



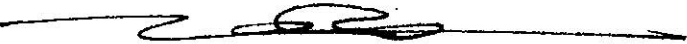
## City of Richmond

## Report to Committee

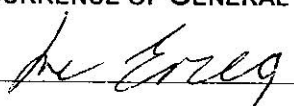
**To:** Planning Committee  
**From:** Victor Wei, P. Eng.  
Director, Transportation  
**Date:** November 5, 2007  
**File:** 10-6450-09-01/2007-Vol  
01  
**Re:** **MCLEAN AVENUE - PROPOSED TRAFFIC CALMING MEASURES**

### Staff Recommendation

1. That the concept of the following proposed traffic calming measures on the McLean Avenue, as described in the attached report, be forwarded to the area residents for feedback by means of mail-out questionnaires:
  - a) installation of a traffic circle at the intersection of McLean Avenue and McRae Street; and
  - b) installation of two speed humps, one each on McLean Avenue and McRae Street, at mid-way along the McLean Park frontage.
2. That staff proceed with the implementation of the proposed traffic calming measures immediately subject to the support of the area residents.

  
Victor Wei, P. Eng.  
Director, Transportation  
(4131)

Att. 1

FOR ORIGINATING DEPARTMENT USE ONLY			
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>	
Engineering .....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Parks & Public Works Operations (W/Y) ..	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
<b>REVIEWED BY TAG</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	<b>REVIEWED BY CAO</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

## Staff Report

### Origin

The residents in the area of McLean Avenue have recently expressed their neighbourhood traffic concerns to the City and requested that a traffic review be carried out regarding vehicle speeding in the area of the McLean Park frontage. As a result, the following Planning Committee referral to staff was carried:

*That the issue of traffic calming on McLean Avenue, in the Hamilton area, be referred to staff to review and examine potential measures which could be taken, including the use of speed humps.*

This report presents staff's assessment of the above traffic-related concerns and the resulted recommendations to enhance traffic safety for McLean Avenue area.

### Analysis

#### 1. Traffic Study

In order to assess and determine the need for implementing traffic calming measures in any residential neighbourhood, staff regularly carry out the following tasks:

- verify the existing traffic characteristics and identify any traffic problems in the area;
- analyze the historical traffic accident data in the area;
- determine the type of traffic calming measure/s appropriate, if any, to be implemented to address any traffic-related problem;
- estimate the costs associated for implementation of any measures to enhance traffic safety in the area and confirm funding availability;
- seek Council's endorsement of any proposed traffic calming concept;
- conduct a survey of the affected residents to obtain their support for any proposed traffic calming measure/s to be implemented;
- if there is majority (approximately 2/3 or greater) support, proceed with the implementation without any further reporting back to Council; and
- monitor the improved area after installation of any enhancements to ensure positive results; or
- if there is no majority support, the proposed improvements will not be pursued or they will be re-evaluated based on the suggestions from the residents, and Council will be advised accordingly.

The following briefly summarizes staff's recent traffic study carried out in the McLean Avenue area.

#### 1.1 General

The study area examined by staff is bounded by McLean Avenue and McRae Street in the area of McLean Park.

McLean Avenue is a 9.0 meter wide two-lane urban roadway constructed with curb and gutter with a sidewalk on the south side. McRae Street is also a 9.0 metre wide two-lane urban roadway with a sidewalk on the east side. On-street parking is permitted on both sides of these two roads.

The frontage of McLean Park is adjacent to McLean Avenue for a distance of 125 meters on the south side and for a distance of 220 meters on McRae Street. The existing playground signage is consistent with the required signage for a park in accordance with the *Manual of Uniform Traffic Control Devices* (MUTCD).

## 1.2 Vehicle Speed and Traffic Volume

McLean Avenue was recently monitored using the City's automatic traffic detectors to determine the extent of vehicle speed and traffic volume on the road. The results of the data collected indicated that the daily traffic volumes for the area are typical for local roads with a peak volume of:

- 105 vehicles eastbound between 8:00 a.m. and 8:30 a.m.; and
- 68 vehicles westbound between 2:30 p.m. and 3:00 p.m.

