

Arborist Report

Gananoque Town Hall
30 King St E, Gananoque, Ontario

June 28, 2018

PREPARED FOR
The Corporation of
the Town of
Gananoque



PREPARED BY

A handwritten signature in black ink, appearing to read "Justin Smith", is written over a white background.

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Introduction

The purpose of this report is to conclude observations of a site visit completed by Justin Smith of Eco Tree Care. The site visit was conducted to complete basic tree risk assessments of trees considered as a potential threat to the general public. During the visit a total of thirty-nine trees were assessed within the park. Appendix A describes the results of the tree inspections completed and associated recommendations.

Please note that the count is only representative of trees considered worthy of a tree risk assessment. This is not an inventory of all trees within Town Hall Park.

Site Description

This site is located in the heart of Gananoque, ON. This site has been established since the mid 1800s and has been used as the town hall since the early 1900s. Some of the most mature trees on site are of an age that likely date back to these periods. Park land for public use was also established in the early 1900s. The soil on these grounds includes a combination of native soils and imported fill used to change the ground grade in the past. Walking traffic has compacted soil in several areas surrounding town hall.

Inspection

In total, thirty-nine inspections took place within the park, following ISA tree risk assessment standards. A basic level 1 (visual) assessment had taken place to provide insight into the overall condition of mature trees found within Town Hall Park. Trees considered for inspection were chosen based on overall condition and the frequency of individuals, vehicles or structures that occupy an area within the immediate vicinity of each tree inspected.

Each tree inspected has been provided an identification tag with a four digit code that corresponds with the numbers listed in Table 1 (see Appendix A). Each tag can be found within the first 1.5 meters of the tree base on the north side of the main stem.

All trees inspected have been given a level of risk based on the result of inspection. All trees described as having a “low” risk do not pose an imminent threat and recommendations for these trees are to provide details for preventative maintenance. All trees listed with a level of risk other than low (ie. moderate, high, extreme) require tree care. Recommendations in this case have been made to reduce the residual risk to low. That is, if recommendations are followed, the level of risk for each tree requiring change will be reduced overall. It is important to remember that all trees have a level of inherent risk. Corrective measures can be made to reduce overall risk, however only when removing a tree is the risk also removed entirely.

Tree Removals

Following the inspection of trees a total of eight trees have been recommended for removal. These trees are suggested for removal as they exhibit poor health and/or structural issues that are beyond a reasonable capacity to recover from.

Tree Preservation

Thirty-one trees were considered for preservation. Recommendations have been made for each tree (see Appendix A) as a means of preventative maintenance. Several trees listed for preservation may require removal within a short time frame (5yrs). The suggested preservation methods will prolong the overall life span to allow the removal of certain trees to be staged. Staging removals over several years will prevent a large portion of the overall canopy cover from being removed in a short time frame.

Trees considered for preservation should have all significant deadwood removed. This is not listed within the table as it can be described for all trees within the park.

Further Considerations:

Construction Damage

Throughout the spring and summer of 2018 a substantial addition had been made to Gananoque Town Hall. Throughout this process significant site changes have occurred, including multiple excavations, grade changes, soil compaction and physical damage to certain trees. All factors listed must be considered moving forward. Any tree within the fenced in construction zone must be monitored closely as these trees are expected to enter into a period of steep decline. All other trees where construction has occurred within 1.5 times the radius of the drip line should also be given additional attention as root damage has likely ensued.

Girdling Roots

Girdling roots have been found to be a common issue within the park trees. The general cause within the park trees is unknown as many of the girdling roots had begun many years previous to present date. Girdling roots cause detriment by cutting of circulation off to the main stem as they grow perpendicular to the overall radial habit of the trees buttress. This interference of circulation can cause dieback within the tree, generally beginning as a crack in bark of the main stem, root decline and/or tip dieback within the upper canopy.

Emerald Ash Borer

All Ash trees on site that can be considered for preservation must be treated for the prevention of damage caused by the Emerald Ash Borer (EAB). At least one Ash tree already exhibits damage caused by the EAB insect and this damage will become terminal to the tree if not treated. That is, all Ash trees must be considered for removal if no treatment is provided. The Ash trees on site will require additional observations to confirm their condition to determine if these trees are in fact retainable. If a given Ash tree on site is considered retainable, then an EAB treatment should be scheduled for the summer of 2017.

Conclusion

Following inspection of thirty-nine trees, it has been recommended that thirty-one be retained and eight be removed. The suggested removals should occur as soon as possible to eliminate any risk associated with them. All other recommendations must also be considered in a timely fashion.

