

COMMITTEE OF THE WHOLE – JUNE 21, 2004

TRAFFIC CALMING MEASURES FOR MAPLE SUGAR LANE

Recommendation

The Commissioner of Engineering and Public Works recommends:

- 1) That an all-way stop control not be installed at the intersection of Maple Sugar Lane and Sugarforest Drive;
- 2) That an all-way stop control not be installed at the intersection of Thornhill Woods Drive and Maple Sugar Lane;
- 3) That pedestrian warning signs be installed in advance of the walkway between #98 and #104 Maple Sugar Lane.
- 4) That traffic calming measures not be installed on Maple Sugar Lane.

Purpose

To review the feasibility of implementing all-way stop controls at the intersection of Maple Sugar Lane and Sugarforest Drive and at the intersection of Maple Sugar Lane and Thornhill Woods Drive, as well as traffic calming measures for Maple Sugar Lane in response to direction from Council.

Background - Analysis and Options

At its meeting on May 3, 2004 Council directed:

“That Engineering staff review the following:

- i) provision for an all-way stop sign to be installed at Maple Sugar Lane and Sugarforest Drive;**
- ii) provision for an all-way stop sign to be installed at Thornhill Woods Drive and Maple Sugar Lane;**
- iii) provision for a pedestrian warning sign to be installed at the walkway connected to the Bakersfield Public Elementary School;**
- iv) review of other traffic calming measures for Maple Sugar Lane once the construction in the area has been completed;”**

Maple Sugar Lane is a feeder roadway, and the speed limit is a statutory 50 km/h. Sugarforest Drive is a local residential roadway, and Thornhill Woods Drive is a collector roadway. Existing stop controls are located on Sugarforest Drive at Maple Sugar Lane, and on Maple Sugar Lane at Thornhill Woods Drive. Bakersfield Public School is located on Mistysugar Trail and has a pedestrian walkway access to Maple Sugar Lane between properties #98 and #104. The area is shown in Attachment No. 1.

Area residents have expressed concerns of safety and speeding on Maple Sugar Lane.

Staff conducted turning movement counts at Maple Sugar Lane and Sugarforest Drive on April 29, 2004, and at Thornhill Woods and Maple Sugar Lane on April 13, 2004 during peak travel

periods. The times the counts were conducted were from 7:30am to 9:00am and from 3:00pm to 5:30pm. The collected traffic volumes compared to the Provincial Warrant for All-way Stop Control are as shown below.

Maple Sugar Lane and Sugarforest Drive

- Warrant 1 – Minimum Vehicular Volumes Warranted 24%
- Warrant 2 – Accident Hazard Warranted 0%
- Warrant 3 – Sight Restriction Warranted 0%

Thornhill Woods Drive and Maple Sugar Lane

- Warrant 1 – Minimum Vehicular Volumes Warranted 60%
- Warrant 2 – Accident Hazard Warranted 0%
- Warrant 3 – Sight Restriction Warranted 0%

For an all-way stop control to be warranted, one or more of the three warrants must be satisfied 100% or more. The results of the turning movement counts for both intersections do not meet the requirements of the Provincial Warrant for All-Way Stop Control. The above results reflect the highest peak traffic hour.

There are no sight distance restrictions noted at these intersections. There are also no reported vehicle collisions at these intersections.

In addition, staff collected speed and volume data from Automatic Traffic Recorders installed on Maple Sugar Lane east of Sugarforest Drive from May 17, 2004 to May 19, 2004. The speed and volume data were collected over a 24-hour period as summarized below.

DATE	TIME	LOCATION	DIRECTION	AVERAGE SPEED	24-HOUR VOLUME
May 17-19, 2004	24 hour data collection	East of Sugarforest	Eastbound	44	1136
March 17-19, 2004	24 hour data collection	East of Sugarforest	Westbound	44	937

The average speeds were found to be 44 km/h in both directions. As the speed limit is a statutory 50 km/h, no change to the speed limit is recommended. The total traffic volumes collected over a 24-hour period are well within the roadway capacity designed for Maple Sugar Lane.

In accordance with Council’s Neighbourhood Traffic Committee Policy and Procedure, speed humps shall be considered only when the following three warrants are met: the street is not a primary emergency response route, the speed limit is 50 km/h or less, and the average speed is measured to be 10 km/h greater than the speed limit. The collected speeds do not exceed the posted speed limit by 10 km/h. Based on the above criteria, the warrant for the installation of speed humps on Maple Sugar Lane is not met. Maple Sugar Lane is considered to be a primary emergency response route to the surrounding residential homes in the area.

The installation of medians, curb extensions or road narrowings shall be considered in existing areas only when the following two warrants are met: the speed limit is 50 km/h or less and the average speed on the street is measured to be 10 km/h greater than the speed limit. Based on the above criteria, the warrant for the installation of medians, curb extensions or road narrowings on Maple Sugar Lane is not met.

There is an existing pedestrian walkway on Maple Sugar Lane between properties #98 and #104 that leads to the Bakersfield Public School property. Staff recommend the installation of pedestrian warning signs to provide notice to motorists on Maple Sugar Lane.

Environmental Assessment Act Requirements

As required under the Environmental Assessment Act, whenever traffic calming measures are installed or removed a Schedule B Environmental Assessment process must be followed. This process requires public notification and consultation, the identification of alternates, and the filing of a Notice of Completion with the Ontario Ministry of the Environment and publication in local media.

