BC Plant Health Care Inc.
Arborist Report

JOB NAME:	Kwantlen Polytechnic University – 20190429
RE:	Arborist Report / Tree Inventory and Resource Evaluation / Tree Management Plan
SITE:	KPU Surrey Campus - 12666 72 Ave, Surrey, BC
PREPARED FOR:	Kwantlen Polytechnic University Shawn Cahill - Manager, Operations, Facilities Services 12666 72 Ave, Surrey V3W 2M8 shawn.cahill@kpu.ca 604-599-2354
DATE:	August 15th, 2019
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1.0 Summary

For reporting purposes, the site was divided into 29 blocks. The number of trees inventoried for the entirety of the site totalled **1023** trees. This report provides information divided into blocks of trees with similar geographic locations and conditions.

The major concerns on the site overall are a lack of access to water and low soil volume coupled with high heat exposure from large swaths of concrete in the parking lots, buildings, and other hardscaping. In some instances, this can be mitigated with the routine addition of water and mulch. Alternatively, some blocks within the site are still not expected to appreciate in value for many years even with the addition of water. This can be defined as "Acceptable Growth Stock" (AGS) and "Unacceptable Growth Stock" (UGS). This data can be found on the ***Detailed Spreadsheet.***

107 trees are recommended to be watered routinely. Watering in most cases is recommended with routine mulch applications.

46 undersized trees are recommended to start receiving young tree training within the next 3 years. This is anticipated to require an average of 3 pruning cycles over the next 5-10 years.

168 trees are recommended for removal within 3 years. **81** of these trees are bylaw protected. This results in **162** trees being required as replacements under the bylaw. The securities or *Cash-in-Lieu* values in Surrey are $400 per tree. Pursuing all of these removals will require $67,200 in securities until replacements are installed. This volume is likely unattainable under the current site constraints, and *Cash-in-Lieu* of replacement should be considered. Another consideration is a forestry method of tree replacement, which is most viable for blocks 20, 22, and 29. This will require a dialogue with the City to negotiate defined replacement values.

Of all the recommended removals, **58** trees are good candidates for the creation of wildlife trees. They are in varying stages of decay and decline. Not all of them should be kept as wildlife trees but each should be considered on an individual basis as desired.

595 trees are recommended for retention with no action required. These trees are not anticipated to require maintenance within the 3-year timeframe. **96** of these trees are western red cedar specimens which are in fair to good condition. Currently the specimens are recommended for retention but the species as a whole are exhibiting widespread death and dieback due to drought stress across the entire mainland. The remaining western red cedar trees should be considered as potentially declining and requiring maintenance within the next 5-10 years.

All of the trees in each block were assessed for their local benefits to the site. Parameters considered and recorded for reporting purposes include gross carbon, pollution sequestration, hydrology effects, and the energy effects and savings associated with the trees. These recorded benefits are intended to aid in management decisions for the site.

2.0 Introduction and Scope

BC Plant Health Care Inc. has been contracted by Mr. Shawn Cahill of the Kwantlen Polytechnic University to provide a written report of a Tree Resource Evaluation and Management Plan at the KPU Surrey campus located at 12666 72 Avenue, Surrey B.C.

The scope of work was to:

- Visit the site;
- Prepare a basic tree inventory of the managed tree populations which will be determined in consultation with the client. This will include a geo-referenced location of the tree, tagging for identification purposes, and metrics used to formulate a qualitative functional value and management recommendations.
- Evaluate the functional attributes of the tree population (iTree Model, ascending or descending value)
- Evaluate the tree risk with a moderate risk reporting threshold and/or for all dead/dying trees.
- Evaluate the environmental pressures on two specific management areas, (central courtyard forest where the cedar trees are dead and dying, and the London planes in planters in the parking lot. This may require the assessor to take soil tests within each sample plot, and wood core tests of select trees.
- Provide a written report with prioritized management recommendations for the tree population (6 months, 12 months, 18 months, 36 months).

The purpose of this assignment is to prepare a report to assist the managers of the site in making decisions to manage risk and facilitate future management of the site in consideration of the changing environmental conditions and site-specific conditions.

3.0 Materials and Methods

Work was performed in accordance with ISA's **Best Management Practices**[1] for Tree Risk Assessment and **ANSI A300**[2] Part 9: Tree Risk Assessment, and ***City of Surrey Tree Protection Bylaw 16100***.

The ISA's **TRAQ**[3] model of qualitative risk assessment was used to determine:

- Tree likelihood of failure;
- Likelihood of failure impacting a target;
- The consequences of such an event.

These likelihood assertations were combined in matrices to produce a risk rating.

Beginning on May 15th, 2019, I, Mitchell Ginter of BC Plant Health Care Inc. visited the site to perform the assessment. The assessment began with a site walk around to aid in categorizing the site into blocks with similar conditions and characteristics. The location of the blocks is listed in figure 2.

Information collected during assessment site visits included:

- Genus and Species
- Diameter at Breast Height (DBH)
- Estimated Height
- Live Crown Ratio
- Trunk Lean
- General Health
- Site Conditions
- Tree suitability for Retention[4]
- Photographs
- I-Tree Metrics

Equipment used during the assessment were as follows:

- Tree Tags
- Camera
- Diameter Tape
- Suunto Clinometer
- Measuring Tape
- Garmin GPSmap 78

1 Best-available, industry-recognized courses of actions, in consideration of the benefits and limitations, based on scientific research and current knowledge.
2 The performance parameters established by industry consensus as a rule for the measure of extent, quality, quantity, value, or weight used to write specifications.

3 Method of tree risk assessment. Qualifies tree risk with ratings derived by combining likelihood of failure, likelihood of failure striking a target, and likely consequences into matrices.

4 A rating assigned to assessed trees to define their suitability for retention. Tree recommendations were based upon separating the inventoried trees into 2 categories based on
their assigned suitability for retention (expected to appreciate or depreciate within the specified timeframe). Recommendations are made to reduce the risk of and retain trees which are expected to appreciate in value on the current site within the specified timeframe.

4.0 Discussions

The following sections provide background information relevant to understanding this document.

4.1 Species Profiles and Contributions - Understanding Your Forest

4.1.1 Douglas-fir (*Pseudotsuga menziesii*)

Table 1 - Douglas-fir Species Profile

Category	Notes
Use Potential	Park
Tree size and crown characteristics	• A massive tree capable of reaching over 100m in favourable conditions. Usually smaller but still massive in cultivation. • A dense conical crown that can be 10m wide at maturity.
Lifespan	These trees can live over 1000 years
Natural habitat	Native to the western North America. Predominantly occurring at low to mid elevations, 0-2800m across a range of habitats. An important component of temperate rainforest in the pacific northwest but also found in riparian corridors in drier regions further south and at alpine timberlines. A pioneer tree after fire, but also found in mid- and late-successional stages. Adaptable to a wide range of soil types providing they are moist and well-drained.
Environmental tolerance	• Partially tolerant to shade. • Moderately sensitive to drought. • Sensitive to water logging. • Tolerant of root disturbance and development pressures.
Ornamental qualities	• Single-stemmed evergreen conifer with needle leaves. Bark is brown to dark grey, becoming platy and deeply fissured with reddish-brown ridges at maturity. • Male and female flowers (strobili) are found separately on the same trees. Inconspicuous. Peak pollination usually occurs in early spring.
Known issues	• Potentially a very large tree. • Prone to losing very long limbs in windstorms.
Cultural relevance	Very important timber tree that carries immense value as an amenity in park environments. Significant to the cultural heritage of British Columbia.

4.1.2 Cottonwood (*Populus trichocarpa*)

Table 2 - Cottonwood Species Profile

Category	Notes
Use Potential	Park, Riparian zones
Tree size and crown characteristics	• A massive tree capable of reaching 50m high in favourable conditions. Usually smaller. • A broad widespread crown that can be 12m wide at maturity.
Lifespan	These trees can live up to 120 years.
Natural habitat	Native to the western North America. They require ample moisture and plenty of nutrients to grow well. They favour floodplains and moist upland sites with lots of light. They do not grow well in the shade of other species. An important species for riparian corridors. A pioneer tree after fire. Adaptable to a wide range of soil types providing they are moist and well-drained.
Environmental tolerance	• Not tolerant of shade. • Not tolerant of drought. • Not tolerant of root disturbance and development pressures.
Ornamental qualities	• Male and female catkins are on separate trees. Male catkins are small, 2 to 3 centimetres long and female catkins are larger, 8 to 20 centimetres long. • The hairy capsules open to release seeds which are covered with white, fluffy hairs. • The bark is smooth, yellowish-grey on younger trees, but grows thick and deeply grooved with age. • It is named cottonwood for the white hairs on mature seed which float through the air like wisps of cotton or snow.
Known issues	• Potentially a very large tree. • High wind breakage potential. • High root damage potential.
Cultural relevance	First Nations people on the coast and, more commonly, in the Interior made dugout canoes from black cottonwood. Also, the Okanagan people made cottonwood into sideboards for riding and cradles to flatten their children's heads.

4.1.3 Red alder (*Alnus rubra*)

Table 3 - Red Alder Species Profile

Category	Notes
Use Potential	Park, Riparian zones, Steep Slopes, Wildland urban interface
Tree size and crown characteristics	• A medium tree capable of reaching 24m high in favourable conditions. Usually smaller. • Trees growing in the forest develop a slightly tapered trunk extending up to a narrow, rounded crown. • Trees in the open have crowns that start near the ground giving it a broad cone shape.
Lifespan	These trees can live up to 60 years.
Natural habitat	Tends to occur on sites rich in nutrients, including floodplains and streambanks. It tends to be associated with a dense layer of shrubs and herbs, including salmonberry, red elderberry, and several ferns.
Environmental tolerance	• Not tolerant of shade. • Not tolerant of drought. • Not tolerant of root disturbance and development pressures.
Ornamental qualities	• Leaves are bright green above and greyish underneath. They are oval-shaped, with pointed tips, and coarsely toothed edges that tend to curl under. The hair-covered veins form a ladder-like pattern. Leaves stay green until they drop off. • The female cones are oval-shaped, 2 centimetres long. The seed is a narrow winged nutlet. • Bark is thin, greenish on young trees, turning grey to whitish with age. The inner bark and fresh wounds tend to turn deep reddish orange when exposed to air.
Known issues	• High wind breakage potential. • High root damage potential. • Very rapid grower.
Cultural relevance	Aboriginal people used the bark for dyeing basket material, wood, wool, feathers, human hair, and skin. The wood is low in pitch, which makes it a good wood for smoking meat. It is a nitrogen-fixer, meaning that it puts nitrogen back into the soil, unlike most plants. Small bumps, called nodules, on the roots house an organism that can convert the nitrogen in the soil into a form that plants can absorb. When the nitrogen-rich leaves fall, they provide a nutritious compost on the forest floor.

4.1.4 London Plane (*Platanus x acerifolia*)

Table 4 - London Planes Species Profile

Category	Notes
Use Potential	Park, Paved areas, Transportation corridors, Sustainable drainage systems
Tree size and crown characteristics	• A massive tree capable of reaching 40m high. • A globular to ovoid crown form. Capable of becoming very wide. • Moderately dense crown.
Lifespan	These trees can live up to 400 years.
Natural habitat	A hybrid between *Platanus orientalis* and *P. occidentalis*. Tolerant to a wide range of soil textures but prefers mildly acidic soils. Very tolerant of hard surfaces and urban conditions in general.
Environmental tolerance	• Moderately shade tolerant. • Moderately drought tolerant. • Moderately tolerant to waterlogging.
Ornamental qualities	• Male and female flowers held separately but on the same tree. • Spherical, spikey fruit about 2.5cm in diameter, held on stalks in groups of two to four. Prominent from late summer. • Deciduous broadleaved tree with simple palmate leaves. • Single-stemmed. A highly attractive bark: grey with exfoliating flakes that reveal green and cream patches underneath. • Tolerant to salt and air pollution.
Known issues	Potentially a very large tree. Hairs associated with the young leaves and fruits can cause respiratory problems. Pollen is also allergenic. Fallen leaves take a long time to rot so can persist in the landscape for some time after they are shed. *Platanus spp.* are known to be high emitters of Biogenic Volatile Organic Compounds (BVOCs).

4.1.5 Sweet gum (*Liquidambar styraciflua*)

Table 5 - Sweet Gum Species Profile

Category	Notes
Use Potential	Park, Paved areas, Transportation corridors, Sustainable drainage systems
Tree size and crown characteristics	A potentially massive tree capable of reaching 30m. Conical for much of its life, becoming more ovoid with age. Moderately dense crown.
Lifespan	These trees can live up to 120 years.
Natural habitat	Native to eastern US and high elevations in parts of Central America. A pioneer tree of disturbed habitats. Predominantly found in swamp margins, floodplains, and low woods, 0-900m. Prefers moist, deep acidic soil but is fairly adaptable to a range of soils.
Environmental tolerance	• Not tolerant of shade. • Moderately tolerant of drought. • Moderately tolerant of waterlogging. • Observed to have some tolerance to salt and air pollution.
Ornamental qualities	• Spikey capsules (gum-balls) form after flowering, are prominent by early autumn and may well persist into winter • Deciduous broadleaved tree with simple palmate leaves. Spectacular autumn colour.
Known issues	Fruit litter can cause a problem on paved surfaces. *L. styraciflua* release a lot of pollen so have high allergenicity potential during the flowering period. High root damage potential. High wind breakage potential. Liquidambar spp. are known to be high emitters of Biogenic Organic Compounds (BVOCs).
Notes	An excellent, fast-growing, versatile tree for green infrastructure.

4.1.6 Red Maple (*Acer rubrum*)

Table 6 - Red Maple Species Profile

Category	Notes
Use Potential	Park, Paved areas, Transportation corridors, Sustainable drainage systems
Tree size and crown characteristics	A potentially massive tree capable of reaching 40m. Cultivars usually much smaller. Ovid to globular crown. Moderately dense crown.
Lifespan	These trees can live up to 100 years.
Natural habitat	Native to eastern North America where it has a huge natural range. It prefers lowland mesic (moist) deciduous woodland and floodplains, including quite poorly drained sites. However it may also be found on some upland sites as it can cope with shallow, nutrient poor soils. Does not tolerate calcareous soils.
Environmental tolerance	• Moderately tolerant of shade. • Moderately tolerant of drought. • Moderately tolerant of waterlogging.
Ornamental qualities	• Flowers appear in late spring, initially on upright racemes but they later begin to droop. Samara fruits mature in late summer. • Deciduous broadleaved tree. Simple leaves, three to five lobes. Excellent autumn colour, orange-red to scarlet-red. • Single- or multi-stemmed. One of the snake-bark maples; on younger stems, white axial strips form on a green background. Bark becomes grey in older stems.
Known issues	No substantial issues to be aware of.
Notes	Multiple cultivars may have different qualities.

4.1.7 Red oak (*Quercus rubra*)

Table 7 - Red Oak Species Profile

Category	Notes
Use Potential	Park, Transportation corridors
Tree size and crown characteristics	A massive tree capable of reaching 35m. Rarely above 20m in cultivation. A globular to broad ovoid crown at maturity. Potentially >10m in diameter. Moderately dense crown.
Lifespan	These trees can live up to 200 years.
Natural habitat	Native to the temperate deciduous forests of the eastern United States. Predominantly found in moist forest communities and moist slopes, up to 1800m. Does well on a wide range of soil textures but requires acidic or neutral soil with good soil depth and moderate to high fertility. Will not perform well on poorly drained (aerated) sites or calcareous soils.
Environmental tolerance	• Moderately tolerant of shade. • Moderately sensitive to drought. • Sensitive to waterlogging. • Tolerant to salt and air pollution.
Ornamental qualities	• Acorns mature by early autumn in the year following pollination. • Deciduous broadleaved tree with simple, lobed leaves. Very attractive red autumn colour occasionally it has a more yellow colour. • Single-stemmed. Grey-brown bark, smooth when young, developing shallow fissures with age.
Known issues	Capable of becoming a very large species so it needs space to grow. High emitter of Biogenic Volatile Organic Compounds (BVOCs)
Notes	Multiple cultivars may have different qualities.

4.2 Site Conditions Classifications

When site conditions match the ideal needs of the trees, the outcome can be a strong, healthy, thriving ecosystem. Typically, each site is limited by one or more conditions which hamper its ability to reach its full potential and provide the most benefits to the area. For reporting purposes, site conditions were recorded for each block to establish areas where they could most efficiently be improved. Breakdown of each definition for the site characteristics:

4.2.1 Site Moisture

Soil moisture was classified as either *Dry*, *Moderately Dry*, *Moderately Wet* and *Wet*.

Soil moisture was not directly measured but was instead qualified using a combination of soil smear tests, a soil probe, and understory species presence. Only potential surface water available can be assessed using this method. The understory species present were recorded to aid in assessing the available site moisture because many will grow in most conditions given sufficient available moisture.

Site Soil Volume and root growing conditions: Soil volume was estimated by measuring the depth a soil probe would penetrate into the soil to a 1 m depth. Soil depths below this were not measured. Soil volume classifications used were based upon their ability to sustain future tree growth and considers the species present, and their general soil volume requirements based on their mature size. Trees in the "*sufficient*" category are on a site with a soil volume with potential to sustain future growth into a mature size. Trees labeled "*insufficient*" are not growing in this condition.

4.2.2 Soil Compaction

Estimates the level of compaction within the soil profile. This estimate was based upon the ease at which the soil probe penetrated the soil profile. The soil compaction classifications used were: *High, Moderate, Low*.

4.2.3 Site Heat Exposure

The exposure of each block was assessed and classified as either *High, Moderate,* or *Low*. The exposure rating was qualified with consideration to crown total exposure time to the sun, time of crown exposure (Full, Morning, Evening), and proximity to a heat island (parking lot or other concrete). Heat islands create conditions for high heat experienced by the trees. During the day the trees evapotranspirate, and typically they are able to recover and perform critical cellular respiration during the cooler evening hours. Because concrete absorbs heat from the sun all day, and emits it during the evening, the trees require higher volumes of soil water for their daily activities, or they remain too hot to perform their nightly respiration.

4.2.4 Soil Type and Soil Genesis

Soil type was estimated for each block using a soil smear method. Soil genesis rate considered the factors which drive or accelerate soil genesis. The soil genesis classifications used were: *High, Moderate,* or *Low.*

Table 8 - Site Condition Factors Table

Site factors	Observed Characteristics	Classification
Site moisture	Dry, Moderately Dry, or Moderately Wet and Wet	D, MD, MW, W
Site Soil Volume and root growing conditions	Sufficient, Insufficient	S, I
Soil Compaction	High, Moderate, Low	H, M, L
Site Heat Exposure	High, Moderate, Low	H, M, L
Soil Type	-	-
Soil Genesis Rate	High, Moderate, Low	H, M, L
Overall Site Health	Good, Moderate, Poor	G, M, P

4.3 Suitability for Retention Classifications

The suitability for retention was evaluated for each inventoried tree. Each tree was assigned a rating, of either “expected to appreciate” or “expected to depreciate” within a 3-year timespan. This rating was determined by evaluating a variety of variables. Tree in the “expected to appreciate” category are trees in good to fair health, are structurally stable and have the potential for longevity at the site with little or no treatment required to improve health or mitigate structural defects.

Trees in the “expected to depreciate” category range from the low end of fair to poor or even dying. Alternatively, they may require extreme treatment to mitigate structural defects. These trees may require more intense management and monitoring and may have shorter lifespans that those in the “Expected to Appreciate” category. Finally, the species or specimen may possess characteristics that are unfavorable or incompatible in the landscape settings or the intended use of the site.

4.4 Wildlife Trees

Traits that qualify as wildlife trees vary from region to region and are dependent on the local wildlife population. In coastal regions of B.C., a plethora of species inhabit the natural stands of forests and utilize trees in all stages of their life. For the purposes of wildlife tree habitat retention and creation, trees are assessed based upon their current stage of life and decay. This report references “Wildlife & Trees in British Columbia” (Fenger et al.) and classifies trees into one of eight different classes. The following tables and figures are intended for reference and do not directly reflect the wildlife species onsite as a formal survey to identify wildlife was not within the scope of work. The characteristics within the following tables can be emulated on-site, or trees with the current qualities, can be retained as wildlife trees. The decision to retain and create wildlife trees instead of tree removal is at the discretion of the tree manager.

Table 9 - Wildlife Tree Characteristics and Uses Potential

Decay Class		Characteristics	
Conifers	Hardwoods	Status	Wildlife Uses
1	1	Alive and Healthy	• Large branches or lateral branches that are clustered or gnarled, provide nest platforms for large birds of prey and herons. • Large mossy branches that are flat on top become nest sites for marbled murrelets
2	2	Alive but typically unhealthy, damaged, or deformed	• Dead tops provide hunting perches for birds of prey and platforms for open nesters • Soft depressions created by top breakage and decay sometimes become nest sites for great horned owls. • Trees with heart rot are used by strong primary cavity excavators • Insects attracted to trees in distress become food for insectivorous birds
3 and 4	3	• Dead in early stages of decay • Class 3 conifers still have fine twigs, whereas class 4 conifers have few if any branches	• Hard outer shell of sapwood surrounding a softer, decaying heartwood attracts all nesting woodpeckers, and other primary cavity excavators. • Abandoned nest holes and natural cavities are used by many different birds and mammals • Abundant insects attract a variety of insectivorous birds.
	4 and 5	• Advanced stages of decay • Class 5 hardwoods show considerable height loss and branches are mostly gone.	• The softwood of class 5 conifers is suitable for bark and cavity excavators • Abandoned nest holes and natural cavities are used by many different birds and mammals • Abundant insects attract a variety of insectivorous birds.
5 and 6	-	• Increasing deterioration • Branches and bark are mostly gone • Some height loss	• Still structurally sound enough for nest cavity excavators by woodpeckers. • Abandoned nest holes and natural cavities are used by many different birds and mammals • Abundant insects attract a variety of insectivorous birds.
7 and 8	-	• Trunk is very soft and much of it has fallen to the ground, contributing coarse woody debris to the forest floor.	• Abandoned nest holes and natural cavities are used by many different birds and mammals • Abundant insects attract a variety of insectivorous birds.

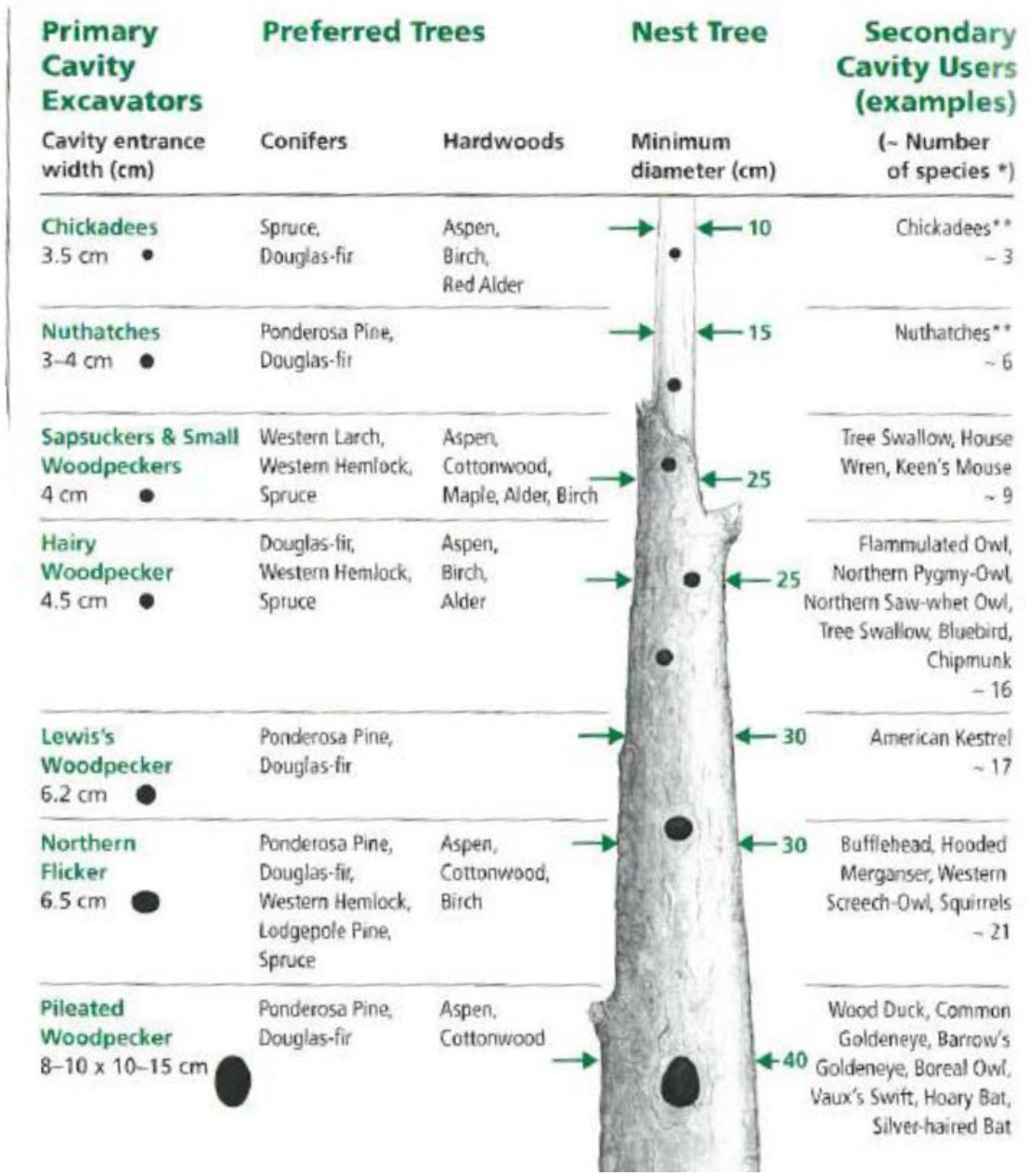


Figure 1 - Primary and Secondary Cavity Species Web - Source: "Wildlife Trees in British Columbia" Fenger et al.

4.4 Understanding i-Tree Data

4.4.1 Air Pollution Removal

Poor air quality is a common problem in many urban areas. It can lead to decreased human health, damage to landscape materials and ecosystem processes, and reduced visibility. The urban forest can help improve air quality by reducing air temperature, directly removing pollutants from the air, and reducing energy consumption in buildings, which consequently reduces air pollutant emissions from the power sources. Trees also emit volatile organic compounds that can contribute to ozone formation. However, integrative studies have revealed that an increase in tree cover leads to reduced ozone formation (Nowak and Dwyer 2000).

4.4.2 Carbon Storage and Sequestration

Climate change is an issue of global concern. Urban trees can help mitigate climate change by sequestering atmospheric carbon (from carbon dioxide) in tissue and by altering energy use in buildings, and consequently altering carbon dioxide emissions from fossil-fuel based power sources (Abdollahi et al 2000). Trees reduce the amount of carbon in the atmosphere by sequestering carbon in new growth every year. The amount of carbon annually sequestered is increased with the size and health of the trees. Carbon storage is the amount of carbon bound up in the above-ground and below-ground parts of woody vegetation. Carbon sequestration is the removal of carbon dioxide from the air by plants. Carbon storage and carbon sequestration values are based on estimated or customized local carbon values. For this analysis, carbon storage and carbon sequestration values are calculated based on $115/ metric ton.

4.4.3 Oxygen Production

Oxygen production is one of the most commonly cited benefits of urban trees. The annual oxygen production of a tree is directly related to the amount of carbon sequestered by the tree, which is tied to the accumulation of tree biomass.

4.4.4 Building Energy Use

Trees affect energy consumption by shading buildings, providing evaporative cooling, and blocking winter winds. Trees tend to reduce building energy consumption in the summer months and can either increase or decrease building energy use in the winter months, depending on the location of trees around the building. Estimates of tree effects on energy use are based on field measurements of tree distance and direction to space conditioned residential buildings (McPherson and Simpson 1999).

Negative numbers indicate that there was not a reduction in carbon emissions and/or value, rather carbon emissions and values increased by the amount shown as a negative value. If appropriate field data were collected, seasonal effects of trees on residential building energy use were calculated based on procedures described in the literature (McPherson and Simpson 1999) using distance and direction of trees from residential structures, tree height and tree condition data. To calculate the monetary value of energy savings, local or custom prices per MWH or MBTU are utilized. For this analysis, energy saving value is calculated based on the prices of $95.99 per MWH and $17.89 per MBTU.

5.0 Block Breakdown and Analysis

The site was broken up into 29 blocks of trees living within similar environmental and infrastructure conditions to aid in providing insight into the resources you manage. Generally, the trees were grouped with consideration to factors such as: proximity to buildings, exposure to strong heat islands, size of community, ratio of turf to canopy cover, exposure to routine utility pruning and other similar factors.

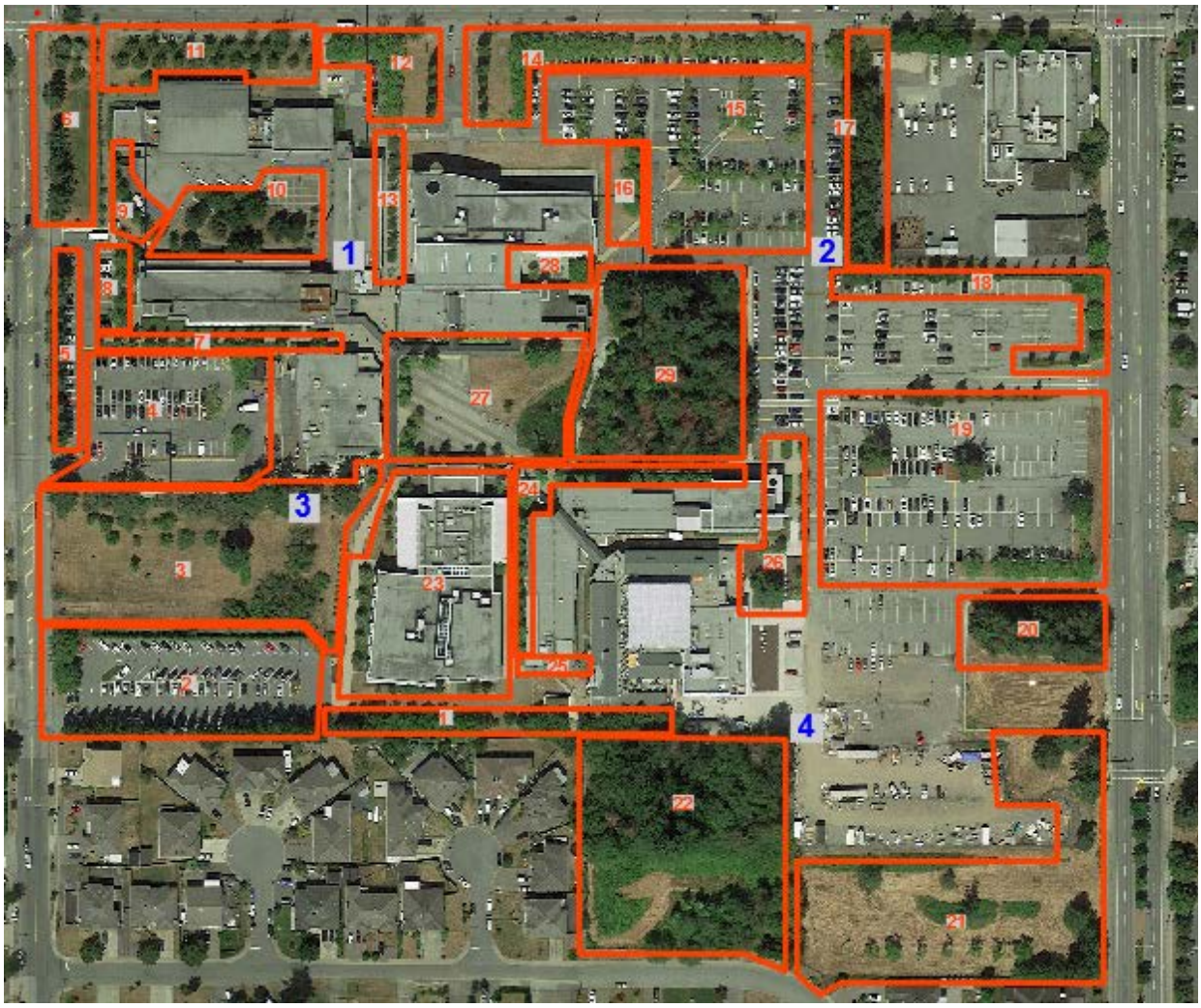


Figure 2 - Block Breakdown Map

Each block was examined for its species composition, site classifications, carbon, and pollution measurements, hydrological effects, energy effects, and energy savings. A summary of each block can be found in the following sections (5.1 -5.29). Each block section was assessed for its general composition and local groups of similar species on the block were discussed together within this report. The recommendations for retention or removal for the block are discussed in the ***Composition and Characteristics*** section. The summary of recommended actions to retain trees are listed in the ***Recommendations*** sections of each block, and details are discussed if necessary. The full list of recommended actions for each tree is in the ***Detailed Spreadsheet*** at the end of this report. Please refer to Detailed Spreadsheet for individual tree recommendations.

5.1 Block 1

Figure 3 - Block 1 Aerial

Figure 4 - Trees 926-941

Figure 5 - Trees 942-947

5.1.1 Composition and Characteristics

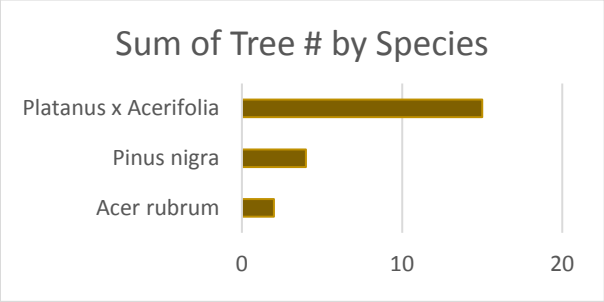


Figure 6 - Block 1 Species Composition

The block exists as a windrow acting as a visual barrier between the properties to the south and the campus grounds. The block also acts to shade the buildings and sidewalks to the north of the treeline. The trees within the block have access to sufficient volumes of soil to support their current biomass and continued growth for many years. The soil within the block was 40 cm deep approximately, as measured by the soil probe. The soil profile was dry and the current turf on the block was already yellow at the time of the assessment. Soil was moderately compacted, and it is unlikely that a large percentage of rainfall infiltrates the soil and is retained long-term.

Table 10 - Block 1 Site factors Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	M
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

The *Acer* (Maple) trees of the block are in good general health. They are bylaw protected. Given proper care, they are expected to appreciate and are recommended for retention. They have no actions recommended within the next 3-years.

The *Platanus* (London Plane) trees of the block are in good general health. Most of them are undersized and not protected by the Bylaw. Tree 929 is Bylaw protected. Given proper care, they are expected to appreciate and are recommended for retention. They have no actions recommended within the next 3-years.

The *Pinus* (Pine) trees of the block are still young and establishing themselves on the site. The dry and likely fast draining site is ideal to support the future growth of these trees.

All the trees within the block have a low risk rating.

5.1.2 Carbon and Pollution

Table 11 - Block 1 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	Value ($)	(metric ton/yr)	($/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.95	109.51	0.03	3.30	0.00	2.88
Austrian pine	0.17	19.14	0.01	0.91	0.00	2.46
London planetree	2.25	257.93	0.10	11.67	0.00	23.31
Total	3.37	386.57	0.14	15.88	0.00	28.65

5.1.3 Hydrology Effects

Table 12 - Block 1 Hydrology Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Total
	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(Can$/yr)
London planetree	230.52	74.52	68.06	74.76	1.99	4.63
Red maple	28.50	9.21	8.41	9.24	1.70	3.95
Austrian pine	24.32	7.86	7.18	7.89	16.11	37.44
Total	**283.34**	**91.59**	**83.66**	**91.89**	**19.80**	**46.02**

5.1.4 Energy Effects & Savings

Table 13 - Block 1 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total
MBTU	-13.05	N/A	-13.05	MBTU	-233	N/A	-233
MWH	-0.67	0.50	-0.17	MWH	-64	48	-16
Carbon Avoided (metric ton)	-0.34	0.03	-0.30	Carbon Avoided	-38	4	-35

5.1.5 Recommendations and priorities

Table 14 - Block 1 Recommended Action Summary

Recommended Action	# of Trees	Priority	# of Trees
Retain	21	Retain no action	21

The trees recommended for retention do not require any mitigation but would benefit from the installation of mulch within their critical root zones, and occasional watering during the summer months where no precipitation has fallen within 3 weeks.

5.2 Block 2

5.2.1 Composition and Characteristics

Figure 7 - Block 2 Aerial

This block is composed of the trees surrounding the southwest parking lot on the campus. The trees on this block receive full sun throughout the day. The light regime and the large area of concrete within the block create a strong heat island effect for the trees. The site has moderate soil compaction from occasional foot traffic.

The *Acer* (Maple) trees of the block are in good general health. They are bylaw protected. Their location provides shade for the entire southernmost row of parking spots in the lot. They have access to sufficient soil on the properties to the south of the site, otherwise the planting site is narrow.

Given proper care, they are expected to appreciate in value and are recommended for retention. They have no actions recommended within the next 3 years.

The *Platanus* trees of the block are in good general health. They are bylaw protected. Their location provides shade for some parking spots along the west of the lot. They have sufficient root habitat though it is dry.

Given proper care, they are expected to appreciate and are recommended for retention. They have no actions recommended within the next 3-years.

Figure 8 - Trees 902-903

Figure 9 - Trees 904-925

Table 15 - Block 2 Species Composition

Species	Number of Trees	Percent of Population
Red maple	22	88.0 %
London planetree	3	12.0 %

Table 16 - Block 2 Site Factors Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.2.2 Carbon Water and Pollution

Table 17 - Block 2 Carbon and Pollution Summary

Species	Trees	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	Number	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	22	6.41	736.64	0.25	28.76	0.00	11.36
London planetree	3	0.85	98.19	0.04	4.42	0.00	5.53
Total	**25**	**7.27**	**834.83**	**0.29**	**33.18**	**0.00**	**16.89**

5.2.3 Hydrology Effects

Table 18 - Block 2 Hydrology Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	($/yr)
Red maple	130.51	27.78	38.51	27.92	5.52	12.84
London planetree	63.50	13.52	18.74	13.59	2.69	6.25
Total	**194.01**	**41.30**	**57.25**	**41.51**	**8.21**	**19.08**

5.2.4 Energy Effects & Savings

Table 19 - Block 2 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**
MBTU	5.32	N/A	5.32	MBTU	95	N/A	95
MWH	0.26	0.69	0.95	MWH	25	67	92
Carbon Avoided (metric ton)	0.14	0.05	0.18	Carbon Avoided	16	5	21

5.2.5 Recommendations and Priorities

Table 20 - Block 2 Recommended Actions Summary

Recommended Action	# of Trees	Priority	# of Trees
Retain	26	Retain no action	26

The trees recommended for retention do not require any mitigation but would benefit from the installation of mulch within their critical root zones, and occasional watering during the summer months where no precipitation has fallen within 3 weeks.

5.3 Block 3

5.3.1 Composition and Characteristics

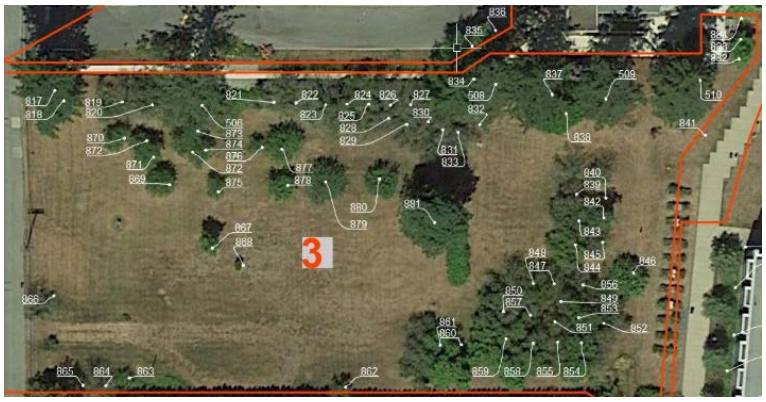


Figure 10 - Block 3 Aerial

Block 3 is a mostly open grown area with a high turf to crown cover ratio and no irrigation. Many of the trees onsite exist as widely spaced communities, and their exposure to heat is moderately high to high moving from the south to the north of the block, where the trees are situated adjacent to a parking lot heat island. The trees receive sun all day, and the edge trees receive heat from the concrete at night to some degree. Due to leaf litter removal, and the dryness of the site, soil genesis is likely to be low.

