

TO:	GENERAL COMMITTEE
SUBJECT:	DUNLOP STREET EAST CORRIDOR IMPROVEMENTS MULCASTER STREET TO TORONTO STREET
WARD:	2
PREPARED BY AND KEY CONTACT:	D. JAMES, P. Eng., SENIOR PROJECT ENGINEER EXT. 4444
SUBMITTED BY:	R. SUTTON, P. Eng. DIRECTOR OF ENGINEERING
GENERAL MANAGER APPROVAL:	R. FORWARD, M.B.A., M.Sc., P. Eng. GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH MANAGEMENT
CHIEF ADMINISTRATIVE OFFICER APPROVAL:	M. PROWSE CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That Staff Report ENG012-17, Dunlop Street East Corridor Improvements (Mulcaster Street to Toronto Street), be received for information purposes.

PURPOSE & BACKGROUND

- A Class Environmental Assessment (Class EA) was conducted in 2015 for the Dunlop Street East Corridor Improvements, Mulcaster Street to Toronto Street. Upon completion of the Class EA study on June 22, 2015, City Council adopted Motion 15-G-152 regarding Dunlop Street Corridor Improvement (Toronto Street to Mulcaster Street) Municipal Class EA Phases 1 and 2 as follows:
 - 1. That the Preferred Alternative for the components of the Dunlop Street Corridor Improvements Toronto Street to Mulcaster Street Municipal Class Environmental Assessment Phase 1 and 2 (Class EA) be adopted as:
 - i) Alternative 5 Reconfigurable street between Toronto Street and Mulcaster Street
 - 2. That staff undertake the additional design associated with incorporating the proposed Dunlop Street Streetscape elements into the Memorial Square Redevelopment Project at a cost not to exceed 10,000 and be funded from the Tax Capital Reserve (13-04-0440).
 - 3. That staff report back to General Committee on an alternative financing model and associated cost sharing agreement for the components of the Dunlop Street Corridor Improvements on the basis of the municipality's portion not to exceed 1/3 of the total project costs and the balance of the funding sourced via matching contributions from the Provincial/Federal Government, user fees, and the B.I.A. via a long term (in excess of 10 years) contributions as well as other potential private partnerships."



AMENDMENT #1 (15-A-085)

That motion 15-G-152 of Section "G" of the Second General Committee Report dated June 15, 2015 concerning the Dunlop Street Corridor Improvement (Toronto Street to Mulcaster Street) Municipal Class EA Phase 1 and 2, be amended by deleting the words "for the Dunlop Street Corridor Improvements" and replacing them with the words "for the components of the Dunlop Street Corridor Improvements associated with enhanced streetscape/beautification (estimated in the amount of \$1.2 million)".

- 3. The implemented solution will generally conform to the street cross-section as outlined in the Class EA. A conceptual sketch of the reconfigurable street concept on Dunlop Street is shown in Appendix A. An overview of the overall design concept and high-level requirements for the design are as follows:
 - Create a pedestrian friendly, aesthetically enhanced streetscape
 - Design elements within boulevard and roadway to include:
 - o retail zone features such as patios;
 - o amenity zone features such as trees, planters, lighting, trash/recycling receptacles;
 - street furniture;
 - pay and display parking; and,
 - flexible zone features allow either parking or pedestrian zone depending on how space is to be utilized.
 - Facilitate a patio program with features that demonstrate operational flexibility and ease of implementation on a seasonal basis
 - Incorporate renewal of existing infrastructure based on existing condition and state of good repair, including:
 - water servicing;
 - o storm and sanitary sewers;
 - o Low Impact Development (LID) upgrades to conform to current design standards; and,
 - o utility upgrades (gas, telephone, cable, electricity, internet).
 - Conformance to AODA requirements
 - Roadway improvements to accommodate transit service vehicles
- 4. After meetings with internal stakeholders to review the project scope an RFQ for the detailed design was issued in August 2016. After evaluation of proposals the project was awarded to CC Tatham/Envision Tatham.

