



STAFF REPORT ACTION REQUIRED

MacDonald Avenue – Traffic Calming

Date:	November 12, 2009
To:	Etobicoke York Community Council
From:	Director, Transportation Services - Etobicoke York District
Wards:	Ward 11 – York South-Weston
Reference Number:	p:\2010\Cluster B\TRA\EtobicokeYork\eycc100015-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 outline the findings of an investigation to determine the need to install speed humps on MacDonald Avenue. A staff assessment has determined that the criteria installing speed humps are met for MacDonald Avenue, between Rosemount Avenue and Jane Street.

RECOMMENDATIONS

Transportation Services recommends that Etobicoke York Community Council:

1. Authorize the City Clerk to conduct a poll of eligible householders, on MacDonald Avenue, between Rosemount Avenue and Jane Street, to determine resident support for the proposed speed hump plan, in accordance with the City of Toronto Traffic Calming Policy;
2. Subject to favourable results of the poll;
 - a. The City Solicitor prepare a by-law to alter sections of the roadway on MacDonald Avenue, between Rosemount Avenue and Jane Street, for traffic calming purposes, generally as shown on the attached Drawing EY09-150, dated November 2009, and circulated to residents through the polling process;

- b. Transportation Services take the necessary actions to reduce the speed limit from 40 km/h to 30 km/h on MacDonald Avenue, between Rosemount Avenue and Jane Street, when the speed humps are installed.

Financial Impact

Type of Funding	Source of Funds	Amount
Available within current budget	Transportation Services Capital Budget	\$27,000.00

ISSUE BACKGROUND

As a result of a request from residents of MacDonald Avenue, submitted to Councillor Frances Nunziata, Transportation Services staff investigated the feasibility of installing traffic calming (speed humps) on MacDonald Avenue, between Rosemount Avenue and Jane Street, to address concerns with speeding.

A map of the area is Attachment 1.

COMMENTS

MacDonald Avenue is classified as a two-way local road located in the residential community north of Lawrence Avenue, east of Weston, Road west of Jane Street. Sidewalks are located on both sides of the street.

The posted speed limit on MacDonald Avenue is 40 km/h.

Weston Collegiate Institute exists on the north side of the street at Pine Street. CR Marchant Middle School is located at the west end of the street, between Ralph Street and Rosemount Avenue. Speed humps currently exist on William Street, north of the school.

As part of our investigation, speed and volume studies were conducted on MacDonald Avenue, between Rosemount Avenue and Jane Street. The results of these studies are described in the following tables:

Location: MacDonald Avenue, west of Pine Street						
Count Date: March 3, 2009						
Time Period	Eastbound			Westbound		
March 3, 2009	Traffic Volume (Veh/Hour)	85 th %-tile Speed (km/h)	10 km/h Pace (km/h)	Traffic Volume (Veh/Hour)	85 th %-tile Speed (km/h)	10 km/h Pace (km/h)
a.m. Peak Hour	72	51		83	52	
p.m. Peak Hour	47	50		49	52	
Total 24 Hour	402	53	41-50	411	53	41-50

Location: MacDonald Avenue, east of Pine Street						
Count Date: March 3, 2009						
Time Period	Eastbound			Westbound		
March 3, 2009	Traffic Volume (Veh/Hour)	85 th %-tile Speed (km/h)	10 km/h Pace (km/h)	Traffic Volume (Veh/Hour)	85 th %-tile Speed (km/h)	10 km/h Pace (km/h)
a.m. Peak Hour	35	46		44	45	
p.m. Peak Hour	28	47		58	43	
Total 24 Hour	315	46	31-40	556	48	36-45

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.

We assessed the subject road conditions to the City of Toronto's Traffic Calming Policy, adopted by City Council at its meeting of April 16, 17 and 18, 2002. According to the policy guidelines, the principle criteria for installing speed humps are vehicle speed and volume. Other environmental factors are also considered, such as road width, pedestrian facilities and grade.

The proposal was further evaluated under these technical criteria, with the results summarized in Appendix A – Table 1. Applying of the study data to the Traffic Calming Warrant shows that MacDonald Avenue, between Rosemount Avenue and Jane Street, satisfies the criteria for the installing 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.

According to the provisions of the City of Toronto Traffic Calming Policy, the City Clerk must formally poll householders who would be directly affected by installing speed humps on MacDonald Avenue. Under this policy, we must receive a minimum response rate of 51 per cent, of which at least 60 per cent of respondents that respond must favour installing speed humps before staff can proceed with the installation.

Subject to approval by Council of the recommendations outlined above, the City Clerk will poll households on MacDonald Avenue, between Rosemount Avenue and Jane Street. If the poll supports installing speed humps on this portion of street, Transportation Services staff will schedule installation according to relative need and competing priorities.

No alterations to parking regulations are required. The number of existing on-street parking stalls is not affected by the installation, with no significant negative impact on winter services, street cleaning or garbage collection.

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 vehicle (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.”

CONTACT

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SIGNATURE

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ATTACHMENTS

Appendix “A”: Traffic Calming Warrant Criteria Table – MacDonald Avenue
Attachment 1: Map - Proposed Speed Hump Location Plan

Appendix A – Table 1

Traffic Calming Warrant Criteria

MacDonald Avenue, between Rosemount Avenue and Jane Street

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 – request from 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 max. 85 th percentile as 53 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 avg. of approximately 1,100 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