

TO: MAYOR J. LEHMAN AND MEMBERS OF COUNCIL

FROM: S. PATTERSON, P. ENG., MANAGER OF DESIGN AND CONSTRUCTION

**NOTED: R. FORWARD, MBA, M.SC., P. ENG., GENERAL MANAGER OF
INFRASTRUCTURE AND GROWTH MANAGEMENT**

CARLA LADD, CHIEF ADMINISTRATIVE OFFICER

**RE: PROPOSED ESSA ROAD WIDENING BETWEEN ANNE STREET AND FAIRVIEW
ROAD IN 2017 (FILE T05-ESS P/N 995)**

DATE: FEBRUARY 13, 2017

The purpose of this memo is to provide information regarding opportunities to advance the capital project or portions thereof associated with the widening of Essa Road between Anne Street and Fairview Road to 2017.

In the recommended 2017 Business Plan, the above noted works are included in the Essa Road ROW Expansion – Anne to Bryne project. The project timing and phasing is proposed as follows:

Phase	2019	2020	2021	Total
Essa Rd – Fairview Rd to Bryne Dr. (including proposed ramp improvements at Highway 400) – Construction Phase 1	\$3,955,000	\$0	\$0	\$3,955,000
Essa Rd – Fairview Rd to Anne St – Construction Phase 2	\$0	\$5,750,000	\$400,000	\$6,150,000
Project Total				\$10,105,000

This recommended phasing was primarily based on three factors:

1. City construction on Essa Road within the area of the Highway 400 interchange would be subject to Ontario Ministry of Transportation (MTO) jurisdiction and approval. With the current construction of the Highway 400/Tiffin Street Overpass and Highway 400/Barrie Collingwood Rail Structure project being completed by MTO, the Essa Road interchange is being used as both a staging area and construction access to the project. Contracts must be separated by time and/or space in order to mitigate liability for the City and MTO under Ministry of Labour requirements. The City's proposed improvements to Essa Road that are in the immediate vicinity of the interchange could not therefore begin until the MTO's 400/Tiffin project is complete.
2. The City's recommended 2017 capital plan includes the construction phase of Essa Road ROW Replacement and Hotchkiss Creek Expansion - Anne to Gowan. The requirement to separate contracts by time and/or space would require extensive coordination for two adjacent projects on Essa Road at Anne Street.
3. The key improvements benefiting traffic flow along Essa Road in the area around the interchange (in the interim period before the bridge structure is widened in the future) are expected to come from the improvements between Fairview and Bryne (described as Construction Phase 1 in the table above).

These improvements include the following:

- a) A right hand turn lane from eastbound Essa Road onto Fairview Road.
- b) Lane improvements on Fairview Road in the vicinity of the Essa Road intersection.

There are a number of factors that City staff would consider as a risk for potential delay or additional cost in an accelerated schedule to construction for the widening of Essa Road between Anne Street and Fairview Road in 2017. These factors include the following:

1. The widening of Essa Road between Anne Street and Bryne Drive has been identified in previous municipal class environmental assessments and was identified as a recommendation in the Multi Modal Active Transportation Master Plan. The recommendation is for widening to three lanes in each direction plus a continuous center median. Some level of service improvements would result from implementing the proposed Essa Road improvements between Anne Street and Fairview Road (through the additional lane in each direction and the intersection improvements at Anne Street), however, the constraints at Fairview Road and the 4-lane bridge structure remain the main contributing factor to congestion.
2. There would be modifications required to the current Essa Road design to account for the suggested change in phasing and the limits of construction that would be determined through discussions with the MTO. Through high level discussions with MTO, they have indicated that they would have concerns of any construction within 500m of their construction zone and that would encompass the majority of the Essa Road – Anne to Fairview project. The MTO property limits are approximately 180m east of Fairview Road to 50m east of the Ardagh Road/Bryne Drive intersection as identified in attached Figure 1.
3. Discussions would need to be initiated with MTO regarding approvals for potential work within their property limits and approvals associated with the Permit to Take Water for construction dewatering would need to be initiated immediately to mitigate risk of delays or impacts to the City contractor.
4. As noted above, the City is reconstructing Essa Road between Anne Street and Gowan Street in 2017. To minimize disruption to traffic using Essa Road, Tiffin Street and Anne Street is intended to be used as a detour route. This detour would not be available to the same extent with Essa Road – Anne to Fairview under construction.
5. While the design is largely complete for the Essa Road – Anne to Bryne project, the current design reflects the phasing shown above. In addition, a tender package has not been prepared as at least the Phase 1 work was intended to be included in the Harvie/Big Bay Point Road Crossing construction. To add the Essa Road – Anne to Fairview works into the 2017 construction program would require a priority to be placed on the project to complete the design revisions and prepare the tender package, and an offsetting lowered priority given to other work in the recommended 2017 plan. Alternatively, there could be an increase in costs and staff time that has not been accounted for in current budgets and developing the 2017 Business Plan.
6. In order to deliver the project within the 2017 construction season, construction should be initiated in the spring as early as possible. The scope of construction is comparable to the Ferndale Drive construction between Dunlop Street and Tiffin Street so it would be important that construction be initiated as soon as possible and delays be minimized to avoid the construction period being extended into 2018.

As described above, this project is part of a larger coordinated schedule for various infrastructure projects in this area. The projects have been phased based on priority, and to minimize risk, disruption, and cost. Advancing individual components out of step with the overall plan poses risks and also impacts the degree to which the City will benefit from the proposed projects.

This project was recommended for inclusion in the Business Plan based on the various timing and scheduling constraints, and also considering its criticality relative to other needs throughout the City. Improvements on Essa Road are important to the City in terms of addressing traffic congestion; however there are many other projects that are considered more critical, including addressing critical risks associated with infrastructure renewal, projects to advance growth in the annexed lands, as well as a number of strategic projects.

The costs and funding sources for the entire project are summarized below based on the current phasing proposed in the 2017 Business Plan. Advancing the Essa Road – Fairview to Anne work would require additional funding in the 2017 capital plan, of approximately \$5,750,000 subject to modifications once the construction limits are finalized through the discussions with MTO.

Funding Source	2019	2020	2021
DC Reserves	\$2,525,250	\$3,542,500	\$260,000
Tax Capital Reserves	\$1,359,750	\$1,907,500	\$140,000
Wastewater Capital Reserve	\$70,000	\$300,000	\$0
Total	\$3,955,000	\$5,750,000	\$400,000

While the funding options could be mitigated through a front-end financing agreement with the developer financing the construction costs, there would still be concerns from City staff of initiating a process to have Essa Road between Anne Street and Fairview Road fully constructed in 2017 without risk of additional costs due to the tight timelines. Staff are therefore not recommending the advancement of this project at this time.

Figure 1 – Phasing Recommended in 2017 Business Plan

