SUBJECT: Traffic Signal Conversion Request - Queenston Road and Donn Avenue (PW10004) - (Wards 5 and 9)
Public Works Committee Outstanding Business List

RECOMMENDATION:
(a) That no changes be made to the form of traffic control at the intersection of Queenston Road and Donn Avenue;
(b) That the item referring to the “Petition on behalf of Wentworth Condo Corp. 132 re: traffic safety measure at the corner of Queenston Road and Donn Avenue” be removed from the Public Works Outstanding Business List.

EXECUTIVE SUMMARY:
Councilor Clark received a petition in July 2009 on behalf of Wentworth Condo Corporation 132 concerning the intersection of Queenston Road and Donn Avenue. Currently the intersection is controlled by an intersection pedestrian signal (IPS). The request was to convert the intersection to a full traffic signal. Staff subsequently undertook a review of the subject intersection as well as evaluated the applicable City Policy and the Ontario Traffic Manual (OTM) guidelines for traffic signal installation. The technical review of Queenston and Donn shows that the criteria are not met for conversion to a full traffic signal.
BACKGROUND:

During the budget deliberations in 2005, City Council supplied a list of intersections for signalization to staff, one of which was to install an Intersection Pedestrian Signal (IPS) at Queenston and Donn. The IPS became operational on November 23, 2006. The IPS consists of vehicular traffic signals for Queenston Road, pedestrian signals for crossing Queenston Road and stop signs for Donn Avenue.

At the August 13, 2009 Council meeting, council received a petition through Councillor Clark’s office and referred the request for full signalization to the General Manager of Public Works for a report to the Public Works Committee.

ANALYSIS/RATIONALE:

Past traffic studies of this intersection, dating back as far as 1993, have indicated that a full traffic signal has not been justified when the volume of traffic, delay to traffic and number of preventable collisions is considered. The latest study completed in August 2009 has scores of 75 for volume, 59 for delay, and 20 for collisions. As per the Ontario Traffic Manual (OTM), a score of 100 is required in any one criterion or 80 in both of the first two criteria, in order to justify implementation of a full traffic signal.

The technical review indicates that a full traffic signal is not warranted and a full traffic signal would increase vehicle delay and stops on an already congested Queenston Road. There are over 21,000 vehicles travelling Queenston Road a day compared to approximately 1,800 vehicles a day on Donn Avenue.

The safety record of the intersection is excellent and is better than 333 of the City’s approximately 465 intersections operated as full traffic signals.

As Staff reported to Council in June 2009 with respect to Mr. Frans Brinkman’s concerns, the operation of the traffic signals along the Queenston Road corridor is not optimal. Conversion to a full traffic signal at this intersection would add to the concerns by increasing delay to vehicles travelling on Queenston Road and potentially increasing the occurrences of collisions or red light running.

To achieve perfect synchronization of traffic signals in a two-way street system, the signals need to be spaced ideally. The ideal spacing is between 500 and 700 metres. This is not achievable in this case as the traffic signal installed at the Fiesta Mall entrance is only 160 metres west of Donn. Poor progression between traffic signals also has the potential to increase collisions or red light running and creates added air pollution.

The conversion to a full signal would also negatively affect the residents of Donn Avenue, as the full traffic signal would attract additional traffic to Donn Avenue.

It is therefore recommended that no change in the form of signal control be made at Queenston and Donn.

ALTERNATIVES FOR CONSIDERATION:

The only alternative would be to convert this IPS to a full traffic signal. This alternative is not recommended for the reasons noted.
FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

The staff recommendation has no financial, staffing, or legal implications. However, if the alternative to install a full signal is directed, the estimated installation costs would be $60,000. Funds are not in the current Public Works budget for this purpose.

POLICIES AFFECTING PROPOSAL:

The recommendation not to convert this location to a full traffic signal, based on the technical review, is consistent with the City’s approved policy: “Installation Policy for Full Traffic Signals”. The recommendation supports the Public Works Business Plan “Innovate Now” in that it shows leadership in “greening” and stewardship for the City. It also aligns with the Corporate Strategic Plan desired end results relating to air quality.

RELEVANT CONSULTATION:

N/A

CITY STRATEGIC COMMITMENT:

By evaluating the “Triple Bottom Line”, (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☒ Yes ☐ No
Public services and programs are delivered in an equitable manner, coordinated, efficient, effective and easily accessible to all citizens.

Environmental Well-Being is enhanced. ☒ Yes ☐ No
A sustainable transportation network provides many options for people and goods movement; vehicle-dependency is reduced.

Economic Well-Being is enhanced. ☐ Yes ☒ No

Does the option you are recommending create value across all three bottom lines? ☐ Yes ☒ No

Do the options you are recommending make Hamilton a City of choice for high performance public servants? ☐ Yes ☒ No