

Traffic Control Signals – Trethewey Drive and Brookhaven Drive

Date: October 22, 2019
To: Etobicoke York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 5 – York South-Weston

SUMMARY

The purpose of this report is to recommend that the existing pedestrian crossover (PXO) at the intersection of Trethewey Drive and Brookhaven Drive be replaced with traffic control signals.

The installation of traffic control signals is justified as the safety audit of the existing PXO on Trethewey Drive at Brookhaven Drive indicated that this location is not environmentally suitable for a PXO, given the number of lanes on Trethewey Drive. As an alternative, installing traffic control signals at this location would provide a safe and convenient access for pedestrians crossing Trethewey Drive.

As the Toronto Transit Commission (TTC) operates bus service on Trethewey Drive, City Council approval of this report is required. TTC has been advised on the matter.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services recommends that:

1. City Council authorize the installation of traffic control signals at the intersection of Trethewey Drive at Brookhaven Drive.
2. City Council authorize the removal of the existing pedestrian crossover (PXO) located on the east leg of Trethewey Drive at Brookhaven Drive in conjunction with the installation of traffic control signals at this intersection.

FINANCIAL IMPACT

The estimated cost for the removal of the pedestrian crossover and installation of traffic control signals at Trethewey Drive and Brookhaven Drive is \$200,000. This installation will be considered in 2021, subject to the availability of funding and competing priorities.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services staff was requested by the Ward Councillor, on behalf of area residents, to review the feasibility of replacing the existing PXO with traffic control signals at the intersection of Trethewey Drive and Brookhaven Drive. A map of the area is shown on Attachment 1.

Trethewey Drive is classified as a "minor arterial" road and has a regulatory 50 km/h speed limit. Sidewalks are located on both sides of the street. At the intersection, there are four lanes of travel as well as a bus bay/right turn lane for westbound motorists.

Brookhaven Drive is classified as a "collector" road. The west side of Brookhaven Drive has a continuous sidewalk, between Trethewey Drive and Lawrence Avenue West, whereas the sidewalk on the east side terminates at Parkchester Road. It is a two lane, north/south roadway, equipped with traffic calming (speed humps) and a speed limit of 30 km/h.

This "T" intersection is controlled by a PXO located on the east leg of Trethewey Drive and a 'Stop' sign on Brookhaven Drive for southbound traffic. The TTC operates bus service on Trethewey Drive. There are nearside westbound and eastbound TTC bus stops.

Pedestrian signals are located approximately 240 metres to the east, near Martha Eaton Way and approximately 328 metres to the west, just east of Tedder Street.

The land use in this area is a mix of residential, business and commercial. On the northwest corner of the intersection is a strip plaza, a church is located on the northeast corner, the southwest corner is residential with a commercial property on the southeast corner.

To address concerns regarding pedestrian safety, traffic counts that were undertaken at Trethewey Drive and Brookhaven Drive in October 2017 were reviewed and the results were applied against the technical warrants for the installation of traffic control signals. The following table summarizes the results:

Table 1: Trethewey Drive and Brookhaven Drive

Warrant Category	Study results
Minimum Vehicular Volume Warrant	28% compliance
Delay to Cross Traffic Warrant	72% compliance
Collision Hazard 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 the first two. The Collision Hazard warrant is based on the number of collisions susceptible to correction by the installation of traffic control signals and must be 100 percent satisfied.

A review of the Toronto Police collision data revealed that over the past three years (January 1, 2016 to December 31, 2018) there were three reported collisions which may have been preventable with the installation of traffic control signals.

Although the warrants for traffic control signals at the intersection of Trethewey Drive and Brookhaven Drive are not satisfied, the location was reviewed against the criteria in the Environmental Pedestrian Crossover Safety Audit as shown in Attachment 2. A PXO is considered environmentally suitable if the operating speed is less than 60 km/h, there are four lanes or less on a two-way street, and the traffic volume is less than or equal to 35,000 vehicles per day. Our review of the criteria found in the safety audit indicates that a PXO is not suitable specifically because of the number of lanes on the east leg of Trethewey Drive exceeds 4 lanes and the operating speed is 60 km/h. Therefore, it is recommended that the existing PXO be replaced with traffic control signals at this intersection to provide safer and controlled crossing for pedestrians.

The TTC has been consulted in the preparation of this report but has not yet provided comments.

