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Item No. 12.1.1 i Transportation Standing Committee March 30, 2023

TO: Chair and Members of Transportation Standing Committee

SUBMITTED BY:

Cathie O'Toole, Chief Administrative Officer

DATE: March 8, 2023

SUBJECT: Hammonds Plains Road and Lucasville Road - Supplementary Report

SUPPLEMENTARY REPORT

ORIGIN

Transportation Standing Committee Oct 27, 2022, Item 12.1.3

Moved by Councillor Kent, seconded by Councillor Outhit

THAT the Transportation Standing Committee defer Item 12.1.3 Hammonds Plains Road and Lucasville Road – Intersection Improvements to a future meeting of the Transportation Standing Committee pending a supplementary staff report with options for a right-turning out bound lane prior to future development.

MOTION TO DEFER PUT AND PASSED.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, Part XII, subsection 322(1) provides:

"The Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light water, clean and clear streets in the Municipality."

Section 4(g) of the Terms of Reference for the Transportation Standing Committee provides that the duties and responsibilities of the Committee include "providing input and review of road and pedestrian safety".

BACKGROUND

Staff submitted a recommendation report (Attachment 1) at the October 27, 2022 session of the Transportation Standing Committee in response to a request to provide:

- 1. Recommendations to upgrade the intersection to ease the congestion of both westbound and eastbound traffic;
- 2. Appropriately plan for transit in this intersection;
- 3. Increase pedestrian safety in this intersection.

The report provided information related to existing conditions, recognizing growing traffic demand and delay at the intersection and identified a development planned for the northwest corner. At the time of the original report, there was limited information related to documented, potential impacts associated with the planned development. As a result, the recommendations provided in the report limited any major infrastructure modifications that could conflict with proposed development plans or infrastructure requirements, and included:

- 1. Prioritize short-term operational improvements to the signalized intersection, including upgrades to the traffic controller cabinet and vehicle detection, along with updated signal timing plans.
- Ensure appropriate, longer-term intersection modifications, including accommodation of pedestrians, cyclists, and transit, are appropriately planned for through the development review process.

Discussion around the report resulted in a vote to defer the matter and request a supplementary information report be submitted to provide additional information regarding options to provide a dedicated right-turn lane for vehicles heading westbound in advance of any development related infrastructure upgrades.

The information outlined in the discussion section of this report is provided as supplementary information to that which has previously been provided in the report presented to Transportation Standing Committee on October 27, 2022 (Attachment 1)

DISCUSSION

In the time since the original report was submitted, the traffic signal controller upgrade has been completed and new signal timing plans implemented to help address the concerns of vehicle delay and queueing. Initial observations done after the upgrades were completed indicated delay and queuing at the intersection were within acceptable limits. Traffic Management staff will continue to monitor and adjust signal timing and phasing as required.

Staff was able to obtain some basic information related to planned access related to the proposed development. Preliminary plans identify a new intersection on Lucasville Rd, approximately 200 metres north of the Hammonds Plains Rd intersection and a new access on Hammonds Plains Rd, approximately 100 metres west of the Hammonds Plains Rd/Lucasville Rd intersection.

The traffic impact study, which will indicate anticipated impacts resulting from additional vehicle, transit and active mode trips, as well as potential infrastructure upgrades required to address these impacts, has not yet been submitted for the development. Anticipated vehicle trip generation from the development, however, will most likely result in an increased number of vehicles making the right turn from Hammonds Plains Rd to Lucasville Rd, adding further demand on the westbound approach. It is anticipated that the requirement for construction of the westbound right turn lane would be detailed in the traffic impact study; along with requirements for extending the southbound right turn lane, relocating transit stops and construction of infrastructure to support active modes of transportation.

Traffic Management has completed a preliminary design for an outbound right turn lane onto Lucasville Rd to investigate the option of providing this upgrade prior to the identification of the impacts and requirements related to the future development. Attachment 2 shows the details of this preliminary design.

The design includes widening the westbound approach on the north side to include a section of raised asphalt multi-use pathway which is included to replace the current shoulder space available for pedestrians and cyclists that would be taken up to accommodate the addition of a 50 m long right-turn lane. This design option avoids the relocation of a utility pole which had been included in the conceptual design provided in the original report (Attachment 1). There is also a new push-button post proposed for the southwest corner to provide improved access to the push-button for pedestrians wanting to cross Hammonds Plains Road.

Like the previous concept, a small wedge of property is required on the northeast corner of the intersection to accommodate the relocation of a signal pole.

Given the constraints at this intersection (existing guide rail to the south and property constraints on both east and west corners), the proposed concept focuses primarily on the addition of only the right-turn lane to minimize cost and impact as there will likely be a need for further changes once the development requirements are identified and design is finalized on the proposed AT corridor along Lucasville Rd.

Preliminary cost related to the proposed right turn lane as identified in this report is estimated at approximately \$220,000. This is a very preliminary estimate as there was no survey available, so a detailed design with survey could potentially identify higher cost requirements. The cost estimate is based on 2022 construction rates and does **not** include costs associated with property acquisition.

It should be noted that the proposed design identified in this report is primarily intended to provide for the implementation of the right-turn lane only, with a minor improvement to existing push-button access, as anything beyond this would require a complete intersection upgrade and likely additional property acquisition. A full-scale intersection / traffic signal upgrade would cost \$500,000 - \$600,000 and require a minimum 2-3 year lead time for proper budget allocation, design, property acquisition and construction.

Moving forward with a full intersection upgrade without understanding the potential requirements related to the proposed development and AT corridor has a very high potential for infrastructure being put in place that is insufficient for those projects. Even with the smaller scale design identified here, there will most likely be property acquisition required to accommodate upgrades related to the development and AT corridor, which would be unknown at this time, so HRM would be put in a position of going through the property acquisition process twice at the same location. The typical time frame for the acquisition of property for construction projects is in the range of 18 months (minimum) and requires a detailed and set project design to accurately identify the extents of the property needed before negotiations can begin.

As noted previously, staff has completed upgrades to the traffic signal controller and signal timing / phasing at this location which appears to have resulted in improved operation. Additional signal timing / phasing adjustments can also be made as needed. Given the uncertainties associated with infrastructure requirements at this location due to the proposed development and AT corridor, continuing with adjustments to the traffic signals appears to be the most appropriate approach until more formalized plans for development and AT requirements are available.

FINANCIAL IMPLICATIONS

There are no financial implications associated with the information outlined in this report.

However, if Transportation Standing Committee decides to identify a project to move forward with the identified right-turn lane concept, which is not recommended at this time, funding in the amount of approximately \$220,000, plus associated property acquisition costs, which are currently unknown, would need to be identified for future capital budgets.

Moving forward with this project at this time would carry financial risk associated with potential disruption of newly built infrastructure. Implementing intersection modifications prior to knowing the extent of the recommended changes to be included in the traffic impact study for the development as well as plans for the AT corridor, could result in the need to remove, replace or alter recently installed infrastructure.

COMMUNITY ENGAGEMENT

No community engagement was required.

ATTACHMENTS

Attachment 1 – Hammonds Plains Road and Lucasville Road – Intersection Improvements – October 27, 2022 (Transportation Standing Committee Recommendation Report)

Attachment 2 - Concept Design - Hammonds Plains Road at Lucasville Road - Westbound Right-Turn Lane

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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