The data collected regarding vehicle speed indicated that motorists were traveling at an average speed of 43 km/h eastbound and 50 km/h westbound.

Since the existing 30 km/h playground speed limit is in effect only during daylight hours, an assessment was made to separate the average speed in the "dawn to dusk" time period. As a result, it was found that the average speed during the daytime was 46 km/h eastbound and 50 km/h westbound, both of which exceed the 30 km/h posted speed limit.

## 1.3 Playground Speed Zone Warrant

A *School and Playground Areas and Zones* warrant was also conducted as part of the traffic review, which is based on the Transportation Association of Canada (TAC) guideline. The review confirmed that a 30 km/h playground speed zone is still warranted across the park frontage on both McLean Avenue and McRae Street.

## 1.4 Crash History

A search of ICBC crash data for the study area indicated there were a total of ten traffic crashes in the area of the park. None of the crashes were speed related and there have been no reported crashes involving pedestrians or cyclists.

**Number of Crashes – January 1996 to May 2006**

<b>Year</b>	<b>Number of Reported Crashes</b>
1996	0
1997	0
1998	0
1999	1
2000	0
2001	0
2002	4
2003	1
2004	3
2005	1
2006	0
<b>10-Year Total</b>	<b>10</b>

## Type of Crashes

Type of crash	Number of crashes
Reversed into parked car	4
Side swipe parked car	1
Turn, Side swipe approaching car	1
Single Vehicle - Lost control hit car in driveway	1
Single Vehicle - Lost control hit mailbox	1
Hit and Run	2

Based on the above information, vehicle crashes are not considered to be of serious concern in this area.

## 2. Recommendation

Based on the above traffic assessment of the McLean Park area, staff recommend the following measures (as summarized in **Attachment 1**) be considered to address the identified traffic concern of speeding during the daytime when the 30 km/h posted speed limit is in effect:

- installation of a traffic circle at McLean Avenue and McRae Street, with the elimination of one on-street parking space in front of 22431 McLean Avenue; and
- installation of two speed humps, one on McLean Avenue and one on McRae Street, at approximately mid-way along the park frontages.

Staff will continue to monitor the area and work with the RCMP to provide traffic data so that enforcement can be carried out during the times when higher vehicle speeds are observed.

## Financial Impact

The costs to install the proposed traffic calming measures are:

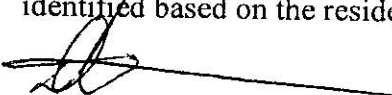
- one traffic circle - \$10,000 (*Class C Estimate*); and
- two speed humps - \$6,000 (*Class C Estimate*).

The total cost for installation of the proposed traffic calming measures in the McLean Avenue area is \$16,000, which would be funded from the 2007 Neighbourhood Traffic Safety Program. The Operational Budget Impacts are;