Should traffic calming measures be approved by Council for installation on Maple Sugar Lane, then the City would be required to publish a Notice of Commencement, develop a plan for review by the public and publish a Notice of Completion. The notices would also have to be filed with the Ministry of the Environment and published in editions of the Vaughan Citizen, Lo Specchio and Vaughan Weekly newspapers. Prior to construction, the City's normal practice is to mail letters to the residents of Maple Sugar Lane should traffic calming measures be approved informing them of their installation.

Relationship to Vaughan Vision 2007

This traffic study is consistent with Vaughan Vision 2007 as to identify and implement innovative traffic management alternatives to improve general traffic safety (1.1.3).

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

Conclusion

Engineering staff recommend that an all-way stop control not be installed at the intersection of Maple Sugar Lane and Sugarforest Drive and that an all-way stop control not be installed at the intersection of Thornhill Woods Drive and Maple Sugar Lane. Because of the existing pedestrian walkway on Maple Sugar Lane servicing the Bakersfield Public School, pedestrian warning signs should be installed in advance of the walkway between #98 and #104 Maple Sugar Lane. It is also recommended that no additional traffic calming measures be installed on Maple Sugar Lane.

Attachments

1. Location Map

Report prepared by

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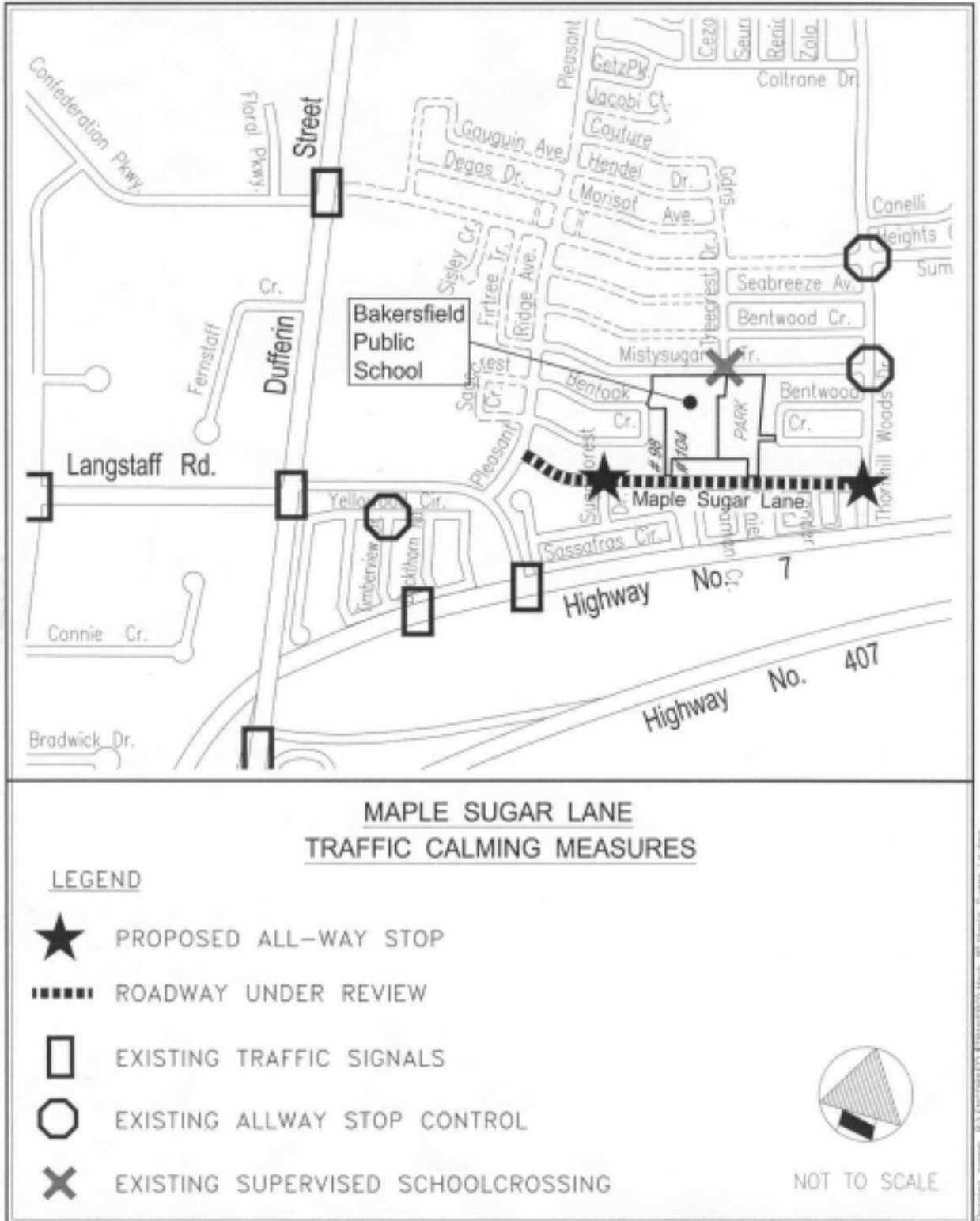
Respectfully submitted,

Bill Robinson, P. Eng.
Commissioner of Engineering and Public Works

MR/fc

Michael Won, P. Eng.
Director of Development/Transportation
Engineering

ATTACHMENT No. 1



CITY OF WUHAN - ENGINEERING DEPARTMENT

DRAFTSPERSON: SMH

Drawing name: R:\Engineering\2004\Draft\holdcw\June 21\Maple Sugar Lane.dwg