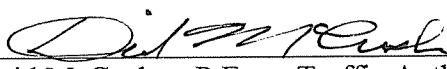

HALIFAX REGIONAL COUNCIL
September 24, 2002

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY: 
David McCusker, P.Eng., Traffic Authority

DATE: September 18, 2002

SUBJECT: TRAFFIC SIGNALS - CASTLEHILL/BROADHOLME

INFORMATION REPORT

ORIGIN

December 18, 2001 Halifax Regional Council meeting, item 9.1.1 and May 7, 2002 Halifax Regional Council meeting, item 10.2.3.

BACKGROUND

Councillor Whalen submitted correspondence from residents expressing safety concerns with respect to the above intersection and requesting traffic lights at this intersection.

DISCUSSION

The correspondence submitted by the Councillor was initiated by a recent vehicular collision. Staff is aware of the long-standing concern of residents related to the lack of traffic signalization at the Kearney Lake/Castlehill/Broadholme intersection. On March 27, 2002, staff met with area residents, the area Councillor, and the Mayor to discuss issues related to safety at the intersection.

In responding to this matter, particularly the request for full signalization, staff has been insistent that the warrant analysis established by the Transportation Association of Canada (TAC) must be adhered to. This well-researched methodology is used to determine when vehicle-vehicle and pedestrian-vehicle conflicts have reached a point where signalization is required to safely manage these interactions. Placing signals at locations where this level of conflict has not yet been reached can be expected to actually increase the rate of collisions.

Staff has determined that this intersection has not yet reached the warrant for full signalization, however, this analysis will continue to be updated annually. Although collisions such as the most recent one at this location are unfortunate, staff is confident that continued application of the TAC signal warrant calculation is the best means of ensuring optimal safety overall.

The issue of limited sight distance at the intersection was identified by residents and found by staff to be 120 metres which is sufficient for approach speeds of 75 km/h. The current 85th percentile speed is 59 km/h westbound and 63 km/h eastbound, well within the available stopping sight distance. However, given the length of the pedestrian crossing distance at this intersection, staff can appreciate the concerns for safety despite the aforementioned analysis criteria.

Staff has reviewed a 1991 consultant study which suggested that signal warrants would be met at this intersection as development proceeded. This report does not sufficiently justify signal installation, as it is overly optimistic regarding future traffic volumes and provides no technical support for the conclusions reached.

When Parkland Drive is connected to Kearney Lake Road, the resulting traffic volumes are anticipated to result in signalization being warranted. Signalization of this nearby intersection should result in improved performance at the Castlehill/Broadholme location because of Kearney Lake Road traffic being platooned by the new signals. Signalization of both intersections would increase operational difficulties and would run the risk of confusion with overlapping visibility of displays.

Although full signalization of the intersection is not warranted, staff has agreed to install pedestrian-actuated 'half-signals' to replace the existing RA-5 crosswalk lights which is anticipated to provide a more positive and safe control for pedestrians at this location given the unique circumstances of a long crosswalk and high travel speeds found at this particular location.

BUDGET IMPLICATIONS

The cost of the conversion proposed is expected to be between \$7000 and \$9000. It will be funded through the existing approved capital budget for Traffic Signal Installation.

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.

ALTERNATIVES

N/A

Additional copies of this report and information on its status can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.
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490-6696.

DMC/bmh