APPENDIX A

Table 1: List of trees inspect on May 31st

ID	Species	Latin Binomial	DBH (cm)	Risk Level	Comments & Recommendations
1649	Silver Maple	<i>Acer saccharinum</i>	125.8	Moderate	Targets: vehicles, pedestrians Notes: large co-dominant stem removed in past, tree exhibits associated dieback on main stem Recommend: slight canopy reduction *tree will show effects of immediate construction activity in future (potential decline)
1650	Sugar Maple	<i>Acer saccharum</i>	78.9	Moderate	Targets: vehicles, pedestrians Notes: poor form (co-dominant stems) Recommend: reduce canopy of co-dominant stems *tree will show effects of immediate construction activity in future (decline)
1651	Sugar Maple	<i>Acer saccharum</i>	59.5	Low	Targets: vehicles, pedestrians, building Notes: compacted soils, construction damage to roots Recommend: install one static cable and one brace between codominant stems *tree will show effects of immediate construction activity in future (decline)
1652	White Ash	<i>Fraxinus americana</i>	76.4	Low	Targets: vehicles, pedestrians, building Notes: compacted soil, physical damage to root and buttress of tree, tree at risk of EAB Recommend: reduce limbs from future extension of building * tree will show effects of immediate construction activity in future (decline)
1653	Sugar Maple	<i>Acer saccharum</i>	62.1	Moderate	Targets: pedestrians, vehicles, secondary electrical Notes: compacted soils, physical damage to tree roots, dieback within upper canopy, poor form (codominant stems) Recommend: significant canopy reduction *this tree may be preserved for the time being, however pruning this tree will be completed to stage future removal due to overall poor condition
1654	Sugar Maple	<i>Acer saccharum</i>	68.5	Low	Targets: vehicles, pedestrians Notes: root damage from excavation, girdling roots, Recommend: reduce overextended limbs on SE side of tree, install static cable in combination with brace to support main union
1655	Norway Maple	<i>Acer platanoides</i>	65.7	Moderate	Targets: vehicles, pedestrians, secondary electrical Notes: severe girdling root, removal of large codominant stem in past, suspected internal decay Recommend: full removal of tree
1656	Norway Maple	<i>Acer platanoides</i>	50.4	Moderate	Targets: pedestrians, vehicles, secondary electrical Notes: significant storm damage, suspected decay within main stem Recommend: remove storm damaged limbs, overall canopy reduction of upper canopy

ID	Species	Latin Binomial	DBH (cm)	Risk Level	Comments & Recommendations
1657	Sugar Maple	<i>Acer saccharum</i>	54	Moderate	Targets: pedestrians Notes: girdling roots, suspected root damage from previous construction, internal decay, *tree entering state of decline Recommend: slight canopy reduction
1658	Sugar Maple	<i>Acer saccharum</i>	67.4	Moderate	Targets: pedestrians Notes: root/buttress decay, storm damage in past, suspected root damage due to recent construction Recommend: install brace within main union, canopy reduction *this tree may require removal, pruning and bracing will be completed as a potential means of staging removal
1659	Sugar Maple	<i>Acer saccharum</i>	55	Low	Targets: pedestrians Notes: girdling roots, suspected root damage due to recent construction, Recommend: canopy reduction of codominant stems
1660	Sugar Maple	<i>Acer saccharum</i>	73.3	Low	Targets: pedestrians Notes: tree in good health overall Recommend: install two braces into main union of tree
1661	Sugar Maple	<i>Acer saccharum</i>	60.8	Low	Targets: pedestrians, play structure, secondary hydro Notes: tree in good health overall Recommend: prune for clearance of hydro to park light, reduce west side of canopy
1662	Silver Maple	<i>Acer saccharinum</i>	60.8	Moderate	Targets: pedestrians, play structure Notes: compaction of soil (gravel = overburden), root damage may have occurred during install of play equipment Recommend: reduce overall canopy
1663	Sugar Maple	<i>Acer saccharum</i>	48.3	Moderate	Targets: pedestrians Notes: loss of codominant stem, internal decay within main stem Recommend: remove poor structural limbs
1664	Sugar Maple	<i>Acer saccharum</i>	52.1	Low	Targets: pedestrians, play structure, secondary hydro Notes: tree in good health overall Recommend: prune for clearance of hydro to park light
1665	White Ash	<i>Fraxinus americana</i>	91.1	Moderate	Targets: pedestrians, parked vehicles, play structure, secondary hydro Notes: tree exhibits poor form (multiple stems), tree at risk EAB Recommend: full removal of tree
1666	Norway Maple	<i>Acer platanoides</i>	68.4	Extreme	Targets: pedestrians, play structure Notes: girdling roots, internal decay within main stem, burling, frost cracking Recommend: full removal of tree
1667	Norway Maple	<i>Acer platanoides</i>	57.5	Low	Targets: pedestrians, vehicles Notes: Recommend: slight reduction of upper canopy
1668	Norway Maple	<i>Acer platanoides</i>	44.9	Moderate	Targets: pedestrians, vehicles, secondary hydro Notes: girdling roots, internal decay within main stem, poor form (codominant/scaffold limbs) Recommend: structural prune to improve overall form of tree

