

REPORT

SPECIAL PLANNING AND DEVELOPMENT COUNCIL MEETING

MEETING DATE: APRIL 10, 2018

FROM: Engineering and Construction Department

DATE: March 12, 2018

SUBJECT: Lakeshore Road East Final Streetscape Plan – Navy Street to Allan Street

LOCATION: Downtown Oakville

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RECOMMENDATIONS:

1. That the final streetscape plan for the Lakeshore Road Reconstruction and Streetscape Project (Navy Street to Allan Street), as detailed in the report from the Engineering and Construction Department dated March 12, 2018, be received;
2. That Option 1, as detailed in the staff report, be approved as the recommended flexible (curbless) street option for the Lakeshore Road; and
3. That the existing decorative streetlight poles/fixtures on Lakeshore Road be replaced with new rather than refurbishing/reusing the existing.

KEY FACTS:

The following are key points for consideration with respect to this report:

- In 2015, Council approved the Downtown Transportation and Streetscape (DTS) study which included a streetscape masterplan for all downtown streets; Council also approved moving forward with the Lakeshore Road Reconstruction and Streetscape Project
- The engineering design phase for the project has been ongoing since 2016; Council approved the streetscape furnishing selections in January 2017 including the use of 3000K streetlight colour temperature, granite curb/pavers and the railing design for the Lakeshore Road Bridge Reconstruction Project.
- Council directed staff to develop/review options for a flexible (curbless) street for Lakeshore Road in whole or in part.
- Staff committed to undertaking a business case assessment of refurbishing/re-using the existing streetlight poles/fixtures vs. replacing them with new.

- Staff presented the Final Streetscape Plan at a public information centre held in early December 2017.
 - Staff are recommending the final streetscape plan includes a flexible (curbless) section of Lakeshore Road in front of Towne Square and linking to George Street (Option 1)
 - Staff are recommending the installation of new decorative street light poles rather than refurbish the existing street light poles
- Staff reported to the Heritage Oakville Advisory Committee in February 2018 and a permit for the final streetscape plan was approved.
- Smart City components for the project are still being contemplated and will be finalized prior to the project tender.
- Several initiatives are planned for the downtown in 2018 including the two-way conversion of one-way streets (including pavement resurfacing).
- Construction of the Lakeshore Road streetscape plan is planned to be completed over two years in 2019 and 2020.

BACKGROUND:

The Downtown Plan, launched in late 2013, was comprised of two studies: the Downtown Cultural Hub (DCH) study and the Downtown Transportation and Streetscape (DTS) study. Both studies were undertaken concurrently to coordinate public engagement and collaboration opportunities.

The DTS study component of the Downtown Plan reviewed traffic and roadway conditions within downtown Oakville and it presented options to enhance the roadways, beautify streets, improve pedestrian/cycle mobility and to revitalize Towne Square.

Council approved the DTS study in April 2015; the study provided a streetscape master plan for all downtown streets. Shortly thereafter, staff initiated the engineering design phase for the Lakeshore Road Reconstruction and Streetscape Project (Navy to Allan).

The first step in the design process was to finalize streetscape furnishing and hardscaping selections (streetlight poles, benches, bike rings, bollards, waste receptacles, granite curbs/pavers) for the project. Throughout 2016, staff hosted public engagement sessions to resolve furnishing and hardscaping types, streetlight LED colour temperature selection and items pertaining specifically to the Lakeshore Road Bridge Reconstruction Project (i.e. railing design). In addition, at its meeting of July 25, 2016, Council directed staff to further investigate options for Lakeshore Road that would provide, in whole or in part, a flexible (curbless) street. Staff had also committed to undertake a business case assessment between replacing the existing “acorn” streetlight poles/fixtures and salvaging/reconditioning the existing poles/fixtures.

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In January 2017, staff provided recommendations to both Council and the Oakville Heritage Advisory Committee on the furniture selections as well as a recommendation to use *3000 Kelvin* colour temperature LED fixtures for all decorative streetlights within the Downtown Oakville commercial district. The recommendations were approved. Refer to Appendix A for details. A decision on the flexible street options and as well as the business case assessment for the streetlight poles/fixtures was deferred until staff could further develop the final engineering design plans.

In early 2017, the Lakeshore Road Bridge Reconstruction Project construction phase was initiated and the project was completed early (November 2017). The bridge project limits included streetscape features/elements that will be featured in the Lakeshore Road Reconstruction and Streetscape Project.