The *Arborvitae* hedge is in good general health. It separates block 3 from the southwestern parking lot. These trees receive a lot of sun exposure and given proper care, it is expected to appreciate and is recommended for retention.

The *Acer* (Maple) tree is a lone tree with root and butt damage from a previous stem failure. The tree is otherwise healthy and structurally stable. Given proper care, it is expected to appreciate and is recommended for retention.

Figure 11 - Block 3 NW section of block

Figure 12 - Block 3 SW section of Block

Figure 13 - Block 3 SE Section of Block

Species	Number of Trees	Percent of Population
American hazelnut	39	55.7 %
apple spp	13	18.6 %
Douglas fir	8	11.4 %
Tulip tree	3	4.3 %
Western redcedar	1	1.4 %
red cedar spp	1	1.4 %
plum spp	1	1.4 %
pine spp	1	1.4 %
magnolia spp	1	1.4 %
Horse chestnut	1	1.4 %
Bigleaf maple	1	1.4 %

Table 21 - Block 3 Species Composition Summary

A soil probe was used to estimate the depth of the topsoil and it was estimated to be 30-45 cm. The dry profile made for strong compaction and an accurate depth reading is difficult.

The *Aesculus* (Horse chestnut) tree is a lone tree, recently planted, which is healthy and stable. Given proper care, it is expected to appreciate and is recommended for retention.

Approximately 50% of the *Corylus (Hazelnut)* trees in this block are in poor shape with strong top-down canopy dieback. This is likely largely due to inadequate access to water, and waterborne minerals. The soil of block 3 was extremely dry at the time of the assessment. *Corylus (Hazelnut)* trees are commonly shallow rooting, and their access to water deep within the soil profile is limited. A strong presence of turf and ground covering species acts quickly to sequester the available water on-site leaving a diminished water availability for the trees. There are 2 groups of *Corylus (Hazelnut)* trees within Block 3. One is a windrow along the north edge adjacent to a parking lot (819-834), and one is in the southeast corner (839-861). Both groups as a whole are in poor condition and most of the *Corylus (Hazelnut)* trees are expected to depreciate under the current site conditions. Some of the specimens are still in fair condition and could benefit from plant health care intervention, as well as restorative crown pruning. Measures for retention, if desired, are outlined in the detailed spreadsheet.

Approximately 20% of the *Malus* trees in Block 3 are recommended for removal. Those listed for removal have conditions ranging from open cavities, heartwood decay, black knot disease and completely broken tops. The remaining 80% are in fair to good general health and are recommended for retention with no action.

The *Liriodendron (Tulip Poplar)*, *Pinus (Pine), Prunus (Plum/Cherry)*, and Magnolia trees, given proper care, are expected to appreciate and are recommended for retention.

The *Thuja (cedar)* tree is a lone tree with direct sunlight and very little access to water. It is expected to depreciate and decline without an established watering and plant health care regime for the remainder of its lifespan. It is recommended for removal and replacement with a more suitable species in a more suitable planting space.

The *Pseudotsuga* (Fir) trees of block 3 are all situated along the northern edge of the block, adjacent to the western parking lot. Tree 506 is in poor condition and is expected to depreciate without plant health care interventions. Trees 834, 837, and 508-510 have slightly rounded tops, and old, and dried *phaeolus* conks were observed within the critical root zone of these trees in a previous assessment. Due to routine mowing practices the presence of *phaeolus* was not observed during this assessment. The trees still appear structurally sound and in fair general health, and given proper care, are expected to appreciate and are recommended for retention.

5.3.2 Site Classification

Table 22 - Block 3 Site Factors Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.3.3 Carbon and Pollution

Table 23 - Block 3 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Bigleaf maple	0.04	5.05	0.01	0.65	0.00	0.56
Horse chestnut	0.00	0.11	0.00	0.08	0.00	0.02
American hazelnut	7.80	896.54	0.15	17.61	0.00	28.37
Tulip tree	0.11	12.33	0.01	1.41	0.00	3.08
magnolia spp	0.08	9.35	0.01	0.58	0.00	0.70
apple spp	1.48	170.28	0.10	11.45	0.00	6.41
pine spp	1.36	156.50	0.03	3.24	0.00	5.84
plum spp	0.10	11.53	0.01	0.71	0.00	0.64
Douglas fir	5.95	683.99	0.11	12.93	0.00	46.55
red cedar spp	0.49	56.84	0.00	0.11	0.00	42.80
Western redcedar	0.00	0.15	0.00	0.02	0.00	0.07
Total	17.43	2002.65	0.42	48.78	0.01	135.02

5.3.4 Hydrology Effects

Table 24 - Block 3 Hydrology Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Douglas fir	380.32	140.90	151.66	141.09	31.15	72.42
red cedar spp	349.75	129.57	139.47	129.75	28.65	66.59
American hazelnut	231.80	85.88	92.43	85.99	18.99	44.14
apple spp	52.34	19.39	20.87	19.42	4.29	9.97
pine spp	47.74	17.69	19.04	17.71	3.91	9.09
Tulip tree	25.13	9.31	10.02	9.32	2.06	4.78
magnolia spp	5.71	2.12	2.28	2.12	0.47	1.09
plum spp	5.19	1.92	2.07	1.93	0.43	0.99
Bigleaf maple	4.54	1.68	1.81	1.68	0.37	0.86
Western redcedar	0.60	0.22	0.24	0.22	0.05	0.11
Horse chestnut	0.13	0.05	0.05	0.05	0.01	0.02
Total	1103.25	408.72	439.93	409.29	90.36	210.07

5.3.5 Energy Effects & Savings

Table 25 - Block 3 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**
MBTU	-3.78	N/A	-3.78	MBTU	-68	N/A	-68
MWH	-0.23	0.29	0.06	MWH	-22	28	6
Carbon Avoided (metric ton)	-0.10	0.02	-0.08	Carbon Avoided	-11	2	-9

5.3.6 Recommendations and Priorities

Recommended Action	# of Trees
Retain	26
Retain or Remove and Replace	18
Crown clean, Mulch, and Fertilizer	5
Remove vines, Mulch, Fertilizer	1
Remove dead tips, Mulch, and Fertilizer	1
Crown clean	2
Crown clean, Mulch, and Fertilizer	5
Deep root Injection	1
Mulch	3
Remove Ivy	1

Table 26 - Block 3 Recommended Actions Summary

The entire block would benefit from a weekly watering regime throughout July-September, as well as more ground cover, and shade trees. The site would benefit from a transition towards less light penetration, and better water sequestration. Due to a changing climate, maintaining the current species and site composition of block 3 will be economically unviable. Instead of establishing an irrigation system, I recommend planting the site with viable xeriscape plantings, and aid its transition into a dryer, hotter site in the future.

Alternatively, this site can be maintained as a more hydric friendly site by adjusting the soil, layout, and clustering the newly planted trees into planting bed communities. Mulch and ground covering plants will greatly increase soil genesis and water retention on site.

A moderate input of resources and efforts will be required if there is a desire to enhance the general health and productivity of the block. The actions above, if implemented, will be required to be completed routinely until the site is more established with the desired characteristics.

Priority	# of Trees
Retain no action	18
Year 1	16
Year 3	36

Table 27 - Block 3 Priority Summary

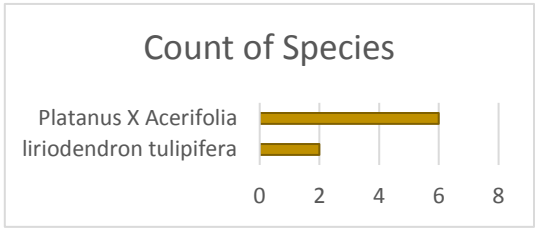
5.4 Block 4

5.4.1 Composition and Characteristics

Figure 14 - Block 4 Aerial

Block 4 is situated in a parking lot. The trees receive strong direct sunlight the majority of the day and are likely to experience a strong heat island effect from the adjacent parking lot. The planting sites for the trees are small parking lot islands with shrub plantings, and wood mulch.

Tress 811-813 are in fair general health and situated in moderately adequate soil volume to sustain their continued growth. They are expected to appreciate in value and are recommended for retention.



Trees 814-816 are in fair to poor general health, which is likely due to inadequate soil volume, soil moisture, and their exposure to direct heat most of the day. Given the recommended plant health care actions, they are expected to appreciate in value and are recommended for retention. Even with soil amendments and adequate maintenance these particular trees are only expected to appreciate for approximately 10 more years. At which point no plant health care measures or level of irrigation is likely to allow the trees to continue to grow appreciate in value. The limiting factor is soil volume.

Figure 15 - Trees 811-813

Figure 16 - Trees 814-815 & 835-836

5.4.2 Site Classification

Table 28 - Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	S/I
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.4.3 Carbon and Pollution

Table 29 - Block 4 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Tulip tree	0.20	23.31	0.01	1.23	0.00	1.84
London planetree	0.33	38.45	0.03	3.28	0.00	4.35
Total	**0.54**	**61.76**	**0.04**	**4.51**	**0.00**	**6.20**

5.4.4 Hydrology Effects

Table 30 - Block 4 Hydrology Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
London planetree	49.75	10.63	14.48	10.68	2.11	4.91
Tulip tree	21.09	4.51	6.14	4.53	0.90	2.08
Total	**70.85**	**15.13**	**20.61**	**15.21**	**3.01**	**6.99**

5.4.5 Energy Effects & Savings

Table 31 - Block 4 Energy Effects Summary

Amounts			
Type	**Heating**	**Cooling**	**Total**
MBTU	-1.41	N/A	-1.41
MWH	-0.07	0.07	0.00
Carbon Avoided (metric ton)	-0.04	0.01	-0.03

5.4.5 Energy Savings

Table 32 - Block 4 Energy Savings Summary

Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**
MBTU	-25	N/A	-25
MWH	-7	7	0
Carbon Avoided	-4	1	-4

5.4.6 Recommendations and Priorities

Table 33 - Block 4 Priority Summary

Priority	# of Trees
Year 1	6
Year 3	2

It is recommended that the trees be retained. Please refer to detailed spreadsheet for plant care recommendations details and their priorities. The trees will benefit from routine addition of water, mulch, and fertilizer. The addition of water is critical during the summer months in the absence of regular rainfall to maintain the tree condition until cooler temperatures.

Table 34 - Block 4 Recommended Action Summary

Recommended Action	# of Trees
Retain	8
Crown Clean	4
Mulch	6
Water	6
Fertilizer	6

5.5 Block 5

5.5.1 Composition and Characteristics

Figure 17 - Block 5 Aerial

The entirety of block 5 is composed of *Pseudotsuga menziesii (Douglas-Fir)*. The majority of the trees are recommended for retention. Many are expected to appreciate but will never reach their full potential given the level of utility pruning required to maintain their crowns, and their buried root collars. Many of the trees require clearance pruning from the parking lot, or the power lines adjacent. The trees within the block have a poor canopy architecture due to the pruning history. The soil appeared very dry at the time of the assessment. The trees are exposed to direct sunlight the entire day and as such require adequate water availability for healthy evapotranspiration.

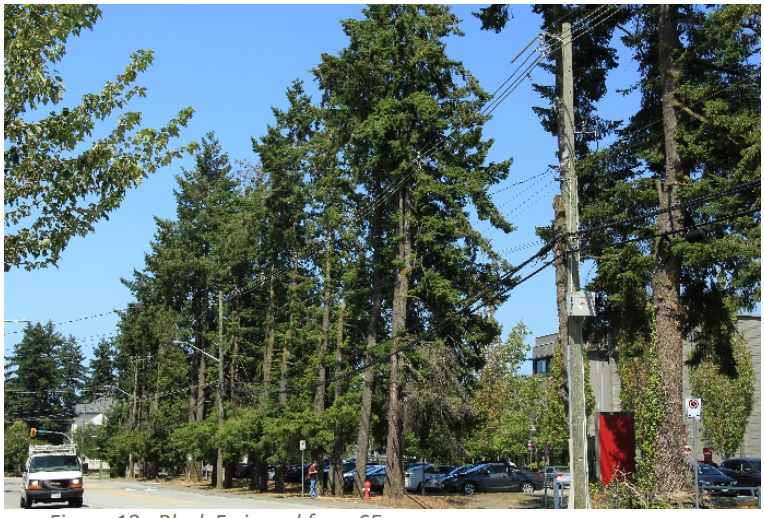


Figure 18 - Block 5 viewed from SE

5.5.2 Site Classification

Table 35 - Block 5 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	S
Soil Compaction	H
Site Heat Exposure	H
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	P

5.5.3 Carbon and Pollution

Table 36 - Block 5 Carbon and Pollution Summary

Species	Trees	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	Number	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Douglas fir	19	5.37	617.00	0.13	14.69	0.00	18.43
Total	19	5.37	617.00	0.13	14.69	0.00	18.43

5.5.4 Hydrology Effects

Table 37 - Block 5 Hydrology Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Douglas fir	148.01	55.55	67.35	55.63	12.35	28.72
Total	148.01	55.55	67.35	55.63	12.35	28.72

5.5.5 Energy Effects & Savings

Table 38 - Block 5 Energy Effects Summary

Amounts			Energy Values (Can$)				
Type	**Heating**	**Cooling**	**Type**	**Heating**	**Cooling**	**Total**	**Total**
MBTU	0.00	N/A	MBTU	0	N/A	0	0.00
MWH	0.00	0.00	MWH	0	0	0	0.00
Carbon Avoided (metric ton)	0.00	0.00	Carbon Avoided	0	0	0	0.00

5.7.6 Recommendations and Priorities

Table 39 - Block 5 Priority Summary

Priority	# of Trees
Annual inspection	3
Year 1	1
Year 2	1
Year 3	14

Table 40 - Block 5 Recommended Action Summary

Recommendation	# of Trees
Remove	3
Retain	16
Clearance prune	10
Crown clean	3
Remove (ground level) Replace	3
Soil amendments	1
Water	1

Each of these trees would benefit from plant health care measures but increased grown and vigor will result in an increased cost of maintenance. Should the removal and replacement of these trees be desired, more suitable species are recommended for the site. Species which respond well to utility pruning and crown training, or with low mature height, are recommended for planting beneath powerlines.

5.6 Block 6

5.6.1 Composition and Characteristics

The majority of block 6 is composed *of Pseudotsuga menziesii (Douglas-Fir)* in a windrow along the western flank of the property. These trees are subjected to the same pruning regime as those in block 5 though the site has a larger volume of viable root habitat for the trees. The majority of the trees are recommended for retention. Many of the trees are expected to appreciate but will never reach their full potential given the level of utility pruning required to maintain their crowns, and their buried root collars. These trees have a poor canopy architecture due to the pruning history. The soil appeared moderately dry at the time of the assessment. The trees are exposed to direct sunlight the entire day and as such require adequate water availability for healthy evapotranspiration. The site has a high turf to crown cover ratio which helps reduce the heat exposure to the crowns but can leave the soil dry.

The *Cercidiphyllum* trees within the block are in poor general health and are suffering from drought and potential bacterial leaf scorch. They are recommended for removal and replacement. They are not expected to recover from their condition.

The *Thuja (cedar)* tree is in fair general health. It is expected to increase in value and is recommended for retention.

The *Prunus (Plum/Cherry)* specimens are in fair general health. They are expected to increase in value and are recommended for retention.

Figure 19 - Block 6 Aerial

Figure 20 - Block 5 and 6 Stand Profiles

Figure 21 - Block 6 Katsura Trees Dying

5.6.2 Species Composition

Table 41 - Block 6 Species Summary

Species	Number of Trees	Percent of Population
Douglas fir	15	45.5 %
Katsura	15	45.5 %
Cherry	2	6.1 %
Western redcedar	1	3.0 %

5.6.3 Site Classification

Table 42 - Block 6 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	L
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.6.4 Carbon Water and Pollution

Table 43 - Block 6 Carbon and Pollution Summary

Species	Trees	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	Number	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Douglas fir	19	5.37	617.00	0.13	14.69	0.00	18.43
Total	19	5.37	617.00	0.13	14.69	0.00	18.43

5.6.5 Hydrology Effects

Table 44 - Block 6 Hydrology Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(Can$/yr)
Douglas fir	148.01	55.55	67.35	55.63	12.35	28.72
Total	**148.01**	**55.55**	**67.35**	**55.63**	**12.35**	**28.72**

5.6.6 Energy Effects & Savings

Table 45 - Block 6 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0
MWH	0.00	0.00	0.00	MWH	0	0	0
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0

5.6.7 Recommendations and Priorities

Recommended Priority	# of Trees
Retain no action	6
Year 1	9
Year 2	1
Year 3	17

Table 46 - Block 6 Priority Summary

Recommended Action	# of Trees
Remove	16
Replace	15
Clearance prune	6
Crown clean	6
Raise canopy	4
Remove and Replace	16
Soil amendments	1
Young tree train	1

Table 47 - Block 6 Recommendations

Many of the trees recommended for retention require action within the next 3 years. The *Cercidiphyllum (katsura)* are likely drought and heat stricken. They are a low risk and are recommended for removal within the next 3 years as budget and timing allows. Some of the *Douglas-Fir* trees will require some of their lowest scaffolds to be removed or reduced to accommodate clearance from either the sidewalk or the parking lot. The branches requiring clearance are minor and are considered a low risk. Minor dead twigs and branches were evident within some of the canopies, but no hangers were apparent.

5.7 Block 7

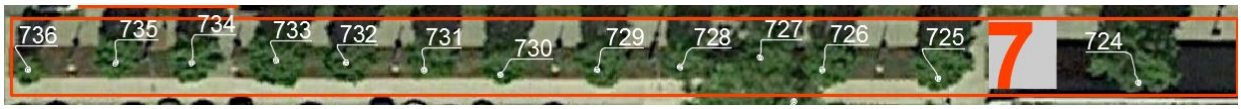


Figure 22 - Block 7 Site Aerial

5.7.1 Composition and Characteristics

Block 7 consists of a windrow of *Acer rubrum* (Maple), located north of the western central parking lot. They act to shade the building adjacent from southern sunlight. They are highly exposed trees with a high rate of transpiration situated in a low volume of soil. The trees exist at a community within their respective planting beds, which helps reduce the impacts of the site. The trees are expected to appreciate but will reach a maximum size and value prematurely due to inadequate available soil volume and access to water. Within a 3-year timeframe the trees are expected to appreciate, and they are recommended for retention with annual watering during the months of July-September to help reduce the drought impacts.

Figure 23 - Block 7 Profiles viewed from SE

5.7.2 Site Classification

Table 48 - Block 7 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	I
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.7.3 Carbon Water and Pollution

Table 49 - Block 7 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	1.73	198.87	0.14	16.11	0.00	4.21
Total	1.73	198.87	0.14	16.11	0.00	4.21

5.7.4 Hydrology Effects

Table 50 - Block 7 hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Red maple	42.63	9.90	8.84	9.97	2.01	4.66
Total	42.63	9.90	8.84	9.97	2.01	4.66

5.7.5 Energy Effects & Savings

Table 51 - Block 7 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**
MBTU	-6.81	N/A	-6.81	MBTU	-122	N/A	-122
MWH	-0.35	0.23	-0.11	MWH	-33	22	-11
Carbon Avoided (metric ton)	-0.17	0.02	-0.16	Carbon Avoided	-20	2	-18

5.7.6 Recommendations and Priorities

Table 52 - Block 7 Priority Summary

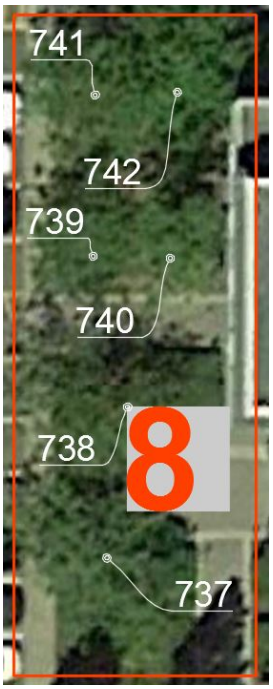
Recommended Priority	# of Trees
Retain no action	13

Table 53 - Block 7 Recommended Action Summary

Recommended Action	# of Trees
Provide water from July to September	13
Retain	13

5.8 Block 8

5.8.1 Composition and Characteristics



The trees are situated adjacent to a parking lot and a building. They act to shade the greenspace and walkways below. They are exposed to full sun most of the day and exist adjacent to a heat island and a building. They have adequate soil volume though appear in fair to poor general health. The soil appeared dry and was moderately difficult to penetrate with the soil probe. The turf appeared green at the time of the assessment, but the sub soil was dry. No irrigation was observed, and the area was observed to have frequent foot traffic. Trees 737 and 738 were in a planting bed with shrubs and mulch. Moisture appeared to be the limiting factor on the site, reducing the potential of the trees.
The trees are undersized and not bylaw protected unless previous replacement trees. Tree 741 is in poor health and is not expected to appreciate within the 3-year timeframe. Given proper care, the remaining trees are expected to appreciate and are recommended for retention.

Figure 24 - Block 8 Site Aerial

5.8.2 Species Composition

This block is comprised of 6 *Gleditsia* trees (*Gleditsia species*)

Figure 25. Block 8

5.8.3 Site Classification

Table 54 - Block 8 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.8.4 Carbon Water and Pollution

Table 55 - Block 8 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Avoided Runoff		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(m^3/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Gleditsia	0.57	65.42	0.05	5.41	2.70	6.27	0.00	5.74
Total	0.57	65.42	0.05	5.41	2.70	6.27	0.00	5.74

5.8.5 Hydrology Effects

Table 56 - Block 8 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Gleditsia	55.71	13.22	10.68	13.31	2.70	6.27
Total	55.71	13.22	10.68	13.31	2.70	6.27

5.8.6 Energy Effects & Savings

Table 57 - Block 8 Energy Effects & Savings Summary

Amounts				Energy Values (Can$)			
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total
MBTU	-1.59	N/A	-1.59	MBTU	-29	N/A	-29
MWH	-0.08	0.14	0.06	MWH	-8	13	5
Carbon Avoided (metric ton)	-0.04	0.01	-0.03	Carbon Avoided	-5	1	-4

5.8.7 Recommendations

All the trees are recommended for immediate watering, mulch, soil amendments or deep root fertilizer, and integrated pest management. Tree 741 is unlikely to recover from its current condition but if desired it could be considered for the same plant health care recommendations as the remaining trees in the block. Mulch would be ideal for the long-term plant health care due to the high frequency of foot traffic in the area.

5.9 Block 9

5.9.1 Composition and Characteristics

Block 9 is composed of a windrow of *Acer rubrum* (Maple) acting to shade the patio to the northeast, and 1 *Gleditsia* providing shade for the grass greenspace below.

The *Gleditsia* tree has a large wound on the trunk beginning approximately at grade, and extending upwards nearly 1 m. The wound wood surrounding the damage is forming strong callous tissue and because the tree is young it is expected to recover from the damage and continue having a safe useful life expectancy. The tree is expected to appreciate and is recommended for retention.

The *Acer* (Maple) within block 9 are young trees with access to a moderate soil volume to the southwest. The placement of these trees has good benefit to the patio acting to cool the site and provide a visual aesthetic. The trees are exposed to strong sunlight the majority of the day and their evapotranspiration rate is expected to be high. The site is not irrigated and the trees would benefit from a maintained layer of wood mulch within as much of their CRZ as is feasible.

Figure 26 - Block 9 Site Aerial

Figure 27 - Block 9

5.9.2 Species Composition

Table 58 - Block 9 Species Composition Summary

Species	Number of Trees	Percent of Population
European ash	7	87.5 %
Gleditsia	1	12.5 %

5.9.3 Site Classification

Table 59 - Block 9 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.9.4 Carbon Water and Pollution

Table 60 - Block 9 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
European ash	0.23	26.97	0.03	3.63	0.00	3.83
Gleditsia species	0.06	6.83	0.01	0.80	0.00	0.35
Total	0.29	33.80	0.04	4.43	0.00	4.18

5.9.5 Hydrology Effects

Table 61 - Block 9 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
European ash	41.26	9.19	10.16	9.24	1.84	4.27
Gleditsia species	3.80	0.85	0.94	0.85	0.17	0.39
Total	45.06	10.03	11.10	10.09	2.01	4.66

5.9.6 Energy Effects & Energy Savings

Table 62 - Block 9 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total
MBTU	-2.07	N/A	-2.07	MBTU	-37	N/A	-37
MWH	-0.11	0.06	-0.04	MWH	-10	6	-4
Carbon Avoided (metric ton)	-0.05	0.00	-0.05	Carbon Avoided	-6	0	-6

5.9.7 Recommendations

Table 63 - Block 9 Recommended Action Summary

Recommended Action	# of Trees
Retain	8

Each of the retained trees currently appears to be well managed and is not in need of any mitigation at the time of the assessment. Maintaining their current care will be ideal.

Table 64 - Block 9 Priority Summary

Priority	# of Trees
Retain no action	8

5.10 Block 10

5.10.1 Composition and Characteristics

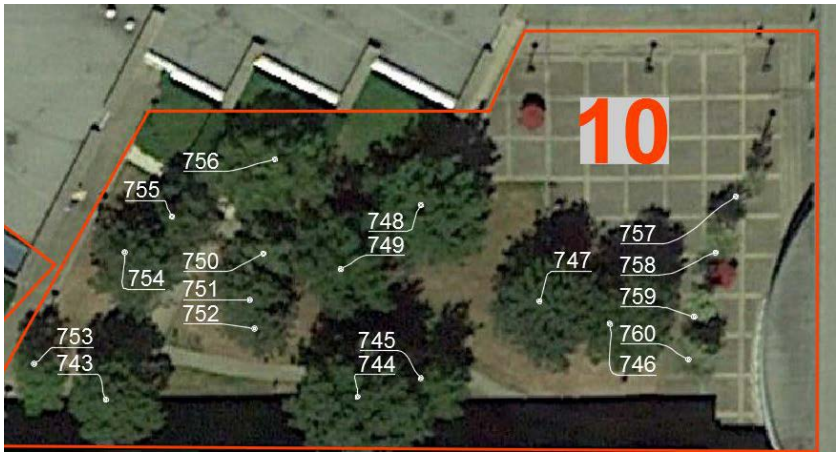


Figure 28 - Block 10 Site Aerial

Block 10 is a central courtyard situated between the buildings on the northwest section of the campus. The site has a slightly hilly topography with the low-lying areas having a cooler, moister soil profile than the top of the hills. Most of the trees were planted on the uphill portion of the hills leaving the majority of their dripline sloping away from the trunk. The trees within the greenspace of the block are protected from direct sunlight for portions of the day and also have access to a large sufficient volume of soil. The trees within the concrete portions of the block have some shade throughout the day but their current soil volume availability is unknown. They also receive a lot more direct heat due to their placement within the block and the heat island created by the concrete and nearby windows.

The *Pinus (Pine)* within the block were grouped into two small planting beds. The majority of the greenspace below the canopies was well shaded at the time of assessment. They are in fair general health and if maintained they are anticipated to appreciate during their safe useful life expectancy and are recommended for retention with no action.

Figure 29 - Block 10 Stand Profiles

Table 65 - Block 10 Species Composition Summary

Species	Number of Trees	Percent of Population
Austrian pine	5	27.8 %
Katsura tree	4	22.2 %
Northern red oak	3	16.7 %
English oak	3	16.7 %
European ash	2	11.1 %
Sweet chestnut	1	5.6 %

The *Quercus* and the *Acer* are dispersed throughout the block and their canopies shade more than half of the greenspace below. They may require some clearance pruning and crown cleaning within 3 years but are expected to appreciate during their safe useful life expectancies, and they are recommended for retention.

The *Cercidiphyllum (Katsura)* are situated within what appear to be tree wells on the hardscaped section of the block. They are not a large species but given the likely volume of soil available and the placement within the block, they are expected to stop appreciating in value prior to the end of their safe useful life expectancy. Annual watering and mulch application from July-September would be beneficial to reduce their drought stress.

The *Fraxinus* are acting to cool the area below and sequester stormwater. They are in fair health and are expected to maintain their safe useful life expectancy.

The *Castanea* (chestnut) is an individual planting acting to cool the building to the north.

Table 66 - Block 10 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	M
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.10.2 Carbon Water and Pollution

Table 67 - Block 10 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Sweet chestnut	0.09	10.07	0.01	0.82	0.00	2.42
Katsura tree	0.13	14.37	0.02	2.18	0.00	0.12
European ash	0.16	17.97	0.01	1.19	0.00	2.06
Austrian pine	0.43	49.96	0.02	2.38	0.00	4.85
English oak	1.44	165.19	0.05	5.20	0.00	5.48
Northern red oak	0.36	41.56	0.02	2.21	0.00	3.32
Total	**2.60**	**299.13**	**0.12**	**13.98**	**0.00**	**18.26**

5.10.3 Hydrology Effects

Table 68 - Block 10 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
English oak	48.91	17.46	15.70	17.50	3.82	8.89
Austrian pine	43.24	15.43	13.88	15.47	3.38	7.86
Northern red oak	29.62	10.57	9.51	10.59	2.32	5.38
Sweet chestnut	21.55	7.69	6.92	7.71	1.68	3.92
European ash	18.40	6.57	5.91	6.58	1.44	3.34
Katsura tree	1.08	0.39	0.35	0.39	0.08	0.20
Total	**162.79**	**58.11**	**52.27**	**58.24**	**12.73**	**29.59**

5.10.4 Energy Effects & Savings

Table 69 - Block 10 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**
MBTU	-1.81	N/A	-1.81	MBTU	-32	N/A	-32
MWH	-0.11	0.26	0.15	MWH	-10	25	14
Carbon Avoided (metric ton)	-0.05	0.02	-0.03	Carbon Avoided	-5	2	-3

5.10.5 Recommendations and Priorities

Table 70 - Block 10 Priority Summary

Recommended Priority	# of Trees
Retain no action	13

Table 71 - Block 10 Recommended Action Summary

Recommended Action	# of Trees
Provide water from July to September	13
Retain	13

5.11 Block 11

5.11.1 Composition and Characteristics

Figure 30 - Block 11 Site Aerial

Block 11 is a planting strip located on the northwest corner of the property. The strip is a hill which slopes down to the north and south for the entire block. This topography typically creates areas which are quick to drain, and if the soil infiltration rate is low during times of high influx, there tends to be strong overland flow of water. Using a soil probe to estimate the depth and relative compaction of the topsoil suggests that the soil is approximately 60 cm deep and is relatively fast draining. There were no signs of strong overland flow of stormwater.

Figure 31 - Block 11 Viewed from South

The *Liquidambar (sweet gum)* within the block act to create shade below their dense, healthy canopies. This acts to maintain a cool soil temperature and helps reduce impacts to roots during drought periods by allowing the soil to retain more accessible water for longer. The group planting has been beneficial for the community as a whole and if it is maintained the entire group is expected to appreciate and is recommended for retention.

The *Thuja (cedar)* within the block are in good general health and are expected to appreciate. They are recommended for retention with no action. Alternatively, the lowest scaffold branches could be raised as they currently act to conceal a collection of garbage.

The *Prunus (Plum/Cherry)* are in poor to fair health and given that plant health care measures are followed, the specimens are expected to appreciate and maintain a safe useful life expectancy.

5.11.2 Species Composition

Table 72 - Block 11 Species Composition Summary

Species	Number of Trees	Percent of Population
Sweetgum	21	80.8 %
Western redcedar	3	11.5 %
plum spp	2	7.7 %

5.11.3 Site Classification

Table 73 - Block 11 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	M
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.11.4 Carbon Water and Pollution

Table 74 - Block 11 Carbon and Pollution Summary

Species	Trees	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	Number	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Sweetgum	21	0.70	80.03	0.06	7.29	0.00	15.94
plum spp	2	0.09	10.71	0.01	1.51	0.00	0.11
Western redcedar	3	0.12	13.38	0.00	0.32	0.00	6.70
Total	**26**	**0.91**	**104.11**	**0.08**	**9.12**	**0.00**	**22.75**

5.11.5 Hydrology Effects

Table 75 - Block 11 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	**(m^3/yr)**	**(m^3/yr)**	**(m^3/yr)**	**(m^3/yr)**	**(Can$/yr)**
Sweetgum	136.86	49.55	40.36	49.65	10.86	25.24
Western redcedar	57.49	20.82	16.96	20.86	4.56	10.60
plum spp	0.97	0.35	0.29	0.35	0.08	0.18
Total	**195.33**	**70.72**	**57.61**	**70.87**	**15.50**	**36.03**

5.11.6 Energy Effects & Savings

Table 76 - Block 11 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**	**Total**
MBTU	1.10	N/A	1.10	MBTU	20	N/A	20	1.10
MWH	0.05	0.09	0.14	MWH	5	9	14	0.14
Carbon Avoided (metric ton)	0.03	0.01	0.04	Carbon Avoided	3	1	4	0.03

5.11.7 Recommendations

The entire block is recommended to receive crown raising and cleaning within 3 years. The *Prunus (Plum/Cherry)* trees would benefit greatly from the mulch and water application immediately. The slopes of the hills appeared to be low traffic areas on the block and are good candidates for mulch application. A central pathway between the rows of trees appeared to be well traveled and would benefit from a mulch pathway.

5.12 Block 12

5.12.1 Composition and Characteristics

Figure 32 - Block 12 Site Aerial

The site is moderately dry and the foot traffic is occasional. The soil profile was moderately compacted but sufficient in volume to sustain the future growth of the block. Each tree has nearly interlocking canopies with its neighbours and the ground below is markedly cooler than the surroundings.

Figure 33 - Block 12 Platanus x Acerifolia Trees Profiles area due to shading.

Figure 34 - Block 12 Acer (Maple) Trees Profiles

5.12.2 Species Composition

Table 77 - Block 12 Species Composition Summary

Species	Number of Trees	Percent of Population
London planetree	8	66.7 %
Red maple	4	33.3 %

5.12.3 Site Classification

Table 78 - Block 12 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.12.4 Carbon Water and Pollution

Table 79 - Block 12 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.72	82.76	0.03	3.98	0.00	1.14
London planetree	0.95	108.64	0.05	5.99	0.00	13.11
Total	**1.67**	**191.40**	**0.09**	**9.97**	**0.00**	**14.25**

5.12.5 Hydrology

Table 80 - Block 12 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
London planetree	154.43	32.36	48.69	32.52	6.42	14.93
Red maple	13.40	2.81	4.23	2.82	0.56	1.30
Total	**167.83**	**35.17**	**52.92**	**35.34**	**6.98**	**16.22**

5.12.6 Energy Effects & Savings

Table 81 - Block 12 Energy Effects Summary

Amounts			Energy Values (Can$)				
Type	Heating	Cooling	Type	Heating	Cooling	Total	Total
MBTU	0.00	N/A	MBTU	0	N/A	0	0.00
MWH	0.00	0.00	MWH	0	0	0	0.00
Carbon Avoided (metric ton)	0.00	0.00	Carbon Avoided	0	0	0	0.00

5.12.7 Recommendations

Each of the trees within the block are recommended for retention with no action though the site appeared to be occupied infrequently and the application of mulch and other ground cover would be beneficial to the tree community.

5.13 Block 13

5.13.1 Composition and Characteristics

The trees within block 13 exist as a windrow of individual trees each in an individual cell. The trees are exposed to full sun the majority of the day and are surrounded by building and sidewalks. The soil compaction was low as it was beneath tree grates. They are growing within limited soil volumes for the species and are expected to appreciate within the 3-year timeframe. The trees are expected to become stunted within 10 years due to insufficient soil volumes.

Tree 1490 is growing directly adjacent to the building but it not anticipated to cause any damage while it grows.

5.13.2 Species Composition

Table 82 - Block 13 Species Composition Summary

Species	Number of Trees	Percent of Population
Red maple	9	90.0 %
Cypress spp	1	10.0 %

Figure 35 - Block 13 Site Aerial

5.13.3 Site Classification

Table 83 - Block 13 Site Classification Summary

Site factors	Classification
Site moisture	MW
Site Soil Volume and root growing conditions	I
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.13.4 Carbon Water and Pollution

Table 84 – Block 13 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.29	33.84	0.05	5.30	0.00	3.13
Cypress spp	0.01	1.14	0.00	0.12	0.00	0.03
Total	**0.30**	**34.97**	**0.05**	**5.43**	**0.00**	**3.15**

5.13.5 Hydrology

Table 85 - Block 13 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Red maple	36.94	8.70	13.12	8.74	1.78	4.14
Cypress spp	0.32	0.07	0.11	0.07	0.02	0.04
Total	**37.26**	**8.78**	**13.23**	**8.81**	**1.80**	**4.18**

5.13.6 Energy Effects & Savings

Table 86 - Block 13 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	-3.45	N/A	-3.45	MBTU	-62	N/A	-62	-3.45
MWH	-0.18	0.07	0.25	MWH	-17	7	-10	-0.10
Carbon Avoided (metric ton)	-0.09	0.01	0.1	Carbon Avoided	-10	1	-10	-0.08

5.13.7 Recommendations

The trees would benefit from young tree training and mulch within 3 years. The soil volume cannot be corrected so providing the trees with a means of soil genesis (mulch) will help maintain their longevity.

5.14 Block 14

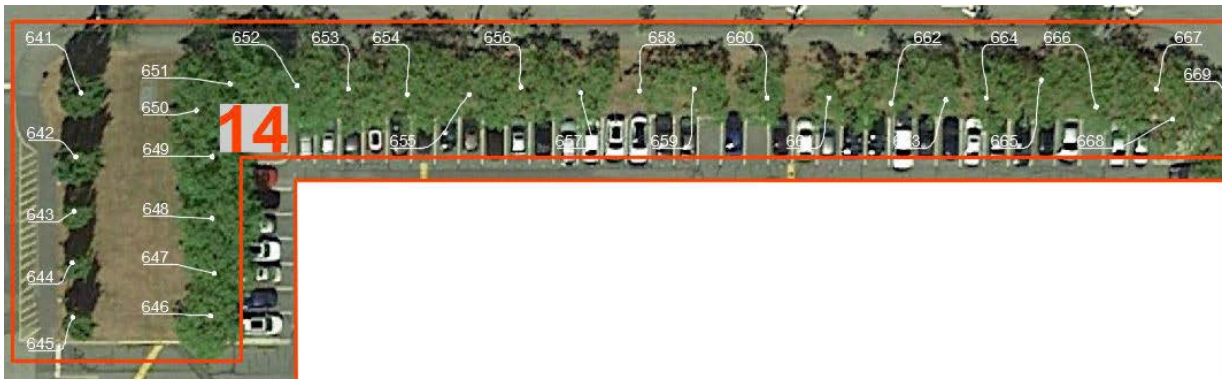


Figure 36 - Block 14 Site Aerial

5.14.1 Composition and Characteristics

The trees within the block act to cool the greenspace below but do not provide much shade or cooling for the cars within the parking lot. The site is dry, and the heat exposure is high. The soil volume on site is sufficient to sustain growth for years to come. Available soil moisture appears to be the limiting factor for this site as the high heat exposure creates a large demand for water on the block.