ANALYSIS

5. Design work is currently in progress. The infrastructure condition assessment and physical layout of the major components is complete and determination of surface materials and selection of street furniture is in progress. The condition of the underground works (i.e. watermain, sanitary and storm sewers) and their age is such that there is a large portion of remaining asset life and they do not have to be replaced as part of this current proposed works. Coordination is also occurring between Memorial Square and the Meridian Place design/build project on design elements.



6. The major elements of the design along with a general description of the function are as follows:

Asset Renewal Element

- a) Sidewalks (Noted as walkway in Appendix "A") The sidewalks are to be a concrete surface to provide a durable surface with lower maintenance costs and minimize the maintenance issues associated with the existing interlocking sidewalks.
- b) Mountable curb Mountable curb is to replace the existing barrier curb that currently exists. This mountable curb will both allow for the use of the flexible space as described below and it will also allow for easier access within the space when the entire right of way is being utilized for events.
- c) Traffic Signals Traffic signals are being proposed at the existing locations within the project limits as well as at the Dunlop Street intersections at Mary Street and Owen Street. The traffic signals will allow for a greater number of safe pedestrian crossings to increase the level of service for pedestrians.
- d) Pedestrian Crossings West of Bayfield Street the traffic signals at each intersection will provide sufficient opportunity for pedestrian crossings of Dunlop Street. East of Bayfield Street the two existing signalized pedestrian crossings (IPS), are going to be removed and, due to the distance between signalized intersections, will be replaced with a mid-block pedestrian crossing area.
- e) Street Trees Street trees will be replaced and will include a LID element (i.e. Silva cells) where stormwater is routed through the component to increase the heath of the trees, decrease stormwater runoff and provide stormwater quality treatment (i.e. phosphorus removal).
- f) Street Furniture Street furniture will be renewed and will be placed at a frequency in line with today's higher standard for pedestrian level of service (An increase to approximately 20 benches from the existing 3).
- g) Intersection Surface Treatment The design is looking at improvements to the intersections (i.e. Five Points) to increase the aesthetics of the area through colours and patterns in the surface material.
- h) Ducts Additional ducts will be installed within the right of way to allow for flexibility in implementing future fibre optic lines or any other cabling that may be required in the area associated with other initiatives in the downtown.
- i) Streetlights The streetlights will be upgraded with LED technology and with pole spacing designed to meet a light intensity appropriate for the downtown core. The lighting will illuminate both the roadway and include a separate lamp to illuminate the sidewalk as well. Streetlights would be expected to include electrical receptacles to facilitate Christmas lights for example and use during other events. The poles would also be designed to support banners or hanging planters in support of other initiatives in the downtown.

Flexible Street Element

a) Flexible Space – The flexible space between the mountable curb and the sidewalk is a key element in the design. In the winter months, the removable bollards are likely to be placed closer to the sidewalk to allow on-street parking to occur. In the summer the bollards would be moved adjacent to the mountable curb for the flexible space to be utilized for patios, retail space or other pedestrian related activities.



- b) Removable Bollards The removable bollard will be used to restrict vehicle movements into pedestrian space, being either the flexible space area when it is being used for pedestrian uses or simply the sidewalk area when the flexible space is being used for parking. The bollards are essentially vertical post and are likely to be a metal material in this design.
- c) Garbage Receptacles There will be an increase density of garbage receptacles in the area as part of the design. The units could include increased capacity through an underground design component. Cigarette butt accommodations and garbage receptacles will be coordinated further with the Downtown Barrie Business Association (B.I.A.).
- 7. The design drawings and streetscaping details are expected to be ready for review by stakeholders and Council in December of 2017.
- 8. The Dunlop Street Corridor Improvement project is proposed to be constructed in two phases: Phase 1 is proposed from Mulcaster Street to Bayfield Street and Phase 2 is proposed from Bayfield Street to Toronto Street.
- 9. The 2017-2026 Capital Plan indicates Phase 1 utility relocations in 2021 and construction in 2023. Phase 2 utility relocates are shown in 2022 with construction in 2024. This timing was based on typical construction practices and prior to the various elements of the project being understood through the design process.
- 10. At this point in the development of the 2018 to 2026 Capital Plan, staff are proposing construction of Phase 1 commencing in early September 2019, after the summer patio season, stopping in early November 2019 to avoid the Christmas shopping season, restarting in April 2020 with a June 2020 completion. Phase 2 would start immediately after the Phase 1 completion and continue until early November 2020 with construction resuming in April 2021 with a June 2021 completion. This phasing would assist in reducing impacts to the businesses during important times in the year. Utility upgrades/relocations in each phase are also planned to be completed at the same time as the streetscaping work in each phase to minimize the impact on businesses. Coordination with the utility companies is occurring now in order to determine the scope of upgrades and the logistics within the proposed schedule to meet the long term needs for servicing in the downtown.
- 11. The detailed design process will include a constructability review that will look at construction timing, hours of work, potential lane closures, etc in order that the construction contract can detail the methodology that can be best implemented again to minimize disruption to the businesses impacted during construction. City staff would also work closely with the B.I.A. to communicate the proposed works to the public both prior to and during construction,