The purpose of this report is to present the final streetscape plan for the Lakeshore Road Reconstruction and Streetscape Project, address the outstanding issues relating to the flexible street options, the business case assessment for the streetlight poles/fixtures, other design elements and to provide an update on next steps.

COMMENT/OPTIONS:

Public Engagement Process - Final Streetscape Plan:

Throughout 2017, the project team further developed the engineering and streetscape plans. A Public Information Centre (PIC) was held on Thursday, December 7, 2017 to present the final streetscape plan for Lakeshore Road from Navy Street to Allan Street. A separate session for the Downtown BIA was held at the Central Library auditorium in the morning while an evening session was held at town hall for the public.

Streetscape plans for each block were presented showing the locations of street furnishings, streetlight poles, tree, materials including granite curbs/pavers, concrete paving, parking and commercial loading zones, road configuration and pavement markings. The streetscape plans for each block are attached in Appendix B. Perspective artist renderings are also attached as Appendix C. A virtual tour of the streetscape design was presented at the December PIC; it can be viewed on the project webpage at www.oakville.ca.

A summary of the comments received is attached as **Appendix D**. There were a variety of comments received which staff have characterized as suggestions and general support for the project.

Flexible (Curbless) Street Options

The Streetscape Master Plan for Downtown, approved by Council in 2015, recommended that a segment of Lakeshore Road be a flexible (curbless) street directly in front of Towne Square and linking to George Street. This important area is a focus for events and gatherings in Downtown. However, at its meeting of July 25, 2016, Council directed staff to further investigate options for Lakeshore Road that would provide, in whole or in part, a flexible street.

Throughout 2017, the project team considered three (3) flexible street design options:

- Option 1 – Adjacent to Towne Square (as recommended in DTS study)
- Option 2 – Thomas to Dunn
- Option 3 – Navy to Allan.

Plans for each option were presented at the PIC along with display panels outlining the advantages/disadvantages for both a traditional street with a raised curb and a flexible street (flush curb). The three options are attached in Appendix E of this report. Only one comment was received at the PIC with regards to flexible street options.

Option 1 – Adjacent to Towne Square is a slightly modified version of what was recommended as part of the DTS study. The limits for Option 1 were expanded to extend the limits on Lakeshore Road East on both the east and west side of George Street. The extension of the limits would only marginally increase the project costs related to the additional unit pavers in the roadway and extending the trench drain.

Staff are recommending this option as it creates a unique focal point in the heart of the downtown and reinforces the civic importance of Towne Square and George Street, which is consistent with the directions of the DTS study approved by Council. The DTS Master Plan envisioned George Street to be transformed into a high quality flexible street to draw pedestrians and activity between Towne Square and Lakeshore Road towards Church Street.

Option 2 – Thomas to Dunn increases the flexible street area to two full blocks between Thomas Street and Dunn Street, and the limits would begin at the typical road closure points for special events. This option would increase the overall project budget with the increased use of unit pavers in the roadway, additional bollards that would be required on both sides of the roadway between Thomas Street and Dunn Street to provide a physical barrier between the roadway and sidewalk area, and the extension of the trench drains to collect runoff.

Staff are not recommending this option.

Option 3 – Navy to Allan includes a flexible street for six full blocks from Navy Street to Allan Street. This option has the greatest impact on overall project cost as a result of substantially more use of unit pavers in the roadway, continuous bollards on both sides along the full length and the extension of trench drains throughout. Presently, only two annual events use all of Lakeshore Road East in the downtown which minimizes the benefit of this option.

There are challenges with regards to the construction schedule with this option compared to the others as the placement of unit pavers throughout the entire project would take significantly longer than the placement of conventional asphalt.

The overall length of the flexible street in this option is concerning to staff from a traffic engineering/safety perspective. Lakeshore Road East is a high volume minor arterial roadway; the use of decorative bollards to separate traffic from the boulevards/pedestrians, especially at the intersection approaches where parking is prohibited, would create a safety concern in staff's opinion. Of the flexible street examples that staff investigated, they were applied in lower volume road classes – not the high volume traffic scenario that currently exists on Lakeshore Road downtown.

Staff are not recommending this option.

Decorative Street Light Pole Business Case Assessment

A business case assessment to determine the costs of refurbishing the existing street light poles/fixtures compared to installing new poles/fixtures was undertaken in 2017. The feasibility study looked at life cycle costs, pole attachments and the logistics of storing/refinishing of the existing poles/fixtures in comparison to providing new.

