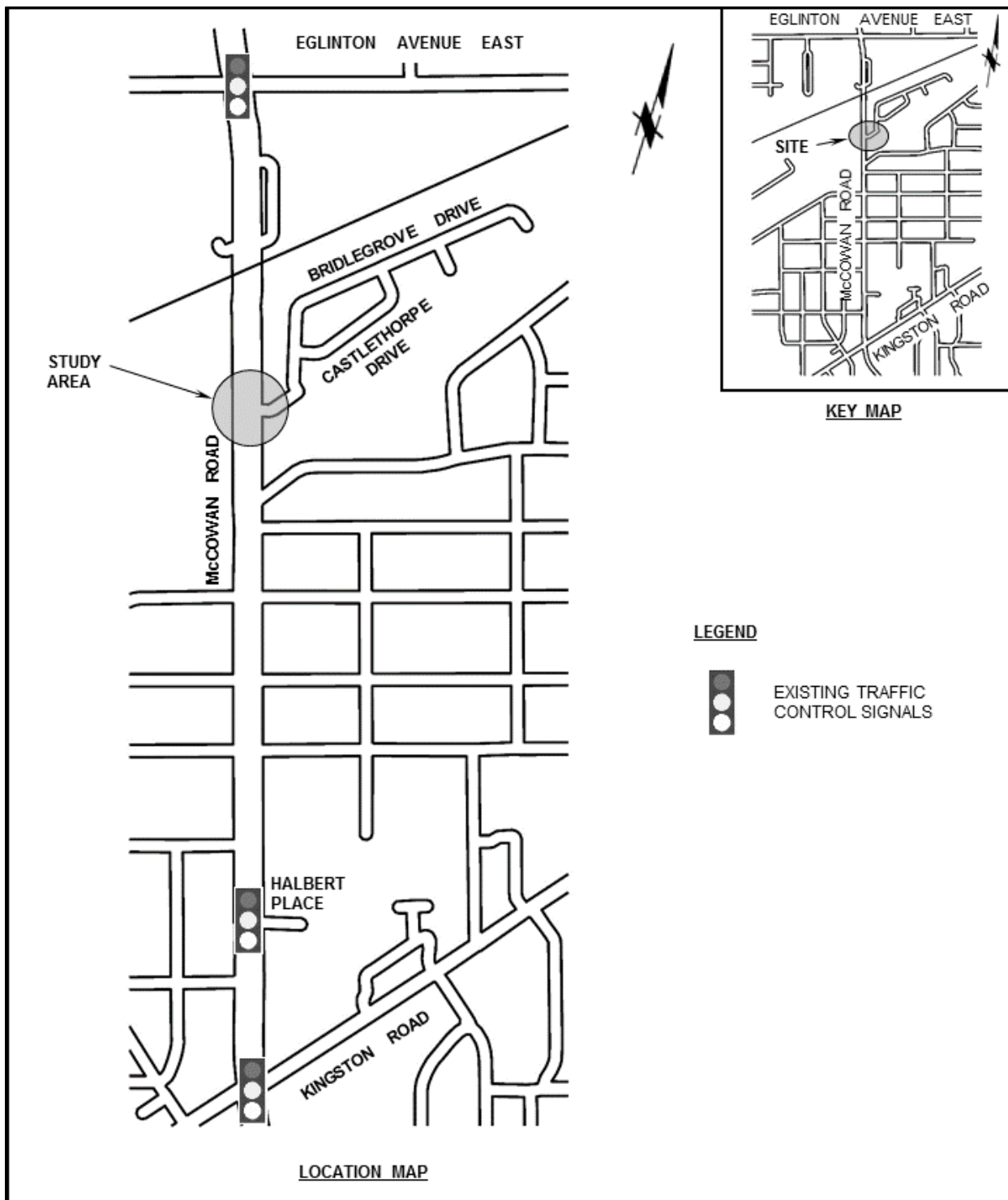
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SC1653  
D15-6806712, D16-7469747

## **ATTACHMENTS**

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1. Location Plan (Traffic Control Signals Review - McCowan Road and Bridlegrove Drive)



<b>TORONTO</b> TRANSPORTATION SERVICES		TRAFFIC OPERATIONS Scarborough District	
SCALE:	N.T.S.	<b>TRAFFIC CONTROL SIGNALS REVIEW</b> <b>McCOWAN ROAD AND BRIDLEGROVE DRIVE</b>	
DATE:	SEPT., 2016		
DRAFTING:	O.K.	FILE NUMBER: D16-7469747	WARD 36
		ATTACHMENT 1	