Figure 37- Acer (Maple) and Platanus Tree profiles of Block 14

5.14.2 Species Composition

Table 87 - Block 14 Species Composition Summary

Species	Number of Trees	Percent of Population
London planetree	23	82.1 %
Red maple	5	17.9 %

5.14.3 Site Classification

Table 88 - Block 14 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.14.4 Carbon, water, pollution

Table 89 - Block 14 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.26	29.41	0.02	2.45	0.00	2.96
London planetree	1.00	115.13	0.08	9.02	0.00	23.99
Total	**1.26**	**144.53**	**0.10**	**11.47**	**0.00**	**26.95**

5.14.5 Hydrology

Table 90 - Block 14 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(Can$/yr)
London planetree	266.01	57.89	71.76	58.20	11.52	26.78
Red maple	32.85	7.15	8.86	7.19	1.42	3.31
Total	298.86	65.04	80.62	65.39	12.94	30.09

5.14.6 Energy Effects & Savings

Table 91 - Block 14 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0	0.00
MWH	0.00	0.00	0.00	MWH	0	0	0	0.00
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0	0.00

5.14.7 Recommendations

Trees 661 and 662 are in poor health and are recommended for removal within 3 years. The remaining trees are recommended for crown cleaning, water, and mulch. The site is a high traffic area and even minor dead branches and twigs have potential to fall and strike passing people or vehicles. The likelihood of this event is low but the trees would benefit from minor crown cleaning within 3 years.

5.15 Block 15

5.15.1 Composition and Characteristics

Figure 38 - Block 15 Site Aerial

The trees in block 15 are exposed to extreme and prolonged heat. They act to cool the northeast parking lot on campus. The area is not irrigated, and the trees are growing in minimal soil volume. These conditions are extremely strenuous. Despite the *Platanus x Acerifolia* (London Planes) being a hardy and tolerant species, most of the trees are in poor to fair health. The primary cause, being the aforementioned low soil volume and lack of irrigation under the current living conditions. Additional soil tests beyond the smear test and soil probe depth estimates were not deemed prudent as a lack of nutrients was not evident during the foliage examination. The soil volume and irrigation factors limiting the tree growth on the block were considered primary to any potential lack of nutrients. This block is unlikely to appreciate in value much beyond a 3-5-year window with consideration of the current climate trend. The addition of irrigation to the region would be beneficial but would not compensate for the low soil volume to have most of the specimens appreciate in value beyond an 8-10-year period.

Figure 39 - Block 15 viewed from east

Figure 40 - Trees in poor health

The *Platanus x Acerifolia* (London Planes) trees are in varying states of stress and decline as some have access to more soil volume than others.

The remaining species within the block are still juvenile infill trees which aid to create a community within the planting spaces but will eventually succumb to the same pressures of the block. They are expected to appreciate in value within a 3-year timeframe.

5.15.2 Species Composition

Table 92 - Block 15 Species Composition Summary

Species	Number of Trees	Percent of Population
London planetree	33	86.8 %
European mountain ash	2	5.3 %
plum spp	2	5.3 %
Douglas fir	1	2.6 %
Total	38	100%

5.15.3 Site Classification

Table 93 - Block 15 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	I
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	P

5.15.4 Carbon Water and Pollution

Table 94 - Block 15 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
London planetree	1.92	220.60	0.12	13.81	0.00	21.08
plum spp	0.01	1.67	0.00	0.31	0.00	0.03
Douglas fir	0.00	0.11	0.00	0.02	0.00	0.02
European mountain ash	0.01	0.83	0.00	0.19	0.00	0.18
Total	**1.94**	**223.21**	**0.12**	**14.33**	**0.00**	**21.32**

5.15.5 Hydrology Effects

Table 95 - Block 15 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
London planetree	243.65	52.82	78.33	53.08	10.56	24.55
European mountain ash	2.10	0.46	0.67	0.46	0.09	0.21
plum spp	0.36	0.08	0.12	0.08	0.02	0.04
Douglas fir	0.29	0.06	0.09	0.06	0.01	0.03
Total	**246.39**	**53.41**	**79.21**	**53.68**	**10.68**	**24.82**

5.15.6 Energy Effects and Savings

Table 96 - Block 15 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**	**Total**
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0	0.00
MWH	0.00	0.00	0.00	MWH	0	0	0	0.00
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0	0.00

Table 97 - Block 15 Energy Savings Summary

5.15.7 Recommendations

Retain the trees with current maintenance schedule of maintaining mulch as it degrades. Water if desired. Remove trees as they decline and replace with more drought and heat tolerant species. Crown clearance and cleaning will be prudent within 3-years. The site is a high traffic area and even minor dead branches and twigs have potential to fall and strike passing people or vehicles. The likelihood of this even is low but the trees would benefit from minor crown cleaning.

Alternatively, if the parking lot planting areas are upgraded to include silvicells and replanted, the newly planted trees would have a strong chance of success for many years and would provide greater benefits to the block.

5.16 Block 16

5.16.1 Composition and Characteristics

Block 16 as a whole acts to shade the same parking lot as block 15. The trees are living with similar conditions to the trees in block 15 for the except for the large soil volume to which they have access. The health and vigor is better than those in adjacent in block 15 growing in limited soil. They are expected to appreciate in value and maintain a safe useful life expectancy without the addition of irrigation.

Figure 43 - Block 16 Site Aerial

The trees in block 16 are noticeably healthier than the trees of block 15 within the same planting row. The limiting factor being soil volume allowing them to retain and access water for longer as well as simply more access to water and waterborne nutrients.

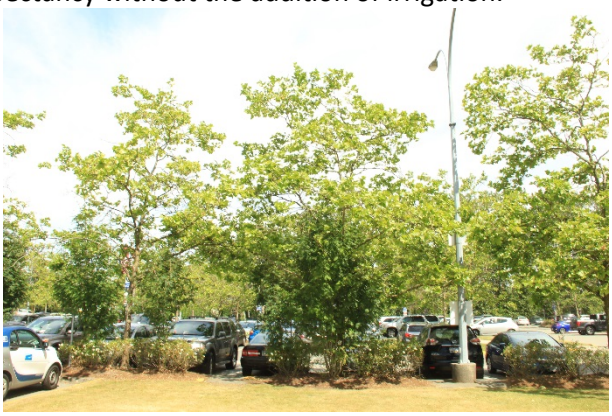


Figure 41 - Undersized trees


Figure 42 - Trees 692-696

5.16.2 Species Composition

Table 98 - Block 16 Species Composition Summary

Species	Number of Trees	Percent of Population
London planetree	5	62.5 %
European mountain ash	3	37.5 %

5.16.3 Site Classification

Table 99 - Block 16 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	I
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	P

5.16.4 Carbon Water and Pollution

Table 100 - Block 16 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
London planetree	0.32	36.21	0.03	3.19	0.00	4.65
European mountain ash	0.02	1.88	0.00	0.29	0.00	0.02
Total	**0.33**	**38.09**	**0.03**	**3.48**	**0.00**	**4.67**

5.16.5 Hydrology Effects

Table 101 - Block 16 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
London planetree	48.03	11.05	10.34	11.12	2.23	5.19
Mountain ash	0.22	0.05	0.05	0.05	0.01	0.02
Total	**48.26**	**11.10**	**10.39**	**11.17**	**2.24**	**5.22**

5.16.6 Energy Effects & Savings

Table 102 - Block 16 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total
MBTU	-0.58	N/A	-0.58	MBTU	-10	N/A	-10
MWH	-0.03	0.02	-0.01	MWH	-3	2	-1
Carbon Avoided (metric ton)	-0.02	0.00	-0.01	Carbon Avoided	-2	0	-2

5.16.7 Recommendations and Priorities

Table 104 – Block 16 Priority Summary

Recommended Priority	# of Trees
Year 1	4
Year 3	4

Many of the trees within block 16 are recommended for young tree training, canopy raising, and clearance pruning within 3 years. The block contains additional viable planting space. The undersized trees within the block are recommended to be maintained away from growing into the adjacent canopies of the remaining overstory trees within the block.

Table 103 - Block 16 Recommended Action Summary

Recommended Action	# of Trees
Crown Clean	4
Retain	8
Young Tree Train	3
Raise Canopy	3
Clearance Prune	1

5.17 Block 17

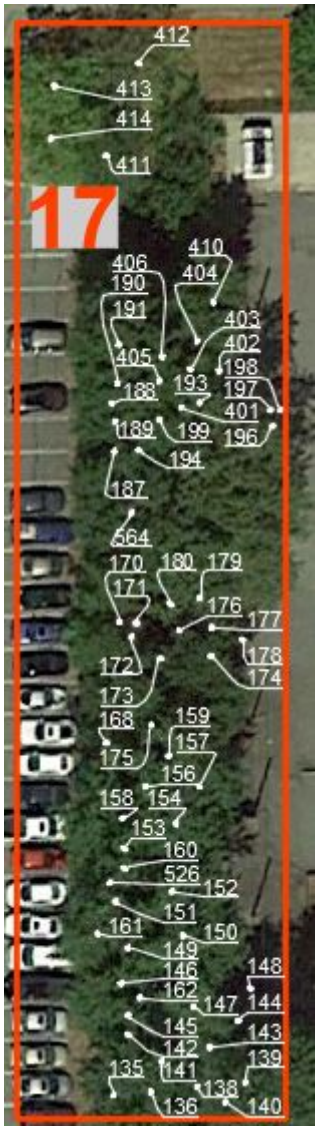


Figure 44 - Block 17 Aerial Site

Figure 45 - Block 17 Stand Profile

5.17.1 Composition and Characteristics

Block 17 is composed entirely of *Populus trichocarpa (Cottonwood)* trees. The stand is youngest to the north of the stand and progressively ages to the south. The trees have sufficient soil volume in which to grow, but it is intermittently flooded annually. *Populus (Poplar)* species commonly grow under these conditions and it is not a concern. The stand acts to shade the parking lot throughout short periods of the day and is a visual barrier to the adjacent property. The soil was moderately wet despite the hot conditions. The area had a moderate rate of soil genesis with nearly all the leaf litter in some state of decay. The soil was lightly compacted. Situated adjacent to large swaths of concrete, the stand is exposed to a high amount of heat throughout the day.

5.17.2 Species Composition

The site is composed of Cottonwood, with one London planetree, one plum and one mountain ash.

5.17.3 Site Classification

Table 105 - Block 17 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.17.4 Carbon Water and Pollution

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
London planetree	0.05	5.73	0.01	0.59	0.00	0.16
Black cottonwood	13.92	1598.86	0.51	58.52	0.00	10.14
plum spp	0.14	16.20	0.01	0.67	0.00	0.05
mountain ash spp	0.04	4.74	0.00	0.30	0.00	0.05
Total	14.15	1625.53	0.52	60.07	0.00	10.40

5.17.5 Hydrology Effects

Species Name	Potential ET	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Black cottonwood	122.36	25.13	42.08	25.24	4.98	11.57
London planetree	1.89	0.39	0.65	0.39	0.08	0.18
mountain ash spp	0.62	0.13	0.21	0.13	0.03	0.06
plum spp	0.62	0.13	0.21	0.13	0.03	0.06
Total	125.49	25.77	43.15	25.89	5.10	11.87

5.17.6 Energy Effects & Savings

Amounts				Energy Values (Can$)			
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0
MWH	0.00	0.00	0.00	MWH	0	0	0
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0

5.17.7 Recommendations and Priorities

The trees of block 17 are recommended for retention with no action. One tree is listed for removal (tree 133).

5.18 Block 18

Figure 46 - Block 18 Site Aerial

5.18.1 Composition and Characteristics

Figure 47 - Block 18 Windrow

Block 18 trees are exposed to high heat from the adjacent parking lot but most of the trees are in fair to good health. They act to cool the property to the north of the site. They are exposed to sun most of the day and provide good environmental benefits. Some have sufficient soil volume to maintain a safe useful life expectancy for many years. Tree 106-108 and 112-116 have minimal soil volume as they exist is a narrow and shallow planting bed. They are expected to maintain a safe useful life expectancy and continue to appreciate for fewer than 10 years, where upon they are likely to become stunted and maintain or decline.

The juvenile *Thuja (cedar)* of the block are not expected to appreciate in the long-term due to extreme drought stress from climate change.

Figure 48 - Block 18 Trees bordering Block 17

5.18.2 Species Composition

Table 106 - Block 18 Species Composition Summary

Species	Number of Trees	Percent of Population
Red maple	18	78.3 %
London planetree	3	13.0 %
Western redcedar	2	8.7 %

5.18.3 Site Classification

Table 107 - Block 18 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.18.4 Carbon Water and Pollution

Table 108 - Block 18 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	1.61	185.50	0.15	16.68	0.00	1.17
London planetree	0.36	40.92	0.03	3.47	0.00	5.37
Western redcedar	0.01	0.71	0.00	0.05	0.00	0.07
Total	**1.98**	**227.13**	**0.18**	**20.20**	**0.00**	**6.62**

5.18.5 Hydrology Effects

Table 109 - Block 18 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
London planetree	57.47	15.24	14.84	15.31	3.18	7.38
Red maple	12.53	3.32	3.24	3.34	0.69	1.61
Western redcedar	0.79	0.21	0.20	0.21	0.04	0.10
Total	**70.79**	**18.77**	**18.28**	**18.86**	**3.91**	**9.09**

5.18.6 Energy Effects & Savings

Table 110 - Block 18 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0	0.00
MWH	0.00	0.00	0.00	MWH	0	0	0	0.00
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0	0.00

5.18.7 Recommendations and Priorities

Table 111 - Block 18 Recommended Action Summary

Recommended Action	# of Trees
Mulch	6
Crown Clean	1
Clearance Prune	3
Young Tree Train	2
Retain	23

Priority	# of Trees
Retain no action	15
Year 1	5
Year 3	3

Table 112 - Block 18 Priority Summary

Many of the trees within block 18 are recommended for young tree training, canopy raising, and clearance pruning within 3 years. Due to the proximity of the parking lot even minor dead branches have potential to strike property. Mulch in the areas with no foot traffic is likely to stay in place and will help reduce some of the heat stress experienced by the trees within the block.

5.19 Block 19

5.19.1 Composition and Characteristics

Figure 49. Aerial Map of Block 19

Block 19 trees are exposed to high heat and sun exposure all day. Trees 101, 102, and 995-1000 are in limited soil volume but have maintained a healthy crown and roots upon inspection. Tree 1000 is a *Juglans* stump which is sprouting currently. It can be maintained as such or it can be removed and replaced.

The *Pinus (Pine)* of the block are healthy and have no concerns.

The *Psedotsuga* of the block have ample soil volume but are not irrigated. The planting areas they are contained within is still supporting 1 tree each and this appears to be the most the soil volume can support for trees of their size.

Figure 50 - Tree 527 and 105

5.19.2 Species Composition

Table 113 - Block 19 Species Composition Summary

Species	Number of Trees	Percent of Population
London planetree	10	45.5 %
Red maple	5	22.7 %
Douglas fir	4	18.2 %
Austrian pine	2	9.1 %
Black walnut	1	4.5 %

5.19.3 Site Classification

Table 114 - Block 19 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

The soil genesis rate of the *Pseudotsuga (Fir)* plantings beds are slightly higher than the remaining block, as mulch appears to be added routinely.

5.19.4 Carbon Water and Pollution

Table 115 - Block 19 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.28	32.33	0.03	3.73	0.00	1.28
Black walnut	0.02	1.77	0.00	0.22	0.00	0.83
Austrian pine	0.36	41.51	0.01	1.16	0.00	2.07
London planetree	0.86	99.18	0.06	6.53	0.00	15.11
Douglas fir	1.47	169.23	0.03	3.17	0.00	12.51
Total	**2.99**	**344.01**	**0.13**	**14.82**	**0.00**	**31.81**

5.19.5 Hydrology Effects

Table 116 - Block 19 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
London planetree	114.81	43.61	28.61	43.72	9.59	22.29
Douglas fir	95.06	36.11	23.69	36.20	7.94	18.46
Austrian pine	15.73	5.98	3.92	5.99	1.31	3.05
Red maple	9.71	3.69	2.42	3.70	0.81	1.89
Black walnut	6.34	2.41	1.58	2.42	0.53	1.23
Total	**241.66**	**91.80**	**60.23**	**92.03**	**20.18**	**46.92**

5.19.6 Energy Effects & Savings

Table 117 - Block 19 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0	0.00
MWH	0.00	0.00	0.00	MWH	0	0	0	0.00
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0	0.00

5.19.7 Recommendations

Table 118 - Block 19 Priority Summary

Recommended Priority	# of Trees
Retain no action	11
Year 1	2
Year 2	5
Year 3	6

Tree 103 and 527 are recommended for removal within 1 year. Tree 1000 is recommended for removal but if retention is desired then a new leader should be selected and maintained. Many of the remaining trees are recommended for crown raising or clearance pruning within 2 years. Many of the trees contain minor amounts of deadwood which are recommended to be removed with crown cleaning within 3 years. *Platanus x Acerifolia (London Planes)* trees are capable of retaining deadwood for many years in the canopy without shedding it. If minor deadwood were to fail if would be unlikely to cause damage to property.

5.20 Block 20

5.20.1 Composition and Characteristics

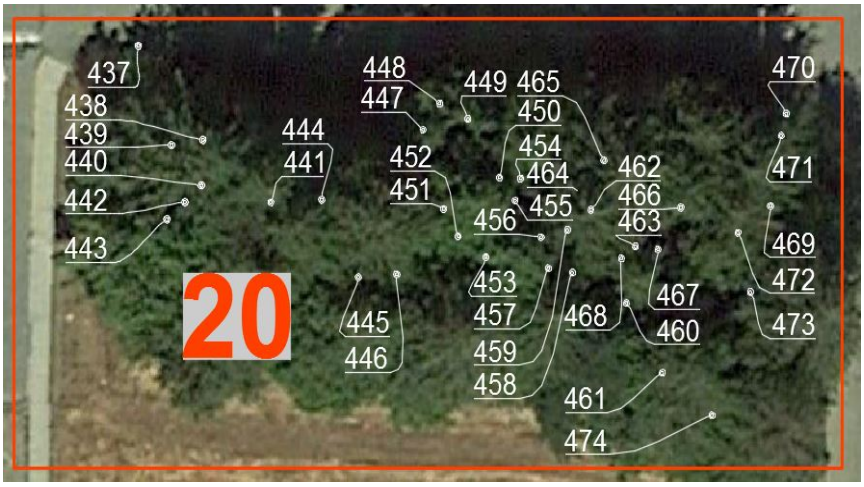


Figure 52 - Block 20 Aerial

Figure 51 - Block 20 Stand Profile

Block 20 trees are in varying states of decline despite a large available soil volume for root habitat. The block is nearly entirely populated by *Thuja plicata* (western red cedar) which are under extreme drought stress across the province. They are not expected to appreciate in the long term though many of them are maintaining their safe useful life expectancy by existing in the community setting in which they are growing. The effects of climate stress can be greatly reduced when the trees exist as a community. Unfortunately, the effects of drought are unlikely to stop. With consideration to the current climate trends, the block is expected to depreciate in the long term. The soil, as with many coniferous stands, was littered with needles and small twigs in a very slow state of decay. The acidity of the needles and the dryness of the soil has created conditions for a very slow soil genesis despite the forested setting.

The birch trees within the block exist as edge trees with moderate sun exposure. They are in fair health but have poor crown architecture.

The *Pseudotsuga (Douglas-Fir)* of the block are in fair general health but the region was shown to have the presence of *phaeolus schweinitzii* (a rot fungus) and the trees should be considered to be potentially affected in the long term by its presence.

5.20.2 Species Composition and Site Classification

Table 119 - Block 20 Species Composition Summary

Species	# of Trees	Percent of Population
Western red cedar	32	86.5 %
birch spp	4	10.8 %
Douglas fir	1	2.7 %

Table 120 - Block 20 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	M
Soil Type	Sandy-Loam
Soil Genesis Rate	M
Overall Site Health	M

5.20.3 Carbon Water and Pollution

Table 121 - Block 20 Carbon and Pollution Summary

Species	Trees	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	Number	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
birch spp	4	0.88	100.84	0.04	4.34	0.00	0.91
Douglas fir	1	0.29	33.57	0.01	0.77	0.00	1.47
Western redcedar	32	12.61	1448.64	0.19	21.40	0.00	44.72
Total	**37**	**13.78**	**1583.05**	**0.23**	**26.51**	**0.00**	**47.10**

5.20.4 Hydrology Effects

Table 122 - Block 20 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Western redcedar	281.19	114.08	71.00	114.60	25.27	58.75
Douglas fir	9.24	3.75	2.33	3.77	0.83	1.93
birch spp	5.72	2.32	1.45	2.33	0.51	1.20
Total	**296.15**	**120.15**	**74.78**	**120.70**	**26.62**	**61.88**

5.20.5 Energy Effects & Savings

Table 123 - Block 20 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0	0.00
MWH	0.00	0.00	0.00	MWH	0	0	0	0.00
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0	0.00

5.20.6 Recommendations

Table 124 - Block 20 Priority Summary

Recommended Priority	# of Trees
Annual inspection	2
Retain no action	30
Year 2	2
Year 3	2
Year 3 inspection	1

Most of the trees are recommended for retention with no action. Tree 473 is recommended to be transitioned to a wildlife tree within 3 years. Tree 463 and 467 are recommended to be retained with no action as they are current wildlife trees. Tree 439 has a history of scaffold and minor trunk failures and is recommended for crown cleaning and re-inspection for changes in condition within 3 years. Alternatively, the tree could be removed and replaced.

Selective removal and replacement of the declining *Thuja (cedar)* is recommended in the long term. The cost burden of removals and replacements can be mitigated by performing the maintenance over multiple years as different specimens are declining at different rates. It is recommended that the removed trees be replaced with drought and shade tolerant species to aid in transitioning this site to the dryer conditions to come.

Though not necessary, the addition of mulch created from any non-diseased specimens is recommended to be added as a layer no thicker than 15 cm to the entire block where possible.

5.21 Block 21

Figure 53 - Block 21 Site Aerial

5.21.1 Composition and Characteristics

Block 21 has a high turf to canopy cover ratio with the majority of the block having canopy cover at its boundaries and little in the center sections. The ground cover present varies from long seasonal grass to perennial flowering plants. The site was moderately dry at the time of assessment, with the seasonal ground grasses in dormancy. Tree 210 exists in a low-lying area where more moisture collects and is retained for a short time. The block acts to provide good stormwater management but provides little else to the property or surrounding properties. The block has great potential but is currently underperforming. The trees which exist as a community are in much greater health than those situated alone within the block.

Figure 54 - Trees 475-478

Figure 55 - Trees 479-490

5.21.2 Species Composition

Table 125 - Block 21 Species Composition Summary

Species	Number of Trees	Percent of Population
Black cottonwood	19	46.3 %
London planetree	8	19.5 %
Red alder	7	17.1 %
Douglas fir	3	7.3 %
Western redcedar	1	2.4 %
plum spp	1	2.4 %
Scots pine	1	2.4 %
Sitka spruce	1	2.4 %

Figure 56 - Trees 212-214

Figure 57 - Trees 479-490

Figure 58 - Trees 490-498

Figure 59 - Tree 202

5.21.3 Site Classification

Table 126 - Block 21 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	L
Soil Type	Sandy-Loam
Soil Genesis Rate	M
Overall Site Health	M

5.21.4 Carbon Water and Pollution

Table 127 - Block 21 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red alder	1.64	188.52	0.05	5.56	0.00	1.05
Sitka spruce	1.48	170.42	0.03	3.26	0.00	1.53
Scots pine	0.48	55.70	0.02	1.75	0.00	0.91
London planetree	0.41	47.21	0.05	5.32	0.00	3.66
Black cottonwood	2.38	273.36	0.10	11.30	0.00	3.25
plum spp	0.25	28.99	0.01	1.43	0.00	0.11
Douglas fir	1.13	130.37	0.03	3.40	0.00	7.50
Western redcedar	0.32	36.45	0.00	0.55	0.00	1.82
Total	**8.10**	**931.02**	**0.28**	**32.58**	**0.00**	**19.83**

5.21.5 Hydrology Effects

Table 128 - Block 21 Hydrology Effects Summary

Species Name	Potential ET	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	**(m^3/yr)**	**(m^3/yr)**	**(m^3/yr)**	**(m^3/yr)**	**(Can$/yr)**
Douglas fir	53.01	20.67	12.69	20.73	4.56	10.59
London planetree	25.84	10.07	6.19	10.10	2.22	5.16
Black cottonwood	23.00	8.96	5.51	8.99	1.98	4.59
Western redcedar	12.88	5.02	3.08	5.04	1.11	2.57
Sitka spruce	10.78	4.20	2.58	4.22	0.93	2.15
Red alder	7.39	2.88	1.77	2.89	0.63	1.48
Scots pine	6.45	2.51	1.54	2.52	0.55	1.29
plum spp	0.78	0.30	0.19	0.30	0.07	0.16
Total	**140.13**	**54.62**	**33.55**	**54.80**	**12.04**	**27.99**

5.21.6 Energy Effects & Savings

Table 129 – Block 21 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**	**Total**
MBTU	0.37	N/A	0.37	MBTU	7	N/A	7	0.37
MWH	0.02	0.04	0.02	MWH	2	3	5	0.05
Carbon Avoided (metric ton)	0.01	0.00	0.01	Carbon Avoided	1	0	1	0.01

5.21.7 Recommendations

Table 130 - Block 21 Priority Summary

Recommended Priority	# of Trees
Retain no action	26
Year 3	15

Many of the *Alnus* (alder) trees are in poor to fair condition and some are recommended for removal. Wildlife tree candidates have been identified. A couple would benefit from young tree training.

The *Picea (spruce)* of the block is in poor health and is recommended for removal and replacement. It qualifies as a wildlife tree candidate.

Table 131 - Block 21 Recommended Action Summary

Recommended Action	# of Trees
Crown clean	4
Mature tree prune	3
Remove (ground level)	5
Remove (wildlife)	5
Retain no action	25
Young tree train	2

The *Pinus (Pine)* tree is in fair health but is growing in an unfavorable location. Despite this it is expected to maintain its safe useful life expectancy for the long term. The *Platanus x Acerifolia (London Planes)* trees are young and most are in fair health. Tree 209 is recommended for removal as it has declined beyond effective and efficient mitigation for restoration. All except 209 are expected to maintain a safe useful life expectancy for the long term without mitigation. The *Populus (Poplar)* trees are mostly in fair health with no actions recommended. Tree 481 is in poor condition and recommended for removal. Sapsucking insects as well as a fungal tar spot was evident on the foliage of nearly every specimen within the block.

The *Prunus (Plum/Cherry)* tree on the block is a lone tree in poor health. It is recommended for removal and replacement.

The *Pseudotsuga (Douglas-Fir)* on the block range from good health to dying. Tree 210 is recommended for removal. The remaining 2 trees have deadwood but are otherwise healthy. The *Thuja (cedar)* tree is recommended for removal within 3 years. It is a good wildlife candidate.

5.22 Block 22

5.22.1 Composition and Characteristics

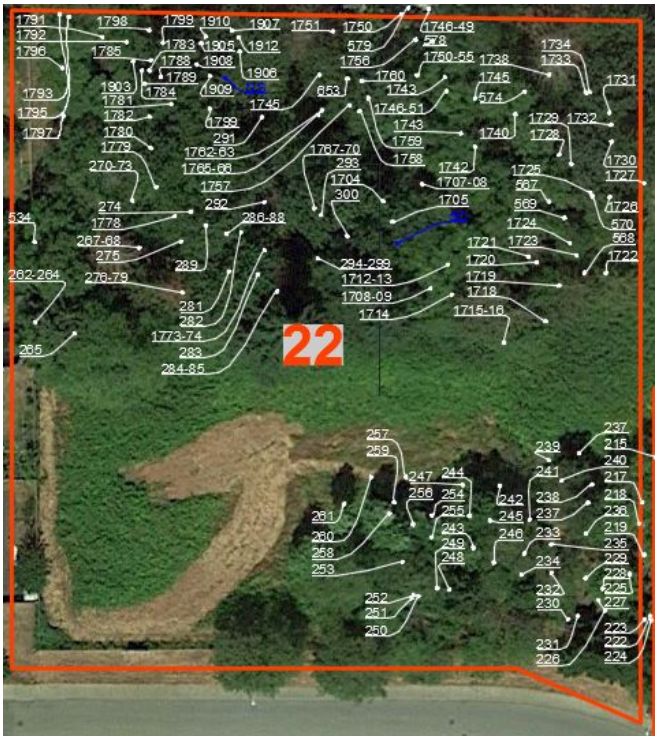


Figure 60 - Block 22 Site Aerial

The block exists as two separate stands. The northern stand consists of a variety of trees but the majority of the stand is composed of the pioneer species, *Alnus rubra*, and *Populus trichocarpa*. The stand acts to sequester stormwater but was moderately dry at the time of assessment. The stand acts to shade the lab to the north but only a select few of the remaining trees actually still cast shade on the building. The majority of the larger trees were previously removed to mitigate the associated risk. Nearly the entire population of *Alnus (alder)* is infected with a sap rot fungus which has trunk failure associated with its presence. This fungus produces spores which will remain in the stand for the foreseeable future and will continue in parasitize the *Alnus* on site. If any are removed, it is recommended that the wood debris be chipped and hauled off site, and not used as mulch for the forest floor.

The southern stand consists of the remaining species and is more diverse than the northern stand. The soil onsite had low compaction and was moderately wet. The profile was measured to be at least 40 cm deep but the shallow rooting species such as the *Pinus (Pine)* have been toppled by wind events. The resulting upheaved root flare exposes the shallow soil below where structural roots were not observed to be below 30 cm depth. The area to the south has higher moisture content than the northern section.

Figure 61 - Trees 237-261

5.22.2 Species Composition

Table 132 - Block 22 Species Composition Summary

Species	Number of Trees	Percent of Population
Red alder	100	49.3 %
Black cottonwood	37	18.2 %
Western redcedar	18	8.9 %
plum spp	11	5.4 %
Quaking aspen	11	5.4 %
Austrian pine	6	3.0 %
Tulip tree	6	3.0 %
Douglas fir	4	2.0 %
London planetree	4	2.0 %
hazelnut spp	2	1.0 %
Red maple	2	1.0 %
mountain ash spp	1	<0.1%
birch spp	1	<0.1%

5.22.3 Site Classification

Table 133 - Block 22 Site Classification Summary

Site factors	Classification
Site moisture	MW
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	L
Soil Type	Sandy-Loam
Soil Genesis Rate	M
Overall Site Health	M

5.22.4 Carbon Water and Pollution

Table 134 - Block 22 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.27	30.50	0.01	1.46	0.00	0.18
Red alder	20.73	2381.34	0.55	63.22	0.00	8.01
birch spp	0.02	2.09	0.00	0.26	0.00	0.09
hazelnut spp	0.05	6.18	0.01	0.60	0.00	0.17
Tulip tree	0.36	41.63	0.02	2.71	0.00	0.81
Austrian pine	0.89	102.41	0.02	2.55	0.00	1.39
London planetree	0.44	50.26	0.02	2.78	0.00	0.84
Black cottonwood	6.26	719.65	0.21	23.89	0.00	3.04
Quaking aspen	1.26	144.26	0.05	5.54	0.00	0.46
plum spp	1.85	212.67	0.07	8.21	0.00	1.11
Douglas fir	1.60	183.51	0.03	3.58	0.00	0.83
mountain ash spp	0.04	4.13	0.00	0.19	0.00	0.08
Western redcedar	4.90	562.88	0.06	6.67	0.00	5.28
Total	**38.67**	**4441.50**	**1.06**	**121.66**	**0.00**	**22.28**

5.22.5 Hydrology Effects

Table 135 - Block 22 Hydrology Effects Summary

Species Name	Potential ET	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(Can$/yr)
Red alder	73.45	25.96	29.68	26.00	5.71	13.27
Western redcedar	48.41	17.11	19.56	17.14	3.76	8.75
Black cottonwood	27.90	9.86	11.27	9.87	2.17	5.04
Austrian pine	12.72	4.50	5.14	4.50	0.99	2.30
plum spp	10.20	3.61	4.12	3.61	0.79	1.84
London planetree	7.75	2.74	3.13	2.74	0.60	1.40
Douglas fir	7.57	2.68	3.06	2.68	0.59	1.37
Tulip tree	7.45	2.63	3.01	2.64	0.58	1.35
Quaking aspen	4.21	1.49	1.70	1.49	0.33	0.76
Red maple	1.63	0.57	0.66	0.58	0.13	0.29
hazelnut spp	1.57	0.55	0.63	0.55	0.12	0.28
birch spp	0.79	0.28	0.32	0.28	0.06	0.14
mountain ash spp	0.74	0.26	0.30	0.26	0.06	0.13
Total	**204.40**	**72.24**	**82.59**	**72.35**	**15.88**	**36.92**

5.22.6 Energy Effects & Savings

Table 136 - Block 22 Energy Effects Summary

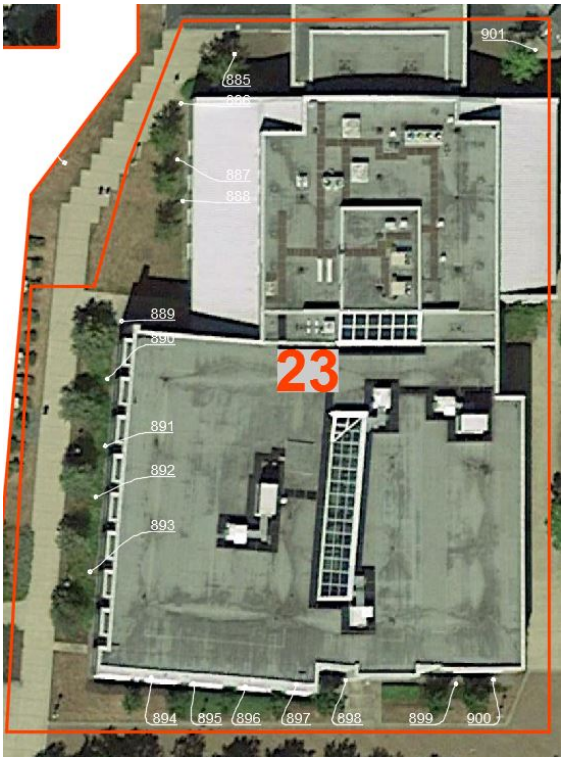
Amounts				Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**
MBTU	0.00	N/A	0.00	MBTU	0	N/A	0
MWH	0.00	0.00	0.00	MWH	0	0	0
Carbon Avoided (metric ton)	0.00	0.00	0.00	Carbon Avoided	0	0	0

5.22.7 Recommendations

Multiple trees are recommended for wildlife tree candidacy, but most are recommended for retention with no action as they do not require risk mitigation and the block is a lower priority in value than others on-site. The northern section of the block should be aided to transition past the pioneer species population. Replanting efforts for the block would be best suited to large scale reforestation practices, where multiple smaller plugs or potted trees are used. The site would also benefit from the addition of additional groundcover capable of competing with the Himalayan blackberry for the recently opened gaps within the stand.

5.23 Block 23

5.23.1 Composition and Characteristics



Block 23 is composed of a variety of species all located around the perimeter of the library and attached building. The block acts to cool the surrounding area and provide shade to the building and the common areas surrounding. Most of the trees are in fair to good health and are recommended for retention. The trees receive sunlight exposure the majority of the day. The *Acer* (Maple) trees receive the most exposure and act to cool the building to the north which has several large windows. The site contains sufficient soil volume to support the specimens, but it was observed to be moderately dry at the time of assessment.

Figure 62 - Block 23 Site Aerial

5.23.2 Species Composition

Table 137 - Block 23 Species Composition Summary

Species	Number of Trees	Percent of Population
Red maple	7	41.2 %
Katsura tree	5	29.4 %
Sweetgum	4	23.5 %
Tulip tree	1	5.9 %

5.23.3 Site Classification

Table 138 - Block 23 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	M
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.23.4 Carbon Water and Pollution

Table 139 - Block 23 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.33	37.83	0.02	2.49	0.00	0.92
Katsura tree	0.24	27.88	0.02	2.14	0.00	1.23
Sweetgum	0.10	11.20	0.01	0.79	0.00	1.00
Tulip tree	0.16	18.61	0.01	0.81	0.00	0.35
Total	**0.83**	**95.52**	**0.05**	**6.23**	**0.00**	**3.50**

5.23.5 Hydrology Effects

Table 140 - Block 23 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(Can$/yr)
Katsura tree	15.00	3.07	5.27	3.08	0.61	1.41
Sweetgum	12.16	2.48	4.27	2.50	0.49	1.14
Red maple	11.18	2.28	3.93	2.29	0.45	1.05
Tulip tree	4.22	0.86	1.48	0.87	0.17	0.40
Total	**42.56**	**8.70**	**14.94**	**8.74**	**1.72**	**4.00**

5.23.6 Energy Effects & Savings

Table 141 - Block 23 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	-9.50	N/A	-9.50	MBTU	-170	N/A	-170	-9.50
MWH	-0.48	0.45	0.93	MWH	-46	43	-3	-0.03
Carbon Avoided (metric ton)	-0.24	0.03	0.27	Carbon Avoided	-28	4	-24	-0.21

5.23.7 Recommendations

The majority of block 23 would benefit from a deep watering followed by a mulch application. The *Liquidambar* trees were in fair health with no need for action.

The *Cercidiphyllum* (katsura) trees have mechanical damage on some of the stems but they are not a risk, and the damage is not expected to greatly affect the safe useful life expectancy of the specimens.

The Acer (Maple) trees appear to have been planted in their root cages with the ties still attached. Some were observed within the critical root zone to have a dried cracked soil surface where the string was still visible. Due to the size of the trees, it is unlikely that the roots are restricted to within the cage. The site is adjacent to a sidewalk and is unlikely to be used as a thoroughfare for foot traffic. With consideration to this, I recommend the row of *Acer* (Maple) have a layer of mulch applied to aid in soil genesis and a variety of other benefits.

Recommended Priority	# of Trees
Retain no action	7
Year 1	8
Year 2	1
Year 3	1

Table 142 - Block 23 Recommended Action Summary

Table 143 - Block 23 Priority Summary

Recommended Action	Count of Tree #
Water and Mulch	8
Raise Canopy	3
Retain no action	25
Young tree train	3
Retain	17

5.24 Block 24

5.24.1 Composition and Characteristics

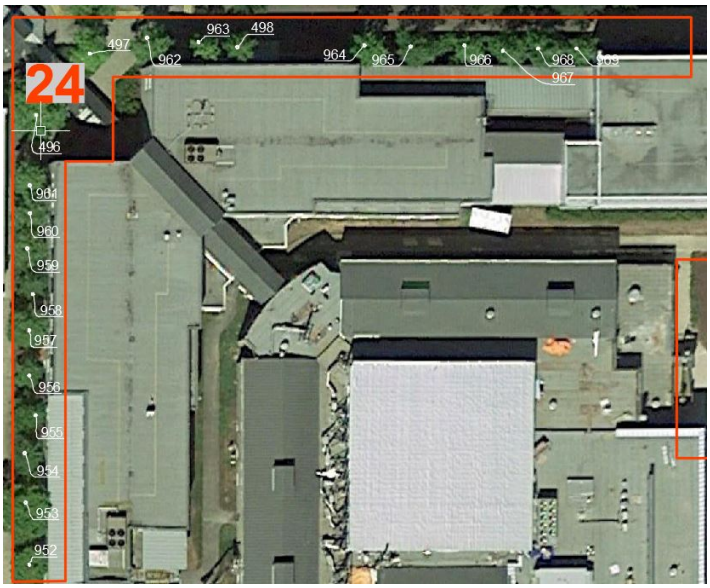


Figure 63 - Block 24 Site Aerial

The block consists of trees surrounding the building containing rooms 116-136. The population is nearly entirely composed of *Liriodendron (Tulip Poplar)* trees which act to cool the adjacent sidewalk areas. The majority of the trees are recommended to be clearance pruned away from the building within 2-3 years. Each would benefit from watering but is expected to maintain their safe useful life expectancy for several years. The trees are exposed to a moderate amount of daily sunlight but are cooled and shaded by the adjacent buildings. Once they reach a height higher than the building, they will receive much more sunlight. Each is planted in adequate soil volume with a mulch bedding to support their continued growth.