ENVIRONMENTAL MATTERS

12. The project is proposing tree root substrate containment that will be installed with a LID component where stormwater collected on the street is routed through the tree substrate providing runoff storage (a stormwater quantity element) as well as stormwater quality treatment (i.e. phosphorus removal) once the trees are established. There are potential funding sources, LSRCA for example, for LID installations which are being pursued by staff.

ALTERNATIVES

13. As this report is being presented for information purposes only, no alternatives are provided.



FINANCIAL

- 14. The costs associated with the detailed design were included in the 2016 and 2017 Capital Plans and is ongoing.
- 15. Construction Cost Estimates have been divided into Asset Renewal costs and Flexible Street costs. The Asset Renewal costs include such items as removals, sewer and water remedial work, road construction (two paved lanes), traffic signals, street lights, sidewalks, street furniture and tree replacement. The Flexible Street costs are the 'enhanced streetscape/beautification costs' as noted in Amendment #1 (15-A-085) to Council Motion 15-G-152 above and are to be limited to \$1.2M. The Flexible Street cost include such items as flexible lane surfacing, street light element illuminating the sidewalk, removable bollards, and concrete planters.
- 16. The total Asset Renewal costs including, utility relocations, construction and contingency costs is presently estimated as follows:

Phase 1 Mulcaster to Bayfield \$3,350,400

Phase 2 Bayfield to Toronto \$3,170,000

TOTAL \$6,520,400

17. As per Motion 15-G-152, the total Flexible Street costs including, utility relocations, construction and contingency costs is presently estimated as follows:

Phase 1 Mulcaster to Bayfield\$ 616,800Phase 2 Bayfield to Toronto\$ 583,200TOTAL\$1,200,000

18. The B.I.A. has been consulted through the design process and this partnership will continue as the design and specific material elements are being finalized. Details of funding as per the approved Motion 15-G-152 will also need to be coordinated as the design is finalized. Staff have been in contact with Lake Simcoe Region Conservation Authority (LSRCA) regarding possible funding related to the installation of LID features. City staff continually monitor the eligibility for grant opportunities through other organizations and levels of government. At this time, no suitable grant programs currently exist for this project, however monitoring will continue. Staff will report back to Council when financing details have been determined.

LINKAGE TO 2014-2018 STRATEGIC PLAN

- 19. The recommendation(s) included in this Staff Report support the following goals identified in the 2014-2018 Strategic Plan:
 - Vibrant Business Environment
 - Responsible Spending
 - Inclusive Community
 - Well Planned Transportation



- 20. The Dunlop Street Corridor Improvements project supports Council's Strategic Plan by:
 - a) Demonstrating the City's commitment to downtown businesses through the implementation of an innovative solution that provides benefits to both residents and businesses through the implementation of a flexible streetscape design.
 - b) By limiting the municipality's contribution to the streetscape/beautification component and pursuing LID funding the project will reduce the capital expenditures from upcoming Capital Plans.
 - c) Improving the public realm by providing additional pedestrian space and encouraging more liveliness within the street corridor; helping create a sense of place and community.
 - d) Recognizing the importance of east-west linkages in the downtown area and the importance of Dunlop Street to the downtown transportation network.



APPENDIX "A"

Dunlop Street Corridor Improvements - Conceptual Sketch

