

COMMITTEE OF THE WHOLE – JUNE 16, 2003

CHANCELLOR COMMUNITY CENTRE SPEED HUMP TESTS

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That this report be received for information; and
2. That the current standard for speed humps and raised crosswalks, with a length of 7.0 m and a height of 100 mm, remain unchanged.

Purpose

To report on the results of tests on the Chancellor Community Centre property of two different speed hump designs.

Background - Analysis and Options

At its meeting of June 24, 2002, Council approved a recommendation that speed humps be constructed on the Chancellor Community Centre property for the purposes of testing their effects on heavy vehicles.

Speed humps in the City of Vaughan are currently 7.0 m long by 100 mm high. Some residents have claimed they are not effective in slowing some vehicles, particularly the sport utility vehicles that are becoming increasingly common on our streets, and have requested that more severe designs be used. However, the Fire Department and other agencies have concerns that more severe designs will have greater impacts on their heavier vehicles. In fact, four incidents of damage to fire trucks when responding to emergency calls may have been as a result of speed humps.

Two test speed humps were constructed on the Chancellor Community Centre property last fall. Refer to Attachment No. 1. One speed hump has a length of 6.0 m and a height of 100 mm (one metre shorter than our current standard) while the other has a length of 4.0 m and a height of 80 mm. This hump is used in the City of Toronto.

On May 28, 2003, the Engineering Department and the Fire Department tested the effects of the two humps on a fire truck. The truck used was a typical fire truck, and not the longest or heaviest in the City's fleet. The humps were traversed at speeds of 15, 25 and 30 km/h.

The tests demonstrated that both test humps, in particular the 4.0 m by 80 mm speed hump used in the City of Toronto, have noticeably greater impacts on fire trucks than the current standard. Considerable discomfort was experienced when traversing the 6.0 m by 100 mm hump at 25 km/h, and it was barely possible to traverse the 4.0 m by 80 mm hump at this speed. By comparison, fire crews are able to traverse most of the City's speed humps with moderate discomfort at 30 km/h (which is the advisory speed now posted at all speed humps and raised crosswalks).

To date the City's speed humps and raised crosswalks have proven to be effective speed reducers. Studies conducted by staff have demonstrated that where traffic calming measures are in place average speeds have been reduced by 8 km/h, and average maximum speeds have been reduced by 13 km/h. As speed humps and raised crosswalks have proven to be the most effective traffic calming measures, their effects on traffic speeds are likely even greater. The Fire Department has concerns that more severe speed hump designs will compromise emergency

response times and possibly result in more damage to their vehicles. Accordingly, it is recommended that the current City standard for speed humps and raised crosswalks of 7.0 m by 100 mm be maintained.

Because of these results, no further testing using other heavy vehicles such as transit buses or school buses is planned.

Conclusion

Based on the tests, it is recommended that the current standard for speed humps and raised crosswalks, with a length of 7.0 m and a height of 100 mm, remain unchanged.

Attachments

1. Location Map

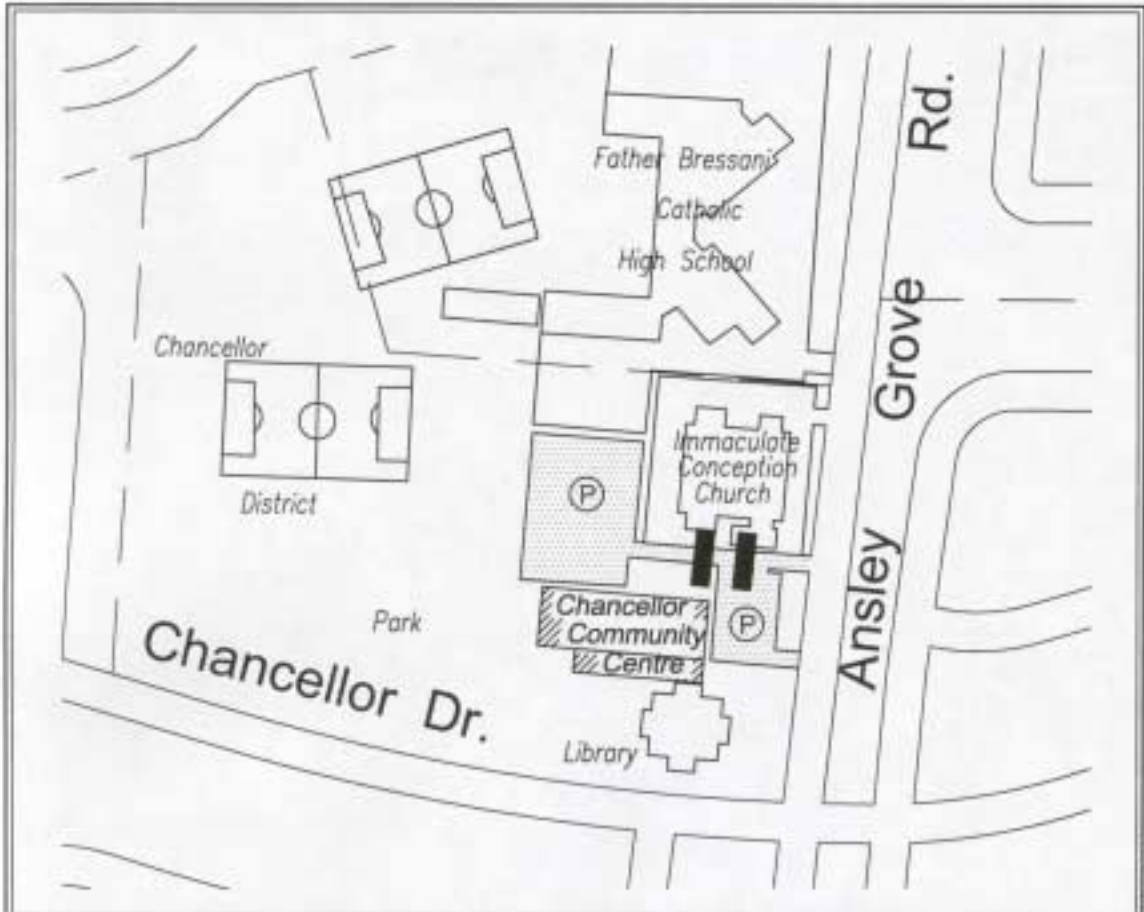
Report prepared by

Philip Weber, Transportation Engineer, ext. 8264

Respectfully submitted,



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

ATTACHMENT No. 1



CHANCELLOR COMMUNITY CENTRE TEST SPEED HUMPS

LEGEND

-  TEST SPEED HUMPS
-  EXISTING PARKING LOT



NOT TO SCALE

CITY OF WAGMAN - ENGINEERING DEPARTMENT

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