Figure 65 - Trees 951-961

Figure 64 - Trees 962-969

5.24.2 Species Composition

Table 144 - Block 24 Species Composition Summary

Species	Number of Trees	Percent of Population
Tulip tree	19	90.5 %
London planetree	2	9.5 %

5.24.3 Site Classification

Table 145 - Block 24 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	L
Soil Type	Sandy-Loam
Soil Genesis Rate	M
Overall Site Health	M

5.24.4 Carbon Water and Pollution

Table 146 - Block 24 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Tulip tree	1.33	152.88	0.08	9.54	0.00	7.29
London planetree	0.13	14.73	0.01	1.01	0.00	0.55
Total	**1.46**	**167.61**	**0.09**	**10.55**	**0.00**	**7.84**

5.24.5 Hydrology Effects

Table 147 - Block 24 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Tulip tree	77.76	17.58	17.97	17.69	3.53	8.21
London planetree	5.88	1.33	1.36	1.34	0.27	0.62
Total	**83.64**	**18.91**	**19.33**	**19.03**	**3.80**	**8.83**

5.24.6 Energy Effects & Savings

Table 148 - Block 24 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	-4.43	N/A		MBTU	-79	N/A	-79	-4.43
MWH	-0.23	0.57		MWH	-22	54	33	0.34
Carbon Avoided (metric ton)	-0.11	0.04		Carbon Avoided	-13	4	-9	-0.08

5.24.7 Recommendations

The trees are generally in good health and do not require much beyond clearance pruning away from the building. The timing of required clearance pruning is variable due to the different distances the current branches are away from the building. The trees recommended for year 1 pruning are unlikely to cause infrastructure damage if the clearance pruning is completed in year 3 instead.

5.25 Block 25

5.25.1 Composition and Characteristics

Figure 66 - Block 25 Site Aerial

The block is separated from block 24 because of the differing conditions under which they are growing. The block consists of newly planted *Acer rubrum* (Maple) trees that are currently struggling to establish on the site under high heat exposure. Adjacent to the building to the north, the placement of the trees is ideal, but a mulch bed would be beneficial to help reduce the water retention of the soil bed. The trees have gator bags on the base but would benefit from more frequent watering.

5.25.2 Species Composition

Table 149 - Block 25 Species Composition Summary

Species	Number of Trees	Percent of Population
Red maple	4	100.0 %

5.25.3 Site Classification

Table 150 - Block 25 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	H
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.25.4 Carbon Water and Pollution

Table 151 - Block 25 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Red maple	0.01	1.32	0.00	0.46	0.00	0.07
Total	**0.01**	**1.32**	**0.00**	**0.46**	**0.00**	**0.07**

5.25.5 Hydrology Effects

Table 152 - Block 25 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Red maple	0.80	0.17	0.22	0.17	0.03	0.08
Total	**0.80**	**0.17**	**0.22**	**0.17**	**0.03**	**0.08**

5.25.6 Energy Effects & Savings

Table 153 - Block 25 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	-1.20	N/A	-1.20	MBTU	-22	N/A	-22	-1.20
MWH	-0.06	0.01	0.07	MWH	-6	1	-4	-0.05
Carbon Avoided (metric ton)	-0.03	0.00	-0.03	Carbon Avoided	-4	0	-3	-0.03

5.25.7 Recommendations

Tree 951 is dying and is recommended for removal within the next 2 years unless it succumbs earlier. It is unlikely to recover from its current health status even if given the same plant health care measures recommended for the remaining trees, though if mitigation is completed quickly, it may recover.

The site is a good location for plantings and is likely to yield plentiful benefits once established.

5.26 Block 26

5.26.1 Composition and Characteristics

Block 26 is another small block which has recently experienced a variety of construction related impacts from the recent development on-site. The most significant specimen is the *Cedrus* which is currently recovering well from the recent impacts. The *Cedrus* shares a mulched planting bed with the *Fraxinus* and the *Davidia*. Each are in fair condition and are expected to maintain a safe useful life expectancy.

The *Liquidambar* and *Liriodendron (Tulip Poplar)* trees are also recovering well from the recent impacts. Trees 976 and 977 were the most severely impacted from the construction and it is currently unknown how they will recover in the coming years.

The entire block acts to shade the surrounding greenspace and buildings. It is exposed to moderate heat and sunlight throughout the day. Several concrete surfaces surround the block, but each tree appears to have adequate soil volume and moisture to maintain a safe useful life expectancy. The soil is highly compacted from the previous construction activities.

Figure 67 - Block 26 Site Aerial

Figure 68 - Trees 974-982

Figure 69 - Trees 970-977

5.26.2 Species Composition

Table 154 - Block 26 Species Composition Summary

Species	Number of Trees	Percent of Population
Sweetgum	6	46.2 %
Tulip tree	4	30.8 %
Green ash	1	7.7 %
Dove Tree	1	7.7 %
Deodar cedar	1	7.7 %

5.26.3 Site Classification

Table 155 - Block 26 Site Classification Summary

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	M
Soil Type	Clay-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.26.4 Carbon Water and Pollution

Table 156 - Block 26 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Deodar cedar	0.78	89.72	0.02	2.30	0.00	7.74
Dove Tree	0.05	5.67	0.00	0.43	0.00	0.09
Green ash	0.03	4.02	0.00	0.26	0.00	0.21
Sweetgum	0.13	14.40	0.01	1.71	0.00	1.59
Tulip tree	0.24	27.68	0.02	1.75	0.00	1.82
Total	**1.23**	**141.49**	**0.06**	**6.45**	**0.00**	**11.44**

5.26.5 Hydrology Effects

Table 157 - Block 26 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Deodar cedar	49.10	19.92	9.93	20.01	4.42	10.27
Tulip tree	11.53	4.68	2.33	4.70	1.04	2.41
Sweetgum	10.07	4.08	2.04	4.10	0.91	2.11
Green ash	1.35	0.55	0.27	0.55	0.12	0.28
Dove Tree	0.55	0.22	0.11	0.22	0.05	0.11
Total	**72.59**	**29.45**	**14.68**	**29.59**	**6.53**	**15.19**

5.26.6 Energy Effects & Savings

Table 158 - Block 26 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**
MBTU	-2.62	N/A	-2.62	MBTU	-47	N/A	-47
MWH	-0.14	0.12	-0.03	MWH	-14	11	-2
Carbon Avoided (metric ton)	-0.07	0.01	-0.06	Carbon Avoided	-8	1	-7

5.26.7 Recommendations

Most of the trees would benefit greatly from the addition of mulch to their critical root zones. Also, a watering regime would greatly increase the chances of the impacted trees re-establishing. Some of the trees are listed for crown cleaning to remove the dead branches from the construction impacts.

5.27 Block 27

5.27.1 Composition and Characteristics

Figure 70 - Block 27 Site Aerial

Block 27 is composed of trees acting to shade a local courtyard north of the library. Some of the trees also shade the buildings to the north to a degree and will continue to do so for many years as their canopies increase in volume and density. The site is exposed to high heat from the sun and from the concrete surfaces below and adjacent. Some of the trees exist within a planting bed which is joined to a small retention pond with water feature. The soil was moderately wet in the planting wells for trees 416-431 as they had aerial irrigation installed. The soil within the wells was relatively low compaction considering it was a high foot traffic area and traffic was observed using the installed rubber tree grates as a walking surface.

Figure 71 - Block 27 Greenspace

Figure 72 - Block 27 Courtyard

5.27.2 Species Composition

Table 159 - Block 27 Species Composition Summary

Species	Number of Trees	Percent of Population
Tulip tree	18	94.7 %
mountain ash	1	5.3 %

5.27.3 Site Classification

Table 160 - Block 27 Site Classification Summary

Site factors	Classification
Site moisture	MW
Site Soil Volume and root growing conditions	S
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	M
Overall Site Health	M

5.27.4 Carbon Water and Pollution

Table 161 - Block 27 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Tulip tree	1.83	209.81	0.09	10.44	0.00	3.34
mountain ash spp	0.02	2.69	0.00	0.47	0.00	0.04
Total	1.85	212.50	0.09	10.90	0.00	3.39

5.27.5 Hydrology Effects

Table 162 - Block 27 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
Tulip tree	36.04	8.03	8.86	8.07	1.61	3.73
mountain ash spp	0.44	0.10	0.11	0.10	0.02	0.05
Total	36.48	8.13	8.96	8.17	1.62	3.78

5.27.6 Energy Effects & Savings

Table 163 - Block 27 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**	**Total**
MBTU	-5.16	N/A	-5.16	MBTU	-92	N/A	-92	-5.16
MWH	-0.26	0.24	-0.02	MWH	-25	23	-2	-0.02
Carbon Avoided (metric ton)	-0.13	0.02	-0.11	Carbon Avoided	-15	2	-13	-0.12

5.27.7 Recommendations

Tree 426 is recommended for removal within 3 years. The tree is low risk but is dying and is not expected to recover from its current condition.

5.28 Block 28

5.28.1 Composition and Characteristics

Figure 73 - Block 28 Site Aerial

Block 28 is composed of three lone trees tucked within an entrance corridor to a building. They act to shade the walking thoroughfare into the adjacent building and once they grow in height they will shade the building to the north. The trees experience high heat exposure and have low crown stature which are not exposed to many winds. The *Cercidiphyllum (katsura)* trees exist within what appears to be a small tree well each fitted with its own tree grate. The tree grate of tree 1493 has been overgrown partially by the trunk and is recommended for removal. The soil volume within the wells is unknown, and it appears that the trees are unirrigated. The soil volume within the planting bed of the *Platanus x Acerifolia (London Planes)* appears to be ample to support the continued growth of the specimen. Without regular water the *Cercidiphyllum (katsura)* trees are expected to dieback further. Each specimen has leaf scorch which is most likely due to drought stress and not bacterial.

Figure 74 - Block 28 Stand Profiles

The *Platanus x Acerifolia (London Planes)* tree is in good health is expected to maintain a safe useful life expectancy if the plant health care measures are followed routinely.

5.28.2 Species Composition

Table 164 - Block 28 Species Composition Summary

Species	Number of Trees	Percent of Population
Katsura tree	2	66.7 %
London planetree	1	33.3 %

5.28.3 Site Classification

Table 165 - Block 28 Site Classification Summary

Site factors	Classification
Site moisture	D
Site Soil Volume and root growing conditions	I
Soil Compaction	L
Site Heat Exposure	H
Soil Type	Sandy-Loam
Soil Genesis Rate	L
Overall Site Health	M

5.28.4 Carbon Water and Pollution

Table 166 - Block 28 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Katsura tree	0.04	4.42	0.01	0.84	0.00	0.08
London planetree	0.18	20.74	0.01	1.52	0.00	1.80
Total	**0.22**	**25.16**	**0.02**	**2.35**	**0.00**	**1.89**

5.28.5 Hydrology Effects

Table 167 - Block 28 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(m^3/yr)	(Can$/yr)
London planetree	19.96	4.35	5.36	4.37	0.87	2.01
Katsura tree	0.92	0.20	0.25	0.20	0.04	0.09
Total	**20.89**	**4.55**	**5.61**	**4.58**	**0.91**	**2.11**

5.28.6 Energy Effects & Savings

Table 168 - Block 28 Energy Effects Summary

Amounts				Energy Values (Can$)				
Type	Heating	Cooling	Total	Type	Heating	Cooling	Total	Total
MBTU	-1.85	N/A	-1.85	MBTU	-33	N/A	-33	-1.85
MWH	-0.09	0.04	-0.05	MWH	-9	4	-5	-0.05
Carbon Avoided (metric ton)	-0.05	0.00	-0.05	Carbon Avoided	-5	0	-5	-0.05

5.28.7 Recommendations

Remove the tree grate from 1493 and remove and replace the tree. Remove the tree grate from tree 1492 and replace with a tree grate which allows larger diameter trunk growth.

5.29 Block 29

5.29.1 Composition and Characteristics

Figure 76 - Block 29 Site Aerial

The *Thuja (cedar)* of the block are mostly dead or in a steep decline. The prolonged drought for many years has left the species struggling to survive across the entire mainland. Specimens within the understory or with extensive rooting systems have sustained a safe useful life to date and are expected to do so for an unforeseen amount of time. The specimens present in good to fair health can be reasonably retained for the 3-year timeframe, but their long-term future is uncertain at best and dire at worst. The long-term plan for the species on site should be that of eventual removal and replacement, or irrigation as water appears to be the primary limiting factor for survival.

Block 29 is a large block of greenspace central to the campus with a high percentage of canopy cover. The only gaps within the canopy are from recently dead or removed trees. The soil volume in the block is sufficient to sustain the growth of large trees for many years given a moderate to low level of soil genesis locally. The soil though mostly light occluded was moderately dry at the time of the assessment and the soil compaction was moderate off the established trails. The block has moderate heat exposure from the sun and adjacent parking lot and sidewalks. The trees near the north border of the block act to shade the parking lot adjacent. This block has a population in varying states of decline.

Figure 75 - Block 29 viewed from SE

5.29.2 Species Composition

The majority of The *Pseudotsuga (Fir)* on the block are in fair to good health and are expected to maintain a safe useful life expectancy for the long-term.

Figure 77- Block 29 Viewed from NW

The understory is composed of a variety of *Prunus (Plum/Cherry) species, Acer macrophyllum* (Bigleaf Maple)*, and Corylus (Hazelnut) species,* which are mostly in good to fair health and are already taking advantage of the newly established gap dynamics in the stand. The understory also contains a single specimen of *Castanea (chestnut), Picea sitchensis (sitka spruce), and Quercus robur (English oak)*, all of which are in fair to good health and are expected to maintain a safe and useful life expectancy.

Species	Number of Trees	Percent of Population
Western redcedar	94	48.0 %
Douglas fir	36	18.4 %
Red alder	21	10.7 %
Bigleaf maple	15	7.7 %
plum spp	12	6.1 %
Quaking aspen	9	4.6 %
birch spp	3	1.5 %
Sitka spruce	2	1.0 %
hazelnut spp	2	1.0 %
English oak	1	<0.1%
chestnut spp	1	<0.1%

Table 169 - Block 29 Species Composition Summary

Multiple *Alnus* (alder) specimens are recommended for removal and many are still in fair health. Those listed for removal are low risk.

The site contains a small section of *Populus tremuloides (Quaking Aspen)*, all of which are recommended for retention with no action.

5.29.3 Site Classification

Site factors	Classification
Site moisture	MD
Site Soil Volume and root growing conditions	S
Soil Compaction	M
Site Heat Exposure	M
Soil Type	Sandy-Loam
Soil Genesis Rate	M
Overall Site Health	M

Table 170 - Block 29 Site Classification Summary

5.29.4 Carbon Water and Pollution

Table 171 - Block 29 Carbon and Pollution Summary

Species	Carbon Storage		Gross Carbon Sequestration		Pollution Removal	
	(metric ton)	(Can$)	(metric ton/yr)	(Can$/yr)	(metric ton/yr)	(Can$/yr)
Bigleaf maple	1.89	217.28	0.08	9.00	0.00	3.11
Red alder	4.39	503.89	0.16	18.28	0.00	6.20
birch spp	0.29	33.52	0.02	2.10	0.00	0.63
chestnut spp	0.13	14.58	0.01	0.76	0.00	0.28
hazelnut spp	0.32	37.02	0.01	1.27	0.00	0.28
Sitka spruce	0.43	49.19	0.01	1.62	0.00	1.05
Quaking aspen	0.90	103.15	0.05	5.20	0.00	2.24
plum spp	3.09	355.46	0.08	8.68	0.00	2.48
Douglas fir	8.10	930.72	0.17	19.31	0.00	16.52
English oak	0.07	7.67	0.00	0.56	0.00	0.25
Western redcedar	11.43	1312.40	0.15	17.52	0.00	31.40
Total	**31.03**	**3564.89**	**0.73**	**84.30**	**0.01**	**64.44**

5.29.5 Hydrology Effects

Table 172 - Block 29 Hydrology Effects Summary

Species Name	Potential Evapotranspiration	Evaporation	Transpiration	Water Intercepted	Avoided Runoff	Avoided Runoff Value
	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(m³/yr)	(Can$/yr)
Western redcedar	239.23	91.01	79.67	91.21	20.08	46.68
Douglas fir	125.90	47.89	41.93	48.00	10.57	24.57
Red alder	47.21	17.96	15.72	18.00	3.96	9.21
Bigleaf maple	23.67	9.00	7.88	9.02	1.99	4.62
plum spp	18.93	7.20	6.30	7.22	1.59	3.69
Quaking aspen	17.10	6.51	5.70	6.52	1.44	3.34
Sitka spruce	8.00	3.04	2.67	3.05	0.67	1.56
birch spp	4.83	1.84	1.61	1.84	0.41	0.94
hazelnut spp	2.12	0.81	0.71	0.81	0.18	0.41
chestnut spp	2.10	0.80	0.70	0.80	0.18	0.41
English oak	1.88	0.72	0.63	0.72	0.16	0.37
Total	**490.98**	**186.78**	**163.51**	**187.18**	**41.21**	**95.81**

5.29.6 Energy Effects & Savings

Table 173 - Block 29 Energy Effects Summary

Amounts				Energy Values (Can$)			
Type	**Heating**	**Cooling**	**Total**	**Type**	**Heating**	**Cooling**	**Total**
MBTU	11.24	N/A	11.24	MBTU	201	N/A	201
MWH	0.52	0.27	0.79	MWH	50	26	76
Carbon Avoided (metric ton)	0.29	0.02	0.30	Carbon Avoided	33	2	35

5.29.7 Recommendations

The site is recommended for reforestation using a series of plugs and smaller potted plantings which will both be more cost effective than traditional balled and burlap plantings and will have a better chance of success within the constraints of the site. The new plantings are recommended to be placed in a bed of mulch and watered as needed. Many trees within the stand are good candidates for wildlife tree creation but the removal to ground and replacement of many is recommended as opposed to converting each candidate into a wildlife tree. The currently established pathways within the stand are recommended to have mulch added and maintained to entice foot traffic to remain on the path during establishment of new plantings. It is also advised to restrict the area during the first year or more of the plantings establishing. This will greatly increase the chances and speed of the site recovery.

6.0 Recommendations by Priority with Specifications

The summary of each block outlines the benefits and recommended required maintenance to sustain a safe useful life expectancy of the trees present. This section outlines the specifications surrounding the recommended management actions.

6.0.1 Pruning Parameters and Scope

All pruning operations should be carried out by an I.S.A. Certified Arborist in accordance with ***ANSI A300 (Part 1) Pruning, and I.S.A's Best Management Practices for Tree Pruning***. Trees have varying pruning tolerances and requirements depending on the species' response to pruning, the species' growth rates, age, and overall health. Pruning requirements have been prioritized over a 3-year time frame.

The parameters of tree pruning are as follows:

- Not more than 25% of the foliage should be removed within an annual growing season. This percentage should be adjusted according to the tree's species, age, health and site,
- Not more than 25% of the foliage should be removed from any branch or limb when it is cut back to a lateral branch capable of assuming apical dominance,
- Pruning cuts should be made in accordance with sound arboricultural practices.

6.0.2 Pruning Specifications

Following is a list of pruning types and specifications. The specifications are intended as guidelines and should be modified as necessary if the practice will not align with sound arboriculture practices.

- Crown Clean: Selective pruning to remove dead, diseased or broken branches to a minimum diameter of 5 cm. 2.5 cm can be considered for younger trees.

- Crown Raise: Pruning to provide vertical clearance for a specified value.
    - Crown Raise Road/Parking Lot requires 5 m vertical clearance,
    - Crown Raise Building requires 1 m vertical clearance,
    - Crown Raise Walkway / Yard requires 3 m vertical clearance.

- Clearance Prune: Pruning to provide vertical and horizontal clearance from a specified value.
    - Clearance Prune Residence requires 1 m of clearance,
    - Clearance Prune Light Standard requires 1 m of clearance,
    - Clearance Prune Power Box requires 3 m of clearance,
    - Clearance Prune Walkway requires 2.5 m of vertical clearance and no encroachment onto the walkway,
    - Clearance Prune from Other Trees requires 1 m of clearance to allow for optimal growth and morphology of adjacent trees.

- Crown Reduce requires:
    - Reducing branch length or end-weight to decrease lever forces on the tree part,

- Reducing branch length to provide clearance or to decrease the likelihood of a tree failure striking a target,
- Removal of the tree part all together.

- Vista Prune: pruning to create lines of sight for vehicle traffic, windows, or other purposes.

- Young tree training: recent installations not yet of legal size (30 cm) should be considered as part of the pruning regimen to promote and facilitate optimal crown structure and future safety. Many tree risk and heath problems can be mitigated through young tree training cycles. Often, young trees require a minimum of [3] treatments over 5 – 10 years to achieve ideal outcomes.

6.0.3 Plant Health Care

All plant health care operations should be carried out in accordance with ***ANSI A300 (Part 6) Standard Practices (Planting and Transplanting); ANSI A300 (Part 2) Soil Management a. Modification, b. Fertilization, and c. Drainage), and I.S.A.'s Best Management Practices for Tree Planting; ANSI A300 (Part 8) Root Management; ANSI A300 (Part 5) Management of Trees and Shrubs During Site Planning, Site Development, and Construction***. Plant health care requirements are an ongoing process, often resulting in an increase in the tree's safe useful life expectancy. The objectives of Plant Health Care include creating conditions facilitating and promoting strong healthy growth and increased social, environmental and economic benefits. Plant health care has been prioritized over a 3-year timeframe.

6.0.4 Plant Health Care Specifications

Following is a list of Plant Health Care recommendations:

- Mulch: Requires a 10 cm even layer of mulch over as much of the root zone as practical. This practice is used to conserve soil moisture, control weeds, buffer soil temperatures, fertilize and replenish organic matter in the soil. Mulch also helps prevent soil erosion and surface crusting. Composted cedar or fir bark mulch is recommended. Do not pile mulch against the trunk of the tree.
- Soil Amendments: Soil compaction reduces water infiltration and percolation rates, water holding capacity, drainage, root penetration and development, and encourages surface runoff and soil erosion. Alleviating soil compaction includes:
  - Mechanical Loosening: with implements including the broad-fork,
  - Pneumatic Loosening: with compressed air,
  - Mulching: mulching should be considered a long-term method of treating compacted soils,
  - Remove Excess Fill from Base of Tree: Excessive fill around the base of the tree causes unfavorable conditions for root growth, promotes decay, and several other structural issues. Excessive fill near trees should be restored to grade throughout the entire critical root zone of the tree. Objectives of removing excessive fill include:
  - Removing as much fill as possible without damaging roots outside the scope of work,
  - Alleviate soil compaction where fill was removed,
  - Where fill is needed to raise the grade for a specific objective, consult an I.S.A. Certified arborist during the planning and design phase.

- Water: Administer 2.5 L of water per cm of diameter each week during the growing season. If exercised in conjunction with the addition of mulch, reduce water regimen by 50 % half-way through the growing season.
- Water should also be used as a flushing agent in the areas containing salt or chemical storage. Salt causes root damage and tree decline and should be flushed free of the soils near trees with frequent watering during the first 25% of the growing season.
- Trees should be administered water in a fashion minimizing runoff and facilitating infiltration and percolation of water into the soils.

6.0.5 Integrated Pest Management

No pests reducing the Safe Useful Life Expectancies of trees were observed during the field assessment save for the trees currently afflicted with English ivy.

Many trees were observed with tar spot or aphids. Most of the specimens observed with these pathogens were within block 22 and were not affecting the trees to the point where mitigation was recommended.

Should treatment be desired, all Integrated Pest Management operations should be carried out in accordance with ***I.S.A.'s Best Management Practices for Integrated Pest Management, the Integrated Pest Management Act, Regulation for Landscape and Structural Pest Management***, and any applicable federal laws and legislation. Integrated Pest Management requirements are an ongoing process, with the goal of reducing a pest to manageable levels with the least amount of harm to non-target species and the surrounding landscape.

Considerations of Integrated Pest Management include:

- Complementing other plant health care practices to promote plant appearance, structure, and vitality,
- Avoiding harmful effects to non-target organisms,
- Causing minimal disturbance to the natural and built environment,
- Achieving the goals of reducing pests to a manageable level in a cost-effective method.

The most effective method of controlling pests to trees is by reducing tree stress and encouraging favorable plant habitat. The second most effective method is creating environments unfavorable to pests. It is also beneficial to select trees resistant to landscape pests.

6.0.6 Integrated Pest Management Specifications

Following is a list of appropriate controls for the observed landscape pests:

- Aphids: Aphids are not a detriment to trees. They are a secondary pest resulting from tree stress. Aphid controls should involve applications of high-pressure water to areas with high aphid populations. The water pressure destroys the aphids' feeding organ, and the insect population drops to manageable levels. Alternatively, repeated chemical treatments are available but are not recommended unless less invasive treatments are not functioning.

- English Ivy: Mechanical controls are recommended. English ivy can lead to many structural instability conditions and should be removed by physically destroying the plant, and by removing a 60 cm section of the vine at the base of infected trees.

- Sapsucker*:* Install a suet feeder to a) attract competing wildlife to disrupt sapsucker feeding activity, and b) allow the bird to feed from a food source other than the tree.

6.2 Planting and Replacement Trees Recommendations

In accordance with the bylaw, the number of replacement trees required for the 81 recommended removals of bylaw protected trees is:

- **162 replacement trees required.**

Many of the replacement trees required will not have viable planting space available if they are planted as full-sized replacement trees. Alternative to balled and burlapped trees being planted as replacements, large scale reforestation practices of using plugs is recommended for reforesting the areas of blocks 20, 22, and 29.

All planting operations should be carried out by in accordance ***with ANSI A300 (Part 6) Planting and Transplanting, ANSI A300 (Part 2) Soil Management a. Modification, b. Fertilization, and c. Drainage, and I.S.A's Best Management Practices for Tree Planting.***

Following is a list of tree planting selection objectives:

- Potential conflicts with utilities, lines of sight, buildings and other infrastructure should be avoided.
- Requirements of individual trees and shrubs should be considered.
- Cardinal orientation of trees and shrubs should be considered.
- Suitability assessments should be considered prior to planting.
- The intended function of the tree should be considered prior to selection.

6.2.1 Planting Specifications

Considerations prior to installation are as follows:

- Root ball inspection and corrective root pruning (girdling roots)
    - Root balls should be inspected.
    - Girdling roots may cause stability and health issues later in the tree's life. This condition should be corrected prior to planting.
    - Circling roots should be loosened and spread out or cut if necessary.
    - Excessive cutting of roots can create serious root loss and increase tree stress, even leading to tree mortality. Moderate stress is preferable to girdling roots persisting throughout the tree's life. Up to 20% root loss is acceptable.
    - Root washing is acceptable or correcting girdling roots. To root wash, combine water with planting soil. Soak the root ball until root ball soil loosens. Gently massage soil away from roots. Gently straighten roots, avoiding unnecessary damage to root tissue.

Install immediately as bareroot stock. If planting is not feasible, planting stock can be held up to 24 hours in root wash solution.

- Trunk flare depth and planting hole
  - Depth of roots at time of planting is critical. Do not assume structural roots are near the top of the planting container. Remove soil to identify the trunk flare. Roots should be within the top 2 cm – 5 cm of soil when measured 10cm from the trunk.
  - If soil is removed from the root ball, newly exposed tissue may be more susceptible to cold and sun damage. Cover exposed roots with moist burlap.
  - The top of the root ball should be 2.5cm to 5cm higher than the original grade to account for settling of the root ball.

- Planting hole depths should be no greater than the depth of the root ball. Width of the planting hole should be no less than [3] times the diameter of the root ball.

- Moisture management
  - Poor drainage accounts for high losses of new trees. When soil permeability is slow, the planting hole can remain saturated for long periods of time.
  - The addition of gravel to the bottom of planting holes does not improve drainage. This results in a 'perched' water table, where drainage from the root ball becomes inhibited.
  - Consider the use of a water bag (gator-bag) for the first 3 – 5 years after installation to facilitate root growth.

- Support systems (2 pole, 3 pole, root staples)
  - Support systems perform a 2-fold function. Support systems help retain stability as roots re-establish post transplant; and they aid in protecting the tree from mechanical damage from lawnmowers and soil compaction from pedestrian traffic.
  - Install [2] or [3] stakes, or root staples. In high traffic areas, choose [3] or more stakes.
  - One tie per stake must be placed at the lowest point of the tree trunk where the crown stands upright. Ties must be placed using a 'figure 8' pattern, around the trunk and firmly attached to the stake.
  - Stakes must be cut off above the tie in point if they interfere with the tree crown.
  - Periodically check the stakes and remove them as soon as new root growth has established stability.
  - Failure to remove tree stakes causes poor trunk taper and creates conditions where the tree is more susceptible to breakage and windthrow.

- Root management
  - Installation of root barrier may be necessary to mitigate root infrastructure conflict.

6.3 Trees Requiring Immediate Action

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
8	737	Walnut Species	25	Poor	Mulch Water Crown clean Soil amendments	Immediate action
8	738	Walnut Species	23	Fair	Mulch Water Crown clean Soil amendments Integrated pest management	Immediate action
8	739	Walnut Species	19	Poor	Water Mulch Soil amendments Integrated pest management	Immediate action
8	740	Walnut Species	21	Fair	Mulch Water Crown clean Soil amendments Integrated pest management	Immediate action
8	742	Walnut Species	26	Fair	Mulch Water Crown clean Soil amendments Integrated pest management	Immediate action
11	768	Cherry species	16	Poor	Water Mulch	Immediate action
11	769	Cherry species	16	Fair	Water Mulch	Immediate action
25	948	Red maple	5	Poor	Water Mulch Crown clean	Immediate action

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
25	949	Red maple	5	Fair	Water Mulch Crown clean	Immediate action
25	950	Red maple	5	Fair	Water Mulch Crown clean	Immediate action

6.4 Trees with First Year Priority

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	506	Douglas-fir	85	Poor	Deep root Injection	Year 1
3	817	Douglas-fir	55	Fair	Remove Ivy	Year 1
3	833	American hazelnut	27	Fair	Remove vines Mulch Fertilizer	Year 1
3	841	White horse chestnut	3.5	Fair	Mulch	Year 1
3	844	American hazelnut	34	Fair	Crown clean Mulch Fertilizer	Year 1
3	847	American hazelnut	24	Dying	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	848	American hazelnut	24	Fair	Remove dead tips Mulch Fertilizer	Year 1
3	849	American hazelnut	23	Dying	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	850	American hazelnut	31	Poor	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	851	American hazelnut	22	Poor	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	852	American hazelnut	33	Fair	Crown clean Mulch Fertilizer	Year 1
3	853	American hazelnut	27	Fair	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	854	American hazelnut	24	Dying	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	855	American hazelnut	35	Fair	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	856	American hazelnut	20	Dying	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	857	American hazelnut	32	Poor	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	859	American hazelnut	33	Fair	Crown clean Mulch Fertilizer	Year 1
3	860	American hazelnut	41	Fair	Crown clean Mulch Fertilizer	Year 1
3	861	American hazelnut	30	Fair	Crown clean Mulch Fertilizer	Year 1
3	862	American hazelnut	21	Poor	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	863	American hazelnut	31	Poor	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	864	American hazelnut	23	Poor	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	865	American hazelnut	17	Dying	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	866	American hazelnut	18	Dying	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	867	Bigleaf maple	16	Fair	Mulch	Year 1
3	868	Western red cedar	10	Fair	Remove (ground level) Replace	Year 1
3	870	Apple species	32	Dead	Remove (ground level) Replace	Year 1
3	872	Apple species	20	Fair	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	873	Apple species	15	Fair	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	874	Apple species	11	Poor	Remove (ground level) Replace	Year 1

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	875	Apple species	12	Good	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	876	Apple species	14	Poor	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3
3	881	Pine	98.5	Fair	Mulch	Year 1
4	811	London planetree	22	Good	Mulch Water Soil amendments Clearance prune	Year 1
4	812	London planetree	20	Good	Soil amendments Water Mulch Clearance prune	Year 1
4	813	London planetree	14	Good	Water Mulch Soil amendments Young tree train	Year 1
4	814	London planetree	12	Poor	Water Mulch Soil amendments Crown clean	Year 1
4	815	London planetree	12	Fair	Crown clean Mulch Water Soil amendments	Year 1
4	816	London planetree	20	Fair	Mulch Water Soil amendments Crown clean	Year 1
5	808	Douglas-fir	49	Fair	Clearance prune	Year 1

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
6	773	Katsura tree	11	Poor	Remove (ground level) Replace	Year 1
6	774	Katsura tree	12	Dying	Remove (ground level) Replace	Year 1
6	775	Katsura tree	12	Dying	Remove (ground level) Replace	Year 1
6	776	Katsura tree	8	Dying	Remove (ground level) Replace	Year 1
6	777	Katsura tree	10	Poor	Remove (ground level) Replace	Year 1
6	778	Katsura tree	14	Poor	Remove (ground level) Replace	Year 1
6	779	Katsura tree	15	Poor	Remove (ground level) Replace	Year 1
6	780	Katsura tree	13	Poor	Remove (ground level) Replace	Year 1
6	781	Katsura tree	11	Dying	Remove (ground level) Replace	Year 1
10	744	English oak	43	Good	Clearance prune Crown clean	Year 1
10	745	Red oak	13	Good	Mulch Water	Year 1
10	746	Red oak	27	Good	Young tree train Crown clean Raise canopy Water	Year 1
10	747	English oak	25	Good	Clearance prune Water	Year 1
10	748	English oak	43	Good	Crown clean Mature tree prune Water	Year 1
10	749	Red oak	23	Fair	Water Crown clean	Year 1

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
10	756	Sweet Chestnut	22	Fair	Crown clean Water	Year 1
13	1490	Cypress	10	Fair	Mulch	Year 1
15	670	London planetree	18	Fair	Water	Year 1
15	673	London planetree	15	Fair	Water	Year 1
15	674	London planetree	15	Fair	Water	Year 1
15	675	London planetree	20	Fair	Water	Year 1
15	676	London planetree	17	Poor	Water	Year 1
15	677	London planetree	18.5	Fair	Water	Year 1
15	678	London planetree	16	Fair	Water	Year 1
15	679	London planetree	17	Fair	Water	Year 1
15	680	London planetree	17	Fair	Water	Year 1
15	681	London planetree	18.5	Fair	Water	Year 1
15	682	London planetree	18	Fair	Water	Year 1
15	683	London planetree	17	Fair	Water	Year 1
15	684	London planetree	17	Fair	Water	Year 1
15	685	London planetree	17	Fair	Water	Year 1
15	686	London planetree	26	Fair	Water	Year 1
15	687	London planetree	15	Fair	Water	Year 1
15	688	London planetree	15	Fair	Water	Year 1
15	689	London planetree	15	Fair	Water	Year 1
15	690	London planetree	15	Fair	Water	Year 1
15	691	London planetree	15	Fair	Water	Year 1
15	698	London planetree	17	Fair	Water	Year 1
15	700	London planetree	17	Fair	Water	Year 1

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
15	701	London planetree	17	Fair	Water	Year 1
15	702	London planetree	17	Fair	Water	Year 1
15	703	London planetree	17	Fair	Water	Year 1
16	695	London planetree	18	Good	Clearance prune Crown clean	Year 1
16	709	European mountain ash	6	Good	Young tree train	Year 1
16	710	European mountain ash	6	Fair	Young tree train	Year 1
16	711	European mountain ash	7	Good	Young tree train	Year 1
18	111	London planetree	25	Fair	Clearance prune	Year 1
18	113	Red maple	30	Fair	Clearance prune	Year 1
18	123	Red maple	20	Fair	Clearance prune Mulch	Year 1
18	136	Red maple	13	Fair	Mulch	Year 1
18	137	Red maple	10	Fair	Mulch	Year 1
19	103	Douglas-fir	50	Dying	Remove (ground level) Replace	Year 1
19	527	Douglas-fir	48	Dying	Remove (ground level) Replace	Year 1
22	223	Black cottonwood	49	Fair	Raise canopy Clearance prune	Year 1
22	224	Cherry species	45	Fair	Raise canopy Clearance prune	Year 1
22	231	Quaking aspen	25	Fair	Clearance prune Raise canopy	Year 1
22	240	Austrian pine	38	Fair	Remove (wildlife) Replace	Year 1
22	1787	Black cottonwood	20	Fair	Remove (ground level) Replace	Year 1

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
23	890	Katsura tree	14	Good	Raise canopy	Year 1
23	893	Katsura tree	13	Fair	Mulch Water Raise canopy	Year 1
23	894	Red maple	13	Fair	Mulch Water	Year 1
23	895	Red maple	13.5	Fair	Water Mulch	Year 1
23	897	Red maple	13	Fair	Young tree train Mulch Water	Year 1
23	898	Red maple	17	Fair	Mulch Water Clearance prune	Year 1
23	899	Red maple	17	Fair	Water Mulch Young tree train	Year 1
23	900	Red maple	16	Fair	Mulch Water	Year 1
24	496	Tulip tree	35	Fair	Clearance prune over sidewalk	Year 1
24	960	Tulip tree	20	Good	Clearance Prune	Year 1
24	969	Tulip tree	16	Fair	Clearance Prune	Year 1
26	972	Sweetgum	15	Good	Clearance prune	Year 1
26	973	Sweetgum	15	Good	Mulch Clearance prune	Year 1
26	974	Sweetgum	15	Good	Mulch	Year 1
26	975	Sweetgum	8	Fair	Mulch Water	Year 1
26	977	Tulip tree	19	Poor	Crown clean Mulch Water	Year 1

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
26	981	Tulip tree	19	Fair	Crown clean Water Mulch	Year 1
26	982	Tulip tree	19	Fair	Water Mulch Crown clean	Year 1
28	1493	Katsura tree	12	Fair	Water Remove tree grate	Year 1
29	1893	red alder	27	Poor	Remove (ground level) Replace	Year 1

6.5 Trees with Second Year Priority

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
5	809	Douglas-fir	50	Fair	Clearance prune	Year 2
6	783	Douglas fir	62	Fair	Remove (ground level) Replace	Year 2
14	641	Red maple	20	Good	Crown clean Water Mulch	Year 2
14	642	Red maple	17	Good	Crown clean Water Mulch	Year 2
14	643	Red maple	13	Fair	Crown clean Water Mulch	Year 2
14	644	Red maple	13	Fair	Crown clean Water Mulch	Year 2
14	645	Red maple	13	Fair	Crown clean Water Mulch	Year 2

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
14	646	London planetree	14	Good	Clearance prune	Year 2
14	647	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	648	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	649	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	650	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	651	London planetree	15	Good	Crown clean Water Mulch	Year 2
14	652	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	653	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	654	London planetree	15	Good	Crown clean Water Mulch	Year 2
14	655	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	656	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	657	London planetree	15	Fair	Crown clean Water Mulch	Year 2

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
14	658	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	659	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	660	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	661	London planetree	15	Poor	Remove (ground level) Replace	Year 2
14	662	London planetree	15	Poor	Remove (ground level) Replace	Year 2
14	663	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	664	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	665	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	666	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	667	London planetree	15	Fair	Crown clean Water Mulch	Year 2
14	668	London planetree	15	Fair	Crown clean Water Mulch	Year 2
19	983	London planetree	20	Fair	Clearance prune Raise canopy	Year 2
19	989	London planetree	22	Fair	Clearance prune	Year 2

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
19	997	Red maple	19	Fair	Young tree train	Year 2
19	102	Austrian Pine	35	Fair	Clearance prune Raise canopy	Year 2
19	101	Austrian Pine	39	Fair	Raise canopy Clearance prune Crown clean	Year 2
20	470	Birch species	15	Fair	Clearance prune	Year 2
20	472	Birch species	33	Fair	Clearance prune	Year 2
22	244	red alder	43	Fair	Replace Remove (ground level)	Year 2
22	265	red alder	92	Good	Mature tree prune Crown clean	Year 2
22	1908	Black cottonwood	16	Fair	Remove (wildlife) Replace	Year 2
23	889	Katsura tree	17	Good	Raise canopy Mulch Clearance prune	Year 2
23	890	Katsura tree	14	Good	Raise canopy	Year 2
24	497	Tulip tree	20	Poor	Water	Year 2
24	498	Tulip tree	16	Fair	Crown Clean	Year 2
24	952	London planetree	16.5	Good	Crown clean rubbing branch	Year 2
24	953	London planetree	18.5	Good	Clearance prune	Year 2
24	954	Tulip tree	16	Fair	Clearance prune	Year 2
24	955	Tulip tree	16	Fair	Clearance Prune	Year 2
24	959	Tulip tree	20	Fair	Crown clean	Year 2
24	961	Tulip tree	19	Good	Clearance Prune	Year 2
24	965	Tulip tree	20	Good	Crown Clean Clearance Prune	Year 2

