



STAFF REPORT ACTION REQUIRED

Shaver Avenue North between Bloor Street West and Burnhamthorpe Road – Traffic Calming

Date:	April 29, 2010
To:	Etobicoke York Community Council
From:	Director, Transportation Services - Etobicoke York District
Wards:	Ward 5 – Etobicoke-Lakeshore
Reference Number:	p:\2010\Cluster B\TRA\EtobicokeYork\eycc100074-to

SUMMARY

This staff report is about a matter that Community Council has delegated authority from City Council to make a final decision.

The purpose of this report is to describe the results of an investigation into a request for speed humps on Shaver Avenue North. A staff assessment concludes that the criteria for installing speed humps are met on Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road.

RECOMMENDATIONS

Transportation Services recommends that Etobicoke York Community Council approve:

1. Authorizing the City Clerk to conduct a survey of eligible residents on Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road, to determine public support for the proposed speed hump plan.
2. Subject to favourable survey results,
 - a. The City Solicitor prepare a by-law to alter sections of the roadway on Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road, for traffic calming purposes, generally as shown on the attached Drawing EY10-043, dated April 2010, and circulated to residents through the survey process; and,

- b. Transportation Services take the necessary actions to reduce the speed limit from 40 km/h to 30 km/h on Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road, when the speed humps are installed.

Financial Impact

Type of Funding	Source of Funds	Amount
Available within current budget – proposed speed hump installation (8 humps) and related signage/markings	Transportation Services Capital Budget	\$24,000.00

ISSUE BACKGROUND

In response to a petition submitted to Councillor Peter Milz cyn from residents on Shaver Avenue North, south of Burnhamthorpe Road, Transportation Services staff investigated the need for traffic calming (speed humps) on Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road, to address concerns with speeding.

A map of the area is Attachment 1.

COMMENTS

Shaver Avenue North, south of Burnhamthorpe Road, is classified as a two-way local road located in the residential community west of Martin Grove Road. The section of Shaver Avenue North, south of Swan Avenue, is identified in the City's Bikeway Network as a proposed bike lane route. A sidewalk exists on the east side of the road between Bloor Street West and Burnhamthorpe Road. There is no sidewalk on the west side of Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road.

The posted speed limit on Shaver Avenue North is 40 km/h. An all-way STOP control is currently located at the intersection of Shaver Avenue North/Swan Avenue. A pedestrian crossover is located at the north approach of the intersection of Shaver Avenue North and Lorene Drive. Traffic control signals are located at the intersection of Bloor Street West and Shaver Avenue North/Shaver Avenue South. STOP controls are located at the north and south approaches to Burnhamthorpe Road and Shaver Avenue North.

Parking is prohibited on the west side of Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road, and on the east side of Shaver Avenue North, between Burnhamthorpe Road and Swan Avenue. The section on the east side of Shaver Avenue North, between Swan Avenue and Bloor Street West, is subject to the City's three hour parking by-law.

To address the petition for traffic calming, speed and volume studies were conducted on Shaver Avenue North, south of Belgrove Drive, on Tuesday, April 28, 2009. The results of these studies are summarized in the following table:

Location Shaver Avenue North, south of Belgrove Drive	Time Period	Two - Way Traffic Volume (Veh/Hour)	85th %-tile Speed (km/h)	10 km/h Pace (km/h)
Date	a.m. Peak Hour	296	n/a	36-45
Tuesday, April 28, 2009	p.m. Peak Hour	282	n/a	41-50
	Total 24 Hour	3270	52	41-50

The 85th percentile speed and 10 km/h pace speed are statistical measures of free-flow vehicular operating speed. The 85th percentile speed is the vehicle operating speed at or below which 85 percent of all traffic is moving. Studies show that crash rates are lowest at or around the 85th percentile speed. The 10 km/h pace speed represents the speed range containing the highest number of speed observations.

The following table summarizes historical traffic volumes for both directions on Shaver Avenue North, in the area of Belgrove Drive.

Location	Date	June 29, 1989	December 9, 2006	April 28, 2009
Shaver Avenue North, in the area of Belgrove Drive	a.m. Peak Hour Volume	218	221	296
	p.m. Peak Volume	339	292	282
	24 Hour Volume	3330	3137	3280

These data show that traffic volumes on Shaver Avenue North have remained stable over the last twenty years, with little evidence of increasing traffic infiltration from the intersecting arterial roads.

We applied this data to the City of Toronto Traffic Calming Policy. According to the policy, the principle criteria for installing speed humps are vehicle speed and volume. Other environmental factors are considered, such as road width, pedestrian facilities and grade. The proposal was evaluated under these technical criteria, with the results summarized in Appendix B. Applying the study data to the Traffic Calming Warrant shows that Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road, satisfies the criteria for speed humps.

