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**June 6, 2016**

**DEVELOPMENT & INFRASTRUCTURE SERVICES INFORMATION REPORT  
ENGINEERING SERVICES 2016-29**

**TO:** Mayor and Members of Council

**SUBJECT:** Water Street Crossing – Update #3  
File No.: T.08 T.30 Water

**ORIGIN:** Director, Engineering Services

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**PREAMBLE**

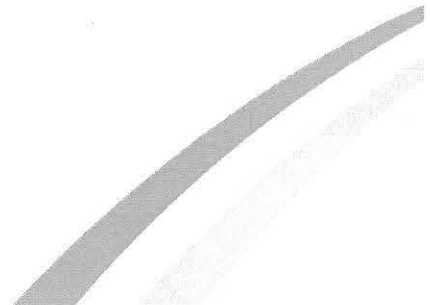
In accordance with the Procedure By-law, any member of Council may request this information report to be placed on an upcoming Committee of the Whole agenda for discussion.

**BACKGROUND**

At its regular meeting of March 30, 2015, Town Council discussed Development and Infrastructure Report – Engineering Services 2015-20 and adopted the following recommendations, amended to include item “iv)” regarding the possibility of preserving left-turn movements:

- i) THAT the implementation of a pedestrian traffic signal not be pursued at this time;
- ii) AND THAT a pedestrian refuge island be considered as the medium term solution to enhancing pedestrian safety;
- iii) AND THAT a consultant be retained to design a pedestrian refuge island, conduct a safety review and provide costing and that the report be brought back to Council for final approval;
- iv) AND THAT the design options explore preserving the left-turn movements while addressing any safety issue;
- v) AND THAT a copy of his report and Council extract be forwarded to representatives of Metrolinx and York Region.

At the Committee of the Whole meeting of January 11, 2016, Committee received and discussed Development and Infrastructure Report – 2016-02 ES Water Street Crossing Update #2, which outlined the preferred option to address pedestrian safety for the design and construction of the proposed pedestrian refuge island on Water Street at Doug Duncan Drive. Committee discussed the following recommendations:



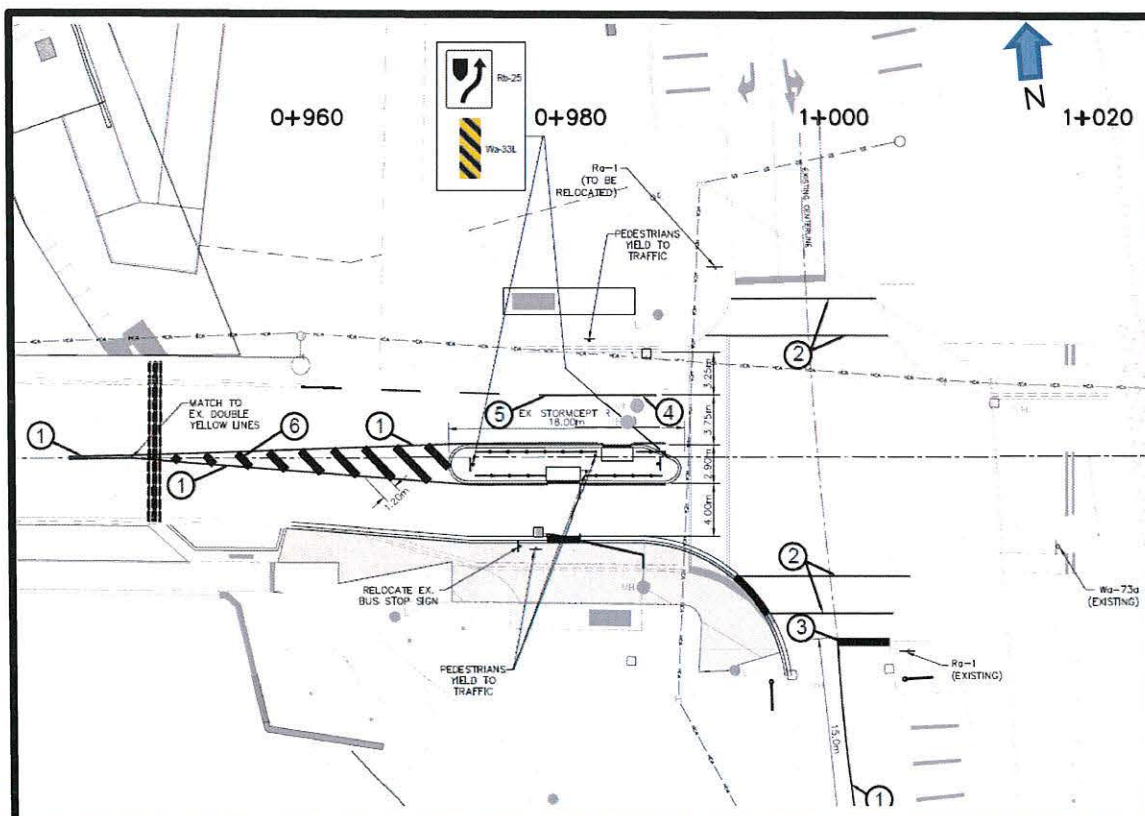
- i) THAT 'Option 2', the design, be endorsed as the preferred option to address pedestrian safety;
- ii) AND THAT a Public Information Centre meeting be held by Q3 2016 with the results and the final design including costs to be forwarded in an Information Report;
- iii) AND THAT a copy of this report and Council extract be forwarded to representatives of Metrolinx and York Region.