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
24	967	Tulip tree	19	Fair	Crown Clean Clearance Prune	Year 2
24	968	Tulip tree	20	Good	Crown Clean Clearance Prune	Year 2
25	951	Red maple	5	Dying	Replace Remove (ground level)	Year 2
29	1822	Cherry species	48	Dead	Replace Remove (ground level)	Year 2
29	1895	western red cedar	22	Dead	Remove (ground level) Replace	Year 2
29	1896	red alder	27	Dead	Remove (wildlife) Replace	Year 2
29	1900	red alder	33	Fair	Remove (wildlife) Replace	Year 2

6.6 Trees with Third Year Priority

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	508	Douglas-fir	72	Fair	Crown clean	Year 3
3	837	Douglas-fir	76	Fair	Crown clean	Year 3
4	835	Tulip tree	24	Good	Crown clean	Year 3
4	836	Tulip tree	22	Good	Crown clean	Year 3
5	794	Douglas-fir	40	Fair	Clearance prune Crown clean Soil amendments Water	Year 3
5	796	Douglas-fir	57	Fair	Clearance prune	Year 3
5	797	Douglas-fir	35	Fair	Clearance prune	Year 3
5	798	Douglas-fir	45	Fair	Clearance prune	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
5	802	Douglas-fir	31	Fair	Clearance prune	Year 3
5	803	Douglas-fir	54	Fair	Clearance prune	Year 3
5	804	Douglas-fir	28	Fair	Clearance prune	Year 3
5	805	Douglas-fir	36	Fair	Clearance prune	Year 3
5	806	Douglas-fir	17	Fair	Clearance prune	Year 3
5	807	Douglas-fir	33	Fair	Crown clean	Year 3
6	501	Douglas fir	45	Fair	Clearance prune	Year 3
6	503	Western red cedar	60	Fair	Clearance prune	Year 3
6	523	Douglas fir	40	Fair	Clearance prune	Year 3
6	601	Cherry species	22	Fair	Raise canopy Crown clean	Year 3
6	602	Cherry species	14	Fair	Soil amendments Young tree train	Year 3
6	603	Katsura tree	27	Good	Raise canopy Crown clean	Year 3
6	604	Katsura tree	15	Good	Raise canopy Crown clean	Year 3
6	605	Katsura tree	21	Good	Raise canopy	Year 3
6	606	Katsura tree	20	Good	Raise canopy Crown clean	Year 3
6	788	Douglas fir	39	Fair	Crown clean	Year 3
6	789	Douglas fir	39	Fair	Crown clean	Year 3
6	790	Douglas fir	34	Fair	Clearance prune	Year 3
6	792	Douglas fir	38	Fair	Clearance prune	Year 3
6	793	Douglas fir	41	Fair	Clearance prune	Year 3
10	743	European ash	24	Fair	Water Raise canopy Clearance prune	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
10	750	Austrian pine	25	Fair	Crown clean Raise canopy	Year 3
10	751	Austrian pine	25	Fair	Crown clean Raise canopy	Year 3
10	752	Austrian pine	26	Fair	Crown clean Raise canopy	Year 3
10	753	European ash	16	Good	Raise canopy	Year 3
10	754	Austrian pine	35	Fair	Crown clean	Year 3
10	755	Austrian pine	23	Fair	Crown clean	Year 3
11	608	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3
11	609	Sweetgum	21	Good	Crown clean Raise canopy Mulch	Year 3
11	610	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3
11	611	Sweetgum	20	Good	Crown clean Raise canopy Mulch	Year 3
11	612	Sweetgum	20	Good	Crown clean Raise canopy Mulch	Year 3
11	613	Sweetgum	21	Good	Crown clean Raise canopy Mulch	Year 3
11	614	Sweetgum	21	Good	Crown clean Raise canopy Mulch	Year 3
11	615	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
11	616	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3
11	617	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3
11	618	Sweetgum	20	Good	Crown clean Raise canopy Mulch	Year 3
11	619	Sweetgum	20	Good	Crown clean Raise canopy Mulch	Year 3
11	620	Sweetgum	20	Good	Crown clean Raise canopy Mulch	Year 3
11	621	Sweetgum	21	Good	Crown clean Raise canopy Mulch	Year 3
11	622	Sweetgum	20	Good	Crown clean Raise canopy Mulch	Year 3
11	623	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3
11	624	Sweetgum	21	Good	Crown clean Raise canopy Mulch	Year 3
11	625	Sweetgum	21	Good	Crown clean Raise canopy Mulch	Year 3
11	626	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3
11	627	Sweetgum	21	Good	Crown clean Raise canopy Mulch	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
11	628	Sweetgum	19	Good	Crown clean Raise canopy Mulch	Year 3
13	715	Red maple	14	Fair	Young tree train Mulch	Year 3
13	716	Red maple	14	Good	Young tree train Mulch	Year 3
13	717	Red maple	14	Good	Young tree train Mulch	Year 3
13	718	Red maple	14	Good	Young tree train Mulch	Year 3
13	719	Red maple	14	Good	Young tree train Mulch	Year 3
13	720	Red maple	14	Good	Young tree train Mulch	Year 3
13	721	Red maple	14	Good	Young tree train Mulch	Year 3
13	722	Red maple	14	Good	Young tree train Mulch	Year 3
13	723	Red maple	14	Fair	Young tree train Mulch	Year 3
15	704	Cherry species	6	Good	Young tree train Clearance prune	Year 3
15	705	Douglas-fir	4	Good	Young tree train	Year 3
15	706	Cherry species	7.5	Good	Young tree train	Year 3
15	707	European mountain ash	6	Good	Young tree train	Year 3
15	708	European mountain ash	4.5	Good	Young tree train	Year 3
16	692	London planetree	21	Good	Raise canopy	Year 3
16	693	London planetree	18	Good	Raise canopy Crown clean	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
16	694	London planetree	18	Good	Raise canopy Crown clean	Year 3
16	696	London planetree	17	Fair	Crown clean	Year 3
18	109	London planetree	25	Fair	Mulch Crown clean	Year 3
18	124	Red maple	12	Fair	Young tree train Mulch	Year 3
18	131	Red maple	14	Fair	Young tree train Mulch	Year 3
19	991	London planetree	14	Fair	Crown clean	Year 3
19	992	London planetree	18	Fair	Crown clean Clearance prune	Year 3
19	993	Black cottonwood	33	Fair	Clearance prune Crown clean	Year 3
19	1000	Black walnut	10	Good	Young tree train OR Remove (ground level)	Year 3
19	104	Douglas-fir	52	Fair	Water Soil amendments Crown clean	Year 3
19	105	Douglas-fir	61	Good	Crown clean	Year 3
21	201	Red alder	30	Fair	Young tree train	Year 3
21	475	Douglas-fir	40	Good	Crown clean	Year 3
21	477	Douglas-fir	89	Fair	Crown clean Mature tree prune	Year 3
21	478	Scot's Pine	65	Fair	Crown clean Mature tree prune	Year 3
21	494	Black cottonwood	30	Fair	Mature tree prune Crown clean	Year 3
21	500	Red alder	26	Fair	Young tree train	Year 3
22	248	red alder	33	Fair	Raise canopy	Year 3
22	1729	Black cottonwood	50	Good		Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
22	1910	Cherry species	26	Fair	Mature tree prune	Year 3
23	896	Red maple	13.5	Fair	Young tree train	Year 3
24	956	Tulip tree	16.5	Fair	Crown Clean	Year 3
24	958	Tulip tree	17	Fair	Crown clean Clearance Prune	Year 3
24	962	Tulip tree	21	Good	Clearance Prune	Year 3
24	963	Tulip tree	16	Fair	Crown Clean	Year 3
24	964	Tulip tree	21	Good	Crown Clean Clearance Prune	Year 3
24	966	Tulip tree	19	Fair	Crown Clean Clearance Prune	Year 3
26	970	Sweetgum	17	Good	Raise canopy Mulch	Year 3
26	976	Tulip tree	17	Fair	Crown clean Mulch Water	Year 3
26	978	Deodar cedar	71	Fair	Crown clean Mulch Water	Year 3
26	979	Green ash	14	Fair	Water Mulch Young tree train	Year 3
26	980	Dove tree	16	Fair	Water Mulch Crown clean	Year 3
29	554	red alder	34	Dying	Mature tree prune	Year 3
29	1804	Douglas-fir	25	Fair	Young tree train	Year 3

6.7 Trees Requiring Year 3 Inspection

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
20	439	Western red cedar	69	Fair	Crown clean and Reinspect for change in stability	Year 3 inspection
20	448	Western red cedar	86	Fair	Reinspect for change in stability	Year 3 inspection
20	449	Western red cedar	60	Fair	Reinspect for change in stability	Year 3 inspection

6.8 Trees Recommended for Removal

Trees in this section are all recommended for removal but those listed with year 1 or Year 3 priorities were given optional recommendations for retention in year 1. If those options were not chosen, or have failed, then the trees can be found on the following list.

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	819	American hazelnut	30	Dying	Remove (ground level) Replace	Year 3
3	820	American hazelnut	30	Poor	Remove (ground level) Replace	Year 3
3	821	American hazelnut	30	Dying	Remove (ground level) Replace	Year 3
3	822	American hazelnut	36	Fair	Remove (ground level) Replace	Year 3
3	823	American hazelnut	33	Poor	Remove (ground level) Replace	Year 3
3	824	American hazelnut	37	Dying	Remove (ground level) Replace	Year 3
3	825	American hazelnut	35	Poor	Remove (ground level) Replace	Year 3
3	826	American hazelnut	31	Poor	Remove (ground level) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	827	American hazelnut	33	Dying	Remove (ground level) Replace	Year 3
3	828	American hazelnut	17	Dying	Remove (ground level) Replace	Year 3
3	829	American hazelnut	30	Poor	Remove (ground level) Replace	Year 3
3	830	American hazelnut	23	Dying	Remove (ground level) Replace	Year 3
3	831	American hazelnut	29	Dying	Remove (ground level) Replace	Year 3
3	832	American hazelnut	24	Poor	Remove (ground level) Replace	Year 3
3	839	American hazelnut	29	Dying	Remove (ground level) Replace	Year 3
3	840	American hazelnut	25	Poor	Remove (ground level) Replace	Year 3
3	843	American hazelnut	29	Poor	Remove (ground level) Replace	Year 3
3	845	American hazelnut	22	Poor	Remove (ground level) Replace	Year 3
3	847	American hazelnut	24	Dying	Remove (ground level) Replace	Year 1 or Year 3
3	849	American hazelnut	23	Dying	Remove (ground level) Replace	Year 1 or Year 3
3	850	American hazelnut	31	Poor	Remove (ground level) Replace	Year 1 or Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	851	American hazelnut	22	Poor	Remove (ground level) Replace	Year 1 or Year 3
3	853	American hazelnut	27	Fair	Remove (ground level) Replace	Year 1 or Year 3
3	854	American hazelnut	24	Dying	Remove (ground level) Replace	Year 1 or Year 3
3	855	American hazelnut	35	Fair	Remove (ground level) Replace	Year 1 or Year 3
3	856	American hazelnut	20	Dying	Remove (ground level) Replace	Year 1 or Year 3
3	857	American hazelnut	32	Poor	Remove (ground level) Replace	Year 1 or Year 3
3	862	American hazelnut	21	Poor	Remove (ground level) Replace	Year 1 or Year 3
3	863	American hazelnut	31	Poor	Remove (ground level) Replace	Year 1 or Year 3
3	864	American hazelnut	23	Poor	Remove (ground level) Replace	Year 1 or Year 3
3	865	American hazelnut	17	Dying	Remove (ground level) Replace	Year 1 or Year 3
3	866	American hazelnut	18	Dying	Remove (ground level) Replace	Year 1 or Year 3
3	869	Apple species	30	Fair	Remove (ground level) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
3	871	Apple species	22	Fair	Remove (ground level) Replace	Year 3
3	872	Apple species	20	Fair	Remove (ground level) Replace	Year 1 or Year 3
3	873	Apple species	15	Fair	Remove (ground level) Replace	Year 1 or Year 3
3	875	Apple species	12	Good	Remove (ground level) Replace	Year 1 or Year 3
3	876	Apple species	14	Poor	Remove (ground level) Replace	Year 1 or Year 3
5	505	Douglas-fir	25	Dead	Remove (ground level) Replace	Year 3
5	799	Douglas-fir	54	Poor	Remove (ground level) Replace	Year 3
5	800	Douglas-fir	30	Poor	Remove (ground level) Replace	Year 3
6	502	Douglas fir	26	Dead	Remove (ground level) Replace	Year 3
6	784	Douglas fir	41	Fair	Remove (ground level) Replace	Year 3
6	785	Douglas fir	22	Poor	Remove (ground level) Replace	Year 3
8	741	Walnut Species	22	Dying	Remove (ground level) Replace OR Soil amendments	Year 3
15	669	London planetree	19	Poor	Remove (ground level) Replace	Year 3
15	671	London planetree	16	Poor	Remove (ground level) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
15	672	London planetree	17	Dying	Remove (ground level) Replace	Year 3
15	697	London planetree	17	Dying	Remove (ground level) Replace	Year 3
15	699	London planetree	17	Dying	Remove (ground level) Replace	Year 3
17	133	Black cottonwood	12	Fair	Remove (ground level) Replace	Year 3
20	462	Western red cedar	17	Dead	Remove (ground level) Replace	Year 3
21	209	London planetree	15	Dying	Remove (ground level) Replace	Year 3
21	210	Douglas-fir	36	Dying	Remove (wildlife) Replace	Year 3
21	211	Cherry species	32	Poor	Remove (ground level) Replace	Year 3
21	212	Red alder	50	Dead	Remove (wildlife) Replace	Year 3
21	213	Red alder	25	Dying	Remove (wildlife) Replace	Year 3
21	214	Red alder	24	Dying	Remove (wildlife) Replace	Year 3
21	476	Western red cedar	68	Dying	Remove (wildlife) Replace	Year 3
21	481	Black cottonwood	6	Dead	Remove (ground level) Replace	Year 3
21	499	Red alder	7	Fair	Remove (ground level) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
21	530	Sitka spruce	85	Dying	Remove (wildlife) Replace	Year 3
22	232	Quaking aspen	23	Dead	Remove (ground level) Replace	Year 3
22	233	red alder	61	Dying	Remove (ground level) Replace	Year 3
22	235	red alder	56	Dead	Remove (ground level) Replace	Year 3
22	236	Austrian pine	27	Fair	Remove (ground level) Replace	Year 3
22	237	Austrian pine	28	Poor	Remove (ground level) Replace	Year 3
22	245	red alder	40	Dying	Remove (ground level) Replace	Year 3
22	251	red alder	15	Dead	Remove (ground level) Replace	Year 3
22	252	red alder	11	Dead	Remove (ground level) Replace	Year 3
22	254	red alder	23	Dead	Remove (wildlife) Replace	Year 3
22	263	red alder	60	Poor	Remove (wildlife) Replace	Year 3
22	266	western red cedar	60	Dying	Remove (wildlife) Replace	Year 3
22	268	western red cedar	46	Dying	Remove (wildlife) Replace	Year 3
22	270	red alder	39	Dead	Remove (ground level) Replace	Year 3
22	272	red alder	10	Dead	Remove (ground level) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
22	273	red alder	8	Dead	Remove (ground level) Replace	Year 3
22	276	red alder	12	Dead	Remove (ground level) Replace	Year 3
22	277	red alder	27	Fair	Remove (ground level) Replace	Year 3
22	281	red alder	13	Poor	Remove (ground level) Replace	Year 3
22	284	western red cedar	73	Dying	Remove (wildlife) Replace	Year 3
22	567	red alder	15	Dead	Remove (ground level) Replace	Year 3
22	568	western red cedar	47	Fair	Remove (wildlife) Replace	Year 3
22	569	red alder	18	Poor	Remove (ground level) Replace	Year 3
22	578	red alder	23	Fair	Remove (ground level) Replace	Year 3
22	1715	western red cedar	86	Dying	Remove (wildlife) Replace	Year 3
22	1720	western red cedar	50	Dying	Remove (wildlife) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
22	1721	western red cedar	73	Dying	Remove (wildlife) Replace	Year 3
22	1722	western red cedar	75	Poor	Remove (wildlife) Replace	Year 3
22	1725	red alder	16.5	Dead	Remove (ground level) Replace	Year 3
22	1736	Cherry species	16	Dying	Remove (ground level) Replace	Year 3
22	1737	Cherry species	14	Dying	Remove (ground level) Replace	Year 3
22	1738	western red cedar	62	Dead	Remove (wildlife) Replace	Year 3
22	1739	Mountain Ash species	14	Dying	Remove (ground level) Replace	Year 3
22	1907	western red cedar	48	Dead	Remove (wildlife) Replace	Year 3
27	426	Tulip tree	17	Dying	Remove (ground level) Replace	Year 3
28	1492	Katsura tree	11.5	Poor	Remove (ground level) Replace	Year 3
29	512	western red cedar	50	Dead	Remove (wildlife) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
29	514	western red cedar	42	Dead	Remove (wildlife) Replace	Year 3
29	515	western red cedar	35	Dead	Remove (wildlife) Replace	Year 3
29	519	western red cedar	54	Dead	Remove (wildlife) Replace	Year 3
29	520	western red cedar	36	Dead	Remove (wildlife) Replace	Year 3
29	529	western red cedar	52	Dead	Remove (wildlife) Replace	Year 3
29	551	western red cedar	45	Dead	Remove (wildlife) Replace	Year 3
29	552	western red cedar	27	Dead	Remove (wildlife) Replace	Year 3
29	553	western red cedar	22	Dead	Remove (wildlife) Replace	Year 3
29	563	western red cedar	33	Dead	Remove (wildlife) Replace	Year 3
29	1626	western red cedar	33	Poor	Remove (ground level) Replace	Year 3
29	1635	western red cedar	37	Dying	Remove (wildlife) Replace	Year 3
29	1639	western red cedar	52	Poor	Remove (wildlife) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
29	1656	western red cedar	62	Dying	Remove (wildlife) Replace	Year 3
29	1658	western red cedar	41	Dead	Remove (wildlife) Replace	Year 3
29	1660	western red cedar	35	Dying	Remove (ground level) Replace	Year 3
29	1689	western red cedar	44	Dead	Remove (wildlife) Replace	Year 3
29	1690	western red cedar	30	Dying	Remove (wildlife) Replace	Year 3
29	1692	western red cedar	79	Dying	Remove (wildlife) Replace	Year 3
29	1801	western red cedar	61	Fair	Remove (wildlife) Replace	Year 3
29	1823	American hazelnut	9	Dead	Remove (ground level) Replace	Year 3
29	1830	western red cedar	47	Dead	Remove (wildlife) Replace	Year 3
29	1832	western red cedar	50	Dead	Remove (wildlife) Replace	Year 3
29	1835	western red cedar	65	Dead	Remove (wildlife) Replace	Year 3

Block	Tree #	Common Name	Diameter (cm)	General Health	Recommended Maintenance	Priority
29	1842	western red cedar	30	Poor	Remove (wildlife) Replace	Year 3
29	1856	western red cedar	52	Dead	Remove (wildlife) Replace	Year 3
29	1857	western red cedar	73	Dying	Remove (wildlife) Replace	Year 3
29	1862	western red cedar	41	Dead	Remove (wildlife) Replace	Year 3
29	1869	western red cedar	46	Dead	Remove (wildlife) Replace	Year 3
29	1878	western red cedar	35	Dying	Remove (wildlife) Replace	Year 3
29	1880	western red cedar	42	Poor	Remove (wildlife) Replace	Year 3
29	1884	western red cedar	48	Dead	Remove (wildlife) Replace	Year 3
29	1885	western red cedar	33	Dead	Remove (wildlife) Replace	Year 3
29	1890	western red cedar	46	Dead	Remove (wildlife) Replace	Year 3
29	1891	western red cedar	25	Dead	Remove (ground level) Replace	Year 3
29	1892	western red cedar	36	Dying	Remove (wildlife) Replace	Year 3
29	1899	western red cedar	33	Dead	Remove (wildlife) Replace	Year 3

7.0 Limitations of this Assessment

It is BC Plant Health Care Inc.'s policy to attach the following clause regarding limitations. We do this to ensure that developers or owners are clearly aware of what is technically and professionally realistic in retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, discolored foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of property and people. Except where specifically noted in the report, none of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be raised that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather conditions.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behavior of any single tree or group of trees or their component parts in all circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
1	927	*Acer rubrum*	Red maple		38	18.5	2.28		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no Action	
1	928	*Acer rubrum*	Red maple		41	18	2.46		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no Action	
1	929	*Platanus x Acerifolia*	London-Plane		33	15	1.98		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no Action	
1	930	*Platanus x Acerifolia*	London-Plane		21	14	1.26		Good	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	931	*Platanus x Acerifolia*	London-Plane		26	15	1.56		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	932	*Platanus x Acerifolia*	London-Plane		24	15	1.44		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	933	*Platanus x Acerifolia*	London-Plane		24	15	1.44		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	934	*Platanus x Acerifolia*	London-Plane		22	15	1.32		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	935	*Platanus x Acerifolia*	London-Plane		24	15	1.44		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	936	*Pinus nigra*	Austrian Pine		19	12	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no Action	
1	937	*Pinus nigra*	Austrian Pine		7	4	0.42		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no Action	
1	938	*Pinus nigra*	Austrian Pine		22	10	1.32		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	939	*Pinus nigra*	Austrian Pine		19	10	1.14		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no Action	
1	940	*Platanus x Acerifolia*	London-Plane		29.5	15	1.77		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	941	*Platanus x Acerifolia*	London-Plane		30	15	1.8		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no Action	
1	942	*Platanus x Acerifolia*	London-Plane		21.5	15	1.29		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	943	*Platanus x Acerifolia*	London-Plane		21.5	15	1.29		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	944	*Platanus x Acerifolia*	London-Plane		22	15	1.32		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	945	*Platanus x Acerifolia*	London-Plane		21	15	1.26		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	946	*Platanus x Acerifolia*	London-Plane		24	15	1.44		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	
1	947	*Platanus x Acerifolia*	London-Plane		21	15	1.26		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no Action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
2	902	*Platanus x Acerifolia*	London-Plane		33	15	1.98		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	903	*Platanus x Acerifolia*	London-Plane		35	15	2.1		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	904	*Acer rubrum*	Red maple		35	19	2.1		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	905	*Acer rubrum*	Red maple		31.5	19	1.89		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	906	*Platanus x Acerifolia*	Red maple		32	19	1.92		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	907	*Acer rubrum*	Red maple		32.5	20	1.95		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	908	*Acer rubrum*	Red maple		32.5	20	1.95		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	909	*Acer rubrum*	Red maple		34	20	2.04		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	910	*Acer rubrum*	Red maple		31	20	1.86		Good	0	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	910	*Acer rubrum*	Red maple		33	20	1.98		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	911	*Acer rubrum*	Red maple		32	20	1.92		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	912	*Acer rubrum*	Red maple		28.5	20	1.71		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
2	913	*Acer rubrum*	Red maple		28	20	1.68		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
2	914	*Acer rubrum*	Red maple		28	20	1.68		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
2	915	*Acer rubrum*	Red maple		26.5	20	1.59		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
2	916	*Acer rubrum*	Red maple		25.5	20	1.53		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
2	917	*Acer rubrum*	Red maple		26	20	1.56		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
2	918	*Acer rubrum*	Red maple		36.5	20	2.19		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	919	*Acer rubrum*	Red maple		32.5	20	1.95		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
2	920	*Acer rubrum*	Red maple		37.5	20	2.25		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	921	*Acer rubrum*	Red maple		37	20	2.22		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	922	*Acer rubrum*	Red maple		35	20	2.1		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	923	*Acer rubrum*	Red maple		34	20	2.04		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	924	*Acer rubrum*	Red maple		32.5	20	1.95		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	925	*Acer rubrum*	Red maple		32	20	1.92		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
2	926	*Acer rubrum*	Red maple		38	20	2.28		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
3	506	*Pseudotsuga menziesii*	Douglas-fir	Tip dieback throughout	85	20	5.1		Poor	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Deep root Injection	Year 1	
3	508	*Pseudotsuga menziesii*	Douglas-fir		72	20	4.32		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3	
3	509	*Pseudotsuga menziesii*	Douglas-fir		88	20	5.28		Fair	>50%	Mature (40+)	Protected (size)		Yes	Retain		Retain no action	
3	510	*Pseudotsuga menziesii*	Douglas-fir		95	20	5.7		Fair	>50%	Mature (40+)	Protected (size)		Yes	Retain		Retain no action	
3	817	*Pseudotsuga menziesii*	Douglas-fir	Ivy should be maintained away from the trunk	55	17	3.3		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Remove Ivy	Year 1	
3	818	*Pseudotsuga menziesii*	Douglas-fir		81	31	4.86		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
3	819	*Corylus americana*	American hazelnut		30	5	1.8		Dying	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	820	*Corylus americana*	American hazelnut		30	5	1.8		Poor	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	821	*Corylus americana*	American hazelnut		30	5	1.8		Dying	<20%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	822	*Corylus americana*	American hazelnut		36	5	2.16		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	823	*Corylus americana*	American hazelnut	Top dieback top 30%	33	5	1.98		Poor	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
3	824	*Corylus americana*	American hazelnut		37	5	2.22		Dying	<20%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	825	*Corylus americana*	American hazelnut		35	5	2.1		Poor	30-40%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	826	*Corylus americana*	American hazelnut		31	5	1.86		Poor	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	827	*Corylus americana*	American hazelnut		33	5	1.98		Dying	20-30%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	828	*Corylus americana*	American hazelnut		17	5	1.02		Dying	<20%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	829	*Corylus americana*	American hazelnut		30	5	1.8		Poor	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	830	*Corylus americana*	American hazelnut		23	5	1.38		Dying	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	831	*Corylus americana*	American hazelnut		29	5	1.74		Dying	40-50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	832	*Corylus americana*	American hazelnut		24	5	1.44		Poor	40-50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	833	*Corylus americana*	American hazelnut		27	5	1.62		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Remove vines Mulch Fertilizer	Year 1	
3	834	*Pseudotsuga menziesii*	Douglas-fir		47	15	2.82		Fair	>50%	Mature (40+)	Protected (size)		Yes	Retain		Retain no action	
3	837	*Pseudotsuga menziesii*	Douglas-fir		76	20	4.8		Fair	>50%	Mature (40+)	Protected (size)		Yes	Retain	Crown clean	Year 3	
3	838	*magnolia species*	Magnolia		20	3	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
3	839	*Corylus americana*	American hazelnut		29	5	1.74		Dying	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	840	*Corylus americana*	American hazelnut		25	5	1.5		Poor	40-50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	841	*Aesculus hippocastanum*	White horsechestnut		3.5	2	0.21		Fair	20-30%	Juvenile (1-5)	Undersized	Low	Yes	Retain	Mulch	Year 1	
3	842	*prunus species*	Cherry species		20	6	1.2		Good	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
3	843	*Corylus americana*	American hazelnut		29	5	1.74		Poor	>50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
3	844	*Corylus americana*	American hazelnut		34	5	2.04		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean Mulch Fertilizer	Year 1	
3	845	*Corylus americana*	American hazelnut		22	5	1.32		Poor	40-50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	846	*Malus species*	Apple species		34	4	2.04		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
3	847	*Corylus americana*	American hazelnut		24	5	1.44		Dying	<20%	Young (5-20)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	848	*Corylus americana*	American hazelnut	Top dieback	24	5	1.44		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Remove dead tips Mulch Fertilizer	Year 1	
3	849	*Corylus americana*	American hazelnut		23	5	1.38		Dying	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	850	*Corylus americana*	American hazelnut		31	5	1.86		Poor	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	2
3	851	*Corylus americana*	American hazelnut		22	5	1.32		Poor	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	852	*Corylus americana*	American hazelnut		33	5	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean Mulch Fertilizer	Year 1	
3	853	*Corylus americana*	American hazelnut		27	5	1.62		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	854	*Corylus americana*	American hazelnut		24	5	1.44		Dying	<20%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
3	855	*Corylus americana*	American hazelnut		35	6	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	2
3	856	*Corylus americana*	American hazelnut		20	5	1.2		Dying	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	858	*Thuja occidentalis*	Eastern white cedar		18	5	1.08		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
3	857	*Corylus americana*	American hazelnut		32	5	1.92		Poor	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	2
3	859	*Corylus americana*	American hazelnut		33	5	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean Mulch Fertilizer	Year 1	
3	860	*Corylus americana*	American hazelnut		41	5	2.46		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean Mulch Fertilizer	Year 1	
3	861	*Corylus americana*	American hazelnut		30	5	1.8		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean Mulch Fertilizer	Year 1	
3	862	*Corylus americana*	American hazelnut		21	5	1.26		Poor	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	863	*Corylus americana*	American hazelnut	Top 50% dead	31	5	1.86		Poor	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	2
3	864	*Corylus americana*	American hazelnut	Top 50% dead	23	5	1.38		Poor	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	865	*Corylus americana*	American hazelnut		17	5	1.02		Dying	<20%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
3	866	*Corylus americana*	American hazelnut		18	5	1.08		Dying	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	867	*Acer macrophyllum*	Bigleaf maple	Previously failed codom at base	16	7	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch	Year 1	
3	868	*Thuja plicata*	Western red cedar		10	2	0.6		Fair	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
3	869	*malus species*	Apple species	Hollow sections of trunk w under 30% swt	30	5	1.8		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
3	870	*malus species*	Apple species	Top failed at 2 m	32	2	1.92		Dead	<20%	Semi-mature (20-40)	Protected (size)	Low	Yes	Remove	Remove (ground level) Replace	Year 1	2
3	871	*malus species*	Apple species		22	6	1.32	10 w	Fair	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
3	872	*malus species*	Apple species		20	6	1.2	10e	Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	873	*malus species*	Apple species		15	6	0.9	15s	Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	874	*malus species*	Apple species	Black knot	11	3	0.66	15e	Poor	<20%	Young (5-20)	Undersized	Low	Yes	Remove	Remove (ground level) Replace	Year 1	
3	875	*malus species*	Apple species		12	4	0.72		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	876	*malus species*	Apple species		14	3	0.84	15e	Poor	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Fertilizer Mulch Water OR Remove and Replace	Year 1 or Year 3	
3	877	*malus species*	Apple species		23	4	1.38		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
3	878	*malus species*	Apple species		29	5	1.74		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
3	879	*malus species*	Apple species		31	4	1.86		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
3	880	*malus species*	Apple species		28	4	1.68		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
3	881	*Pinus species*	Pine		98.5	20	5.91		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Mulch	Year 1	
3	882	*Liriodendron tulipifera*	Tulip tree		11.5	6	0.69		Good	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
3	883	*Liriodendron tulipifera*	Tulip tree		11.5	6	0.69		Good	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
3	884	*Liriodendron tulipifera*	Tulip tree		22	12	1.32		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
4	811	*Platanus X Acerifolia*	London planetree	Moderate soil volume, Soil was moderately dry at time of assessment	22	7	1.32		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Mulch Water Soil amendments Clearance prune	Year 1	
4	812	*Platanus X Acerifolia*	London planetree	Moderate soil volume, Soil was moderately dry at time of assessment	20	7	1.2		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Soil amendments Water Mulch Clearance prune	Year 1	
4	813	*Platanus X Acerifolia*	London planetree	Moderate soil volume, Soil was moderately dry at time of assessment	14	7	0.84		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch Soil amendments Young tree train	Year 1	
4	814	*Platanus X Acerifolia*	London planetree	Low Soil Volume. Soil was very dry at time of assessment	12	7	0.72		Poor	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch Soil amendments Crown clean	Year 1	
4	815	*Platanus X Acerifolia*	London planetree	Low Soil Volume. Soil was very dry at time of assessment	12	7	0.72		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Mulch Water Soil amendments	Year 1	
4	816	*Platanus X Acerifolia*	London planetree	Low Soil Volume. Soil was very dry at time of assessment	20	8	1.2		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Mulch Water Soil amendments Crown clean	Year 1	
4	835	*Liriodendron tulipifera*	Tulip tree		24	10	1.44		Good	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean	Year 3	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
4	836	*Liriodendron tulipifera*	Tulip tree		22	8	1.32		Good	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean	Year 3	
5	504	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	66	25	3.96		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
5	505	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	25	8	1.5		Dead	Dead	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
5	794	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	40	25	2.4		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune Crown clean Soil amendments Water	Year 3	
5	795	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	60	25	3.6		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
5	796	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	57	25	3.42		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
5	797	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	35	25	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
5	798	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	45	25	2.7		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
5	799	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	54	25	3.24		Poor	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
5	800	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	30	25	1.8		Poor	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
5	801	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	40	25	2.4		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
5	802	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	31	25	1.86		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
5	803	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	54	25	3.24		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
5	804	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	28	10	1.68		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Clearance prune	Year 3	
5	805	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	36	25	2.16		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
5	806	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	17	15	1.02		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Clearance prune	Year 3	
5	807	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	33	15	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3	
5	808	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	49	25	2.94		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 1	

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5	809	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	50	25	3		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 2	
5	810	*Pseudotsuga menziesii*	Douglas-fir	Collar buried/Not visible	44	25	2.64		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
6	501	*Pseudotsuga menziesii*	Douglas fir		45	15	2.7		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
6	502	*Pseudotsuga menziesii*	Douglas fir	Pitch/Sap ooze	26	20	1.56		Dead	0	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
6	503	*Thuja plicata*	Western red cedar	Dead twigs/Branches Unbalanced	60	20	3.6		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
6	523	*Pseudotsuga menziesii*	Douglas fir		40	20	2.4		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
6	601	*Prunus species*	Cherry species		22	5	1.32		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Raise canopy Crown clean	Year 3	
6	602	*Prunus species*	Cherry species		14	3	0.84		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Soil amendments Young tree train	Year 3	
6	603	*Cercidiphyllum japonicum*	Katsura tree		27	8	1.62		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Raise canopy Crown clean	Year 3	
6	604	*Cercidiphyllum japonicum*	Katsura tree		15	7	0.9		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Raise canopy Crown clean	Year 3	
6	605	*Cercidiphyllum japonicum*	Katsura tree		21	7	1.26		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Raise canopy	Year 3	
6	606	*Cercidiphyllum japonicum*	Katsura tree		20	7	1.2		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Raise canopy Crown clean	Year 3	
6	607	*Cercidiphyllum japonicum*	Katsura tree		18	7	1.08		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
6	608	*Cercidiphyllum japonicum*	Katsura tree		13	6	0.78		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
6	773	*Cercidiphyllum japonicum*	Katsura tree		11	7	0.66		Poor	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	774	*Cercidiphyllum japonicum*	Katsura tree	Necrotic Chlorotic	12	7	0.72		Dying	>50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	775	*Cercidiphyllum japonicum*	Katsura tree	Necrotic Chlorotic	12	7	0.72		Dying	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	776	*Cercidiphyllum japonicum*	Katsura tree		8	6	0.48		Dying	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	777	*Cercidiphyllum japonicum*	Katsura tree		10	7	0.6		Poor	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	

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6	778	*Cercidiphyllum japonicum*	Katsura tree		14	7	0.84		Poor	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	779	*Cercidiphyllum japonicum*	Katsura tree		15	7	0.9		Poor	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	780	*Cercidiphyllum japonicum*	Katsura tree	Cracks Dead/Missing bark Heartwood decay	13	7	0.78		Poor	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	781	*Cercidiphyllum japonicum*	Katsura tree		11	7	0.66		Dying	30-40%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
6	782	*Pseudotsuga menziesii*	Douglas fir		31	20	1.86		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Remove		Retain no action	
6	783	*Pseudotsuga menziesii*	Douglas fir		62	25	3.72		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Remove	Remove (ground level) Replace	Year 2	2
6	784	*Pseudotsuga menziesii*	Douglas fir		41	18	2.46		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Remove	Remove (ground level) Replace	Year 3	2
6	785	*Pseudotsuga menziesii*	Douglas fir		22	7	1.32		Poor	<20%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
6	786	*Pseudotsuga menziesii*	Douglas fir	Collar buried/Not visible	36	20	0		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Remove	Remove (ground level) Replace	Retain no action	2
6	787	*Pseudotsuga menziesii*	Douglas fir	Collar buried/Not visible	42	20	2.52		Poor	30-40%	Mature (40+)	Protected (size)	Low	Yes	Remove	Remove (ground level) Replace	Retain no action	2
6	788	*Pseudotsuga menziesii*	Douglas fir	Collar buried/Not visible	39	20	2.34		Fair	30-40%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3	
6	789	*Pseudotsuga menziesii*	Douglas fir	Collar buried/Not visible	39	15	2.34		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3	
6	790	*Pseudotsuga menziesii*	Douglas fir	Collar buried/Not visible	34	8	2.04		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
6	791	*Pseudotsuga menziesii*	Douglas fir	Collar buried/Not visible	42	20	2.52		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
6	792	*Pseudotsuga menziesii*	Douglas fir		38	25	2.28		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
6	793	*Pseudotsuga menziesii*	Douglas fir		41	20	2.46		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 3	
7	724	*Acer rubrum*	Red maple		33	12	1.98		Good	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	725	*Acer rubrum*	Red maple		29	12	1.74		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	