We emphasise that installing speed humps results in slower operating speeds for all vehicles, including emergency service vehicles, and can result in increased response times in the event of an emergency.

The City of Toronto Traffic Calming Policy requires that the City Clerk formally survey residents directly affected by installing speed humps on Shaver Avenue North. Under the policy, we must receive a minimum response rate of 51 per cent, of which at least 60 per cent of respondents must respond in favour of installing speed humps.

Subject to approval by Community Council of the recommendations outlined above, the City Clerk will survey residents on Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road. If the survey shows support for installing speed humps, Transportation Services will schedule installation according to relative need and competing priorities.

No alterations to parking regulations are required. The number of existing on-street parking spaces is not affected by the installation, with no significant negative impact on winter services, street cleaning or garbage collection; however, as indicated previously, it will reduce emergency vehicle speeds on a street designated as a primary response route.

Consultation with emergency services (Police, Fire and Emergency Medical Services) is required to ensure that the design and layout of traffic calming proposals do not negatively affect their operations. Although we generally advise emergency services of our intentions, we do not always receive a formal response; however, in the past Toronto Fire Services has provided the following general statement regarding speed hump installation.

“...Toronto Fire Service is supportive of initiatives that improve the life safety of our citizens. Our concern is that the physical calming measures being proposed may negatively impact emergency response to the area.

The vertical restrictions imposed by speed humps have a much greater affect on large fire vehicles than smaller passenger vehicles. Response time increases with every obstacle a fire vehicle encounters en route from the fire station to the incident. Although the increase at each hump may only be seconds, the cumulative effect can be a significant amount of time that could result in increased property damage, unnecessary injury or loss of life.

Speed humps are generally hard on large, heavy vehicles (fire vehicles) and increase the potential to suffer mechanical damage. This in turn can lead to a vehicle being placed out of service for considerable periods of time. Aside from the costs associated with repairs, there is a decrease in the resources available to respond to other emergency situations.”

Our Pedestrian and Cycling Infrastructure section advises that this section of Shaver Avenue is shown as a designated bike route in the City’s Bike Plan, and that installing speed humps will not interfere with the proposed installation of dedicated bike lanes on Shaver Avenue.

CONTACT

Mark Hargot, Supervisor of Traffic Operations - Etobicoke York District

Tel: (416)394-8453; Fax: (416)394-8942

e-mail: mahargot@toronto.ca

AFS12093

SIGNATURE

Allan Smithies

Acting Director, Transportation Services - Etobicoke York District

ATTACHMENTS

Appendix "A": Traffic Calming Warrant Criteria Table – Shaver Avenue North

Attachment 1: Map - Proposed Speed Hump Location Plan

Appendix A

Traffic Calming Warrant Criteria

Shaver Avenue North, between Bloor Street West and Burnhamthorpe Road

Warrant	Criterion	Requirement		Met/Not Met
Warrant 1 Petition	1.1 Petition	A petition requesting traffic calming must be signed by at least 25% of households on the street. OR A direct request from the Ward Councillor. Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.		Met – Petition and request from Ward Councillor
Impacts to Adjacent Streets		No significant traffic impacts on adjacent streets		Met –there should be no traffic spill-over to other streets given the configuration of streets in the area
Warrant 2 Safety Requirements (all three criteria must be fulfilled to satisfy this Warrant)	2.1 sidewalks	Continuous sidewalks on at least one side of the street (both sides for collector streets or higher classification). OR Where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered		Met – continuous sidewalks on both sides
	2.2 Road Grade	Road grade 5% or less OR Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.		Met – Road grade is less than 8%
	2.3 Emergency Response	No significant Impacts on Emergency Services (as determined in consultation with Emergency Services (Fire, Ambulance and Police) staff.		General objections from Toronto Fire, Ambulance and Police
Warrant 3 Technical Requirements (all four criteria must be fulfilled to satisfy this warrant)	3.1 Minimum Speed	85 th percentile speed is a minimum of 10 km/h (but less than 15 km/h) over a warranted 40 km/h speed limit, and the traffic volume requirements of Warrant 3.2 must be fulfilled. OR On streets where the 85 th percentile speed exceeds a warranted 40 km/h speed limit by a minimum of 15 km/h, there is no minimum volume required in warrant 3.2.		Met – Speed studies show 85 th (24 hr total) percentile as 52 km/h
	3.2 Min. and Max. Traffic Volume	Local Roads Traffic volume between 1,000 Veh/day and 8,000 Veh/day	Collector Roads Traffic volume between 2,500 Veh/day and 8,000 Veh/day	Met – Local with volume of 3270 Veh/day
	3.3 Minimum Street Segment Length between stop controls	Street segment length must exceed 120 meters between stop controls (signals or stop signs)		Met – Street segments exceeds 120 metres
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff)		Met – No TTC service