



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: August 30, 2007  
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Meeting Date: September 20, 2007

TO: Standing Committee on Planning and Environment  
FROM: General Manager of Engineering Services  
SUBJECT: Pedestrian Enhancements for School Crosswalks, 2007 Program

**RECOMMENDATION**

- A. That Council approve the construction of pedestrian corner bulges on:
- King Edward Ave at Collingwood Street,
  - Arbutus Street at W 8<sup>th</sup> Avenue,
  - W 16<sup>th</sup> Avenue at Columbia Street, and
  - E 45<sup>th</sup> Avenue at Doman Street
- B. THAT funding of \$200,000 be provided from the Streets Basic Capital Account Group CC1EA5AX1 - Local Area Traffic Plans and Other Improvements (order # 30008863).
- C. THAT the Streets Operating Budget be increased by \$1,500 for Street Maintenance without offset commencing in 2009, subject to annual Budget Review.

**COUNCIL POLICY**

The Vancouver Transportation Plan emphasizes the need to provide more comfortable pedestrian environments.

On June 5, 2001, Council passed a motion that staff be encouraged to accelerate the installation of various methods for improving pedestrian crossings.

## PURPOSE

The purpose of this report is to seek Council's approval to construct curb bulges at four existing school crosswalk locations.

## BACKGROUND

Curb bulges are used to improve the pedestrian environment on arterial and collector streets with full time on-street parking. Curb bulges have been constructed at more than thirty school crosswalks since the fall of 2000. Currently, there are fifteen remaining school crosswalk locations on arterial and collector streets which need to be evaluated.

The majority of responses received to date from both schools and the public have been favourable. A concern raised by the Bicycle Advisory Committee was that bulges could create an area of friction between cyclists and motorists. To address this concern all proposed bulges on arterial streets are designed to provide a curb lane no less than 4.3 m wide, appropriate for bicycle/motor vehicle lane sharing, and wherever possible 4.5 m or wider in order to accommodate potential future bike lanes.

Curb bulges improve crossing conditions for pedestrians in several ways:

- increase pedestrian visibility;
- increase pedestrian sight distance;
- reduce pedestrian crossing distance;
- restrict parking too close to a crosswalk.

## DISCUSSION

There are four proposed curb bulge locations at school crosswalks that have been identified by Engineering Services staff in consultation with the following organizations: School Traffic Working Group, comprised of staff members from the Vancouver School Board, and the Community Road Education and Safety Team (CREST) of the Vancouver Police Department. Additionally, the principals of each school have been directly involved and support these proposals. A list of locations with descriptions is presented in Appendix A. All proposed curb bulges are scheduled to be constructed before the 2008 school year.

No vehicle turning movements will be restricted at any of these locations. However, at some locations vehicles may be prevented from passing on the right while other vehicles are turning left or stopped for pedestrians. All curb bulges will leave a travel lane at least 4.3 metres (14 feet) wide, suitable for bicycle/motor vehicle lane sharing, for each direction of travel. Curb bulges will be located within existing by-law clearances; therefore, no legal parking spaces will be displaced.

The proposed curb bulges address two of the recommendations of the 1997 Vancouver Transportation Plan:

- R5 - small changes to improve pedestrian environments; and
- NP8 - improve pedestrian spaces.

They also address a recommendation contained in a 1999 Vancouver School Board report entitled Traffic Safety around Vancouver Schools which supports "developing and implementing innovative engineering measures such as corner bulges, speed humps and painted clearance panels in cooperation with individual schools".

### **FINANCIAL IMPLICATIONS**

The total cost of installing the curb bulges as described above is estimated at \$200,000. It is recommended that funding for this project be provided from the Streets Basic Capital Account Group CC1EA5AX1 - Local Area Traffic Plans and Other Improvements (order # 30008863).

The curb bulges will require ongoing maintenance and therefore the Streets Operating Budget is recommended to be increased by \$1,500 for Street Maintenance in the Curb and Gutter program without offset commencing in 2009, subject to annual Budget Review.

### **CONCLUSION**

Curb bulges have been identified as effective, relatively low cost means to enhance the pedestrian environment, and are therefore recommended for installation at the locations presented in this report. It is anticipated that additional school crosswalk safety enhancements will be identified and recommended in subsequent years.

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## Proposed Curb Bulge Locations at School Crosswalks

1. King Edward at Collingwood ( Kitchener Elementary School)

This crosswalk serves Kitchener Elementary School and local transit users. There is a wide median on King Edward that allows pedestrians to cross one direction of traffic at a time. A bulge is recommended on the north side of King Edward only, where pedestrians' visibility and sight distance can be affected by parked cars. There is an existing student crossing patrol at this intersection and this crosswalk is well used by parents and students walking to Kitchener school. Kitchener School is one of the ten schools participating in the One Day One School pilot program.

A bulge on the south side of King Edward would interfere with the existing bus stop and would not substantially improve visibility.

2. Arbutus and 8<sup>th</sup> Avenue (St. Augustine Elementary School)

This crosswalk is immediately adjacent to St. Augustine Elementary School and the Montessori Day Care Society. It also serves pedestrians travelling to Delamont Park.

3. W. 16<sup>th</sup> Avenue and Columbia (Fraser Elementary School)

This crosswalk is immediately adjacent to Fraser Elementary School. A bulge is recommended on the south side of W. 16<sup>th</sup> Avenue only, where pedestrians' visibility and sight distance can be affected by parked cars. A bulge on the north side of W. 16<sup>th</sup> Avenue would interfere with the right-in/right-out diverter and would not substantially improve visibility.

4. Doman and 45<sup>th</sup> Avenue (Carleton, Weir and MacCorkindale Elementary Schools)

This crosswalk serves Carleton and Weir Elementary Schools, and is along a transit route. A bulge is recommended on the north side of E. 45<sup>th</sup> Avenue only, where pedestrians' visibility and sight distance can be affected by parked cars. A bulge on the south side of E 45<sup>th</sup> Avenue would interfere with the existing bus stop and would not substantially improve visibility.