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7	726	*Acer rubrum*	Red maple		24	12	1.44		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	727	*Acer rubrum*	Red maple	Sapwood damage/Decay Heartwood decay	24	12	1.44		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	728	*Acer rubrum*	Red maple		24	12	1.44		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	729	*Acer rubrum*	Red maple		25	12	1.5		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	730	*Acer rubrum*	Red maple		26	12	1.56		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	731	*Acer rubrum*	Red maple		26	12	1.56		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	732	*Acer rubrum*	Red maple		24	12	1.44		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	733	*Acer rubrum*	Red maple		24	12	1.44		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	734	*Acer rubrum*	Red maple		24	12	1.44		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	735	*Acer rubrum*	Red maple		24	12	1.44		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
7	736	*Acer rubrum*	Red maple	Mechanical damage	15	12	0.9		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Provide water from July to September	Retain no action	
8	737	*Gleditsia species*	Locust Species		25	8	1.5		Poor	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Mulch Water Crown clean Soil amendments	Immediate action	
8	738	*Gleditsia species*	Locust Species		23	8	1.38		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water Crown clean Soil amendments Integrated pest management	Immediate action	
8	739	*Gleditsia species*	Locust Species		19	8	1.14		Poor	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch Soil amendments Integrated pest management	Immediate action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
8	740	*Gleditsia species*	Locust Species		21	15	1.26		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Water Crown clean Soil amendments Integrated pest management	Immediate action	
8	741	*Gleditsia species*	Locust Species		22	8	1.32		Dying	<20%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace OR Soil amendments	Year 3	
8	742	*Juglans species*	Walnut Species		26	8	1.56		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Mulch Water Crown clean Soil amendments Integrated pest management	Immediate action	
9	761	*Fraxinus excelsior*	European Ash		15	9	0.72		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
9	762	*Fraxinus excelsior*	European Ash		15	9	0		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
9	763	*Fraxinus excelsior*	European Ash		15	9	0		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
9	764	*Fraxinus excelsior*	European Ash		15	9	0		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
9	765	*Fraxinus excelsior*	European Ash		15	9	0		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
9	766	*Fraxinus excelsior*	European Ash		15	9	0		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
9	767	*Fraxinus excelsior*	European Ash		15	9	0		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
9	1489	*Gleditsia species*	Locust Species	Mechanical damage	19	6	0.66		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Retain no action	
10	743	*Fraxinus excelsior*	European ash	Cut/Damaged roots Mechanical damage	24	10	1.44		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Raise canopy Clearance prune	Year 3	
10	744	*Quercus robur*	English oak	Mechanical damage	43	15	2.58		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Clearance prune Crown clean	Year 1	
10	745	*Quercus rubra*	Red oak		13	14	0.78		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Water	Year 1	
10	746	*Quercus rubra*	Red oak		27	15	1.62		Good	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Young tree train Crown clean Raise canopy Water	Year 1	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
10	747	*Quercus robur*	English oak	Sap Sucking insects	25	14	1.5		Good	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Clearance prune Water	Year 1	
10	748	*Quercus robur*	English oak	Sap Sucking insects	43	14	2.58		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean Mature tree prune Water	Year 1	
10	749	*Quercus rubra*	Red oak	Sap Sucking insects	23	14	1.38		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water Crown clean	Year 1	
10	750	*Pinus nigra*	Austrian pine		25	12	1.5		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean Raise canopy	Year 3	
10	751	*Pinus nigra*	Austrian pine		25	12	1.5		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean Raise canopy	Year 3	
10	752	*Pinus nigra*	Austrian pine		26	12	1.56		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean Raise canopy	Year 3	
10	753	*Fraxinus excelsior*	European ash	Sap Sucking insects	16	8	0.96		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy	Year 3	
10	754	*Pinus nigra*	Austrian pine	Sap Sucking insects	35	12	2.1		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3	
10	755	*Pinus nigra*	Austrian pine	Collar buried/Not visible	23	10	1.38		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean	Year 3	
10	756	*Castanea sativa*	Sweet Chesnut	Weak attachments	22	10	1.32		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean Water	Year 1	
10	757	*Cercidiphyllum japonicum*	Katsura tree	Soil weakness	12	8	0.72		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain No Action	
10	758	*Cercidiphyllum japonicum*	Katsura tree		15.5	8	0.93		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain No Action	
10	759	*Cercidiphyllum japonicum*	Katsura tree		12	8	0.72		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain No Action	
10	760	*Cercidiphyllum japonicum*	Katsura tree		17	8	1.02		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain No Action	
11	608	*Liquidambar styraciflua*	Sweetgum		19	7	0.96		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	609	*Liquidambar styraciflua*	Sweetgum		21	7	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	610	*Liquidambar styraciflua*	Sweetgum		19	7	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
11	611	*Liquidambar styraciflua*	Sweetgum		20	7	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	612	*Liquidambar styraciflua*	Sweetgum		20	7	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	613	*Liquidambar styraciflua*	Sweetgum		21	7	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	614	*Liquidambar styraciflua*	Sweetgum		21	7	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	615	*Liquidambar styraciflua*	Sweetgum		19	7	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	616	*Liquidambar styraciflua*	Sweetgum		19	7	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	617	*Liquidambar styraciflua*	Sweetgum		19	7	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	618	*Liquidambar styraciflua*	Sweetgum		20	7	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	619	*Liquidambar styraciflua*	Sweetgum		20	7	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	620	*Liquidambar styraciflua*	Sweetgum		20	7	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	621	*Liquidambar styraciflua*	Sweetgum		21	7	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	622	*Liquidambar styraciflua*	Sweetgum		20	7	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	623	*Liquidambar styraciflua*	Sweetgum		19	7	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	

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11	624	*Liquidambar styraciflua*	Sweetgum		21	7	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	625	*Liquidambar styraciflua*	Sweetgum		21	7	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	626	*Liquidambar styraciflua*	Sweetgum		19	7	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	627	*Liquidambar styraciflua*	Sweetgum		21	7	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	628	*Liquidambar styraciflua*	Sweetgum		19	7	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Raise canopy Mulch	Year 3	
11	768	*Prunus species*	Cherry species		16	3	0.96		Poor	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch	Immediate action	
11	769	*Prunus species*	Cherry species		16	3	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch	Immediate action	
11	770	*Thuja plicata*	Western red cedar		20	7	1.2		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
11	771	*Thuja plicata*	Western red cedar		18	8	1.08		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
11	772	*Thuja plicata*	Western red cedar		18	8	1.08		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
12	629	*Platanus x acerifolia*	London planetree		28	10	1.68		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	
12	630	*Platanus x acerifolia*	London planetree		20	10	1.2		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	
12	631	*Platanus x acerifolia*	London planetree		25	10	1.5		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	
12	632	*Platanus x acerifolia*	London planetree		29	10	1.74		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	
12	633	*Platanus x acerifolia*	London planetree		19	10	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	
12	634	*Platanus x acerifolia*	London planetree		20	10	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	
12	635	*Platanus x acerifolia*	London planetree		19	10	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	

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12	636	*Platanus x acerifolia*	London planetree		19	10	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	None	
12	637	*Acer rubrum*	Red maple		29	13	1.74		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Retain no action	None	
12	638	*Acer rubrum*	Red maple		31	13	1.86		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Retain no action	None	
12	639	*Acer rubrum*	Red maple		3	13	0.18		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Retain no action	None	
12	640	*Acer rubrum*	Red maple		31	13	1.86		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Retain no action	None	
13	715	*Acer rubrum*	Red maple		14	5	0.84		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	716	*Acer rubrum*	Red maple		14	7	0.66		Good	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	717	*Acer rubrum*	Red maple		14	7	0		Good	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	718	*Acer rubrum*	Red maple		14	7	0		Good	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	719	*Acer rubrum*	Red maple		14	7	0		Good	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	720	*Acer rubrum*	Red maple		14	7	0		Good	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	721	*Acer rubrum*	Red maple		14	7	0		Good	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	722	*Acer rubrum*	Red maple		14	7	0		Good	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	723	*Acer rubrum*	Red maple		14	5	0.48		Fair	40-50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
13	1490	*Cupressus species*	Cypress		10	7	0.6		Fair	>50%	Young (5-20)	undersized	Low	No	Retain	Mulch	Year 1	
14	641	*Acer rubrum*	Red maple		20	13	1.2		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	642	*Acer rubrum*	Red maple		17	13	1.02		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	643	*Acer rubrum*	Red maple		13	12	0.78		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	

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14	644	*Acer rubrum*	Red maple		13	12	0.78		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	645	*Acer rubrum*	Red maple		13	12	0.78		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	646	*Platanus x acerifolia*	London planetree		14	11	0.84		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance prune	Year 2	
14	647	*Platanus x acerifolia*	London planetree		15	13	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	648	*Platanus x acerifolia*	London planetree		15	13	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	649	*Platanus x acerifolia*	London planetree		15	13	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	650	*Platanus x acerifolia*	London planetree		15	13	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	651	*Platanus x acerifolia*	London planetree		15	13	0		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	652	*Platanus x acerifolia*	London planetree		15	13	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	653	*Platanus x acerifolia*	London planetree		15	13	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	654	*Platanus x acerifolia*	London planetree		15	11	0		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	655	*Platanus x acerifolia*	London planetree		15	13	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	656	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	

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14	657	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	658	*Platanus x acerifolia*	London planetree		15	9	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	659	*Platanus x acerifolia*	London planetree		15	9	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	660	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	661	*Platanus x acerifolia*	London planetree		15	13	0		Poor	40-50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 2	
14	662	*Platanus x acerifolia*	London planetree		15	13	0		Poor	40-50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 2	
14	663	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	664	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	665	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	666	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	667	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
14	668	*Platanus x acerifolia*	London planetree		15	10	0		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 2	
15	669	*Platanus x acerifolia*	London planetree		19	0	1.14		Poor	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
15	670	*Platanus x acerifolia*	London planetree		18	0	1.08		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
15	671	*Platanus x acerifolia*	London planetree		16	8	0.96		Poor	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
15	672	*Platanus x acerifolia*	London planetree		17	0	1.02		Dying	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
15	673	*Platanus x acerifolia*	London planetree		15	0	0.9		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	674	*Platanus x acerifolia*	London planetree		15	0	0.9		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	675	*Platanus x acerifolia*	London planetree		20	0	1.2		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	676	*Platanus x acerifolia*	London planetree		17	0	1.02		Poor	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	677	*Platanus x acerifolia*	London planetree		18.5	0	1.11		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	678	*Platanus x acerifolia*	London planetree		16	0	0.96		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	679	*Platanus x acerifolia*	London planetree		17	0	1.02		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	680	*Platanus x acerifolia*	London planetree		17	0	1.02		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	681	*Platanus x acerifolia*	London planetree		18.5	0	1.11		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	682	*Platanus x acerifolia*	London planetree		18	0	1.08		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	683	*Platanus x acerifolia*	London planetree		17	0	1.02		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	684	*Platanus x acerifolia*	London planetree		17	0	1.02		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	685	*Platanus x acerifolia*	London planetree		17	0	1.02		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	686	*Platanus x acerifolia*	London planetree		26	0	1.56		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	687	*Platanus x acerifolia*	London planetree		15	0	0.9		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	688	*Platanus x acerifolia*	London planetree		15	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	689	*Platanus x acerifolia*	London planetree		15	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
15	690	*Platanus x acerifolia*	London planetree		15	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	691	*Platanus x acerifolia*	London planetree		15	0	0.9		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	697	*Platanus x acerifolia*	London planetree		17	9	1.02		Dying	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
15	698	*Platanus x acerifolia*	London planetree		17	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	699	*Platanus x acerifolia*	London planetree		17	8	1.02		Dying	20-30%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
15	700	*Platanus x acerifolia*	London planetree		17	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	701	*Platanus x acerifolia*	London planetree		17	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	702	*Platanus x acerifolia*	London planetree		17	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	703	*Platanus x acerifolia*	London planetree		17	0	0		Fair	0	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Water	Year 1	
15	704	*Prunus species*	Cherry species		6	5	0.36		Good	0	0	Undersized	Low		Retain	Young tree train Clearance prune	Year 3	
15	705	*Pseudotsuga menziesii*	Douglas-fir		4	5	0.24		Good	0	0	Undersized	Low		Retain	Young tree train	Year 3	
15	706	*Prunus species*	Cherry species		7.5	5	0.45		Good	0	0	Undersized	Low		Retain	Young tree train	Year 3	
15	707	*Sorbus aucuparia*	European mountain ash		6	5	0.36		Good	0	0	Undersized	Low		Retain	Young tree train	Year 3	
15	708	*Sorbus aucuparia*	European mountain ash		4.5	5	0.27		Good	0	0	Undersized	Low		Retain	Young tree train	Year 3	
16	692	*Platanus x acerifolia*	London planetree		21	10	1.26		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy	Year 3	
16	693	*Platanus x acerifolia*	London planetree		18	10	1.08		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy Crown clean	Year 3	
16	694	*Platanus x acerifolia*	London planetree		18	10	1.08		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy Crown clean	Year 3	
16	695	*Platanus x acerifolia*	London planetree		18	10	1.08		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance prune Crown clean	Year 1	
16	696	*Platanus x acerifolia*	London planetree		17	10	1.02		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean	Year 3	
16	709	*Sorbus aucuparia*	European mountain ash		6	4	0.36		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Year 1	

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16	710	*Sorbus aucuparia*	European mountain ash		6	5	0.36		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Year 1	
16	711	*Sorbus aucuparia*	European mountain ash		7	5	0.42		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Year 1	
17	126	*Populus trichocarpa*	Black cottonwood		48	20	2.88		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
17	127	*Populus trichocarpa*	Black cottonwood		43	20	2.58		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	128	*Populus trichocarpa*	Black cottonwood		18	20	1.08	10 se	Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	129	*Populus trichocarpa*	Black cottonwood		17	20	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	130	*Populus trichocarpa*	Black cottonwood		15	15	0.9		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	132	*Populus trichocarpa*	Black cottonwood		23	12	1.38		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	133	*Populus trichocarpa*	Black cottonwood		12	11	0.72		Fair	>50%	Young (5-20)	Undersized	Low	no	Remove	Remove (ground level) Replace	Year 3	
17	134	*Populus trichocarpa*	Black cottonwood		72	20	4.32		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
17	138	*Populus trichocarpa*	Black cottonwood		50	20	3		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	139	*Populus trichocarpa*	Black cottonwood		80	20	4.8		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
17	140	*Populus trichocarpa*	Black cottonwood		90	20	5.4		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
17	141	*Populus trichocarpa*	Black cottonwood		41	20	2.46		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	142	*Populus trichocarpa*	Black cottonwood		42	20	2.52		Fair	30-40%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
17	143	*Populus trichocarpa*	Black cottonwood		33	20	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	144	*Populus trichocarpa*	Black cottonwood		27	20	1.62		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	145	*Populus trichocarpa*	Black cottonwood		27	20	1.62		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	146	*Populus trichocarpa*	Black cottonwood		30	20	1.8		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
17	147	*Populus trichocarpa*	Black cottonwood		46	20	2.76		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	148	*Populus trichocarpa*	Black cottonwood		40	20	2.4		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	149	*Populus trichocarpa*	Black cottonwood		46	20	2.76	5	Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	150	*Populus trichocarpa*	Black cottonwood		18	20	1.08		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	151	*Populus trichocarpa*	Black cottonwood		18	10	1.08		Poor	20-30%	Young (5-20)	Undersized	Low	No	Retain		Retain no action	
17	152	*Populus trichocarpa*	Black cottonwood		10	15	0.6		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	153	*Populus trichocarpa*	Black cottonwood		39	25	2.34		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
17	154	*Populus trichocarpa*	Black cottonwood		17	16	1.02		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	155	*Populus trichocarpa*	Black cottonwood		25	20	1.5		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	156	*Populus trichocarpa*	Black cottonwood		18	18	1.08		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	157	*Populus trichocarpa*	Black cottonwood		20	20	1.2		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	158	*Populus trichocarpa*	Black cottonwood		18	20	1.08		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	159	*Populus trichocarpa*	Black cottonwood		25	20	1.5		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	160	*Populus trichocarpa*	Black cottonwood		18	20	1.08		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	161	*Populus trichocarpa*	Black cottonwood		15	15	0.9		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	162	*Populus trichocarpa*	Black cottonwood		40	20	2.4		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	163	*Populus trichocarpa*	Black cottonwood		24	20	1.44	10e	Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	164	*Populus trichocarpa*	Black cottonwood		18	20	1.08		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	165	*Populus trichocarpa*	Black cottonwood		34	20	2.04		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	

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17	166	*Populus trichocarpa*	Black cottonwood		24	10	1.44		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	167	*Populus trichocarpa*	Black cottonwood		18	18	1.08		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	168	*Populus trichocarpa*	Black cottonwood		20	20	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	169	*Populus trichocarpa*	Black cottonwood		18	20	1.08		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	170	*Populus trichocarpa*	Black cottonwood		22	20	1.32		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	171	*Populus trichocarpa*	Black cottonwood		16	16	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	172	*Populus trichocarpa*	Black cottonwood		25	20	1.5		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	173	*Populus trichocarpa*	Black cottonwood		15	10	0.9		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	174	*Populus trichocarpa*	Black cottonwood		30	20	1.8		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	175	*Populus trichocarpa*	Black cottonwood		20	20	1.2		Fair	<20%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	176	*Populus trichocarpa*	Black cottonwood		10	10	0.6		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	177	*Populus trichocarpa*	Black cottonwood		33	20	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
17	178	*Populus trichocarpa*	Black cottonwood		45	20	2.7		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
17	179	*Populus trichocarpa*	Black cottonwood		20	20	1.2		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	180	*Populus trichocarpa*	Black cottonwood		25	20	1.5		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	181	*Populus trichocarpa*	Black cottonwood		22	20	1.32		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	182	*Populus trichocarpa*	Black cottonwood		20	20	0		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	183	*Populus trichocarpa*	Black cottonwood		16	18	0.96		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	184	*Populus trichocarpa*	Black cottonwood		18	20	1.08		Fair	<20%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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17	184	*Populus trichocarpa*	Black cottonwood		20	20	0		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	185	*Populus trichocarpa*	Black cottonwood		15	18	0.9		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	186	*Populus trichocarpa*	Black cottonwood		20	20	1.2		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	194	*Populus trichocarpa*	Black cottonwood		21	20	1.26		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	195	*Populus trichocarpa*	Black cottonwood		9	12	0.54		Dead	0	0	Undersized	Low	No	Retain		Retain no action	
17	196	*Populus trichocarpa*	Black cottonwood		20	20	1.2		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	197	*Populus trichocarpa*	Black cottonwood		12	20	0.72		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	198	*Populus trichocarpa*	Black cottonwood		22	14	1.32		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
17	199	*Populus trichocarpa*	Black cottonwood		12	14	0.72		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	200	*Populus trichocarpa*	Black cottonwood		12	12	0.72		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	401	*Populus trichocarpa*	Black cottonwood		12	12	0.72		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	402	*Populus trichocarpa*	Black cottonwood		12	12	0.72		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	403	*Populus trichocarpa*	Black cottonwood		12	12	0.72		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	404	*Populus trichocarpa*	Black cottonwood		3	7	0.18		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	405	*Populus trichocarpa*	Black cottonwood		3	7	0.18		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	406	*Populus trichocarpa*	Black cottonwood		3	7	0.18		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	407	*Populus trichocarpa*	Black cottonwood		3	7	0.18		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	408	*Populus trichocarpa*	Black cottonwood		3	7	0.18		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	409	*Populus trichocarpa*	Black cottonwood		3	7	0.18		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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17	410	*Populus trichocarpa*	Black cottonwood		3	7	0.18		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	411	*Prunus species*	Cherry species		23	4	1.38		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	412	*Sorbus species*	Mountain Ash species		15	4	0.9		Poor	20-30%	Young (5-20)	Undersized	Low	No	Retain		Retain no action	
17	413	*Platanus x Acerifolia*	London planetree		12	6	0.72		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
17	414	*Platanus x Acerifolia*	London planetree		12	6	0.72		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
18	106	*Acer rubrum*	Red maple		16	10	0.96		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	107	*Acer rubrum*	Red maple		15	10	0.9		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	108	*Acer rubrum*	Red maple		17	13	1.02		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	109	*Platanus x acerifolia*	London planetree		25	10	1.5		Fair	>50%	Semi-mature (20-40)	undersized	Low	Yes	Retain	Mulch Crown clean	Year 3	
18	110	*Platanus x acerifolia*	London planetree		25	10	1.5		Fair	>50%	Semi-mature (20-40)	undersized	Low	Yes	Retain		Retain no action	
18	111	*Platanus x acerifolia*	London planetree		25	10	1.5		Fair	>50%	Semi-mature (20-40)	undersized	Low	Yes	Retain	Clearance prune	Year 1	
18	112	*Thuja Plicata*	Western red cedar		12	8	0.72		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	113	*Acer rubrum*	Red maple		30	15	1.8		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 1	
18	114	*Acer rubrum*	Red maple		15	14	0.9		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	115	*Thuja Plicata*	Western red cedar		2.5	4	0.15		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	116	*Acer rubrum*	Red maple		16	14	0.96		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	117	*Acer rubrum*	Red maple		18	11	1.08		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	118	*Acer rubrum*	Red maple		29	15	1.74		Fair	>50%	Semi-mature (20-40)	undersized	Low	Yes	Retain		Retain no action	
18	119	*Acer rubrum*	Red maple		24	15	1.44		Fair	>50%	Semi-mature (20-40)	undersized	Low	Yes	Retain		Retain no action	
18	120	*Acer rubrum*	Red maple		27	15	1.62		Fair	>50%	Semi-mature (20-40)	undersized	Low	Yes	Retain		Retain no action	
18	121	*Acer rubrum*	Red maple		33	15	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
18	122	*Acer rubrum*	Red maple		32	15	1.92		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
18	123	*Acer rubrum*	Red maple		20	15	1.2		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain	Clearance prune Mulch	Year 1	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
18	124	*Acer rubrum*	Red maple		12	10	0.72		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
18	125	*Acer rubrum*	Red maple		10	10	0.6		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain		Retain no action	
18	131	*Acer rubrum*	Red maple		14	10	0.84		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain	Young tree train Mulch	Year 3	
18	136	*Acer rubrum*	Red maple		13	10	0.78		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain	Mulch	Year 1	
18	137	*Acer rubrum*	Red maple		10	10	0.6		Fair	>50%	Young (5-20)	undersized	Low	Yes	Retain	Mulch	Year 1	
19	983	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	20	10	1.2		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Clearance prune Raise canopy	Year 2	
19	984	*Platanus x acerifolia*	London planetree		25	10	1.5		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
19	985	*Platanus x acerifolia*	London planetree		23	10	1.38		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
19	986	*Platanus x acerifolia*	London planetree		23	10	1.38		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
19	987	*Platanus x acerifolia*	London planetree		21	10	1.26		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
19	988	*Platanus x acerifolia*	London planetree		19	10	1.14		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
19	989	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	22	10	1.32		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Clearance prune	Year 2	
19	990	*Platanus x acerifolia*	London planetree		13	10	0.78		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
19	991	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	14	10	0.84		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean	Year 3	
19	992	*Platanus x acerifolia*	London planetree		18	10	1.08		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Clearance prune	Year 3	
19	993	*Populus trichocarpa*	Black cottonwood	Dead twigs/Branches	33	10	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune Crown clean	Year 3	
19	994	*Populus trichocarpa*	Black cottonwood		27	10	1.62		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
19	995	*Acer rubrum*	Red maple		19	12	1.14		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
19	996	*Acer rubrum*	Red maple		10	12	0.6		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
19	997	*Acer rubrum*	Red maple		19	12	1.14		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Year 2	
19	998	*Acer rubrum*	Red maple		10	9	0.6		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
19	999	*Acer rubrum*	Red maple		24	12	1.44		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
19	1000	*Juglans nigra*	Black walnut		10	3	0.6		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train OR Remove (ground level)	Year 3	
19	102	*Pinus nigra*	Austrian Pine		35	12	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune Raise canopy	Year 2	
19	101	*Pinus nigra*	Austrian Pine	Cankers/Galls/Burls Pitch/Sap ooze	39	12	2.34		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Raise canopy Clearance prune Crown clean	Year 2	
19	103	*Pseudotsuga menziesii*	Douglas-fir	Dead twigs/Branches	50	20	3		Dying	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 1	2
19	104	*Pseudotsuga menziesii*	Douglas-fir		52	20	3.12		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Water Soil amendments Crown clean	Year 3	
19	105	*Pseudotsuga menziesii*	Douglas-fir	Dead twigs/Branches	61	20	3.66		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3	
19	527	*Pseudotsuga menziesii*	Douglas-fir	Dead twigs/Branches	48	20	2.88		Dying	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 1	2
20	438	*Thuja plicata*	Western red cedar	Codominant stems	77	25	4.62		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	439	*Thuja plicata*	Western red cedar	History of failure Codominant stems	69	25	4.14		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3 inspection	
20	440	*Thuja plicata*	Western red cedar		69	25	4.14		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	441	*Thuja plicata*	Western red cedar		58	25	3.48		Fair	30-40%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	442	*Thuja plicata*	Western red cedar		56	25	3.36		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	443	*Thuja plicata*	Western red cedar		70	25	4.2		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	444	*Thuja plicata*	Western red cedar	Codominant stems	88	25	5.28		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	445	*Thuja plicata*	Western red cedar	Conks/Mushrooms	78	25	4.68		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	446	*Thuja plicata*	Western red cedar	Sapwood damage/Decay	80	25	4.8		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	447	*Thuja plicata*	Western red cedar		52	25	3.12		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	448	*Thuja plicata*	Western red cedar	Codominant stems	86	25	5.16		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Year 3 inspection	

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20	449	*Thuja plicata*	Western red cedar	Codominant stems History of failure	60	25	3.6		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Year 3 inspection	
20	450	*Thuja plicata*	Western red cedar		25	25	1.5		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
20	451	*Thuja plicata*	Western red cedar		37	25	2.22		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	452	*Thuja plicata*	Western red cedar		37	25	2.22		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	453	*Thuja plicata*	Western red cedar		88	25	5.28		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	454	*Thuja plicata*	Western red cedar	Codominant stems	90	25	5.4		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	455	*Thuja plicata*	Western red cedar		49	25	2.94		Fair	20-30%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	456	*Thuja plicata*	Western red cedar		22	25	1.32		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
20	457	*Pseudotsuga Menziesii*	Douglas-fir		42	25	2.52	10e	Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	458	*Thuja plicata*	Western red cedar		32	25	1.92		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	459	*Thuja plicata*	Western red cedar	Codominant stems	52	25	3.12		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	460	*Thuja plicata*	Western red cedar		43	25	2.58		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	461	*Thuja plicata*	Western red cedar		72	25	4.32		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	462	*Thuja plicata*	Western red cedar	History of failure	17	25	1.02		Dead	0	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
20	463	*Thuja plicata*	Western red cedar		30	25	1.8		Dead	0	Semi-mature (20-40)	Protected (size)	Low	No	Retain	Retain as wildlife tree	Retain no action	
20	464	*Thuja plicata*	Western red cedar		40	25	2.4		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	465	*Thuja plicata*	Western red cedar		64	25	3.84		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	466	*Thuja plicata*	Western red cedar		59	25	3.54		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	467	*Thuja plicata*	Western red cedar		55	25	3.3		Poor	>50%	Mature (40+)	Protected (size)	Low	No	Retain	Retain as wildlife tree	Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
20	468	*Thuja plicata*	Western red cedar		36	25	2.16		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	469	*Betula species*	Birch species		32	10	1.92	20 w	Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
20	470	*Betula species*	Birch species		15	8	0.9		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance prune	Year 2	
20	471	*Betula species*	Birch species		25	10	1.5		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
20	472	*Betula species*	Birch species		33	11	1.98		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Year 2	
20	473	*Thuja plicata*	Western red cedar		84	25	5.04		Poor	>50%	Mature (40+)	Protected (size)	Low	No	Retain	Retain as wildlife tree	Year 3	
20	474	*Thuja plicata*	Western red cedar		74	25	4.44		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
20	437	*Cotinus coggygria*	Smoke tree		8	2	0.48		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain			
21	201	*Alnus rubra*	Red alder		30	15	1.8		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Young tree train	Year 3	
21	202	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	20	10	1.2		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	203	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	16	10	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	204	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	20	10	1.2		Fair	0	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	205	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	17	10	1.02		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	206	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	15	10	0.9		Fair	<20%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	207	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	20	10	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	208	*Platanus x acerifolia*	London planetree	Dead twigs/Branches	16	10	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	209	*Platanus x acerifolia*	London planetree	Dead twigs/Branches Live crown ratio (LCR) %	15	10	0.9		Dying	<20%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
21	210	*Pseudotsuga menziesii*	Douglas-fir	Dead twigs/Branches	36	15	2.16		Dying	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
21	211	*Prunus species*	Cherry species	Dead twigs/Branches	32	10	1.92		Poor	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
21	212	*Alnus rubra*	Red alder		50	10	3		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2

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21	213	*Alnus rubra*	Red alder		25	15	1.5		Dying	40-50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (wildlife) Replace	Year 3	
21	214	*Alnus rubra*	Red alder		24	15	1.44		Dying	40-50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (wildlife) Replace	Year 3	
21	475	*Pseudotsuga menziesii*	Douglas-fir	Broken branches/Hangers	40	20	2.4		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean	Year 3	
21	476	*Thuja plicata*	Western red cedar		68	20	4.08		Dying	30-40%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
21	477	*Pseudotsuga menziesii*	Douglas-fir	Dead twigs/Branches	89	20	5.34		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean Mature tree prune	Year 3	
21	478	*Pinus sylvestris*	Scot's Pine	Codominant stems	65	14	3.9		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean Mature tree prune	Year 3	
21	479	*Populus trichocarpa*	Black cottonwood		36	18	2.16		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Retain no action	Retain no action	
21	480	*Populus trichocarpa*	Black cottonwood	Leaves chewed	7	4	0.42		Poor	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	481	*Populus trichocarpa*	Black cottonwood		6	5	0.36		Dead	40-50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
21	482	*Populus trichocarpa*	Black cottonwood		25	15	1.5		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	483	*Populus trichocarpa*	Black cottonwood		35	15	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Retain no action	Retain no action	
21	484	*Populus trichocarpa*	Black cottonwood		15	15	0.9		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	485	*Populus trichocarpa*	Black cottonwood		13	15	0.78		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	486	*Populus trichocarpa*	Black cottonwood		36	15	2.16		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Retain no action	Retain no action	
21	487	*Populus trichocarpa*	Black cottonwood		23	15	1.38		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	488	*Populus trichocarpa*	Black cottonwood		13	15	0.78		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	489	*Populus trichocarpa*	Black cottonwood		20	15	1.2		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	490	*Populus trichocarpa*	Black cottonwood		27	15	1.62		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	491	*Populus trichocarpa*	Black cottonwood		20	15	1.2		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	

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21	492	*Populus trichocarpa*	Black cottonwood		11	15	0.66		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	493	*Populus trichocarpa*	Black cottonwood		18	15	1.08		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	494	*Populus trichocarpa*	Black cottonwood		30	15	1.8		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Mature tree prune Crown clean	Year 3	
21	495	*Populus trichocarpa*	Black cottonwood		20	15	1.2		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	496	*Populus trichocarpa*	Black cottonwood		20	15	1.2	5e	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	497	*Populus trichocarpa*	Black cottonwood		48	15	2.88		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Retain no action	Retain no action	
21	498	*Alnus rubra*	Red alder		25	15	1.5		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Retain no action	Retain no action	
21	499	*Alnus rubra*	Red alder		7	6	0.42		Fair	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
21	500	*Alnus rubra*	Red alder		26	15	1.56		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Young tree train	Year 3	
21	530	*Picea sitchensis*	Sitka spruce	Dead twigs/Branches	85	20	5.1		Dying	20-30%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	215	*Alnus rubra*	red alder		38	15	2.28		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Crown clean Young tree train	Retain no action	
22	216	*Pinus nigra*	Austrian pine		38	15	2.28		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	217	*Platanus x acerifolia*	London Plane tree		21	10	1.26		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	218	*Pinus nigra*	Austrian pine		27	6	1.62		Dead				Low	No	Retain		Retain no action	
22	219	*Platanus x acerifolia*	London Plane tree	Dead twigs/Branches	21	10	1.26		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	220	*Populus tremuloides*	Quaking aspen		10	9	0.6		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	221	*Populus tremuloides*	Quaking aspen		16	10	0.96		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	222	*Populus tremuloides*	Quaking aspen		37	15	2.22		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	223	*Populus trichocarpa*	Black cottonwood		49	0	2.94		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Raise canopy Clearance prune	Year 1	
22	224	*Prunus species*	Cherry species		45	15	2.7		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Raise canopy Clearance prune	Year 1	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
22	225	*Populus tremuloides*	Quaking aspen		25	10	1.5		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	226	*Populus tremuloides*	Quaking aspen		19	15	1.14		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	227	*Populus tremuloides*	Quaking aspen	Dead twigs/Branches	28	15	1.68		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	228	*Populus tremuloides*	Quaking aspen	Dead twigs/Branches	40	15	2.4		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune	Retain no action	
22	229	*Populus tremuloides*	Quaking aspen		8	10	0.48		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	230	*Populus tremuloides*	Quaking aspen	Dead twigs/Branches	9	9	0.54		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	231	*Populus tremuloides*	Quaking aspen	Dead twigs/Branches	25	15	1.5		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Clearance prune Raise canopy	Year 1	
22	232	*Populus tremuloides*	Quaking aspen		23	12	1.38		Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	233	*Alnus rubra*	red alder	History of failure	61	15	3.66		Dying	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
22	234	*Acer rubrum*	Red maple	Dead twigs/Branches	22	17	1.32		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	235	*Alnus rubra*	red alder		56	15	3.36		Dead			Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
22	236	*Pinus nigra*	Austrian pine	Root plate lifting Soil weakness	27	17	1.62	50nw	Fair	>50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	237	*Pinus nigra*	Austrian pine	Root plate lifting Soil weakness	28	15	1.68	40nw	Poor	>50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	238	*Platanus x acerifolia*	London Plane tree	Dead twigs/Branches	22	15	1.32		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	239	*Pinus nigra*	Austrian pine	Dead twigs/Branches Unbalanced	37	17	2.22		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	240	*Pinus nigra*	Austrian pine	Corrected lean Root plate lifting	38	15	2.28	5sw	Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 1	2
22	241	*Alnus rubra*	red alder	Dead twigs/Branches	67	17	4.02		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	242	*Platanus x acerifolia*	London Plane tree	Dead twigs/Branches	23	15	1.38		Good	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	243	*Liriodendron tulipifera*	Tulip tree	Dead twigs/Branches	20	18	1.2		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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22	244	*Alnus rubra*	red alder	Codominant stems Heartwood decay	43	15	2.58		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 2	2
22	245	*Alnus rubra*	red alder	Dead twigs/Branches	40	15	2.4		Dying	30-40%	Young (5-20)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
22	246	*Acer rubrum*	Red maple	Dead twigs/Branches	24	18	1.44		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	247	*Liriodendron tulipifera*	Tulip tree		20	16	1.2		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	248	*Alnus rubra*	red alder	Dead twigs/Branches	33	14	1.98	5e	Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain	Raise canopy	Year 3	
22	249	*Alnus rubra*	red alder	Dead twigs/Branches	17	11	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	250	*Alnus rubra*	red alder	Dead twigs/Branches	34	15	2.04	5s w	Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
22	251	*Alnus rubra*	red alder		15	14	0.9	5w	Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	252	*Alnus rubra*	red alder		11	10	0.66		Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	253	*Alnus rubra*	red alder		10	10	0.6		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	254	*Alnus rubra*	red alder		23	17	1.38		Dead			Undersized	Low	No	Remove	Remove (wildlife) Replace	Year 3	
22	255	*Alnus rubra*	red alder	Cut/Damaged roots Decay	33	15	1.98	10 w	Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	256	*Liriodendron tulipifera*	Tulip tree	Dead twigs/Branches	18	15	1.08		Good	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	257	*Liriodendron tulipifera*	Tulip tree	Dead twigs/Branches	17	15	1.02		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	258	*Corylus americana*	American hazelnut		14	6	0.84		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	259	*Alnus rubra*	red alder	Codominant stems	38	15	2.28		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	260	*Liriodendron tulipifera*	Tulip tree		18	15	1.08		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	261	*Liriodendron tulipifera*	Tulip tree		18	12	1.08		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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22	262	*Thuja plicata*	western red cedar	Unbalanced	64	19	3.84		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	263	*Alnus rubra*	red alder	Heartwood decay History of failure Mechanical damage	60	18	3.6		Poor	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	264	*Thuja plicata*	western red cedar		50	18	3		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	265	*Alnus rubra*	red alder	Dead twigs/Branches	92	20	5.52		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Mature tree prune Crown clean	Year 2	
22	266	*Thuja plicata*	western red cedar	Dead twigs/Branches	60	18	3.6		Dying	30-40%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	267	*Thuja plicata*	western red cedar		50	18	3		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	268	*Thuja plicata*	western red cedar	Dead twigs/Branches	46	18	2.76		Dying	40-50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	269	*Corylus americana*	American hazelnut		10.5	5	0.63		Good		Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	270	*Alnus rubra*	red alder		39	19	2.34		Dead			Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
22	271	*Alnus rubra*	red alder		12.5	12	0.75		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	272	*Alnus rubra*	red alder		10	10	0.6		Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	273	*Alnus rubra*	red alder		8	10	0.48		Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	274	*Alnus rubra*	red alder	Dead twigs/Branches	39	20	2.34		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	275	*Populus trichocarpa*	Black cottonwood		10	8	0.6		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	276	*Alnus rubra*	red alder		12	10	0.72		Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	277	*Alnus rubra*	red alder	Pitch/Sap ooze Sapwood damage/Decay Cankers/Galls/Burls	27	19	1.62		Fair	>50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	

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22	278	*Betula species*	Birch species	History of failure Dead/Missing bark Heartwood decay	10	8	0.6		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	279	*Populus trichocarpa*	Black cottonwood	Dead twigs/Branches	20	12	1.2		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	280	*Populus trichocarpa*	Black cottonwood		42	20	2.52		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	281	*Alnus rubra*	red alder	Cankers/Galls/Burls Dead/Missing bark	13	15	0.78		Poor	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	282	*Pseudotsuga menziesii*	Douglas-fir		80	21	4.8		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	283	*Thuja plicata*	western red cedar		40	21	2.4		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	284	*Thuja plicata*	western red cedar	Dead twigs/Branches Live crown ratio (LCR) %	73	21	4.38		Dying	30-40%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	285	*Pseudotsuga menziesii*	Douglas-fir		26	18	1.56	15e	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	286	*Populus trichocarpa*	Black cottonwood		16.5	18	0.99		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	287	*Populus trichocarpa*	Black cottonwood		23	9	1.38		Dead			Undersized	Low	No	Retain		Retain no action	
22	288	*Populus trichocarpa*	Black cottonwood	Dead twigs/Branches	10	15	0.6		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	289	*Populus trichocarpa*	Black cottonwood		23	20	1.38		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	290	*Populus trichocarpa*	Black cottonwood	Dead twigs/Branches	13	15	0.78		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	291	*Populus trichocarpa*	Black cottonwood		15.5	15	0.93		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	292	*Populus trichocarpa*	Black cottonwood		10	15	0.6		Dead			Undersized	Low	No	Retain		Retain no action	
22	293	*Alnus rubra*	red alder		19	15	1.14		Dead			Undersized	Low	No	Retain		Retain no action	

