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Western Region Community Council
July 26, 2010

TO: Chair and Members of Western Region Community Council

SUBMITTED BY:

A handwritten signature in dark ink, appearing to read "Ken Reashor".

Ken Reashor, P.Eng., Acting Director, Transportation and Public Works

DATE: June 16, 2010

SUBJECT: **Safety Concerns and Lack of Street Lighting on Hammonds Plains Road**

INFORMATION REPORT

ORIGIN

Item 15 raised at the February 22, 2010 meeting of Western Region Community Council.

MOVED BY Councillor Lund, seconded by Councillor Rankin that the Western Region Community Council request a staff report addressing the safety concerns and lack of street lighting on Hammonds Plains Road.

BACKGROUND

There has been a great deal of communication between Traffic and Right of Way Services staff and the Highland Park Ratepayers Association, as well as members of the public regarding a variety of issues on Hammonds Plains Road, between Pockwock Road and Westwood Hills Boulevard. Beginning in 2008, concerns respecting street lighting, speed limits and other issues were brought to the attention of Traffic and Right of Way Services. Specifically, in 2008, the three main issues looked at were street lighting, the speed limit and the request for a traffic signal at the intersection of Northwood Road. In 2008, Nova Scotia Power increased the arm lengths on existing lights at intersections along this stretch of highway to improve lighting over the roadway. Due to the nature of the controlled access highway, it was determined that further lighting was not required. The methodology to determine appropriate speed zones indicated that the 90 km/h zone was the correct posted speed, and the traffic signal warrant scored 65 points. One hundred (100) points are required for an intersection to be considered for signals.

In January of 2010, the Hammonds Plains Ratepayers Association, as well as a number of individual residents from the area contacted staff again, with more issues and concerns. The issues were responded to directly via e-mail and also discussed at a March 8, 2010 Town Hall meeting.

A traffic count taken in November 2009 on Hammonds Plains Road adjacent to Nottingham Drive showed a 24-hour weekday traffic volume of 11,200 vehicles, not 20,000 as has often been mentioned in various communications. Also in November 2009, a traffic count on Hammonds Plains Road at Giles Drive, much closer to Bedford, was 20,000 vehicles per day. A May 2008 traffic count on Hammonds Plains Road taken between Rockcliffe Crescent and Northwood Road showed a 24-hour weekday volume of 10,960 vehicles. A volume of 11,000 vehicles per day is consistent with the design and designation of this part of Hammonds Plains Road as a rural arterial. The idea of restricting new driveways and side road connections ("controlled access designation") to allow for good traffic flow fits with this concept.

DISCUSSION

The following issues were brought to the attention of staff:

Traffic Signals at the intersection of Northwood Road

HRM follows the Transportation Association of Canada (TAC) guideline for determining whether an intersection should be signalized. Specific data is collected regarding vehicle and pedestrian volumes, and other factors such as posted speed, proximity to the next signalized intersection, proximity to schools, etc. are considered. This data is entered into a spreadsheet and intersections scoring 100 or more points may be considered for the installation of traffic signals. This intersection was studied in 2008 and fell well short of the required score to consider signals. The low score can

be attributed to the low volume of traffic on the side streets, compared with the main street and the low number of pedestrians. Traffic signals are generally located at intersections where traffic volumes on both legs are comparable.

An updated signal warrant conducted in May 2010 yielded 59 points at this intersection. Therefore, it is still unwarranted. The low number of pedestrians contributed only one point toward the final score. As the subdivisions on either side of Hammonds Plains Road continue to grow, HRM will monitor this intersection to determine whether signals are warranted in the future.

Crosswalk at Northwood Road

Because of the numerous requests for marked crosswalks, it has been necessary to establish criteria which provide an objective basis for evaluation as to where marked crosswalks are installed on HRM roadways. Given that it is not practical to mark crosswalks at every intersection, most jurisdictions use some form of evaluation criteria to determine which crosswalks will be marked and which will not.

The TAC guidelines for marked crosswalk installation which have been adopted for use in HRM require that the volume of traffic results in fewer than 120 crossing opportunities per hour and there be a minimum of 20 pedestrians per hour crossing.

During the data collection process for the signal warrant, which included pedestrian counts, the busiest crossing time was in the p.m. peak, when only four (4) pedestrians crossed Hammonds Plains Road. Since the minimum pedestrian volume is not met, a marked crosswalk would not be warranted.

