

Pedestrian Crossing Protection - The Pond Road and Nelson Road

Date: February 22, 2021
To: Etobicoke York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 7, Humber River-Black Creek

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on The Pond Road, City Council approval of this report is required.

Transportation Services is recommending the installation of a pedestrian crossover (PXO) on The Pond Road at Nelson Road. The PXO will provide enhanced safety for vulnerable road users and is justified based on the assessment undertaken.

RECOMMENDATIONS

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

1. City Council authorize the installation of a pedestrian crossover on The Pond Road, immediately east of Nelson Road.

FINANCIAL IMPACT

The estimated cost for installing a PXO on The Pond Road is approximately \$80,000. Funding is available within the Transportation Services 2022 Capital Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by the Ward Councillor, on behalf of an area resident, to review the need for pedestrian crossing protection on The Pond Road at Nelson Road. This request is to enhance safety for pedestrians accessing various faculties of York University located on the north side of The Pond Road at Nelson Road.

Existing Conditions

The Pond Road is characterized by the following conditions:

- It is a two-lane, east/west, minor arterial roadway
- It operates two-way traffic on a pavement width of approximately 9.4 metres
- The daily two way traffic volume is approximately 4,300 vehicles
- The posted speed limit is 40 km/h
- Heavy trucks are prohibited at all times
- TTC service is provided by bus route 106
- There are sidewalks located on both sides of the street, with the south side terminating approximately 35 metres west of Nelson Road.
- There are dedicated bicycle lanes on both sides of the street.

Nelson Road is a two-lane, north/south private roadway which meets The Pond Road on the north side to form a "T" intersection, controlled by a stop sign for southbound traffic on Nelson Road. The east/west traffic on The Pond Road is uncontrolled free-flow.

The adjacent land use on The Pond Road is institutional and residential on the north and south side, respectively.

The closest adjacent traffic controls are located approximately 240 metres to the east at Sentinel Road in the form of traffic control signals and approximately 625 metres to the northwest at Shoreham Drive/Arboretum Lane, also in the form of traffic control signals. A map of the area is shown on Attachment 1.

Pedestrian Crossover (PXO)

To determine the need for a PXO at The Pond Road and Nelson Road staff rely on the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 15. The OTM justification criteria includes two main factors: the volume of vehicles and pedestrians; and pedestrian delay to cross traffic. Based on the traffic volume on The Pond Road, the warrants require a minimum of 322 pedestrians crossing over eight hours. Also, based on the pedestrian crossing volume, at least 75 pedestrians must be delayed more than 10 seconds.

An eight-hour pedestrian volume and delay study was conducted on December 18, 2019, which recorded the total volume and delays of pedestrians crossing The Pond Road and Nelson Road. Seniors, unassisted children and people with disabilities that are observed crossing are given a higher weighting by a factor of two. The adjusted volume of pedestrians observed crossing was 558; of these, 270 experienced a delay

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greater than 10 seconds. The compliance level of the study results in relation to the warrant criteria is shown in Table 1 below.

Table 1: Pedestrian Crossover Warrant Criteria and Compliance at The Pond Road and Nelson Road

Justification	Compliance
Pedestrian Volume	100 percent
Pedestrian Delay	100 percent

In order to meet the warrant criteria, 100 percent compliance is required in both categories. Based on the results of the study, a PXO is technically justified as both the pedestrian volume and delays have met the minimum requirements.

Staff also reviewed the collision history at this location. Collision statistics provided by the Toronto Police Service for the three-year period ending December 31, 2019, disclosed no (0) collisions at The Pond Road and Nelson Road that involved crossing pedestrians.

Environmental safety characteristics were also evaluated to ensure that the installation of a PXO would be appropriate at this location. Based on the evaluation, a PXO would be a suitable type of pedestrian crossing protection at this location. Details of the evaluation are included in Attachment 2.

In considering the above, Transportation Services recommends the installation of a PXO at The Pond Road and Nelson Road as it will provide enhanced safety for all road users.

The TTC has been advised of the study results and recommendations but has not yet provided comments.

Other Considerations

It should also be noted that the installation of a PXO at The Pond Road and Nelson Road may result in minor delays for traffic, including TTC buses, on The Pond Road as east-west traffic will no longer operate free flow.

The Ward Councillor has been advised of the recommendations of this staff report.