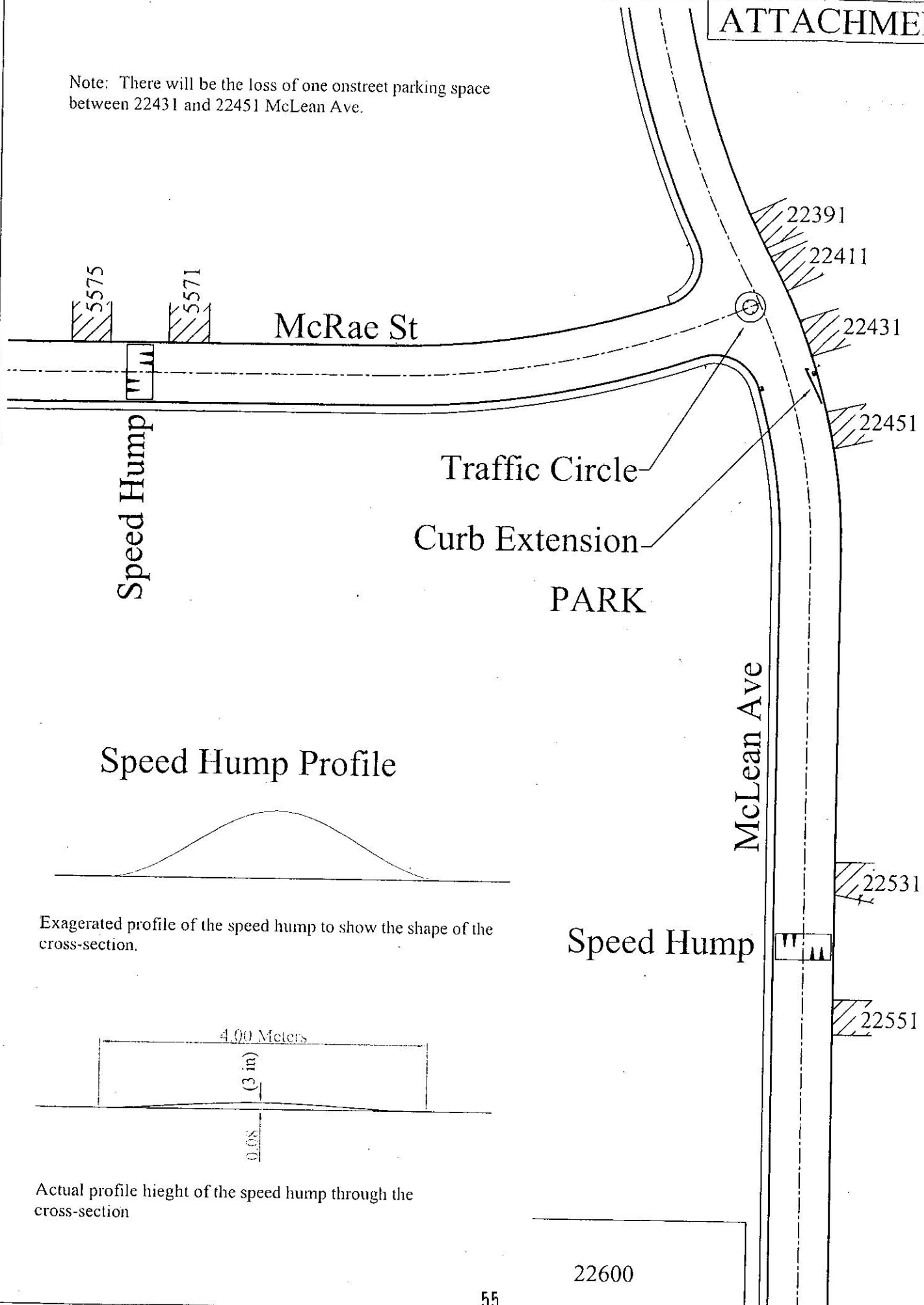
- Parks Department - \$600.00
- Public Works - \$600.00

## Conclusion

The recent traffic study conducted by staff in the McLean Park area has found that the traffic volume in the area is typical for a residential area. However, speeding had been observed in the vicinity of the park and playground where there is a posted reduced speed zone of 30 km/h. To enhance traffic safety in this area, the concept of traffic calming measures is proposed to be forwarded to the area residents for feedback by means of mail-out questionnaires. The proposed traffic calming measures would be implemented immediately if supported by the majority of the residents. Otherwise, the proposed measures would be re-evaluated and alternatives would be identified based on the residents' feedback.

  
Doug Newton  
Traffic Technician (4032)

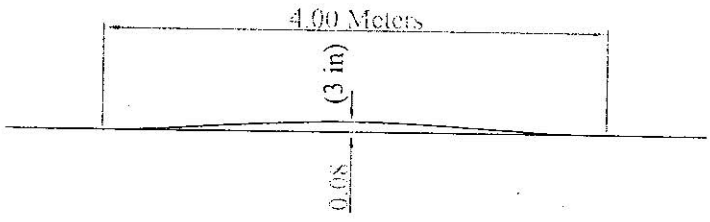
Note: There will be the loss of one onstreet parking space between 22431 and 22451 McLean Ave.



## Speed Hump Profile



Exaggerated profile of the speed hump to show the shape of the cross-section.



Actual profile height of the speed hump through the cross-section.