

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING MARCH 7 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR OF ENVIRONMENTAL AND ENGINEERING SERVICES & CITY ENGINEER
SUBJECT:	2017 INFRASTRUCTURE RENEWAL PROGRAM - TREES

RECOMMENDATION

That, on the recommendation of the Managing Director of Environmental and Engineering Services & City Engineer, the following information concerning tree removal, mitigation, and communication as part of the 2017 Infrastructure Renewal Program **BE RECEIVED** for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

None.

2015-2019 STRATEGIC PLAN

The 2015 – 2019 Strategic Plan identifies this objective under Building a Sustainable City; 1B – Manage and improve our water, wastewater and stormwater infrastructure and services.

BACKGROUND

Purpose:

The purpose of this report is to provide an overview of the tree removal identification and mitigation approach as part of the 2017 Infrastructure Renewal Program (IRP) and to identify a greater than usual number of tree removals on three specific construction projects. The IRP is generally funded by a combination of Wastewater, Water and Transportation Capital Budgets.

Background:

The London Plan includes strategies to increase protection, maintenance, monitoring, and planting of the urban forest. These strategies are applicable to City infrastructure projects and are actioned through an Environmental and Engineering Services (EES) Tree Strategy. This specific strategy meets the London Plan requirements by recognizing trees as municipal assets to be protected with specific measures during construction, their condition managed based on expert evaluation of health and structural condition, and a robust post-construction planting plan. Through Water, Sewer and Transportation lifecycle budgeted projects, a significant part of the City of London (the City) tree asset management program is funded.

The City is committed to maintaining strong and healthy infrastructure. There are a number of large construction projects currently planned for 2017. The IRP is an annual program intended to replace municipal infrastructure that has reached the end of its service life. Typically, about 10 to 15 construction projects are assigned to City design teams and engineering consultants every year to help deliver this annual program.

The projects are typically on local streets, and generally include sanitary and storm sewer reconstruction, watermain reconstruction, road restoration, replacement of curb and gutter and sidewalk, as well as restoration of areas disturbed by construction. The scope of each project varies in length, excavation depth and extent of infrastructure replacement.

Generally, IRP projects are situated in older areas of the City. Each of the projects have work plans that include the required engineering design plan to complete the project. In addition, all projects require the design consultant to retain an arborist to analyze all trees on City Right-Of-Way (ROW) within the project limits, support tree decisions for that project, prepare a Tree Inspection Report (TIR), and assist in the creation of tree protection plans. The City has adopted standards for tree protection during construction.

Discussion:

To ensure continuity within the IRP, the City has an internal tree protection strategy to manage the design and implementation of construction projects with respect to trees on public property. This document was last updated in October 2016 and covers project design considerations, public relations, construction, and tree protection measures, as well as standards for tree planting and preservation.

It is noted that an arborist is hired for each individual IRP contract to assess each tree in the City ROW within the project limits. This assessment includes the determination of the health and the impact of construction activities for each tree. A TIR is prepared for each project which provides recommendations for tree removal/retention.

All trees within the ROW are visually evaluated to assess health and structural integrity. Evaluated trees are reviewed for health risk status based on the International Society of Arboriculture (ISA) standards. Generally, most are deemed suitable for retention, pending decisions regarding the construction footprint. However, some can be deemed unhealthy, high risk, or have a limited life span and are not suitable for retention.

In accordance with EES's Tree Strategy, on projects where there are significant tree removals or where there is perception of a major tree impact, a design meeting is held at the 50% design stage to discuss and confirm tree impacts. At this time, the City's Design Project Manager will invite Operations Forestry staff to review the consultants TIR and to walk the site to obtain consensus on the condition of each tree. If a major tree impact is anticipated, the issue is elevated to Division Managers and a communication plan is triggered. This report forms a part of the overall communications plan.

The table below provides a listing of three 2017 IRP projects that are considered to have a higher-than-average number of trees recommended for removal.

PROJECT	STREET (LIMITS)	TOTAL # OF TREES	TREES TO BE REMOVED	% REMOVAL
Contract #5	Victor (Westcott to Wortley) Tecumseh (Cathcart to Wortley) Byron (Teresa to Wortley)	99	16	16%
Contract #6	Byron Baseline (Griffith to Grand View)	383	27-49	7%-13%
Contract #11	Beachwood (Commissioners to Southcrest)	100	15 + unknown # poor health trees	15%

An additional project on Trowbridge Avenue originally identified a large number of tree removals, in the order of 25-30 trees, which would have had a significant negative impact to the streetscape. Through additional focused effort between City staff, the consultant, and the arborist, revised project design and construction methods have now reduced the projected number of tree removals down to seven medium-to-large sized trees, which is considered to be reasonable for a project of this scale.

At this time, about 58-80 trees are scheduled to be removed in 2017 as it relates to the three IRP projects identified above. This includes trees of various sizes and removal is required due to their high risk nature, construction conflict, poor health, or short life expectancy. The remaining IRP projects (17 in total) each have fewer than ten tree removals per project.

Following construction, the City's Forestry Co-ordinator will review the tree inventory on those streets. At that time, a determination will be made on the number and species of trees that will be replanted based on available space and planting guidelines. Generally, the City plants trees after construction in every viable planting location. An average street might get three trees removed and ten planted. About 300 to 400 trees get planted on reconstructed streets per year. The strategy stays away from replacing with a specific ratio, i.e. one tree replanted for every one removed.

Communications Plan:

The social impact is being mitigated through design team coordination and public communication. In an effort to ensure continuity within the program, the specific communication strategies for the various projects include:

- Homeowner Letter #2, which is sent approximately two weeks prior to the Public Information Centre (PIC), describes the tree impact that is anticipated, with further information to be available at the PIC on tree conditions and removals.
- Tree removals will be shown on plans and discussed at the PIC. The difference between construction removals and health and safety trees or end of life is highlighted. The tree arborist is typically present at the PIC, especially for projects with a high number of tree removals.
- Homeowner Letter #3, which is sent two weeks prior to construction, will show a list of all tree removals by address and will highlight any added/saved trees since the PIC.

Summary:

Trees are an important asset to the City of London and best efforts are being made to protect them during construction. The final number of trees slated for removal may change, recognizing that tree location may conflict with the installation of water services and private drain connections. Considerable effort will be made to minimize impact of construction on any tree.

The 2017 Infrastructure Renewal Program is experiencing higher-than-average planned tree removals on multiple projects. All design assignments include Tree Inspection Reports, meaning that all trees within the ROW are visually evaluated by an arborist to assess health and structural integrity against international standards. Homeowners are kept informed of the extent and impact of tree removals through multiple communication efforts. The City's Forestry Division will assess all streets with tree removals and initiate replanting efforts in subsequent years.

Acknowledgements:

This report was prepared within the Wastewater and Drainage Engineering Division by Kyle Chambers, P. Eng., Environmental Services Engineer

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