CONTACT

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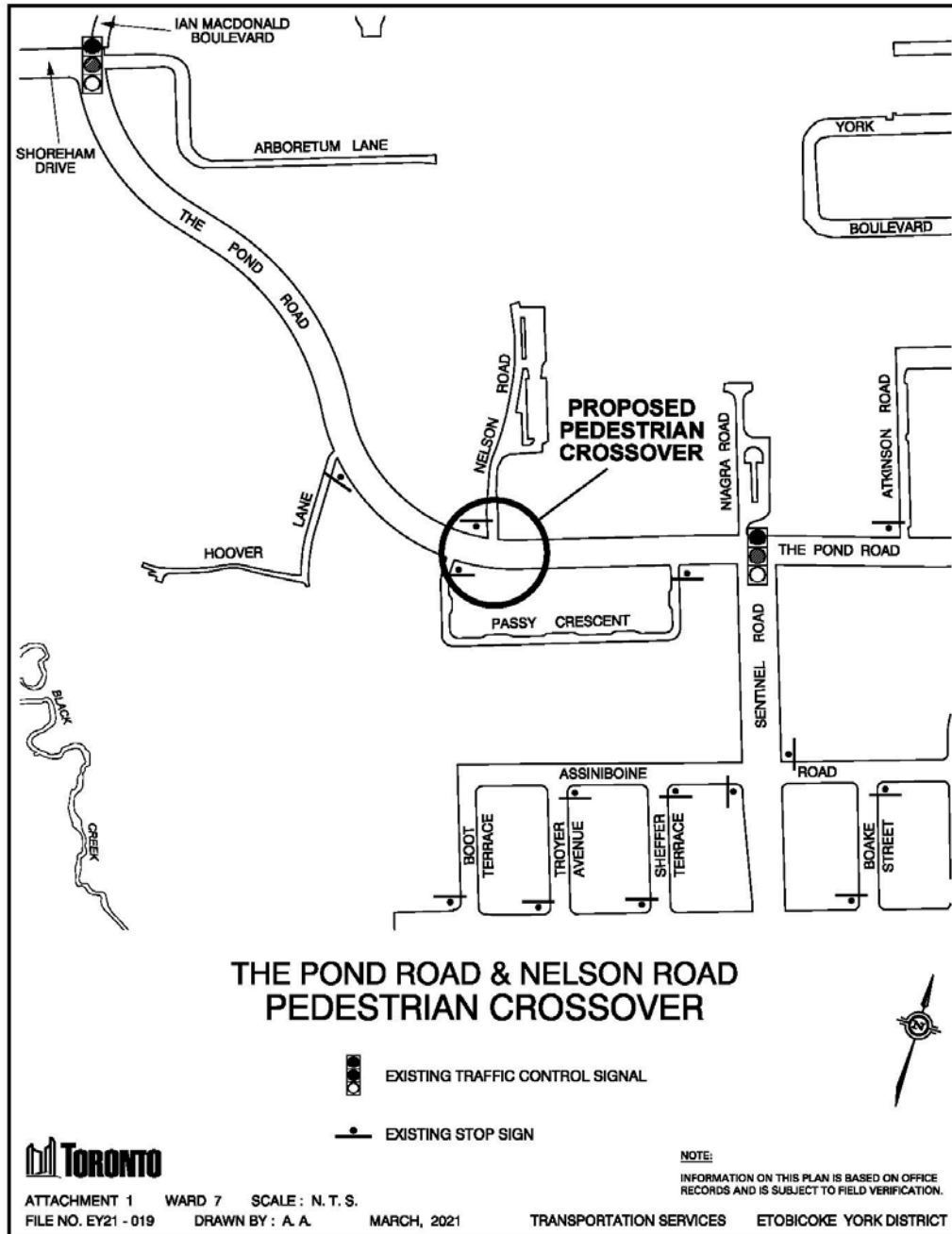
SIGNATURE

Roger Browne, M.A.Sc., P.Eng
Acting Director, Traffic Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - Pedestrian Crossover - The Pond Road and Nelson Road
Attachment 2: Environmental Safety Audit - PXO - The Pond Road

Attachment 1: Map - Pedestrian Crossover - The Pond Road and Nelson Road



Attachment 2: Environmental Safety Audit - PXO - The Pond Road

Standard	Comments	Standard Met/Not Met
Vehicle operating speed less than 60 km/h	85th percentile speed is 56 km/h (based on speed study, free flow conditions)	Met
Not more than four lanes wide on a two-way street or more than three lanes wide on a one-way street	The Pond operates with two lanes in each direction	Met
Traffic volume not more than 35,000 vehicles per day	The Pond carries approximately 4,300 vehicles per day	Met
No significant volume of turning movements	The volume of traffic turning to/from The Pond is moderate (approx. 210 vehicles over busiest eight hours)	Met
No visibility problems exist for either pedestrians or motorists	No vertical or horizontal curves	Met
No loading zones (including TTC) in the immediate area	TTC stops are located on The Pond at Sentinel Road and at The Pond and Shoreham Drive/Arboretum Lane	Met
No driveways or entrances nearby	No driveways in the immediate vicinity	Met
Spacing is not less than 200 metres to another pedestrian crossover or traffic control signal	Sentinel Road (TCS) - 240 metres to the east Shoreham Drive/Arboretum Lane (TCS) -625 metres to the northwest	Met