Unfortunately, the provision of marked crosswalks does not ensure the safety of pedestrians and several traffic engineering studies have concluded that more pedestrian injury collisions occur at marked rather than unmarked crosswalks. The installation of an unwarranted marked crosswalk can lead pedestrians to believe they are safe to cross because of the crosswalk and lead to a false sense of security. In reality, the safest way to cross any street, whether at a marked crosswalk or an unmarked crosswalk at an intersection, is to wait for an adequate gap in traffic.

Flashing Light at Northwood Road

Flashing overhead amber lights are reserved for intersections with a need to alert drivers of such things as a physical obstruction in the roadway, sharp curves or hidden intersections, and are used when regulatory or cautionary signs are insufficient. There is very good sight distance to this intersection from each direction, and no significant collision history according to the most recent data we have received from the province. In addition, there are oversized street name signs in advance of the intersection, as well as 'Intersection Ahead' warning signs. Therefore, a flashing beacon is not warranted or recommended for this intersection.

Street Lighting

Concerns regarding safety of the unlit stretch of Hammonds Plains Road between Yankeetown Road and Nottingham Drive were also brought to the attention of Traffic and Right-of-Way Services. Staff entered the required information into the TAC street lighting warrant and found that lighting of the entire stretch of Hammonds Plains Road is not warranted. With this in mind, three years of collision statistics were obtained from the RCMP, for 2007 to 2009. Nineteen (19) of the 41 collisions reported in this period occurred while it was dark out, so these 19 collisions were examined more closely. A closer inspection of these individual collisions indicates that all occurred at or near an intersection. Though the entire stretch of Hammonds Plains Road is not lit, every intersection does have lighting. So, considering the night time collisions occurred at these lit intersections, a lighting specialist was retained to study light levels at the intersections in this corridor. The lighting specialist's findings coupled with information inserted into TAC's intersection lighting guidelines has resulted in a requirement for six additional poles with 150 w lights at five intersections. In addition, eight existing lights will be upgraded from 100 watt bulbs to 150 watt bulbs. These changes will properly light the intersections to current standards. These upgrades are planned for 2010.

In addition to these confirmed changes, the remaining intersections in the corridor will also be examined to determine if light levels are acceptable or not. If it is required to bring them up to acceptable standards, additional poles and lights will be added along with the proposed upgrades.

Though lighting the entire stretch of Hammonds Plains Road is not warranted, staff has completed a cost estimate for this work. The estimated cost for installation of poles and lights is \$445,000 and \$18,500 annually to operate.

Speed Limit

Prior to March 5, 2010, the speed limit between Yankeetown Road and Nottingham Drive was 90 km/h. The Transportation Association of Canada (TAC) recently updated guidelines and issued a new tool to aid in determining appropriate speed limits, taking into account such things as geometry, width, number of intersections, road classification, etc.

Experience has shown that approximately 85% of motorists drive at a speed that is reasonable and prudent. Speed limits established in this manner encourage voluntary compliance because they appear reasonable to the public. So, by meshing our most recent speed statistics with this new TAC guideline, it has been determined that 80 km/h is a more appropriate speed limit for this section of roadway. This change was implemented on March 5, 2010.

Some residents have requested that the speed limit be lowered even further to 70 km/h. There is a common misconception that lowering the posted speed limit will cause motorists to react accordingly. However, experience has proven that unrealistically low speed limits will invite violation by responsible drivers. Considering the nature of the roadway, a 70 km/h speed limit would

be an unreasonable one for drivers to adhere to and difficult for RCMP or Halifax Regional Police to enforce.

Bus Shelter

Metro Transit has reviewed the request for a bus shelter on Hammonds Plains Rd at Northwood Rd. If it is physically feasible, the site is added to the list of requests. The site must have sufficient HRM Right of Way to facilitate the installation of a concrete base and the shelter itself. The shelter must also be placed in a location that does not block pedestrian movements or impede snow removal operation. However, requests are typically prioritized by rider ship served. Considering that 2009 counts show five (5) passengers boarding at this location per day, a shelter is currently unwarranted.

Bus Pull Off Lanes

Metro Transit has stated that it is opposed to bus pull-off lanes in general and specifically for this section of Hammonds Plains Road. A bus that is driven fully out of the path of vehicles travelling in the same direction will have a much more difficult time re-entering the flow of traffic. As it stands now, buses typically pull partially off of Hammonds Plains Road to allow passengers to load or unload. With a small gap in traffic, it is easier for buses to signal and get back into the travel lane, without loss of time. It is true that drivers have to cross the centre line to pass the stopped bus. The same scenario exists at most bus stops throughout HRM, and even though this is a higher speed road than most bus stop locations, there is no known history of collisions due to this reason anywhere along this stretch of road. Route 33 has been in service for many years. These stops were initially approved by the provincial Department of Transportation. Metro Transit is of the understanding that these stops are "grand fathered", so will remain as they are.