ID	Species	Latin Binomial	DBH (cm)	Risk Level	Comments & Recommendations
1669	White Ash	<i>Fraxinus americana</i>	87.1	Moderate	Targets: pedestrians, vehicles, primary hydro, baseball field Notes: root damage from construction (excavation), dieback in upper canopy, tree at risk of EAB Recommend: remove all dieback within upper canopy; reduce upper canopy where not balanced following removal of desiccated material
1670	Black Walnut	<i>Juglans nigra</i>	77.2	Low	Targets: pedestrians, gazebo Notes: included chain (buttress of tree) Recommend: slight reduction of scaffold limbs
1671	Sugar Maple	<i>Acer saccharum</i>	56.2	Moderate	Targets: pedestrians, vehicles Notes: dieback within central/upper canopy Recommend: reduction of remaining living canopy *this tree may require removal, pruning will be completed as a means of staging removal
1672	Sugar Maple	<i>Acer saccharum</i>	82.2	High	Targets: pedestrians, vehicles, secondary hydro Notes: substantial inner decay, codominant stems Recommend: install static cable 5' above main union, retrenchment prune (significant reduction)
1673	Silver Maple	<i>Acer saccharum</i>	92.6	Moderate	Targets: pedestrians, vehicles, secondary hydro, memorial monument Notes: internal decay, cavities within main stem Recommend: static cable from NE stem to ..., reduction of canopy (NE stem), slight reduction of entire remaining stem
1674	Silver Maple	<i>Acer saccharinum</i>	38.3	Moderate	Targets: pedestrians, vehicles Notes: poor form (codominant limbs), splitting from main union down stem, buttress wound, wound/internal decay (south stem) Recommend:
1675	Sugar Maple	<i>Acer saccharum</i>	98.9	High	Targets: pedestrian, vehicles Notes: large codominant stems, south stem splitting away from central stem, significant storm damage in past, significant heartwood decay, sapwood decay (Dryad Saddle), girdling root, root damage in past, adventitious roots within areas of decay Recommend: cable south stem to central stem (dynamic), install two braces through main unions to prevent failure, reduction of canopy (north stem)
1676	Sugar Maple	<i>Acer saccharum</i>	97.2	Low	Targets: pedestrians, primary hydro, neighbouring structures (houses) Notes: internal decay within main stem Recommend: install bracing between three main stems (two braces total), dynamic cable between east/west stems, overall canopy reduction
1677	Norway Maple	<i>Acer platanoides</i>	37.5	Moderate	Targets: pedestrians, secondary hydro Notes: internal decay, girdling roots Recommend: full removal of tree

ID	Species	Latin Binomial	DBH (cm)	Risk Level	Comments & Recommendations
1678	Sugar Maple	<i>Acer saccharum</i>	85.2	Moderate	Targets: pedestrians, vehicles, primary/secondary hydro Notes: Recommend: install bracing (two braces) between lower codominant stems, install dynamic cable between two main stems, slight overall canopy reduction
1679	Sugar Maple	<i>Acer saccharum</i>	50.5	Low	Targets: pedestrians, primary hydro, neighbouring structures (houses) Notes: root decay, codominant stems Recommend: prune limbs that contact adjacent Maple tree
1680	Sugar Maple	<i>Acer saccharum</i>	106.9	Extreme	Targets: pedestrians, primary hydro, neighbouring structures (houses) Notes: adventitious roots within decay, cankers (Eutypella or Nectria), sap decay (kretzschmaria) within main union between three main stems Recommend: full removal of tree
1681	Sugar Maple	<i>Acer saccharum</i>	47.1	Moderate	Targets: pedestrians, vehicles, building Notes: girdling root and/or root damage in past Recommend: install brace at main union
1682	Sugar Maple	<i>Acer saccharum</i>	57.1	Moderate	Targets: pedestrians, vehicles, building Notes: girdling root and/or root damage in past, dieback in main stem and upper canopy, physical damage from construction equipment, *tree in decline Recommend: remove eight inch limb (lowest on west side), canopy reduction
1683	Sugar Maple	<i>Acer saccharum</i>	33.1	Moderate	Targets: pedestrians Notes: tree in decline Recommend: full removal of tree
1684	Norway Maple	<i>Acer platnoides</i>	35.1	Moderate	Targets: pedestrians, vehicles Notes: girdling roots, included bark within main unions, remaining stems splitting apart Recommend: full removal of tree
1685	Sugar Maple	<i>Acer saccharum</i>	93.3	Moderate	Targets: pedestrians, vehicles Notes: girdling roots, internal decay Recommend: reduce canopy (south side), install dynamic cable between north and south stems
1686	Silver Maple	<i>Acer saccharinum</i>	61.5	Low	Targets: pedestrians, baseball diamond Notes: codominant limbs Recommend: reduce canopy of codominant stems, reduce dominant side of tree canopy
1687	Sugar Maple	<i>Acer saccharum</i>	88.8	Extreme	Targets: pedestrians, vehicles, primary hydro, playing field Notes: root and heartwood decay, fruiting bodies present (f.b. could not be identified) Recommend: full removal of tree