## COMMENTS

Staff retained the services of the IBI Group to provide a full safety review of the proposed refuge island. IBI Group has provided its final report and has determined:

1. Between 4:30 and 5:30 p.m., long queues were noted in both eastbound and westbound directions. However, these queues were largely the result of signal delays at the downstream intersections.
2. For the most part, queued vehicles did not block the intersection or the railway crossing.
3. Since pedestrians only need to find gaps in one direction of traffic at a time, overall crossing opportunities are expected to increase (with the construction of a refuge island), particularly during the afternoon rush hour, when pedestrian crossings often depend on courtesy gaps from both eastbound and westbound traffic.
4. Operating performance indicates low demand and significant excess capacity for eastbound Water Street vehicles wishing to turn left onto Doug Duncan Drive. Very minor eastbound left-turn traffic volume was noted.

## REFUGE ISLAND DESIGN



## **CONSIDERATIONS**

<b>Measure</b>	<b>IBI Findings</b>	<b>IBI-Recommended Mitigation Measures</b>
Left-turn movement	Left turn lane removal could increase delays and queues	Install No Left Turn (Any Time) sign Consideration could be given to a.m. and p.m. rush-hour only left-turn restrictions
Streetlighting	Streetlighting not well positioned	Improve lighting in the vicinity of the proposed refuge island
Dimension of proposed island	Proposed island dimension may result in potential unused space	Any potential unused space at the west end of the island could be repurposed, e.g. aesthetic (low) streetscape or landscaping features
Alignment of the island crossings	The proposed alignment may discourage users due to extra walking distance	The Nokiidaa trail at the south side could be re-aligned to reduce the extra walking distance
New pedestrian-vehicle conflict	The refuge island represents new pedestrian-vehicle conflict points on Water Street	Pedestrian Ahead warning signs could be installed upstream of the refuge island in both directions, possibly as a transitional measure

Engineering staff would consider the peak period left-turn restrictions as a preferred alternative to a full restriction or an unrestricted left-turn movement. This movement will be monitored post-construction, as well as the traffic flow around the island and pedestrian crossings to determine if adjustments are required.

## **PUBLIC CONSULTATION**

A PIC will be held at the Community Centre rather than at the Municipal Office to engage more people who live, work and play in this vicinity. The PIC is planned for July 5, 2016. At the PIC, staff and the consultant will communicate important elements of IBI Group's safety review, among other aspects of the design. Once this public consultation is completed, comments made by the public will be taken into consideration when producing the final, construction tender design. No public consultation was undertaken in the preparation of this report.

## **BUSINESS PLAN AND STRATEGIC PLAN LINKAGES**

- Well-planned and connected...strategically planning for the future to improve information access and enhance travel to, from and within Newmarket.

## **HUMAN RESOURCE CONSIDERATIONS**

No impact on current staffing levels.

## IMPACT ON BUDGET

### Operating Budget (Current and Future)

Operation and maintenance of the pedestrian refuge island will be part of the budget for road maintenance. Any additional maintenance of features (planting bed for example) will need to be determined based on final design.

### Capital Budget

Construction costs are estimated at \$150,000, inclusive of all consulting fees. These costs do not include any additional streetscaping elements or alteration of the island to incorporate any public art. There is \$112,000 available in the budget that was originally earmarked for the installation of traffic signals that will be put forward to this project. The balance would come from unexpended reserves.

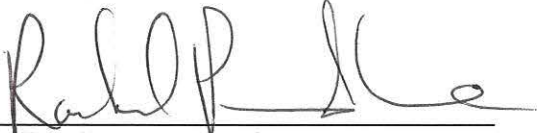
## CONTACT

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