Reference has also been made that *"The Municipal design guidelines also require bus pull off lanes on any collectors or arterials."* This is in fact a quote from the HRM Regional Subdivision By-Law which states that "Bus bays shall be provided along all **new** arterial streets and major collector streets in accordance with the Design Guidelines." The Subdivision By-Law applies to the subdivision of land within HRM and not to existing infrastructure or retrofits. This provision is to ensure HRM has the ability to request developers to, in this case, add lay-bys if deemed appropriate. This is no different from decisions that are made based on other design aspects for new construction.

Bus Stops

Concerns have also been raised that the bus stops are located in areas where the shoulder is too narrow. Though the possibility of narrowed shoulders exists due to snow, the typical width of shoulder along this stretch is three metres, much wider than most gravel shoulders. The locations have all been assessed by Metro Transit and it has been determined that they currently exist at the best possible location. Since a community meeting was held in the spring of 2010, Metro Transit has since replaced all bus stop signage along Hammonds Plains Road, upgrading to a new reflective material for enhanced visibility in dark or inclement weather conditions.

Oversized Street Name Signs

There was a request for an oversized street name sign in advance of Yankeetown Road to advise motorists in advance that they are approaching an intersection. Staff will be installing this sign and similar signs at other intersections in this corridor as needed. The cost for these signs will come from the general Operating Budget.

Pockwock Road at Hammonds Plains Road

Two issues were raised at this intersection.

The first issue was the fact that motorists were finding that the light facing Pockwock Road would sometimes not turn green while sitting at a red light. This would lead to driver frustration and exiting on a red light. As a result, an additional sensor has been added at this location to ensure all vehicles trigger the sensor, no matter where they stop at this intersection.

The other issue is the crosswalk crossing Hammonds Plains Road at this signalized intersection. Some pedestrians indicated that left turning vehicles from Pockwock Road are not yielding to them even when they are in the crosswalk and have a crosswalk signal. One suggestion was to orient the pedestrian signal so that it is visible to motorists. Pedestrian signals are intended for pedestrians, while motorists are to pay attention to traffic signals. Just like all intersections, drivers must be aware and yield to pedestrians in a crosswalk. The RCMP have been made aware of these concerns and have agreed to monitor and provide appropriate enforcement. As an aside, though intended for pedestrians, the pedestrian signal is partially visible to a motorist if one was to look for it.

Another suggestion was to move the crosswalk to the other leg of Hammonds Plains Road to avoid the left turning movement from Pockwock. Most pedestrians using this crosswalk are coming from the north side of Pockwock (facing traffic), which leads them directly to the existing crosswalk. The destinations from here would typically include the convenience stores or school on the other side of Hammonds Plains Road and to the east. Moving the crosswalk would not only have pedestrians backtracking, but crossing two crosswalks, including still dealing with left turning vehicles from Hammonds Plains Road onto Pockwock Road. Then pedestrians would then be walking a greater distance along Hammonds Plains Road.

For the aforementioned reasons, the existing crosswalk is located at the proper leg of the intersection. Pedestrians and motorists alike must exercise caution at all intersections and this location is no different.

BUDGET IMPLICATIONS

There are no budget implications with this report.

The installation cost for six poles and lights is approximately \$15,000. Funds are available in Account No. CTU01086 - Intersection Improvement Program. The six new 150 w cobra heads will also contain a monthly charge of \$17.61 each and the eight upgraded lights from 100 watts to 150 watts will each add an additional \$4.00 per month. This will result in an annual operating cost of approximately \$1,650 per year. Funds are available in operating account R825 - Street Lights. Funds for the installation of oversized street name signs are available in operating account R747 - Traffic Signs.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

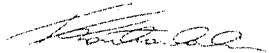
This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

COMMUNITY ENGAGEMENT

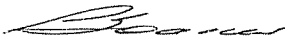
The completed community engagement process complies with the HRM Community Engagement Strategy. The completed process was primarily information sharing and consultation and was carried out through e-mails and a Town Hall meeting on March 8, 2010. The proposed recommendations will impact residents and commuters by potentially increasing the safety of this corridor due to the lower speed limit, better lit intersections and oversized advance street name signs.

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

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