

REGION OF OTTAWA-CARLETON
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REPORT
RAPPORT

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DATE 02 May 2000

TO/DEST. Co-ordinator Transportation Committee

FROM/EXP. Director Mobility Services and Corporate Fleet Services
 Environment and Transportation Department

SUBJECT/OBJET **KING EDWARD AVENUE AND RIDEAU STREET -
 INTERSECTION MODIFICATIONS**

DEPARTMENTAL RECOMMENDATION

That Transportation Committee recommend Council approve the proposed intersection modifications at the intersection of King Edward Avenue and Rideau Street as shown in Annex B (Ainley Group, Dwg #KE-01).

BACKGROUND

The intersection of King Edward Avenue and Rideau Street was identified in the 1997 Safety Improvement Programme (SIP) as being a safety concern due to its collision rates and problematic traffic operations. In the four-year period ending December 1998, 118 collisions were reported at this site of which 26 resulted in injury - eight involved pedestrians, one was fatal. The intersection is the crossing point of two major arterials where King Edward Avenue is a multi-lane facility which plays a significant role in the movement of traffic between the Region of Ottawa-Carleton and the Outaouais, and for the most part abuts residential land uses; and Rideau Street is a multi-lane facility which is the primary east/west arterial north of the Queensway and supports commercial development in the vicinity of the intersection (Annex A refers). In addition to supporting large vehicle volumes, the intersection supports large pedestrian volumes, cyclists, forms part of a primary transit route and is one of the key intersections on the truck route between Highway 5 in Hull and Highway 417 in Ottawa.

Through the SIP process, various measures were assessed to address the intersection's areas of concern, in particular the southbound right-turn movement from King Edward to Rideau. As a result, the intersection modifications proposed in Annex B are put forth for Committee and Council approval.

In addition to addressing specific safety issues at the intersection, staff were also asked to report on the fit of the recommended modifications with those set out in the King Edward Avenue Community Improvement Plan.

DISCUSSION

In assessing the intersection for safety improvements, a review of the 85 collision reports for the three-year period ending 31 December 1997 revealed that one-third (28) of the collisions involved southbound right-turning vehicles. Of all the collisions at the intersection, this movement is recognized as the significant reoccurring collision movement which has the greatest potential for corrective measures. The prominent feature of these collisions is the involvement of heavy vehicles and their turning requirements.

As the current curb lane configuration does not provide adequate space to turn a large truck within the appropriate lanes, larger trucks have been forced to initiate their turn from the through lane adjacent to the turning lane. When this occurs, drivers of smaller vehicles, unaware that the operator of the large truck intends to turn right, frequently attempt to make concurrent right turns from the curb lane with the result having the trucks pinching the smaller vehicles into the curb. In addition to damage and possible injury incurred by the vehicles and occupants in this situation, traffic control signals and street lighting hardware are often damaged by large trucks turning right from the appropriate lane but not being able to clear the hardware mounted on the boulevard, and most importantly pedestrians are subjected to an unsafe environment with collisions occurring in the area and trucks mounting the curbs while turning.

Therefore, to enhance pedestrian safety and facilitate southbound right turns for trucks, the turning radius on the northwest corner must be increased. To accommodate this additional turning radius and maintain the current lane configuration, the southbound roadway on the north side of the intersection must shift to the east. In addition to the northwest corner modifications, narrowings at the northeast and southwest corners are proposed where there is excess lane capacity and lane realignments are required respectively. These narrowings result in shorter pedestrian walking distances across King Edward. The proposed configuration also provides for cycling facilities through 4.25 metre curb lanes along King Edward Avenue and an appropriate radius for truck turning requirements on the intersection's northeast corner.

King Edward Avenue Community Improvement Plan

On 22 December 1999, an Ontario Municipal Board appeal ruling (which dealt with the Region's Official Plan, the King Edward Avenue corridor and the routing of truck traffic) was handed down which increased the status of the King Edward Avenue Community Improvement Plan (KEACIP) to a Priority One project within the Region's Official Plan. As a result of this decision, concerns were raised that modifications proposed to address the safety concerns as identified by SIP would be in conflict with the intersection design and concepts approved in the KEACIP. In order for the KEACIP not to be influenced by the SIP proposed modifications, as they would be implemented prior to the KEACIP,

staff were asked to review both concepts and incorporate KEACIP elements where possible to protect the integrity of the KEACIP.

Having reviewed the KEACIP concept drawings, both are similar in their approach to traffic operations at the intersection. Both address the critical southbound right-turning truck issue and both provide lane narrowings to reduce pedestrian walking distances across King Edward. The exception however is that the KEACIP concept does not properly deal with the safe movement of westbound right-turning trucks. It proposes a wider centre median on King Edward to support trees and a gateway concept; however the wider median does not leave adequate northbound lane space for the turning requirements of those larger vehicles.

Staff's primary concern is the safety of pedestrians and the overall safe operation of the intersection by other users; therefore, to accommodate all movements safely within the intersection, incorporating the KEACIP median concept is not recommended at this time.

CONSULTATION

Two public open houses were held by the Ward Councillor (03 February 2000 and 30 March 2000) to inform and solicit comments from the community. Comments received from these forums were used as input in developing the proposed modifications.

As required by the *Municipal Act of Ontario* regarding Public Hearings, a notice of the proposed roadway modifications has been placed in Le Droit, the Ottawa Citizen and the Ottawa Sun for four consecutive weeks.

A copy of this report has been circulated to the Regional Cycling Advisory Group (RCAG) for comments. Any RCAG comments received will be made available at the Public Hearing.

Temporary signs advising pedestrians, cyclists and motorists that "roadway modifications are proposed" have been placed at the intersection of King Edward and Rideau. They feature a telephone number from which more information can be obtained and/or comments and concerns can be recorded. Comments received will be made available at the Public Hearing.

FINANCIAL IMPLICATION

The construction cost estimate for the work as recommended in this report is \$210,600.00.

If approved by the Transportation Committee and Council, funds for this project are available in the 2000 Capital Budget, Order No. 900079, Safety Improvement Programme (reference page 170).

*Approved by
Doug Brousseau*

GK/

Attach. (2)



