



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 4

Halifax Regional Council
December 11, 2007

TO: Mayor Kelly and Members of Halifax Regional Council

A handwritten signature in black ink, appearing to read "Mike Labrecque".

SUBMITTED BY: _____
Mike Labrecque, P.Eng., Director, Transportation and Public Works

DATE: November 29, 2007

SUBJECT: Fairview Overpass Design Changes - Merge Lanes

INFORMATION REPORT

ORIGIN

Item 12.1(i) raised at the October 30, 2007 meeting of Halifax Regional Council; and Item 12.1. 4, a staff presentation on November 13, 2007 meeting of Halifax Regional Council. Staff was asked to monitor the location, review collision reports, and make recommendations for possible improvements.

BACKGROUND

The recently completed changes to the Windsor/Kempt intersection are the second phase of the four-phase Lacewood Drive/Fairview Interchange project identified in the Regional Plan.

Concerns have been expressed with regard to the short distance within which two lanes must merge into one on the exit from the signals when heading toward the Fairview Overpass from either the two "through"lanes on Lady Hammond Road or the two "left-turn" lanes from Windsor Street.

DISCUSSION

The length and design of the merge is in accordance with design standards and is in the form of a “Right Lane Drop”. It is designated by two “Right Lane Drop” signs supplemented with pavement markings.

The purpose of carrying two lanes through an intersection and ultimately merging them into one lane on the exit is to increase the overall vehicular capacity of the intersection. This project has been successful in achieving a significant reduction in delay, and improving the overall efficiency of not only the intersection but the interchange as a whole.

Merge conditions are neither new nor unique to HRM. They are used extensively in areas where there is insufficient roadway width to continue an optimal number of travel lanes beyond a certain point. In this particular case, the Fairview Overpass can only accommodate three lanes in the outbound direction.

It is difficult to accurately report the number of collisions which may have occurred here since the completion of the project due to the facts that some collisions go unreported for insurance considerations, while for others, the actual location of the collision may be wrongly identified. Records provided by Police for the period, September 7, 2007 to December 2, 2007 indicate a total of two reported collisions involving vehicles at this merge point.

Staff has already initiated steps to improve visual cues to drivers that they are approaching a merge condition and that the right lane ends. Changes to the pavement markings include: increasing the width of the painted transition lane line, and adding three painted arrows in the auxiliary lane to accentuate the need to merge to the left lane, Changes to the signs will include: replacing the two symbol “Right Lane Drop” signs on the exit with oversized versions, adding a third symbol “Right Lane Drop” sign on the Lady Hammond approach, supplementing all three of these symbol signs with worded signs, including distance information tab signs for the merge, replacing the single overhead dual left turn sign with two separate signs (the right sign will have an “Ends 100m distance tab). In addition to the above, the “Right Lane Drop” on the exit and closest to the signals will be angled so as to be seen by motorists approaching on both Lady Hammond and Windsor.

The third phase of the Lacewood Drive/Fairview Interchange Project, which will be submitted as part of the 2008-09 capital budget, modifies the ramp from Joseph Howe Drive and also the section between that ramp and the Windsor/Kempt intersection. These changes provide an opportunity to extend this particular merge section by 180 metres as well as extend concrete medians to provide an added degree of safety.

BUDGET IMPLICATIONS

There are no budget implications.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by : Kevin McEachern, Traffic Analyst, 490-6133



Report Approved by: Ken Reashor, P.Eng., Manager, Traffic & Right of Way, 490-6637