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22	294	*Pseudotsuga menziesii*	Douglas-fir	Pitch/Sap ooze	43	20	2.58		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	295	*Thuja plicata*	western red cedar	Dead twigs/Branches	35	12	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	296	*Pseudotsuga menziesii*	Douglas-fir	Dead twigs/Branches	52	25	3.12		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	297	*Populus trichocarpa*	Black cottonwood		19	18	1.14		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	298	*Alnus rubra*	red alder		12	15	0.72		Dead			Undersized	Low	No	Retain		Retain no action	
22	299	*Alnus rubra*	red alder		20	10	1.2		Dead			Undersized	Low	No	Retain		Retain no action	
22	300	*Alnus rubra*	red alder	Dead twigs/Branches	20	10	1.2		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	No	Retain		Retain no action	
22	567	*Alnus rubra*	red alder		15	20	0.9		Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	568	*Thuja plicata*	western red cedar		47	18	2.82	10e	Fair	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	569	*Alnus rubra*	red alder	Mechanical damage Heartwood decay Uncorrected lean	18	15	1.08	10e	Poor	>50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	570	*Alnus rubra*	red alder	Cankers/Galls/Burls Uncorrected lean	23	20	1.38	5e	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	578	*Alnus rubra*	red alder	Cankers/Galls/Burls	23	20	1.38	10ne	Fair	>50%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	579	*Alnus rubra*	red alder		24	13	1.44	10ne	Fair	>50%	Semi-mature (20-40)	Undersized		Yes	Retain		Retain no action	
22	1701	*Populus trichocarpa*	Black cottonwood	Dead twigs/Branches	40	10	2.4		Dead			Protected (size)	Low	No	Retain		Retain no action	
22	1701	*Alnus rubra*	red alder		16	15	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1702	*Populus trichocarpa*	Black cottonwood		25	24	1.5		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1703	*Alnus rubra*	red alder		13	16	0.78		Dead			Undersized	Low	No	Retain		Retain no action	
22	1704	*Alnus rubra*	red alder		18.5	20	1.11		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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22	1705	*Alnus rubra*	red alder	Corrected lean Cankers/Galls/Burls Sapwood damage/Decay	18.5	20	1.11	5w	Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1706	*Alnus rubra*	red alder		16	20	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1707	*Alnus rubra*	red alder		20	20	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1708	*Alnus rubra*	red alder		17	20	1.02		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1709	*Alnus rubra*	red alder		11	16	0.66		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1710	*Alnus rubra*	red alder		13	14	0.78		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1711	*Alnus rubra*	red alder		14	14	0.84		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1712	*Alnus rubra*	red alder		10	14	0.6		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1713	*Alnus rubra*	red alder		19	20	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1714	*Thuja plicata*	western red cedar	History of failure	13	10	0.78		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1715	*Thuja plicata*	western red cedar	Codominant stems	86	20	5.16		Dying	20-30%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	1716	*Alnus rubra*	red alder		41	8	2.46		Dead			Protected (size)	Low	No	Retain		Retain no action	
22	1717	*Thuja plicata*	western red cedar		75	25	4.5		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1718	*Alnus rubra*	red alder	Codominant stems	45	16	2.7	10s	Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1719	*Alnus rubra*	red alder		20	18	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1720	*Thuja plicata*	western red cedar		50	22	3		Dying	30-40%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	1721	*Thuja plicata*	western red cedar		73	25	4.38		Dying	30-40%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	1722	*Thuja plicata*	western red cedar		75	25	4.5		Poor	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	1723	*Alnus rubra*	red alder		20	18	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1724	*Populus trichocarpa*	Black cottonwood		12	15	0.72		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
22	1725	*Alnus rubra*	red alder		16.5	12	0.99	10e	Dead			Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	1726	*Alnus rubra*	red alder		16.5	12	0.99		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1727	*Populus trichocarpa*	Black cottonwood		35	22	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1728	*Alnus rubra*	red alder		21	18	1.26		Dead			Undersized	Low	No	Retain		Retain no action	
22	1729	*Populus trichocarpa*	Black cottonwood		50	25	3		Good	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Year 3	
22	1730	*Alnus rubra*	red alder		20	20	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1731	*Populus trichocarpa*	Black cottonwood		35	25	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1732	*Populus trichocarpa*	Black cottonwood		38	20	2.28		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1735	*Prunus species*	Cherry species		16	15	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1736	*Prunus species*	Cherry species		16	6	0.96		Dying	<20%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	1737	*Prunus species*	Cherry species		14	6	0.84		Dying	40-50%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	1738	*Thuja plicata*	western red cedar		62	18	3.72		Dead		Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	1739	*Sorbus species*	Mountain Ash species		14	6	0.84		Dying	20-30%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
22	1740	*Alnus rubra*	red alder		14	12	0.84		Dead		Young (5-20)	Undersized	Low	No	Retain		Retain no action	
22	1741	*Alnus rubra*	red alder		20	15	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1742	*Alnus rubra*	red alder		20	15	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1743	*Alnus rubra*	red alder		21	15	1.26	10n	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1744	*Alnus rubra*	red alder	Sapwood damage/Decay	20	15	1.2	5n	Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1745	*Alnus rubra*	red alder		22	15	1.32		Dead		Semi-mature (20-40)	Undersized	Low	No	Retain		Retain no action	
22	1746	*Alnus rubra*	red alder		17	15	1.02		Poor	40-50%	Young (5-20)	Undersized	Low	No	Retain		Retain no action	
22	1747	*Alnus rubra*	red alder	Sapwood damage/Decay	21	15	1.26		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
22	1748	*Alnus rubra*	red alder	Sapwood damage/Decay	20	15	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1749	*Alnus rubra*	red alder	Sapwood damage/Decay	21	15	1.26		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1750	*Alnus rubra*	red alder	Sapwood damage/Decay	20	10	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1751	*Alnus rubra*	red alder	Sapwood damage/Decay	17	15	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1752	*Alnus rubra*	red alder	Sapwood damage/Decay	17	15	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1753	*Alnus rubra*	red alder		17	15	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1754	*Alnus rubra*	red alder		16	15	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1755	*Alnus rubra*	red alder	Sapwood damage/Decay	16	15	0.96		Fair	>50%	Young (5-20)	Undersized	Low	No	Remove		Retain no action	
22	1756	*Alnus rubra*	red alder	Sapwood damage/Decay	17	15	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1757	*Alnus rubra*	red alder		19	15	1.14		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1758	*Alnus rubra*	red alder	Sapwood damage/Decay	11	15	0.66		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1759	*Alnus rubra*	red alder	Sapwood damage/Decay	12	10	0.72		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1760	*Alnus rubra*	red alder	Sapwood damage/Decay	23	15	1.38		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1761	*Thuja plicata*	western red cedar		35	6	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1762	*Alnus rubra*	red alder		23	15	1.38	5n	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1763	*Alnus rubra*	red alder	History of failure	23	2.5	1.38		Poor	20-30%	Semi-mature (20-40)	Undersized	Low	No	Retain		Retain no action	
22	1764	*Alnus rubra*	red alder	History of failure	25	4	1.5		Poor	20-30%	Semi-mature (20-40)	Undersized	Low	No	Retain		Retain no action	
22	1765	*Alnus rubra*	red alder	History of failure	30	4	1.8		Poor	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Retain		Retain no action	
22	1766	*Alnus rubra*	red alder		24	15	1.44		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1767	*Alnus rubra*	red alder		20	15	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1768	*Alnus rubra*	red alder		24	15	1.44		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1769	*Alnus rubra*	red alder		24	15	1.44		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1770	*Alnus rubra*	red alder		23	15	1.38		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1771	*Alnus rubra*	red alder	Sapwood damage/Decay	15.5	8	0.93		Dying	>50%	Young (5-20)	Undersized	Low	No	Retain		Retain no action	
22	1772	*Alnus rubra*	red alder		16	15	0.96		Dead			Undersized	Low	No	Retain		Retain no action	

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22	1773	*Alnus rubra*	red alder		41	25	2.46		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1774	*Alnus rubra*	red alder		20	10	1.2		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1775	*Alnus rubra*	red alder	Sapwood damage/Decay	17	20	1.02		Fair	20-30%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1776	*Populus trichocarpa*	Black cottonwood		19	20	1.14		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1777	*Populus trichocarpa*	Black cottonwood		26	25	1.56		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1778	*Populus trichocarpa*	Black cottonwood		41	25	2.46		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1779	*Populus trichocarpa*	Black cottonwood		57	25	3.42		Good	>50%	Mature (40+)	Undersized	Low	Yes	Retain		Retain no action	
22	1780	*Prunus species*	Cherry species		10	8	0.6		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1781	*Populus trichocarpa*	Black cottonwood		16	12	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1782	*Populus trichocarpa*	Black cottonwood		16	15	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1783	*Populus trichocarpa*	Black cottonwood		48	25	2.88		Fair	>50%	Mature (40+)	Undersized	Low	Yes	Retain		Retain no action	
22	1784	*Populus trichocarpa*	Black cottonwood	Sapwood damage/Decay	16	12	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1785	*Populus trichocarpa*	Black cottonwood		18	20	1.08		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1786	*Populus trichocarpa*	Black cottonwood		22	25	1.32		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1787	*Populus trichocarpa*	Black cottonwood		20	25	1.2	5n	Fair	<20%	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 1	
22	1788	*Populus trichocarpa*	Black cottonwood	Corrected lean	26	25	1.56		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1789	*Alnus rubra*	red alder		14	12	0.84		Dead			Undersized	Low	No	Retain		Retain no action	
22	1790	*Alnus rubra*	red alder	Sapwood damage/Decay	16	14	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1791	*Alnus rubra*	red alder	Sapwood damage/Decay	16	20	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1792	*Alnus rubra*	red alder	Sapwood damage/Decay	20	20	1.2		Fair	30-40%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1793	*Alnus rubra*	red alder	Sapwood damage/Decay	25	14	1.5	5s	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1794	*Alnus rubra*	red alder		18	11	1.08	10e	Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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22	1795	*Alnus rubra*	red alder		16	10	0.96	10e	Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1796	*Alnus rubra*	red alder	Sapwood damage/Decay	25	20	1.5	5se	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1797	*Alnus rubra*	red alder	Sapwood damage/Decay	26	15	1.56	5ne	Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1798	*Prunus species*	Cherry species	Dead twigs/Branches	34	14	2.04	5n	Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1799	*Prunus species*	Cherry species		10	8	0.6		Poor	>50%	Young (5-20)	Undersized	Low	No	Retain		Retain no action	
22	1800	*Prunus species*	Cherry species	Mechanical damage	14	12	0.84	5n	Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1901	*Alnus rubra*	red alder		26	25	1.56		Fair	20-30%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
22	1902	*Populus trichocarpa*	Black cottonwood	Sapwood damage/Decay	19	20	1.14		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1903	*Populus trichocarpa*	Black cottonwood	Corrected lean	18	13	1.08	5n	Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1904	*Alnus rubra*	red alder	Sapwood damage/Decay	14	14	0.84		Poor	30-40%	Young (5-20)	Undersized	Low	No	Retain		Retain no action	
22	1905	*Prunus species*	Cherry species		32	8	1.92		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
22	1906	*Prunus species*	Cherry species	Mechanical damage	10	8	0.6		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1907	*Thuja plicata*	western red cedar		48	18	2.88		Dead			Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
22	1908	*Populus trichocarpa*	Black cottonwood	Sapwood damage/Decay	16	17	0.96	5n	Fair	30-40%	Young (5-20)	Undersized	Low	No	Remove	Remove (wildlife) Replace	Year 2	
22	1909	*Populus trichocarpa*	Black cottonwood	Sapwood damage/Decay	17	15	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1910	*Prunus species*	Cherry species	Dead twigs/Branches	26	15	1.56		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain	Mature tree prune	Year 3	
22	1911	*Populus trichocarpa*	Black cottonwood	Sapwood damage/Decay	17	18	1.02		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
22	1912	*Populus trichocarpa*	Black cottonwood		12	20	0.72	5n	Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
23	885	*Liquidambar styraciflua*	Sweetgum		17	10	1.02		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
23	886	*Liquidambar styraciflua*	Sweetgum		12	8	0.72		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
23	887	*Liquidambar styraciflua*	Sweetgum		12	8	0.72		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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23	888	*Liquidambar styraciflua*	Sweetgum		11	8	0.66		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
23	889	*Cercidiphyllum japonicum*	Katsura tree		17	8	1.02		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy Mulch Clearance prune	Year 2	
23	890	*Cercidiphyllum japonicum*	Katsura tree	Heartwood decay Mechanical damage Dead/Missing bark	14	8	0.84		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy	Year 1	
23	890	*Cercidiphyllum japonicum*	Katsura tree	Heartwood decay Mechanical damage Dead/Missing bark	14	8	0.84		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy	Year 2	
23	892	*Cercidiphyllum japonicum*	Katsura tree	Mechanical damage Heartwood decay Dead/Missing bark	17	8	0		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
23	893	*Cercidiphyllum japonicum*	Katsura tree	Mechanical damage Heartwood decay Dead/Missing bark	13	8	0.78		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Water Raise canopy	Year 1	
23	894	*Acer rubrum*	Red maple	Cut/Damaged roots	13	9	0.78		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Water	Year 1	
23	895	*Acer rubrum*	Red maple	Cut/Damaged roots	13.5	11	0.81		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch	Year 1	
23	896	*Acer rubrum*	Red maple	Leaves chewed Fungal disease	13.5	11	0		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train	Year 3	
23	897	*Acer rubrum*	Red maple	Leaves chewed Fungal disease	13	11	0.78		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Young tree train Mulch Water	Year 1	
23	898	*Acer rubrum*	Red maple		17	11	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Water Clearance prune	Year 1	
23	899	*Acer rubrum*	Red maple	Mechanical damage Dead/Missing roots	17	11	1.02		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch Young tree train	Year 1	

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23	900	*Acer rubrum*	Red maple		16	11	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Water	Year 1	
23	901	*Liriodendron tulipifera*	Tulip tree		28	8	1.68		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
24	496	*Liriodendron tulipifera*	Tulip tree		35	14	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain	Clearance prune over sidewalk	Year 1	
24	497	*Liriodendron tulipifera*	Tulip tree		20	14	1.2		Poor	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Water	Year 2	
24	498	*Liriodendron tulipifera*	Tulip tree		16	14	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean	Year 2	
24	952	*Platanus x acerifolia*	London planetree		16.5	10	0.99		Good	20-30%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean rubbing branch	Year 2	
24	953	*Platanus x acerifolia*	London planetree		18.5	10	1.11		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance prune	Year 2	
24	954	*Liriodendron tulipifera*	Tulip tree		16	12	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance prune	Year 2	
24	955	*Liriodendron tulipifera*	Tulip tree		16	12	0.96		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance Prune	Year 2	
24	956	*Liriodendron tulipifera*	Tulip tree		16.5	12	0.99		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean	Year 3	
24	957	*Liriodendron tulipifera*	Tulip tree		23	12	1.38		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance Prune		
24	958	*Liriodendron tulipifera*	Tulip tree		17	10	1.02		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Clearance Prune	Year 3	
24	959	*Liriodendron tulipifera*	Tulip tree		20	13	1.2		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean	Year 2	
24	960	*Liriodendron tulipifera*	Tulip tree		20	13	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance Prune	Year 1	
24	961	*Liriodendron tulipifera*	Tulip tree		19	13	1.14		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance Prune	Year 2	
24	962	*Liriodendron tulipifera*	Tulip tree		21	15	1.26		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance Prune	Year 3	
24	963	*Liriodendron tulipifera*	Tulip tree		16	15	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean	Year 3	
24	964	*Liriodendron tulipifera*	Tulip tree		21	15	1.26		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean Clearance Prune	Year 3	
24	965	*Liriodendron tulipifera*	Tulip tree		20	14	1.2		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean Clearance Prune	Year 2	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
24	966	*Liriodendron tulipifera*	Tulip tree		19	14	1.14		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean Clearance Prune	Year 3	
24	967	*Liriodendron tulipifera*	Tulip tree		19	14	1.14		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean Clearance Prune	Year 2	
24	968	*Liriodendron tulipifera*	Tulip tree		20	14	1.2		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown Clean Clearance Prune	Year 2	
24	969	*Liriodendron tulipifera*	Tulip tree		16	14	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance Prune	Year 1	
25	948	*Acer rubrum*	Red maple		5	5	0.3		Poor	20-30%	Juvenile (1-5)	Undersized	Low	Yes	Retain	Water Mulch Crown clean	Immediate action	
25	949	*Acer rubrum*	Red maple		5	5	0.3		Fair	20-30%	Juvenile (1-5)	Undersized	Low	Yes	Retain	Water Mulch Crown clean	Immediate action	
25	950	*Acer rubrum*	Red maple		5	5	0.3		Fair	20-30%	Juvenile (1-5)	Undersized	Low	Yes	Retain	Water Mulch Crown clean	Immediate action	
25	951	*Acer rubrum*	Red maple		5	5	0.3		Dying	20-30%	Juvenile (1-5)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 2	
26	970	*Liquidambar styraciflua*	Sweetgum		17	8	1.02		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Raise canopy Mulch	Year 3	
26	971	*Liquidambar styraciflua*	Sweetgum	Shares bed w 72	15	8	0.9		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Retain no action		
26	972	*Liquidambar styraciflua*	Sweetgum		15	8	0.9		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Clearance prune	Year 1	
26	973	*Liquidambar styraciflua*	Sweetgum		15	8	0.9		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Clearance prune	Year 1	
26	974	*Liquidambar styraciflua*	Sweetgum	Shares bed 73	15	8	0.9		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch	Year 1	
26	975	*Liquidambar styraciflua*	Sweetgum		8	7	0.48		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain	Mulch Water	Year 1	
26	976	*Liriodendron tulipifera*	Tulip tree		17	8	1.02		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Mulch Water	Year 3	
26	977	*Liriodendron tulipifera*	Tulip tree		19	9	1.14		Poor	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Mulch Water	Year 1	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
26	978	*Cedrus deodara*	Deodar cedar		71	20	4.26		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain	Crown clean Mulch Water	Year 3	
26	979	*Fraxinus pensylvanica*	Green ash		14	10	0.84		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch Young tree train	Year 3	
26	980	*Davidia involucrata*	Dove tree		16	6	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch Crown clean	Year 3	
26	981	*Liriodendron tulipifera*	Tulip tree		19	9	1.14		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Crown clean Water Mulch	Year 1	
26	982	*Liriodendron tulipifera*	Tulip tree		19	10	1.14		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain	Water Mulch Crown clean	Year 1	
27	416	*Liriodendron tulipifera*	Tulip tree		18	10	1.08		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	417	*Liriodendron tulipifera*	Tulip tree		18	10	1.08		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	418	*Liriodendron tulipifera*	Tulip tree		19	12	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	419	*Liriodendron tulipifera*	Tulip tree		15	10	0.9		Poor	20-30%	Young (5-20)	Undersized	Low	Yes	Retain	Remove (ground level) Replace	Retain no action	
27	420	*Liriodendron tulipifera*	Tulip tree		20	12	1.2		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	421	*Liriodendron tulipifera*	Tulip tree		16	8	0.96		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	422	*Liriodendron tulipifera*	Tulip tree		21	10	1.26		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
27	423	*Liriodendron tulipifera*	Tulip tree		25	13	1.5		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
27	424	*Liriodendron tulipifera*	Tulip tree		21	8	1.26		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	425	*Liriodendron tulipifera*	Tulip tree		20	10	1.2		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
27	426	*Liriodendron tulipifera*	Tulip tree	Dead branches	17	7	1.02		Dying	<20%	Young (5-20)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
27	427	*Liriodendron tulipifera*	Tulip tree		24	12	1.44		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
27	428	*Liriodendron tulipifera*	Tulip tree		19	10	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	429	*Liriodendron tulipifera*	Tulip tree		19	8	1.14		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
27	430	*Liriodendron tulipifera*	Tulip tree		25	12	1.5		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
27	431	*Liriodendron tulipifera*	Tulip tree		37	12	2.22		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
27	432	*Liriodendron tulipifera*	Tulip tree		35	12	2.1		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
27	433	*Liriodendron tulipifera*	Tulip tree		26	12	1.56		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
27	1699	*Sorbus species*	Mountain Ash species		13	4	0.78		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
28	1491	*Platanus x acerifolia*	London planetree		30	8	1.8		Good	>50%	Semi-mature (20-40)	Protected (size)			Retain		Retain no action	
28	1492	*Cercidiphyllum japonicum*	Katsura tree		11.5	7	0.69		Poor	>50%	Young (5-20)	Undersized			Remove	Remove (ground level) Replace	Year 3	
28	1493	*Cercidiphyllum japonicum*	Katsura tree	Remove tree grate	12	7	0.72		Fair	40-50%	Young (5-20)	Undersized			Retain	Water Remove tree grate	Year 1	
29	512	*Thuja plicata*	western red cedar		50	20	3		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	513	*Thuja plicata*	western red cedar		85	20	5.1		Wildlife tree in use	0	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	514	*Thuja plicata*	western red cedar		42	20	2.52		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	515	*Thuja plicata*	western red cedar		35	20	2.1		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	517	*Alnus rubra*	red alder		31	18	1.86		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	519	*Thuja plicata*	western red cedar		54	20	3.24		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	520	*Thuja plicata*	western red cedar		36	18	2.16		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	521	*Thuja plicata*	western red cedar		56	20	3.36		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	

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29	529	*Thuja plicata*	western red cedar		52	20	3.12		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	551	*Thuja plicata*	western red cedar		45	18	2.7		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	552	*Thuja plicata*	western red cedar		27	18	1.62		Dead	0	Mature (40+)	Undersized	Low	No	Remove	Remove (wildlife) Replace	Year 3	
29	553	*Thuja plicata*	western red cedar		22	18	1.32		Dead	0	Mature (40+)	Undersized	Low	No	Remove	Remove (wildlife) Replace	Year 3	
29	554	*Alnus rubra*	red alder		34	20	2.04		Dying	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Mature tree prune	Year 3	
29	562	*Alnus rubra*	red alder		33	16	1.98		Fair	<20%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	563	*Thuja plicata*	western red cedar		33	15	1.98		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	776	*Thuja plicata*	western red cedar		60	4	3.6		Dead	0	Mature (40+)	Previously Removed	Low	No	Retain		Retain no action	
29	1484	*Thuja plicata*	western red cedar		24	12	1.44		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
29	1485	*Thuja plicata*	western red cedar		28	16	1.68		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
29	1486	*Thuja plicata*	western red cedar		16	10	0.96		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1487	*Thuja plicata*	western red cedar		20	14	1.2		Fair	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
29	1488	*Pseudotsuga menziesii*	Douglas-fir		30	18	1.8		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1625	*Alnus rubra*	red alder		23	18	1.38		Fair	<20%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
29	1626	*Thuja plicata*	western red cedar		33	16	1.98		Poor	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
29	1627	*Acer macrophyllum*	Bigleaf maple		32	14	1.92	10e	Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1628	*Thuja plicata*	western red cedar		18	11	1.08		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1629	*Thuja plicata*	western red cedar		19	11	1.14		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1630	*Thuja plicata*	western red cedar		82	15	4.92		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	

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29	1631	*Acer macrophyllum*	Bigleaf maple		49	8	2.94		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1632	*Acer macrophyllum*	Bigleaf maple		27	13	1.62		Good	>50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
29	1633	*Acer macrophyllum*	Bigleaf maple		33	15	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1634	*Thuja plicata*	western red cedar		15	7	0.9		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1635	*Thuja plicata*	western red cedar		37	14	2.22		Dying	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1636	*Thuja plicata*	western red cedar		47	12	2.82		Dying	40-50%	Mature (40+)	Protected (size)	Low	No	Remove	Replace	Year 3	
29	1637	*Pseudotsuga menziesii*	Douglas-fir		73	25	4.38		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1638	*Pseudotsuga menziesii*	Douglas-fir		19	15	1.14		Poor	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1639	*Thuja plicata*	western red cedar		52	25	3.12		Poor	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1640	*Acer macrophyllum*	Bigleaf maple		18	12	1.08		Fair	30-40%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1641	*Pseudotsuga menziesii*	Douglas-fir		54	25	3.24		Fair	30-40%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1642	*Pseudotsuga menziesii*	Douglas-fir		48	25	2.88		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1643	*Acer macrophyllum*	Bigleaf maple		10	6	0.6		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1644	*Acer macrophyllum*	Bigleaf maple		11	8	0.66		Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1645	*Acer macrophyllum*	Bigleaf maple		10	7	0.6	10n	Good	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1646	*Pseudotsuga menziesii*	Douglas-fir		91	30	5.46		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1647	*Pseudotsuga menziesii*	Douglas-fir		32	20	1.92		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1648	*Thuja plicata*	western red cedar		82	25	4.92		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1649	*Acer macrophyllum*	Bigleaf maple		10	11	0.6		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	

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29	1650	*Acer macrophyllum*	Bigleaf maple		10	10	0.6	10n	Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1651	*Pseudotsuga menziesii*	Douglas-fir		26	13	1.56		Fair	40-50%	Semi-mature (20-40)	Undersized	Low	Yes	Retain		Retain no action	
29	1652	*Acer macrophyllum*	Bigleaf maple		12	11	0.72		Fair	>50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1653	*Acer macrophyllum*	Bigleaf maple		18	12	1.08		Good	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1654	*Pseudotsuga menziesii*	Douglas-fir		67	25	4.02		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1655	*Acer macrophyllum*	Bigleaf maple		16.5	11	0.99		Fair	40-50%	Young (5-20)	Undersized	Low	Yes	Retain		Retain no action	
29	1656	*Thuja plicata*	western red cedar		62	25	3.72		Dying	30-40%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1657	*Pseudotsuga menziesii*	Douglas-fir		47	25	2.82		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1658	*Thuja plicata*	western red cedar		41	16	2.46		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1659	*Pseudotsuga menziesii*	Douglas-fir		68	25	4.08		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1660	*Thuja plicata*	western red cedar		35	15	2.1		Dying	20-30%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	2
29	1661	*Thuja plicata*	western red cedar		19	15	1.14		Fair	40-50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1662	*Thuja plicata*	western red cedar		33	18	1.98		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1663	*Thuja plicata*	western red cedar		62	25	3.72		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1664	*Pseudotsuga menziesii*	Douglas-fir		51	25	3.06		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1665	*Betula species*	Birch species		20	8	1.2		Poor	<20%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1666	*Pseudotsuga menziesii*	Douglas-fir		61	20	3.66	15 ne	Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1667	*Alnus rubra*	red alder		24	12	1.44		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1668	*Alnus rubra*	red alder		34	12	2.04		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
29	1669	*Corylus americana*	American hazelnut		34	10	2.04		Good	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1670	*Betula species*	Birch species		17	8	1.02		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1671	*Prunus species*	Cherry species		22	12	1.32		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1672	*Betula species*	Birch species		22	8	1.32		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1673	*Picea sitchensis*	Sitka spruce	Bird nest	23	10	1.38		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1674	*Pseudotsuga menziesii*	Douglas-fir		18	14	1.08		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1675	*Pseudotsuga menziesii*	Douglas-fir		11	7	0.66		Fair	40-50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1676	*Pseudotsuga menziesii*	Douglas-fir		34	20	2.04		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1677	*Pseudotsuga menziesii*	Douglas-fir		27	15	1.62		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1678	*Thuja plicata*	western red cedar	Reiterated	15	10	0.9		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1679	*Thuja plicata*	western red cedar		17	9	1.02		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1680	*Thuja plicata*	western red cedar		10	7	0.6		Fair	<20%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1681	*Thuja plicata*	western red cedar		28	18	1.68		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1682	*Thuja plicata*	western red cedar		19	10	1.14		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1683	*Thuja plicata*	western red cedar		29	16	1.74		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1684	*Thuja plicata*	western red cedar		35	16	2.1		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1685	*Thuja plicata*	western red cedar		29	8	1.74		Dead	0	Mature (40+)	Undersized	Low	No	Retain		Retain no action	
29	1686	*Thuja plicata*	western red cedar		26	18	1.56		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1687	*Pseudotsuga menziesii*	Douglas-fir		38	18	2.28	15nw	Fair	20-30%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
29	1688	*Pseudotsuga menziesii*	Douglas-fir		18	16	1.08		Fair	<20%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1689	*Thuja plicata*	western red cedar		44	25	2.64		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1690	*Thuja plicata*	western red cedar		30	25	1.8		Dying	20-30%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1691	*Thuja plicata*	western red cedar		27	16	1.62		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1692	*Thuja plicata*	western red cedar		79	25	4.74		Dying	40-50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1693	*Pseudotsuga menziesii*	Douglas-fir		28	14	1.68		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1694	*Pseudotsuga menziesii*	Douglas-fir		11	6	0.66		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1695	*Pseudotsuga menziesii*	Douglas-fir		12	6	0.72		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1696	*Thuja plicata*	western red cedar		26	16	1.56		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1697	*Thuja plicata*	western red cedar		30	18	1.8		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1698	*Thuja plicata*	western red cedar		27	18	1.62		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1699	*Acer macrophyllum*	Bigleaf maple		22	16	1.32		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1700	*Pseudotsuga menziesii*	Douglas-fir		48	25	2.88		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1801	*Thuja plicata*	western red cedar		61	20	3.66		Fair	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1802	*Pseudotsuga menziesii*	Douglas-fir		24	15	1.44	5w	Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1803	*Pseudotsuga menziesii*	Douglas-fir		18	15	1.08		Good	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1804	*Pseudotsuga menziesii*	Douglas-fir	Previous topped	25	15	1.5		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Young tree train	Year 3	
29	1805	*Pseudotsuga menziesii*	Douglas-fir		18	15	1.08		Fair	30-40%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1806	*Pseudotsuga menziesii*	Douglas-fir		10	12	0.6		Fair	<20%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	

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29	1807	*Quercus robur*	English oak		17	15	1.02		Good	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1808	*Pseudotsuga menziesii*	Douglas-fir		16	15	0.96		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1809	*Prunus species*	Cherry species		19	10	1.14	15 w	Fair	20-30%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1810	*Prunus species*	Cherry species		37	16	2.22		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1811	*Prunus species*	Cherry species		28	10	1.68		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1811	*Pseudotsuga menziesii*	Douglas-fir		18	15	1.08		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1812	*Pseudotsuga menziesii*	Douglas-fir		18	16	1.08		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1813	*Pseudotsuga menziesii*	Douglas-fir		11	14	0.66		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1814	*Populus tremuloides*	Quaking aspen		16	15	0.96	10s w	Fair	20-30%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1815	*Populus tremuloides*	Quaking aspen		25	17	1.5		Fair	20-30%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1816	*Populus tremuloides*	Quaking aspen	Phototropic lean	19	18	1.14	15s	Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1817	*Populus tremuloides*	Quaking aspen		23	17	1.38		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1818	*Pseudotsuga menziesii*	Douglas-fir		10	10	0.6		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1819	*Alnus rubra*	red alder		10	10	0.6	10s	Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1820	*Alnus rubra*	red alder		20	8	1.2	20s	Fair	20-30%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1821	*Thuja plicata*	western red cedar		25	4	1.5		Wildlife tree	0	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1822	*Prunus species*	Cherry species		48	15	2.88	10s	Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 2	2
29	1823	*Corylus americana*	American hazelnut		9	10	0.54	15s	Dead	0	Mature (40+)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 3	
29	1824	*Prunus species*	Cherry species		33	10	1.98	10s	Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1825	*Prunus species*	Cherry species		6	5	0.36		Fair	40-50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	

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29	1826	*Populus tremuloides*	Quaking aspen		16	16	0.96		Fair	30-40%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1827	*Populus tremuloides*	Quaking aspen		17	12	1.02		Fair	30-40%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1828	*Thuja plicata*	western red cedar		12.5	10	0.75		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1829	*Populus tremuloides*	Quaking aspen		26	18	1.56		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1830	*Thuja plicata*	western red cedar		47	20	2.82		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1831	*Thuja plicata*	western red cedar		14	10	0.84		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1832	*Thuja plicata*	western red cedar		50	20	3		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1833	*Prunus species*	Cherry species		24	11	1.44		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1834	*Thuja plicata*	western red cedar		22	12	1.32		Dead	0	Mature (40+)	Undersized	Low	No	Retain		Retain no action	
29	1835	*Alnus rubra*	red alder		12	10	0.72	25n	Fair	20-30%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1835	*Thuja plicata*	western red cedar		65	17	3.9		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1836	*Alnus rubra*	red alder		41	18	2.46		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1837	*Prunus species*	Cherry species		42	12	2.52		Dead	0	Mature (40+)	Protected (size)	Low	No	Retain		Retain no action	
29	1838	*Alnus rubra*	red alder		36	6	2.16		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1839	*Alnus rubra*	red alder		10	6	0.6		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1840	*Alnus rubra*	red alder		18	11	1.08		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1841	*Alnus rubra*	red alder		28	16	1.68		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1842	*Thuja plicata*	western red cedar		30	10	1.8		Poor	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1843	*Castanea species*	Chesnut species		23	15	1.38		Good	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
29	1844	*Populus tremuloides*	Quaking aspen		32	18	1.92		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1845	*Populus tremuloides*	Quaking aspen		30	20	1.8		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1846	*Alnus rubra*	red alder		35	18	2.1	10e	Fair	20-30%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1847	*Thuja plicata*	western red cedar		17	11	1.02		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1848	*Thuja plicata*	western red cedar		85	20	5.1		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1849	*Thuja plicata*	western red cedar		25	16	1.5	10se	Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1850	*Thuja plicata*	western red cedar		47	18	2.82		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1851	*Alnus rubra*	red alder		24	18	1.44	10e	Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1853	*Thuja plicata*	western red cedar		11	11	0.66		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1855	*Prunus species*	Cherry species		14	6	0.84		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1856	*Thuja plicata*	western red cedar		52	18	3.12		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1857	*Thuja plicata*	western red cedar		73	18	4.38		Dying	<20%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1858	*Picea sitchensis*	Sitka spruce		39	18	2.34		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1859	*Pseudotsuga menziesii*	Douglas-fir		33	18	1.98		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1860	*Thuja plicata*	western red cedar		10	5	0.6		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1861	*Thuja plicata*	western red cedar		23	14	1.38		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1862	*Thuja plicata*	western red cedar		41	20	2.46		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1863	*Thuja plicata*	western red cedar		33	15	1.98		Poor	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1864	*Thuja plicata*	western red cedar		42	18	2.52		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	

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29	1865	*Thuja plicata*	western red cedar		52	20	3.12		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1866	*Pseudotsuga menziesii*	Douglas-fir		49	25	2.94		Good	30-40%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1867	*Pseudotsuga menziesii*	Douglas-fir		20	13	1.2		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1868	*Cornus species*	Dogwood		10	7	0.6		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1869	*Thuja plicata*	western red cedar		46	20	2.76		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1870	*Thuja plicata*	western red cedar		20	14	1.2		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1871	*Thuja plicata*	western red cedar		27	15	1.62		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1872	*Thuja plicata*	western red cedar		17	13	1.02		Fair	40-50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1873	*Prunus species*	Cherry species		16	15	0.96		Fair	30-40%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1874	*Thuja plicata*	western red cedar		15	8	0.9		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1875	*Thuja plicata*	western red cedar		48	20	2.88		Fair	40-50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1876	*Thuja plicata*	western red cedar		28	16	1.68		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1877	*Thuja plicata*	western red cedar		14.5	11	0.87		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1878	*Thuja plicata*	western red cedar		35	20	2.1		Dying	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1879	*Thuja plicata*	western red cedar		15	10	0.9		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1880	*Thuja plicata*	western red cedar		42	20	2.52		Poor	>50%	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1881	*Thuja plicata*	western red cedar		16	10	0.96		Fair	>50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1882	*Thuja plicata*	western red cedar		12	11	0.72		Fair	30-40%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1883	*Acer macrophyllum*	Bigleaf maple		16	18	0.96		Fair	40-50%	Young (5-20)	Protected (size)	Low	Yes	Retain		Retain no action	

Block	Tree #	Species	Common Name	Tree Notes	Diameter (cm)	Height (m)	CRZ Radius from Trunk(m)	Trunk Lean	General Health	Live Crown Ratio	Age	Bylaw Class	Overall Risk Rating	Expected to Increase in Value (Y/N)	Retain of Remove	Recommended Maintenance	Priority	# of Replacement Trees required
29	1884	*Thuja plicata*	western red cedar		48	20	2.88		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1885	*Thuja plicata*	western red cedar		33	16	1.98		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1886	*Thuja plicata*	western red cedar		40	16	2.4		Poor	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1887	*Alnus rubra*	red alder		34	18	2.04		Fair	<20%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1888	*Thuja plicata*	western red cedar		23.5	14	1.41		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1889	*Thuja plicata*	western red cedar		32	18	1.92		Fair	>50%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1890	*Thuja plicata*	western red cedar		46	18	2.76		Dead	0	Mature (40+)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1891	*Thuja plicata*	western red cedar		25	11	1.5		Dead	0	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 3	
29	1892	*Thuja plicata*	western red cedar		36	15	2.16		Dying	>50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1893	*Alnus rubra*	red alder		27	16	1.62		Poor	30-40%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (ground level) Replace	Year 1	
29	1894	*Prunus species*	Cherry species		23	15	1.38		Fair	30-40%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1895	*Thuja plicata*	western red cedar		22	12	0		Dead	0	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (ground level) Replace	Year 2	
29	1896	*Alnus rubra*	red alder		27	20	1.62		Dead	0	Semi-mature (20-40)	Undersized	Low	No	Remove	Remove (wildlife) Replace	Year 2	
29	1897	*Thuja plicata*	western red cedar		46	16	2.76		Fair	>50%	Mature (40+)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1898	*Alnus rubra*	red alder		24	20	1.44		Fair	<20%	Semi-mature (20-40)	Protected (size)	Low	Yes	Retain		Retain no action	
29	1899	*Thuja plicata*	western red cedar		33	18	1.98		Dead	0	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 3	2
29	1900	*Alnus rubra*	red alder		33	20	1.98		Fair	40-50%	Semi-mature (20-40)	Protected (size)	Low	No	Remove	Remove (wildlife) Replace	Year 2	2