The assessment highlighted the existing poles/fixtures are approaching the end of their life span and that the cost of refinishing (sandblasting, repairing/repainting) them would be significant. It was also noted that there are not enough existing streetlight poles in the downtown to meet the current lighting design criteria; the present lighting standards require shorter spacing between poles to achieve the appropriate lighting levels resulting in more poles along Lakeshore Road. Further, the existing poles would require significant modifications to adapt them for new banner and hanging basket arms, and updated electrical receptacles. Finally, re-using the existing poles would require a temporary lighting system to be put in place to provide some lighting levels for pedestrians during the construction of the project; this would add significant cost to the project.

The assessment concluded that it would not be cost effective nor feasible to salvage, refurbish and re-use the existing poles. Staff are recommending that the project include new decorative street light poles.

Lakeshore Road Street Trees

The reconstruction of Lakeshore Road will have an adverse impact on existing street trees as a result of implementing/reconstructing the wider boulevards as per the streetscape master plan in the DTS study. Tree condition has been reviewed with Forestry; many of the trees are not in good condition as a result of the existing poor growing environment. There are approximately five (5) trees that are considered worthy of saving and the final design plans are considering how they can be accommodated.

As a result, the majority of the existing trees on Lakeshore Road will be removed as part of the project. All new trees on Lakeshore Road will be planted in soil cell systems which will allow the new street trees to thrive. To irrigate the soil cell system, storm water will be harvested through a system of trench drains and distributed throughout the soil cell tree pits. Forestry staff have been consulted and support the use of the soil cell system. The soil cell system will provide much healthier street trees on Lakeshore Road. Species of proposed street trees will be confirmed through Forestry staff prior to the tendering of the project.

Lakeshore Streetscape – Local Identity and Sense of Place

The DTS study contemplated an element in the streetscape design that speaks to local identity and promoting a sense of place. To create a unique, integrated and interesting layer within the Lakeshore Road streetscape, a series of bronze inlays are proposed within the boulevards that will tell the story of the native Oaks of Ontario. The inlays will highlight the subtle but distinct biological differences between species and will include bronze inlays of leaves, acorns and tree form diagrams. Each of the six blocks in downtown will be themed around a different Oak species (refer to Appendix F) and inlays listing the botanical and common names of species will signify the focus of each block. The inlays will be strategically placed in the boulevard and are intended to be discovered as curiosities.

Solar Powered Self-Compacting Waste Receptacles:

Council previously approved a pilot project involving the use of solar powered self-compacting waste receptacles. A total of 5 units were purchased (*Big Belly*); three were placed along Lakeshore Road at known high frequency trash locations, two were placed within Towne Square.

The results of the pilot were favourable. The BIA has indicated to staff that these units were well received by both merchants and the public. Staff confirmed that these units were able to hold significantly more trash than the conventional bins

downtown, resulting in less collection cycles. The units have SmartCity features in that they can communicate with staff who service them (alarms provided via cell phone that the units are approaching capacity) – resulting in servicing requirements only when needed, not on regular schedule as is the case with the conventional bins.

It was noted; however, that the units were best serviced where a service vehicle can park next to the units. As this units collect significantly more trash, the bags can be quite heavy. In the case of Towne Square, it was quite difficult to carry/move the heavy trash bags as it is not always possible to have the service vehicle park within Towne Square. In some cases, the trash bags had to be dragged over a significant length and this resulted in the bags splitting with refuse spilling on the hardscape within Town Square.

As a result of the pilot, staff are not recommending that the units be utilized within Towne Square. However, the units will be adopted for use along Lakeshore Road. One additional unit will be purchased for a total inventory of Six (6) *Big Belly* units. The streetscape design is allowing for one unit per block and each unit will be located in the highest trash frequency location.

Two-Way Street Conversion, Water Street and Halton Work Coordination

As part of the DTS study, an assessment of the existing road network was made at an operational level of detail that examined the operation of the existing intersections and road sections in Downtown Oakville. The DTS study recommended converting the one-way streets to two-way operation. Navy Street from Randall Street to Lakeshore Road was converted to two-way operation prior to the commencement of the Lakeshore Road bridge reconstruction project.

The following streets will be converted to two-way operation by the autumn of 2018:

- Randall Street from Navy Street to Douglas Avenue;
- Church Street from Navy Street to Allan Street;
- Thomas Street from Randall Street to Lakeshore Road;
- George Street from Randall Street to Lakeshore Road;
- Dunn Street from Randall Street to Lakeshore Road.

