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REQUEST FOR WESTBOUND RIGHT-TURN LANE BATHURST STREET AND ATKINSON AVENUE, CITY OF VAUGHAN

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, May 31, 2007, from the General Manager, Roads:

1. RECOMMENDATIONS

It is recommended that:

1. Staff be authorized to enter into a cost-sharing agreement with the City of Vaughan, as outlined in this report, for the City of Vaughan to design and construct a westbound to northbound right-turn lane at the intersection of Bathurst Street (Y.R. 38) and Atkinson Avenue.
2. The Regional Clerk forward this report to the Clerk of the City of Vaughan.

2. PURPOSE

This report considers a resolution from Vaughan Council (*Attachment 1*) for the Region to design and construct a westbound to northbound right-turn lane at the intersection of Bathurst Street and Atkinson Avenue in the City of Vaughan. This report seeks authorization to enter into a cost-sharing agreement with the City of Vaughan for the City of Vaughan to design and construct a right-turn lane.

3. BACKGROUND

Bathurst Street, in the City of Vaughan, is a five lane roadway, including a centre left-turn lane, between Steeles Avenue and Highway 7 carrying approximately 36,000 vehicles per day. This roadway serves as an arterial road providing commuter access to the City of Toronto from both the City of Vaughan and areas to the north.

Atkinson Avenue is a local collector road in the City of Vaughan that essentially provides a ring road in the north-east quadrant of Centre Street and Bathurst Street. Atkinson Avenue intersects Bathurst Street directly opposite New Westminster Drive at a traffic control signal, see the location plan (*Attachment 2*). Both Atkinson Avenue and New Westminster Drive are under the jurisdiction of the City of Vaughan and Bathurst Street is a Regional road.

As stated in the background of the resolution from Vaughan Council, residents of the area of Atkinson Avenue are concerned with long traffic queues on Atkinson Avenue

approaching Bathurst Street particularly during the peak traffic periods. These long queues can create delay at the intersection and lead to driver frustration.

In November 2006, Regional staff received a request from the City of Vaughan to consider constructing a westbound right-turn lane at this location. After analysis by Regional staff, it was determined that traffic volumes at this intersection warrant a westbound right-turn lane and that the additional lane would reduce overall delay at the intersection. However, as this right-turn lane would be located on a local road, and therefore alleviate traffic congestion on the local road, all costs related to the design and construction of this lane would be the responsibility of the City of Vaughan. This information was conveyed to the City of Vaughan in a letter dated November 24, 2006.

4. ANALYSIS AND OPTIONS

Right-turn lanes can be included at major intersections of two Regional roads or at intersections of a Regional road and a local road. They are often implemented at locations where there are high volumes of right turning traffic based on turning movement counts or they can be designed and implemented through development applications based on a traffic impact study and projected traffic volumes.

The intention of a right-turn lane is to separate vehicles by direction and to allow a right turning vehicle to continue its turn without being delayed by a through vehicle. This separation is particularly important at signalized intersections where a right turning vehicle is delayed by a through vehicle waiting during a red signal indication. The additional right-turn lane allows a vehicle to complete its turn, even during a red signal indication, assuming there is a sufficient acceptable gap in traffic and that there are no pedestrians crossing the road. The construction of a right turn lane at this location will provide a small operational benefit to the Region and, will improve operations significantly on Atkinson Avenue by reducing delay to right turning vehicles.

Auxiliary lanes, including right-turn lanes, require appropriate rights-of-way. There must be enough physical space in the public right-of-way to construct the lane including underground utilities. In the case of adding an auxiliary lane to an existing intersection, it is often necessary to relocate existing infrastructure including gas, hydro, bell, and other street furniture.

The Region typically has jurisdiction and maintenance responsibility to the back of the daylighting triangles at intersections (*Attachment 3*). The funding of any work completed at an intersection should be shared based on the costs allocated on each side of the jurisdiction line at the back of the daylighting triangle.

As Atkinson Avenue is under the jurisdiction of the City of Vaughan, and Bathurst Street is under the jurisdiction of the Region, the construction of a right-turn lane at the intersection should be the responsibility of both agencies. In addition there is an

operational benefit to both the Region and the City in this case and therefore it is recommended that the cost of the right turn lane be shared.

Since this request initiated from the City of Vaughan it is recommended that the City of Vaughan be responsible for the design and construction of the right turn lane. The Region will require the City of Vaughan to submit plans for review and approval and obtain all permits prior to any work being carried out. In addition the contractor will be required to obtain an occupancy permit from the Region.

5. FINANCIAL IMPLICATIONS

It is suggested that the City of Vaughan be responsible for the cost of the right-turn lane within the City of Vaughan's right-of-way and the Region be responsible for the portion within the Regional road right-of-way. In order to determine the cost of this work, detailed plans and a cost estimate will be required for the construction of a westbound right-turn lane at the intersection of Bathurst Street and Atkinson Avenue and the impact to existing utilities, traffic control signals, etc. will need to be determined. Typically, the cost of an additional right-turn lane is in the order of \$300,000, not including utility re-locations, of which the Region would be responsible for approximately 30%.

6. LOCAL MUNICIPAL IMPACT

The construction of a westbound to northbound right-turn lane at the intersection of Bathurst Street and Atkinson Avenue would benefit the City of Vaughan by alleviating some of the traffic congestion on the local road. Overall delay at the intersection would be decreased as motorists will be able to complete a right-turn without impacting the through traffic at the intersection. The City of Vaughan should be responsible for the design and construction of these works on a cost shared basis as outlined in the report.

7. CONCLUSION

Regional staff has investigated a request to construct a westbound to northbound right-turn lane on Atkinson Avenue at Bathurst Street. Regional staff concurs that the addition of this right-turn lane would decrease traffic delay at the intersection and improve traffic operations. Bathurst Street is a Regional road and Atkinson Avenue is a local road under the jurisdiction of the City of Vaughan, therefore, it is recommended that the Region should enter into a cost-sharing agreement with the City of Vaughan. This cost-sharing agreement shall be determined by Regional and City of Vaughan staff through the review of appropriate design plans and an overall cost estimate for the work. In addition, since this request came from the City of Vaughan it is recommended that the City of Vaughan should be responsible for the design and construction of the right turn lane.

Report No. 6 of the Transportation and Works Committee
Regional Council Meeting of June 21, 2007

For more information on this report, contact Brian Harrison, Director, Operations, Roads Branch at extension 5205 in the Transportation and Works Department.

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause were included in the agenda for the June 13, 2007 Committee meeting.)