Block	Tree #	Botanical Name	Diameter (cm)	Condition	Action
4	811	London planetree	22	Good	Retain
4	812	London planetree	20	Good	Retain
4	813	London planetree	14	Good	Retain
4	814	London planetree	12	Poor	Retain
4	815	London planetree	22	Fair	Retain
4	816	London planetree	20	Fair	Retain
4	835	Tulip tree	24	Good	Retain
4	836	Tulip tree	22	Good	Retain
5	506	Douglas-fir	66	Fair	Retain
5	505	Douglas-fir	25	Dead	Remove
5	794	Douglas-fir	40	Fair	Retain
5	795	Douglas-fir	50	Fair	Retain
5	796	Douglas-fir	57	Fair	Retain
5	797	Douglas-fir	48	Fair	Retain
5	798	Douglas-fir	45	Fair	Retain
5	799	Douglas-fir	54	Poor	Remove
5	800	Douglas-fir	30	Poor	Remove
5	801	Douglas-fir	40	Fair	Retain
5	802	Douglas-fir	31	Fair	Retain
5	803	Douglas-fir	54	Fair	Retain
5	804	Douglas-fir	28	Fair	Retain
5	805	Douglas-fir	36	Fair	Retain
5	806	Douglas-fir	37	Fair	Retain
5	807	Douglas-fir	49	Fair	Retain
5	808	Douglas-fir	40	Fair	Retain
5	809	Douglas-fir	50	Fair	Retain
5	810	Douglas-fir	44	Fair	Retain
5	501	Douglas-fir	45	Fair	Retain
6	502	Douglas-fir	26	Dead	Remove
6	503	Western red cedar	40	Fair	Retain
6	523	Douglas-fir	40	Fair	Retain
6	901	Cherry species	24	Fair	Retain
6	902	Cherry species	24	Fair	Retain
6	903	Cherry species	24	Fair	Retain
6	604	Katsura tree	21	Good	Retain
6	605	Katsura tree	21	Good	Retain
6	606	Katsura tree	20	Good	Retain
6	607	Katsura tree	18	Good	Retain
6	608	Katsura tree	13	Good	Retain
6	773	Katsura tree	11	Poor	Remove
6	774	Katsura tree	12	Dying	Remove
6	775	Katsura tree	12	Dying	Remove
6	776	Katsura tree	10	Poor	Remove
6	777	Katsura tree	8	Poor	Remove
6	778	Katsura tree	14	Poor	Remove
6	779	Katsura tree	15	Poor	Remove
6	780	Katsura tree	13	Poor	Remove
6	781	Katsura tree	11	Dying	Remove
6	782	Douglas-fir	31	Fair	Remove
6	783	Douglas-fir	42	Fair	Remove
6	784	Douglas-fir	41	Fair	Remove
6	785	Douglas-fir	40	Fair	Remove
6	786	Douglas-fir	39	Poor	Remove
6	787	Douglas-fir	42	Poor	Remove
6	788	Douglas-fir	39	Fair	Retain
6	789	Douglas-fir	39	Fair	Retain
6	790	Douglas-fir	34	Fair	Retain
6	791	Douglas-fir	42	Fair	Retain
6	792	Douglas-fir	38	Fair	Retain
6	793	Douglas-fir	41	Fair	Retain
7	724	Red maple	33	Good	Retain
7	725	Red maple	29	Good	Retain
7	726	Red maple	24	Good	Retain
7	727	Red maple	24	Good	Retain
7	728	Red maple	24	Good	Retain
7	729	Red maple	25	Good	Retain
7	730	Red maple	26	Good	Retain
7	731	Red maple	26	Good	Retain
7	732	Red maple	24	Good	Retain
7	733	Red maple	24	Good	Retain
7	734	Red maple	24	Good	Retain
7	735	Red maple	24	Good	Retain
7	736	Red maple	25	Good	Retain
8	737	Walnut Species	23	Fair	Retain
8	738	Walnut Species	23	Fair	Retain
8	739	Walnut Species	19	Poor	Retain
8	740	Walnut Species	21	Fair	Retain
8	741	Walnut Species	22	Dying	Remove
8	742	Walnut Species	26	Fair	Retain
10	743	European ash	24	Fair	Retain
10	744	English oak	43	Good	Retain
10	745	Red oak	13	Good	Retain
10	746	Red oak	23	Good	Retain
10	747	English oak	25	Good	Retain
10	748	English oak	43	Good	Retain
10	749	Red oak	23	Fair	Retain
10	750	Austrian pine	25	Fair	Retain
10	751	Austrian pine	25	Fair	Retain
10	752	Austrian pine	26	Fair	Retain
10	753	European ash	16	Good	Retain
10	754	Austrian pine	35	Fair	Retain
10	755	Austrian pine	23	Fair	Retain
10	756	Sweet Cherry	43	Fair	Retain
10	757	Katsura tree	12	Fair	Retain
10	758	Katsura tree	13.5	Fair	Retain
10	759	Katsura tree	12	Fair	Retain
10	760	Katsura tree	17	Fair	Retain
11	608	Sweetgum	19	Good	Retain
11	609	Sweetgum	21	Good	Retain
11	610	Sweetgum	19	Good	Retain
11	611	Sweetgum	20	Good	Retain
11	612	Sweetgum	20	Good	Retain
11	613	Sweetgum	21	Good	Retain
11	614	Sweetgum	21	Good	Retain
11	615	Sweetgum	19	Good	Retain
11	616	Sweetgum	19	Good	Retain
11	617	Sweetgum	19	Good	Retain
11	618	Sweetgum	20	Good	Retain
11	619	Sweetgum	20	Good	Retain
11	620	Sweetgum	20	Good	Retain
11	621	Sweetgum	21	Good	Retain
11	622	Sweetgum	19	Good	Retain
11	623	Sweetgum	19	Good	Retain
11	624	Sweetgum	21	Good	Retain
11	625	Sweetgum	21	Good	Retain
11	626	Sweetgum	19	Good	Retain
11	627	Sweetgum	21	Good	Retain
11	628	Sweetgum	19	Good	Retain
11	768	Cherry species	36	Poor	Retain
11	769	Cherry species	35	Fair	Retain
11	770	Western red cedar	18	Good	Retain
11	771	Western red cedar	18	Good	Retain
12	629	London planetree	28	Good	Retain
12	630	London planetree	20	Fair	Retain
12	631	London planetree	25	Good	Retain
12	632	London planetree	29	Good	Retain
12	633	London planetree	19	Good	Retain
12	634	London planetree	20	Good	Retain
12	635	London planetree	19	Good	Retain
12	636	London planetree	19	Good	Retain
12	637	Red maple	29	Good	Retain
12	638	Red maple	31	Good	Retain
12	639	Red maple	3	Good	Retain
12	640	Red maple	31	Good	Retain
13	715	Red maple	14	Fair	Retain
13	716	Red maple	14	Good	Retain
13	717	Red maple	14	Good	Retain
13	718	Red maple	14	Good	Retain
13	719	Red maple	14	Good	Retain
13	720	Red maple	14	Good	Retain
13	721	Red maple	14	Good	Retain
13	722	Red maple	14	Good	Retain
13	723	Red maple	14	Fair	Retain
13	1490	Cypress	10	Fair	Retain
14	641	Red maple	20	Good	Retain
14	642	Red maple	17	Good	Retain
14	643	Red maple	13	Fair	Retain
14	644	Red maple	13	Fair	Retain
14	646	London planetree	14	Good	Retain
14	647	London planetree	15	Fair	Retain
14	648	London planetree	15	Fair	Retain
14	649	London planetree	15	Fair	Retain
14	650	London planetree	15	Fair	Retain
14	651	London planetree	15	Good	Retain
14	652	London planetree	15	Fair	Retain
14	653	London planetree	15	Fair	Retain
14	654	London planetree	15	Good	Retain
14	655	London planetree	15	Fair	Retain
14	656	London planetree	15	Fair	Retain
14	657	London planetree	15	Fair	Retain
14	658	London planetree	15	Fair	Retain
14	659	London planetree	15	Fair	Retain
14	660	London planetree	15	Fair	Retain
14	661	London planetree	15	Poor	Remove
14	662	London planetree	15	Poor	Remove
14	663	London planetree	15	Fair	Retain
14	664	London planetree	15	Fair	Retain
14	665	London planetree	15	Fair	Retain
14	666	London planetree	15	Fair	Retain
14	667	London planetree	15	Fair	Retain
14	668	London planetree	15	Fair	Retain
27	416	Tulip tree	18	Good	Retain
27	417	Tulip tree	18	Good	Retain
27	418	Tulip tree	19	Good	Retain
27	419	Tulip tree	19	Poor	Retain
27	420	Tulip tree	20	Good	Retain
27	421	Tulip tree	16	Good	Retain
27	422	Tulip tree	21	Good	Retain
27	423	Tulip tree	21	Good	Retain
27	424	Tulip tree	21	Fair	Retain
27	425	Tulip tree	20	Good	Retain
27	426	Tulip tree	27	Dying	Remove
27	427	Tulip tree	28	Good	Retain
27	428	Tulip tree	28	Good	Retain
27	429	Tulip tree	19	Good	Retain
27	430	Tulip tree	25	Good	Retain
27	431	Tulip tree	37	Good	Retain
27	432	Tulip tree	33	Good	Retain
27	433	Tulip tree	26	Good	Retain
28	1489	Mountain ash species	13	Fair	Retain
28	1491	London planetree	30	Good	Retain
28	1492	Katsura tree	12	Fair	Retain

LEGEND

- Map #
- Blocks #
- Block Extents
- Tree Identification #

Block	Tree #	Common Name	Diameter (cm)	Health Rating	Action (Removal)
14	641	Red maple	20 Good	Retain	
14	642	Red maple	17 Good	Retain	
14	643	Red maple	13 Fair	Retain	
14	644	Red maple	13 Fair	Retain	
14	645	Red maple	13 Fair	Retain	
14	646	London planetree	14 Good	Retain	
14	647	London planetree	15 Fair	Retain	
14	648	London planetree	15 Fair	Retain	
14	649	London planetree	15 Fair	Retain	
14	650	London planetree	15 Good	Retain	
14	651	London planetree	15 Fair	Retain	
14	652	London planetree	15 Fair	Retain	
14	653	London planetree	15 Fair	Retain	
14	654	London planetree	15 Fair	Retain	
14	655	London planetree	15 Fair	Retain	
14	656	London planetree	15 Fair	Retain	
14	657	London planetree	15 Fair	Retain	
14	658	London planetree	15 Fair	Retain	
14	659	London planetree	15 Fair	Retain	
14	660	London planetree	15 Fair	Retain	
14	661	London planetree	15 Poor	Remove	
14	662	London planetree	15 Poor	Remove	
14	663	London planetree	15 Fair	Retain	
14	664	London planetree	15 Fair	Retain	
14	665	London planetree	15 Fair	Retain	
14	666	London planetree	15 Fair	Retain	
14	667	London planetree	15 Fair	Retain	
14	668	London planetree	15 Fair	Retain	
15	669	London planetree	10 Poor	Remove	
15	670	London planetree	18 Fair	Retain	
15	671	London planetree	17 Dying	Remove	
15	672	London planetree	15 Fair	Retain	
15	673	London planetree	17 Fair	Retain	
15	674	London planetree	15 Fair	Retain	
15	675	London planetree	20 Fair	Retain	
15	676	London planetree	17 Poor	Retain	
15	677	London planetree	18.5 Fair	Retain	
15	678	London planetree	16 Fair	Retain	
15	679	London planetree	17 Fair	Retain	
15	680	London planetree	17 Fair	Retain	
15	681	London planetree	16 Fair	Retain	
15	682	London planetree	16 Fair	Retain	
15	683	London planetree	16 Fair	Retain	
15	684	London planetree	15 Fair	Retain	
15	685	London planetree	17 Fair	Retain	
15	686	London planetree	20 Fair	Retain	
15	687	London planetree	15 Fair	Retain	
15	688	London planetree	15 Fair	Retain	
15	689	London planetree	15 Fair	Retain	
15	690	London planetree	15 Fair	Retain	
15	691	London planetree	15 Fair	Retain	
15	692	London planetree	15 Fair	Retain	
15	693	London planetree	17 Fair	Retain	
15	694	London planetree	17 Dying	Remove	
15	695	London planetree	17 Dying	Remove	
15	696	London planetree	17 Fair	Retain	
15	697	London planetree	15 Fair	Retain	
15	698	London planetree	15 Fair	Retain	
15	699	London planetree	15 Fair	Retain	
15	700	London planetree	15 Fair	Retain	
15	701	London planetree	17 Fair	Retain	
15	702	London planetree	17 Fair	Retain	
15	703	London planetree	17 Fair	Retain	
15	704	Cherry species	6 Good	Retain	
15	705	Douglas-fir	4 Good	Retain	
15	706	Cherry species	6 Good	Retain	
15	707	European mountain ash	5 Good	Retain	
15	708	European mountain ash	4.5 Good	Retain	
16	691	London planetree	17 Good	Retain	
16	693	London planetree	18 Good	Retain	
16	694	London planetree	18 Good	Retain	
16	695	London planetree	18 Good	Retain	
16	696	London planetree	17 Fair	Retain	
16	709	European mountain ash	6 Good	Retain	
16	710	European mountain ash	6 Fair	Retain	
16	711	European mountain ash	7 Good	Retain	
16	712	Cherry species	15 Good	Retain	
17	126	Black cottonwood	43 Fair	Retain	
17	128	Black cottonwood	18 Fair	Retain	
17	129	Black cottonwood	17 Fair	Retain	
17	130	Black cottonwood	15 Fair	Retain	
17	131	Black cottonwood	23 Fair	Retain	
17	133	Black cottonwood	12 Fair	Remove	
17	134	Black cottonwood	72 Fair	Retain	
17	138	Black cottonwood	50 Fair	Retain	
17	139	Black cottonwood	50 Fair	Retain	
17	140	Black cottonwood	90 Fair	Retain	
17	141	Black cottonwood	42 Fair	Retain	
17	142	Black cottonwood	42 Fair	Retain	
17	143	Black cottonwood	33 Fair	Retain	
17	144	Black cottonwood	27 Fair	Retain	
17	145	Black cottonwood	27 Fair	Retain	
17	146	Black cottonwood	30 Fair	Retain	
17	147	Black cottonwood	46 Fair	Retain	
17	148	Black cottonwood	46 Fair	Retain	
17	149	Black cottonwood	40 Fair	Retain	
17	150	Black cottonwood	38 Fair	Retain	
17	151	Black cottonwood	69 Poor	Remove	
17	152	Black cottonwood	10 Dead	Retain	
17	153	Black cottonwood	39 Fair	Retain	
17	154	Black cottonwood	17 Dead	Retain	
17	155	Black cottonwood	25 Fair	Retain	
17	156	Black cottonwood	38 Fair	Retain	
17	157	Black cottonwood	20 Fair	Retain	
17	158	Black cottonwood	20 Fair	Retain	
17	159	Black cottonwood	18 Fair	Retain	
17	160	Black cottonwood	30 Fair	Retain	
17	161	Black cottonwood	20 Fair	Retain	
17	162	Black cottonwood	40 Fair	Retain	
17	163	Black cottonwood	34 Fair	Retain	
17	164	Black cottonwood	18 Fair	Retain	
17	165	Black cottonwood	34 Fair	Retain	
17	166	Black cottonwood	16 Fair	Retain	
17	167	Black cottonwood	18 Fair	Retain	
17	168	Black cottonwood	18 Fair	Retain	
17	169	Black cottonwood	22 Fair	Retain	
17	170	Black cottonwood	16 Fair	Retain	
17	172	Black cottonwood	20 Fair	Retain	
17	173	Black cottonwood	17 Dead	Retain	
17	174	Black cottonwood	30 Fair	Retain	
17	175	Black cottonwood	20 Fair	Retain	
17	176	Black cottonwood	10 Dead	Retain	
17	177	Black cottonwood	20 Fair	Retain	
17	178	Black cottonwood	40 Fair	Retain	
17	179	Black cottonwood	20 Fair	Retain	
17	180	Black cottonwood	25 Fair	Retain	
17	181	Black cottonwood	22 Fair	Retain	
17	182	Black cottonwood	20 Fair	Retain	
17	183	Black cottonwood	16 Fair	Retain	
17	184	Black cottonwood	18 Fair	Retain	
17	185	Black cottonwood	20 Fair	Retain	
17	186	Black cottonwood	16 Fair	Retain	
17	187	Black cottonwood	20 Fair	Retain	
17	188	Black cottonwood	21 Fair	Retain	
17	189	Black cottonwood	50 Fair	Retain	
17	190	Black cottonwood	20 Fair	Retain	
17	191	Black cottonwood	20 Fair	Retain	
17	192	Black cottonwood	20 Fair	Retain	
17	193	Black cottonwood	20 Fair	Retain	
17	194	Black cottonwood	21 Fair	Retain	
17	195	Black cottonwood	50 Fair	Retain	
17	196	Black cottonwood	20 Fair	Retain	
17	197	Black cottonwood	12 Fair	Retain	
17	198	Black cottonwood	12 Fair	Retain	
17	199	Black cottonwood	12 Fair	Retain	
17	200	Black cottonwood	12 Fair	Retain	
17	201	Black cottonwood	12 Fair	Retain	
17	202	Black cottonwood	12 Fair	Retain	
17	203	Black cottonwood	12 Fair	Retain	
17	204	Black cottonwood	12 Fair	Retain	
17	205	Black cottonwood	12 Fair	Retain	
17	206	Black cottonwood	12 Fair	Retain	
17	207	Black cottonwood	12 Fair	Retain	
17	208	Black cottonwood	12 Fair	Retain	
17	209	Black cottonwood	12 Fair	Retain	
17	210	Black cottonwood	12 Fair	Retain	
17	211	Black cottonwood	12 Fair	Retain	
17	212	Black cottonwood	12 Fair	Retain	
17	213	Black cottonwood	12 Fair	Retain	
17	214	Black cottonwood	12 Fair	Retain	
17	215	Black cottonwood	12 Fair	Retain	
17	216	Black cottonwood	12 Fair	Retain	
17	217	Black cottonwood	12 Fair	Retain	
17	218	Black cottonwood	12 Fair	Retain	
17	219	Black cottonwood	12 Fair	Retain	
17	220	Black cottonwood	12 Fair	Retain	
17	221	Black cottonwood	12 Fair	Retain	
17	222	Black cottonwood	12 Fair	Retain	
17	223	Black cottonwood	12 Fair	Retain	
17	224	Black cottonwood	12 Fair	Retain	
17	225	Black cottonwood	12 Fair	Retain	
17	226	Black cottonwood	12 Fair	Retain	
17	227	Black cottonwood	12 Fair	Retain	
17	228	Black cottonwood	12 Fair	Retain	
17	229	Black cottonwood	12 Fair	Retain	
17	230	Black cottonwood	12 Fair	Retain	
17	231	Black cottonwood	12 Fair	Retain	
17	232	Black cottonwood	12 Fair	Retain	
17	233	Black cottonwood	12 Fair	Retain	
17	234	Black cottonwood	12 Fair	Retain	
17	235	Black cottonwood	12 Fair	Retain	
17	236	Black cottonwood	12 Fair	Retain	
17	237	Black cottonwood	12 Fair	Retain	
17	238	Black cottonwood	12 Fair	Retain	
17	239	Black cottonwood	12 Fair	Retain	
17	240	Black cottonwood	12 Fair	Retain	
17	241	Black cottonwood	12 Fair	Retain	
17	242	Black cottonwood	12 Fair	Retain	
17	243	Black cottonwood	12 Fair	Retain	
17	244	Black cottonwood	12 Fair	Retain	
17	245	Black cottonwood	12 Fair	Retain	
17	246	Black cottonwood	12 Fair	Retain	
17	247	Black cottonwood	12 Fair	Retain	
17	248	Black cottonwood	12 Fair	Retain	
17	249	Black cottonwood	12 Fair	Retain	
17	250	Black cottonwood	12 Fair	Retain	
17	251	Black cottonwood	12 Fair	Retain	
17	252	Black cottonwood	12 Fair	Retain	
17	253	Black cottonwood	12 Fair	Retain	
17	254	Black cottonwood	12 Fair	Retain	
17	255	Black cottonwood	12 Fair	Retain	
17	256	Black cottonwood	12 Fair	Retain	
17	257	Black cottonwood	12 Fair	Retain	
17	258	Black cottonwood	12 Fair	Retain	
17	259	Black cottonwood	12 Fair	Retain	
17	260	Black cottonwood	12 Fair	Retain	
17	261	Black cottonwood	12 Fair	Retain	
17	262	Black cottonwood	12 Fair	Retain	
17	263	Black cottonwood	12 Fair	Retain	
17	264	Black cottonwood	12 Fair	Retain	
17	265	Black cottonwood	12 Fair	Retain	
17	266	Black cottonwood	12 Fair	Retain	
17	267	Black cottonwood	12 Fair	Retain	
17	268	Black cottonwood	12 Fair	Retain	
17	269	Black cottonwood	12 Fair	Retain	
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17	416	London planetree	12 Fair	Retain	
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17	419	Western red cedar	12 Fair	Retain	
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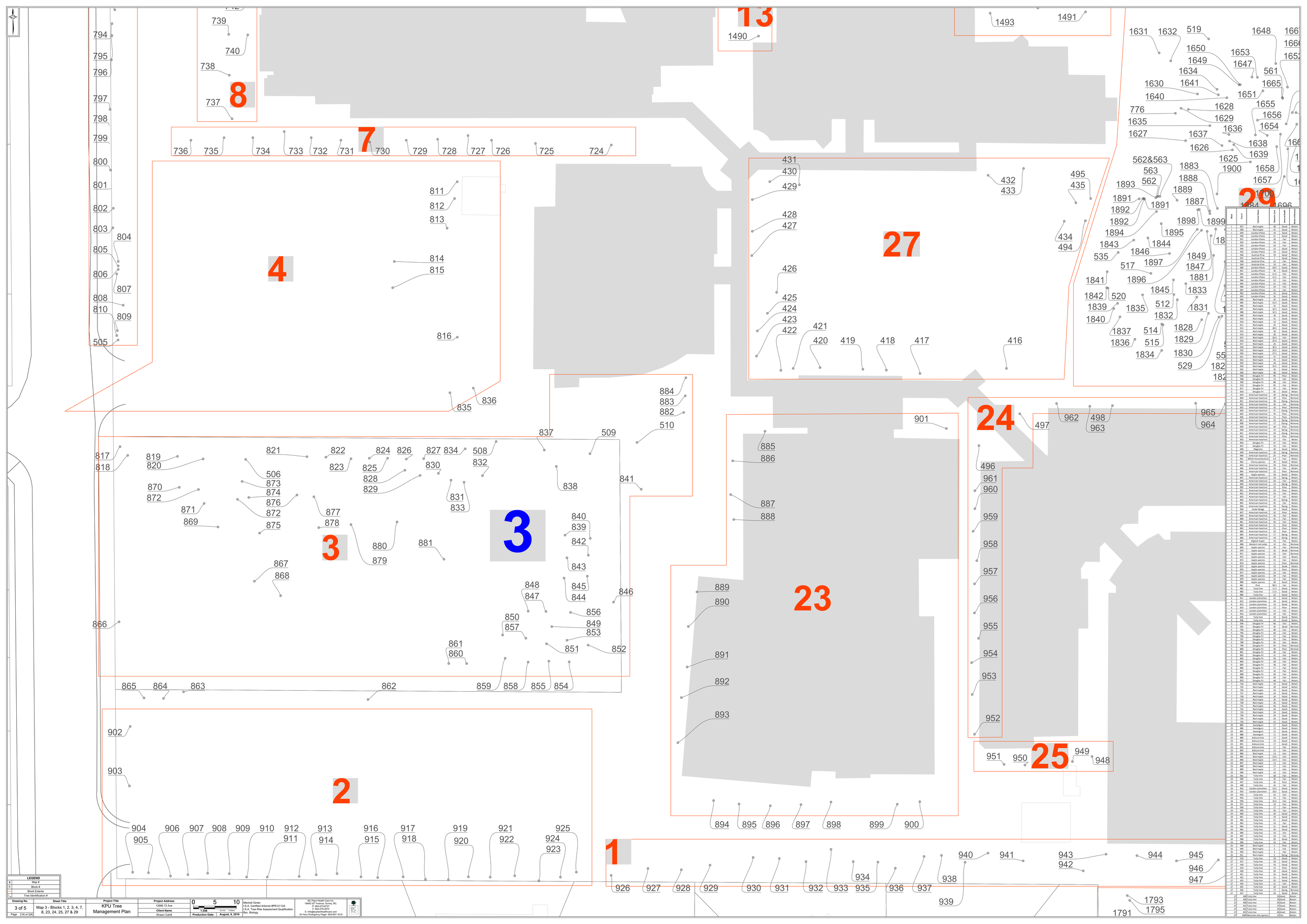
17	598	Western red cedar	12 Fair	Retain	
17	599



LEGEND
Map #
Block #
Block Extents
Tree Identification #

Drawing No.	Sheet Title	Project Title	Project Address	0 5 10	Mitchell Ginter I.S.A. Certified Arborist #PN-5112A I.S.A. Tree Risk Assessment Qualification Bsc. Biology	BC Plant Health Care Inc. 16655 24 Avenue, Surrey, BC. V3Z 0C6 T: 604-576-9727 F: 604-576-2972 E: info@bcplanthealthcare.com 24 Hour Emergency Pager: 604-607-1616
3 of 5	Map 3 - Blocks 1, 2, 3, 4, 7, 8, 23, 24, 25, 27 & 29	KPU Tree Management Plan	12666 72 Ave	1:250 (0.5 0 5 10 metres)		
Page 218 of 226			Client Name: Shawn Cahill	Production Date: August, 9, 2019		

Block	Tree #	Common Name	Diameter (cm)	Condition	Action
1	927	Red maple	38	Good	Retain
1	928	Red maple	41	Good	Retain
1	929	London Plane	33	Good	Retain
1	930	London Plane	21	Good	Retain
1	931	London Plane	26	Fair	Retain
1	932	London Plane	24	Fair	Retain
1	933	London Plane	24	Fair	Retain
1	934	London Plane	23	Good	Retain
1	935	London Plane	22	Good	Retain
1	936	Austrian Pine	19	Good	Retain
1	937	Austrian Pine	7	Good	Retain
1	938	Austrian Pine	22	Fair	Retain
1	939	Austrian Pine	19	Fair	Retain
1	940	London Plane	29.5	Good	Retain
1	941	London Plane	30	Good	Retain
1	942	London Plane	21.5	Fair	Retain
1	943	London Plane	21.5	Fair	Retain
1	944	London Plane	22	Fair	Retain
1	945	London Plane	22	Fair	Retain
1	946	London Plane	24	Fair	Retain
1	947	London Plane	21	Fair	Retain
2	902	London Plane	33	Good	Retain
2	903	London Plane	35	Good	Retain
2	904	Red maple	35	Good	Retain
2	905	Red maple	31.5	Good	Retain
2	906	Red maple	32	Good	Retain
2	907	Red maple	32.5	Good	Retain
2	908	Red maple	32.5	Good	Retain
2	909	Red maple	34	Good	Retain
2	910	Red maple	31	Good	Retain
2	910	Red maple	33	Good	Retain
2	911	Red maple	32	Good	Retain
2	912	Red maple	28.5	Good	Retain
2	913	Red maple	28	Good	Retain
2	914	Red maple	28	Good	Retain
2	915	Red maple	29.5	Good	Retain
2	916	Red maple	29.5	Fair	Retain
2	917	Red maple	29	Good	Retain
2	918	Red maple	30.5	Good	Retain
2	919	Red maple	32.5	Good	Retain
2	920	Red maple	37.5	Good	Retain
2	921	Red maple	37	Good	Retain
2	922	Red maple	35	Good	Retain
2	923	Red maple	34	Good	Retain
2	924	Red maple	33.5	Good	Retain
2	925	Red maple	33	Good	Retain
3	505	Douglas-fir	72	Fair	Retain
3	506	Douglas-fir	85	Poor	Retain
3	508	Douglas-fir	72	Fair	Retain
3	509	Douglas-fir	88	Fair	Retain
3	510	Douglas-fir	95	Fair	Retain
3	817	Douglas-fir	55	Fair	Retain
3	818	Douglas-fir	81	Good	Retain
3	819	American hazelnut	30	Dying	Remove
3	820	American hazelnut	30	Poor	Remove
3	821	American hazelnut	30	Dying	Remove
3	822	American hazelnut	36	Fair	Remove
3	823	American hazelnut	33	Poor	Remove
3	824	American hazelnut	37	Dying	Remove
3	825	American hazelnut	35	Poor	Remove
3	826	American hazelnut	31	Poor	Remove
3	827	American hazelnut	33	Dying	Remove
3	828	American hazelnut	17	Dying	Remove
3	829	American hazelnut	30	Poor	Remove
3	830	American hazelnut	23	Dying	Remove
3	831	American hazelnut	29	Dying	Remove
3	832	American hazelnut	24	Poor	Remove
3	833	American hazelnut	27	Fair	Retain
3	834	Douglas-fir	47	Fair	Retain
3	837	Douglas-fir	76	Fair	Retain
3	838	Magnolia	20	Good	Retain
3	839	American hazelnut	25	Dying	Remove
3	840	American hazelnut	30	Dying	Remove
3	841	White horsechestnut	3.5	Fair	Retain
3	842	Cherry species	20	Good	Retain
3	843	American hazelnut	29	Poor	Remove
3	844	American hazelnut	34	Fair	Retain
3	845	American hazelnut	22	Poor	Remove
3	846	Apple species	34	Good	Retain
3	847	American hazelnut	24	Dying	Remove
3	848	American hazelnut	24	Dying	Remove
3	849	American hazelnut	31	Poor	Retain
3	850	American hazelnut	31	Poor	Retain
3	851	American hazelnut	22	Poor	Retain
3	852	American hazelnut	33	Fair	Retain
3	853	American hazelnut	27	Fair	Retain
3	854	American hazelnut	24	Dying	Retain
3	855	American hazelnut	35	Fair	Retain
3	856	American hazelnut	20	Dying	Retain
3	858	Cedar Hedge	19	Good	Retain
3	859	American hazelnut	33	Good	Retain
3	859	American hazelnut	33	Fair	Retain
3	860	American hazelnut	41	Fair	Retain
3	861	American hazelnut	30	Fair	Retain
3	862	American hazelnut	21	Poor	Retain
3	863	American hazelnut	33	Poor	Retain
3	864	American hazelnut	23	Poor	Retain
3	865	American hazelnut	17	Dying	Retain
3	866	American hazelnut	19	Dying	Retain
3	867	Apple species	30	Fair	Retain
3	868	Western red cedar	10	Fair	Remove
3	869	Apple species	30	Fair	Remove
3	870	Apple species	32	Dead	Remove
3	871	Apple species	22	Fair	Remove
3	872	Apple species	20	Fair	Retain
3	873	Apple species	15	Fair	Retain
3	874	Apple species	13	Poor	Remove
3	875	Apple species	12	Good	Retain
3	876	Apple species	23	Good	Retain
3	877	Apple species	33	Fair	Retain
3	878	Apple species	29	Fair	Retain
3	879	Apple species	31	Fair	Retain
3	880	Apple species	28	Good	Retain
3	881	Pine	94.5	Fair	Retain
3	882	Tulip tree	11.5	Good	Retain
3	883	Tulip tree	11.5	Good	Retain
3	884	Tulip tree	22	Good	Retain
4	811	London planetree	20	Good	Retain
4	812	London planetree	22	Good	Retain
4	813	London planetree	14	Good	Retain
4	814	London planetree	12	Poor	Retain
4	815	London planetree	12	Fair	Retain
4	816	London planetree	20	Fair	Retain
4	835	Tulip tree	24	Good	Retain
4	836	Tulip tree	22	Good	Retain
5	504	Douglas-fir	66	Fair	Retain
5	705	Douglas-fir	45	Poor	Remove
5	706	Douglas-fir	40	Fair	Retain
5	706	Douglas-fir	57	Fair	Retain
5	707	Douglas-fir	35	Fair	Retain
5	708	Douglas-fir	45	Fair	Retain
5	709	Douglas-fir	54	Poor	Remove
5	802	Douglas-fir	30	Poor	Remove
5	803	Douglas-fir	40	Fair	Retain
5	803	Douglas-fir	31	Fair	Retain
5	804	Douglas-fir	34	Fair	Retain
5	805	Douglas-fir	36	Fair	Retain
5	806	Douglas-fir	17	Fair	Retain
5	807	Douglas-fir	33	Fair	Retain
5	808	Douglas-fir	49	Fair	Retain
5	809	Douglas-fir	50	Fair	Retain
5	810	Douglas-fir	44	Fair	Retain
7	724	Red maple	33	Good	Retain
7	725	Red maple	29	Good	Retain
7	726	Red maple	24	Good	Retain
7	727	Red maple	24	Good	Retain
7	728	Red maple	24	Good	Retain
7	729	Red maple	25	Good	Retain
7	730	Red maple	26	Good	Retain
7	731	Red maple	26	Good	Retain
7	732	Red maple	24	Good	Retain
7	733	Red maple	24	Good	Retain
7	734	Red maple	24	Good	Retain
7	735	Red maple	24	Good	Retain
7	736	Red maple	24	Good	Retain
23	885	Sweetgum	17	Good	Retain
23	886	Sweetgum	12	Good	Retain
23	887	Sweetgum	12	Good	Retain
23	888	Sweetgum	11	Good	Retain
23	889	Katsura tree	17	Good	Retain
23	890	Katsura tree	14	Good	Retain
23	891	Katsura tree	17	Good	Retain
23	892	Katsura tree	13	Good	Retain
23	893	Katsura tree	12	Fair	Retain
23	894	Red maple	13	Fair	Retain
23	895	Red maple	13.5	Fair	Retain
23	896	Red maple	13.5	Fair	Retain
23	897	Red maple	13	Fair	Retain
23	898	Red maple	17	Fair	Retain
23	899	Red maple	17	Fair	Retain
23	900	Red maple	16	Fair	Retain
24	496	Tulip tree	28	Fair	Retain
24	497	Tulip tree	20	Poor	Retain
24	498	Tulip tree	16	Fair	Retain
24	952	London planetree	16.5	Good	Retain
24	953	London planetree	16.5	Good	Retain
24	954	Tulip tree	16	Fair	Retain
24	955	Tulip tree	16	Fair	Retain
24	956	Tulip tree	16.5	Fair	Retain
24	957	Tulip tree	23	Fair	Retain
24	958	Tulip tree	20	Fair	Retain
24	960	Tulip tree	20	Good	Retain
24	961	Tulip tree	19	Good	Retain
24	962	Tulip tree	21	Good	Retain
24	963	Tulip tree	16	Fair	Retain
24	964	Tulip tree	21	Good	Retain
24	965	Tulip tree	20	Good	Retain
24	966	Tulip tree	18	Fair	Retain
24	967	Tulip tree	19	Fair	Retain
24	968	Tulip tree	20	Fair	Retain
24	969	Tulip tree	16	Fair	Retain
25	948	Red maple	5	Poor	Retain
25	949	Red maple	5	Fair	Retain
25	950	Red maple	5	Fair	Retain
25	951	Red maple	5	Dead	Remove
27	416	Tulip tree	18	Good	Retain
27	417	Tulip tree	18	Good	Retain
27	418	Tulip tree	19	Good	Retain
27	419	Tulip tree	19	Good	Retain
27	420	Tulip tree	20	Good	Retain
27	421	Tulip tree	16	Good	Retain
27	422	Tulip tree	25	Good	Retain
27	423	Tulip tree	25	Good	Retain
27	424	Tulip tree	21	Fair	Retain
27	425	Tulip tree	20	Good	Retain
27	426	Tulip tree	17	Dying	Remove
27	427	Tulip tree	24	Good	Retain
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27	435	Tulip tree	20	Good	Retain
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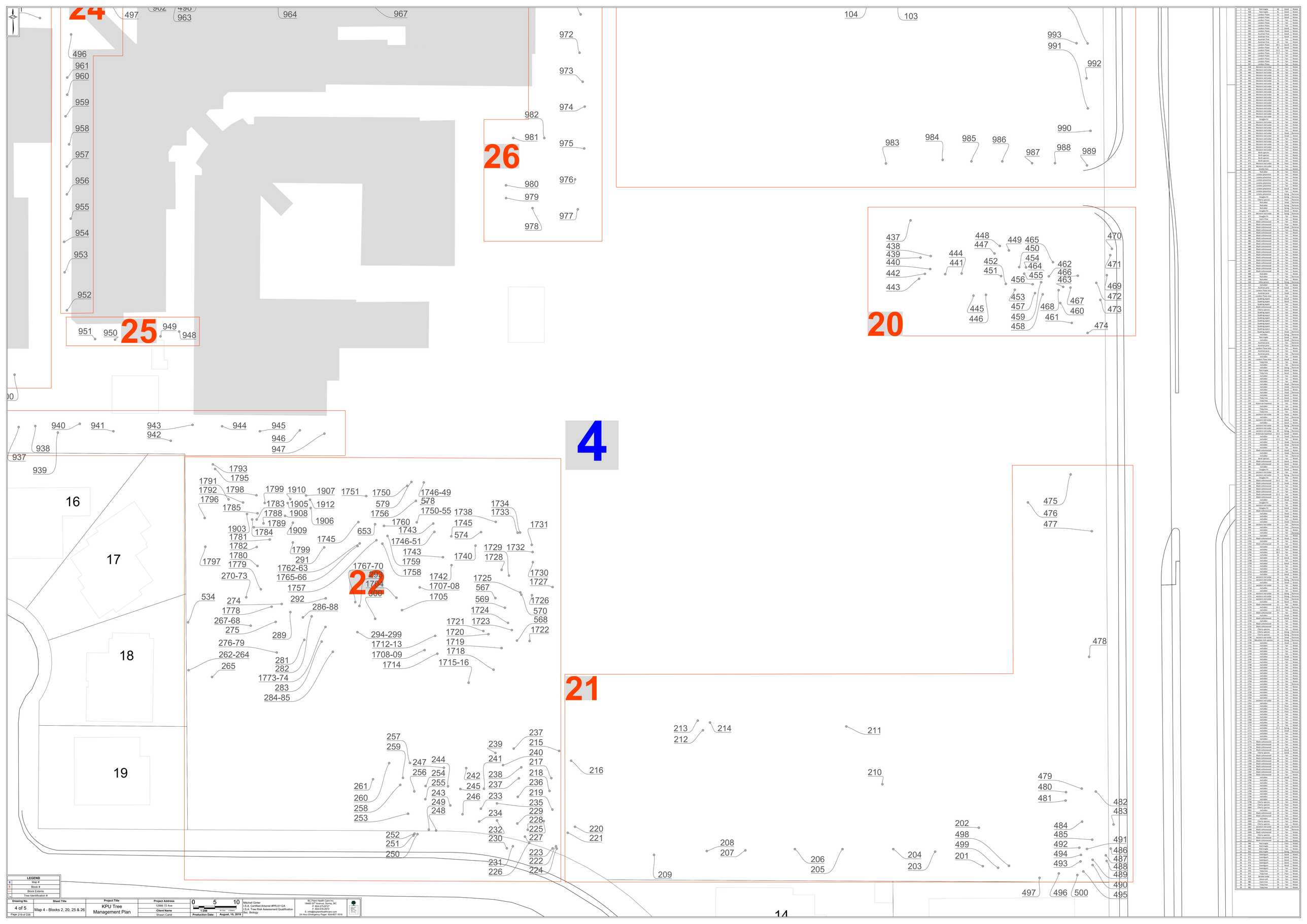
23	1690	Mountain Ash species	13	Fair	Retain



LEGEND

	Map #
	Block #
	Block Extents
	Tree Identification #

Drawing No.	Sheet Title	Project Title	Project Address
4 of 5	Map 4 - Blocks 2, 20, 25 & 26	KPU Tree Management Plan	12666 72 Ave
Page 218 of 226			Client Name: Shawn Cahill

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Mitchell Ginter
I.S.A. Certified Arborist #PR-5112A
I.S.A. Tree Risk Assessment Qualification
Bsc. Biology

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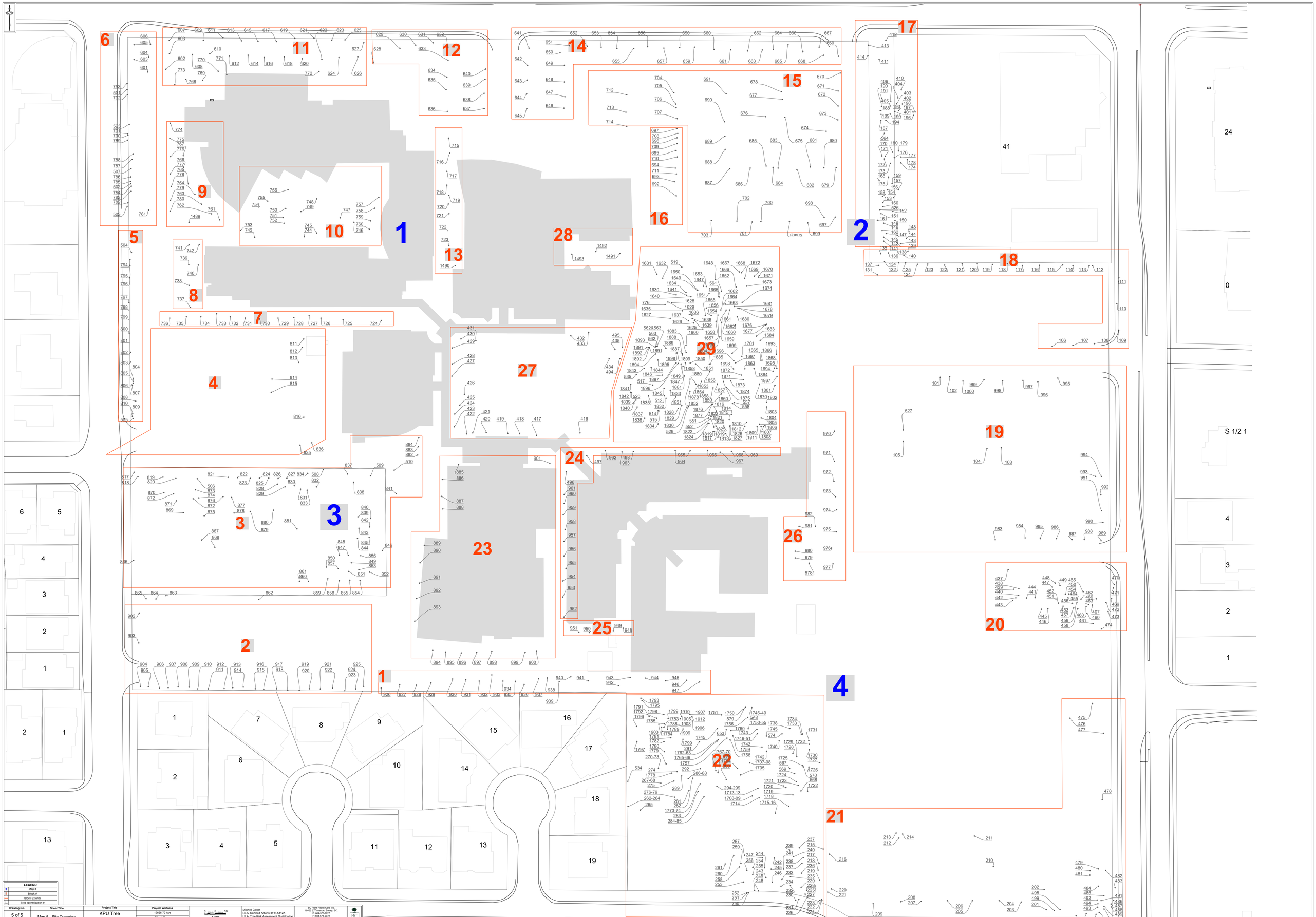
24 Hour Emergency Page: 604-607-1616



LEGEND	
1	Map #
1	Block #
—	Block Extents
—	Tree Identification #

Drawing No.	Sheet Title	Project Title	Project Address			
5 of 5	Map 5 - Site Overview	KPU Tree Management Plan	12666 72 Ave	Scale: 1:529	Mitchell Ginter I.S.A. Certified Arborist #PR-5112A I.S.A. Tree Risk Assessment Qualification Bsc. Biology	BC Plant Health Care Inc. 19460 92nd Avenue, Surrey, BC. P: 604-575-8727 F: 604-576-2972 E: info@bcplanthealthcare.com 24 Hour Emergency Pager: 604-607-1618
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