Modifications of the existing traffic signals to accommodate the conversions are required. This work will commence over the summer months. With the exception of Thomas Street, the two-way conversions will include the resurfacing (“shave and pave”) of the converted streets, prior to the new pavement markings being applied. Staff also plan to place the final layer of asphalt on Trafalgar Road (MacDonald to Randall) later this spring to complete Halton’s previous wastewater main project from 2 years ago.

In addition, Water Street has reached the end of its service life and staff plan to reprocess the roadway in place and pave new wearing layers of asphalt during the spring season.

Halton has a water and wastewater main project planned for Reynolds and Allan Street in 2018. Staff will coordinate its resurfacing works/two way conversions with this project.

A PIC is planned for later this spring to outline more specific details of the above.

Smart City Initiatives

A smart city is a municipality that uses information and communication technologies to increase operational efficiency, share information with the public and improve both the quality of government services and citizen welfare. The Lakeshore Road Reconstruction and Streetscape Project is planning/considering to include a number of smart city initiatives, including:

- Pedestrian and traffic counting devices
- Parking sensors and electronic parking information display boards
- Public WIFI
- Electronic Vehicle Charging Stations
- USB charging stations
- Digital information boards
- Hydro smart grid technologies

One of the primary objectives of the design is to ensure that the underground infrastructure that is required to accommodate existing and future smart city opportunities is planned for and constructed with the project, with a separate initiative to install the hardware for the smart city components as each construction phase of the Lakeshore Project is completed.

Heritage Oakville Permit:

A report and presentation was provided to the Heritage Oakville Advisory Committee at its meeting of February 2018 to present the final streetscape plan and a request for a heritage permit was made and approved. The minutes of the Heritage Oakville Advisory Committee are included in Council's agenda package.

Maintenance Operations

The final streetscape design may require the town to reconsider its current maintenance regime for the roadway and boulevard areas, particularly during the winter season. Roads and Works Operations has been consulted on the final design and they will be reviewing the operational requirements (service levels, costs) for Lakeshore Road as part of the development of the 2019 and 2020 operating budgets.

Next Steps:

Over the coming months, staff will be moving forward with the following:

- Complete detailed design of underground utilities and services
- Confirm construction staging requirements
- Confirm/design smart city initiatives
- Preparation of the construction tender documents
- Complete two-way street conversions by Autumn 2018
- Initiate contractor pre-qualification process and issue tender in late 2018
- Contract award late 2018/early 2019

Phase one of Lakeshore Road construction is planned for 2019 (spring to fall) between Navy Street and Dunn Street. Phase two construction is planned for 2020 (spring to fall) between Dunn Street and Allan Street.

The rehabilitation of Towne Square is planned to be included as part of phase 1 of the Lakeshore Road Reconstruction and Streetscape Project; subject to public consultant and final design details.

CONSIDERATIONS:**(A) PUBLIC**

The public and BIA have been made aware of this report and the Council meeting date.

(B) FINANCIAL

The construction budget for the Lakeshore Road Reconstruction and Streetscape Project has been included in the town's capital forecast (2019-2020). The engineering budget for the project was previously approved in a prior year's budget.

The final streetscape design may require the town to reconsider its current maintenance regime for the roadway and boulevard areas, particularly during the winter season. Operating impacts as a result of this road improvement will be reviewed during the development of the 2019 and 2020 operating budgets.

(C) IMPACT ON OTHER DEPARTMENTS & USERS

Roads and Works Operations, Parks and Open Space, Planning, Economic Development and Strategy, Policy & Corporate Communications have been involved in the design process and have reviewed this report.

(D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS

This report addresses the corporate strategic goal to:

- enhance our economic environment
- continuously improve our programs and services
- provide outstanding service to our residents and businesses
- be accountable in everything we do
- enhance our cultural environment
- enhance our social environment

(E) COMMUNITY SUSTAINABILITY

The Lakeshore Road Reconstruction and Streetscape Project addresses all the pillars of sustainability; linkages between streets, business, promotes social, improving active transportation promotes environmental, the vibrancy of the downtown promotes economic and the link to the DCH promotes the cultural pillar of community sustainability.

APPENDICES:

Appendix A – Approved Streetscape Furnishings

Appendix B – Final Streetscape Plans

Appendix C – Artist Perspective Renderings

Appendix D – PIC Comments

Appendix E – Flexible Street Options

Appendix F – Local Identity and Sense of Place

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