CONTACT

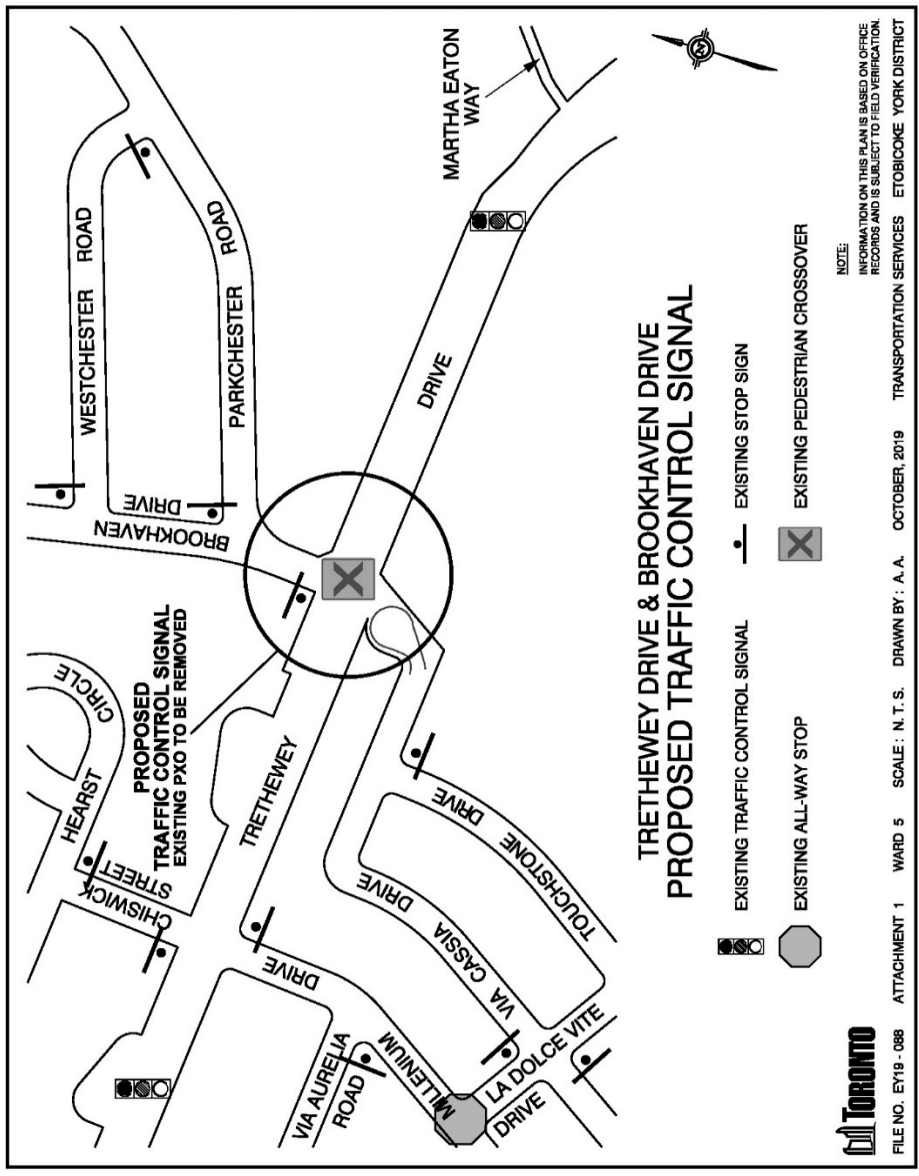
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SIGNATURE

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ATTACHMENTS

Attachment 1 - Area Map Trethewey Drive and Brookhaven Drive
Attachment 2 - Environmental Standard for PXO Suitability



Attachment 2: Environmental Standard for PXO Suitability

Environmental Audit – Trethewey Drive and Brookhaven Drive

Standards or Criteria to be met for Physical Suitability of a PXO	Met/Not Met	Comment
Vehicle operating speed less than 60 km/h	Not Met	85th percentile speed is 60 km/h (based on the radar speed study, free flow conditions)
Not more than four lanes wide on a two -way street, or more than three lanes on a one-way street	Not Met	Five lanes (on the east leg)
Traffic volume less than 35, 000 vehicles per day (total both directions)	Met	9,456 vehicles per day
No driveway entrances within 30 metres	Not Met	Driveway for businesses on the south side of Trethewey Drive
No significant volume of turning movements which interfere with PXO	Met	No significant turning movements at PXO
No visibility problems exist for either pedestrians or motorists	Met	No significant sightline issues
No loading zones (including TTC) in the immediate vicinity	Not Met	TTC bus stops on both sides of the street
Not less than 200 metres to another PXO or traffic device	Met	Traffic signals located at 228 metres west of the PXO location