

Providence College Tree Inventory & Management Plan | 2015

Submitted by
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Providence College Tree Inventory and Management Plan

MAKING THE MOST OF YOUR INVENTORY MANAGEMENT PLAN

Those who operate a large business or institution understand how inventory impacts operations and budgeting. One must know what's there, how much or how many, and where it all is. But the task doesn't end there. To obtain the greatest benefit from inventory, owners or their designees must *manage* it. A good management plan will address these issues and keep the inventory current, in good condition, and functioning for the benefit and safety of those involved.

Managing trees on a large property can seem like an overwhelming task, but the same principles of inventory management apply. This inventory and management plan should provide managers the data they need to develop realistic budgets for their tree maintenance needs, and it will help make the Providence College campus a safer and more beautiful environment.

The following tips will assist you in making the most of this document:

Who's Who

Those who conducted the inventory and prepared this document are members of the Bartlett Inventory Solutions team. They are also employees of Bartlett Tree Experts. Bartlett Inventory Solutions operates out of the Bartlett Tree Research Laboratories in Charlotte, North Carolina and two remote offices: Auburn, Alabama and Seattle, Washington. In some cases, trained regional inventory arborists from local Bartlett Tree Experts' offices may assist. These individuals also may have conducted the entire inventory themselves and prepared this document. Readers may interpret the terms "Bartlett Tree Experts," "Bartlett," "the Inventory Team," "the team," "we," and "our" as the Bartlett company and those who conducted the inventory and prepared this management plan.



Subject Trees

In this document, the term “subject trees” refers (depending on context) to some or all of the 1,489 trees (some of them groupings of trees) included in the inventory.

Definitions & Bolded Terms

Some definitions or specifications are detailed within a given section to explain how readers should interpret certain terms or classifications. We have also appended a Glossary for other terms that appear throughout the document. The first reference to each of these terms appears in **bold** for the reader’s convenience.

How This Document is Organized

An outline appears below that introduces the order in which the sections of the management plan will appear. Starting with the Introduction, pages are numbered consecutively up to the “Entire Inventory” at the end of this document. So that it can stand alone as a main inventory document, the “Entire Inventory” starts over with page -1-. The management plan layout is as follows:

- **Table of Contents**
 - Road map for the management plan
- **List of Tables**
 - Directory for locating specific findings, recommendations, or tree locations in a table display
- **List of Maps**
 - Directory for locating specific findings, recommendations, or tree locations in a map display
- **List of Figures**
 - Directory for locating diagrams or pictures used as examples for specific findings or recommendations
- **Making the Most of Your Inventory Management Plan**
 - Explanations for how to efficiently and effectively understand and navigate this management plan document
- **Executive Summary**
 - Synopsis of the major findings and recommendations
- **Introduction**
 - Brief explanation of the inventory and what was included
- **Goals & Objectives**
 - Explanation of the specific goals and objectives for this inventory
- **Data Collection & Tree Inspection Methodology**
 - Lists, explanations, and definitions of all data collected during the inventory
- **Stand Dynamics Results**
 - Summary information for the entire tree population inventoried including risk ratings assigned during the inventory with corresponding table and map displays with figures if applicable

- **Recommendations**
 - Summary of all recommendations made during the inventory including associated table and map displays, explanations and examples, and figures if applicable
- **Dedicated or Memorial Trees**
 - List of all dedicated or memorial trees observed during the inventory in a table and map display with corresponding figures if applicable
- **Defects or Observations**
 - List of all trees observed to have defects in the field in a table view with associated descriptive figures and maps if applicable
- **Entire Inventory**
 - List of all trees collected in a table display
- **List of Appended Items**
 - Listing of all appended items for this management plan

EXECUTIVE SUMMARY

In April, 2015, the Bartlett Inventory Solutions Team from Bartlett Tree Experts conducted an inventory of trees on the Providence College campus. We identified 1,489 trees that included 82 species. The attributes that we collected include tree latitude and longitude, size, age and condition class, and a visual assessment of tree structure, health, and **vigor**.

We conducted the attribute collection using a sub-meter accuracy Global Positioning Satellite Receiver (GPSr) device with an error-in-location potential of not greater than three meters. Our recommendations for the subject trees over the next three-year period are outlined below. All tree work activities will comply with current American National Standards Institute (ANSI) Z133.1 requirements for safety.

Tree Risk Assessments and Mitigation

Perform the recommended tree risk mitigation activities for the 246 trees (17%) which we found defects or concerns that prompted the need to use the International Society of Arboriculture's (ISA) risk matrices in the field. Risk mitigation activities will comply with current ANSI A300 standard practices.

Soil Sampling

Take soil samples throughout planting beds and actively managed areas. Soil analysis provides information on the presence of soil nutrients, pH, organic matter, and cation exchange capacity.

Bulk Density Sampling

Take bulk density samples throughout planting beds and actively managed areas to determine the amount of soil compaction.

Root Invigoration™

Perform Bartlett's patented Root Invigoration™ on 800 trees (54%) to improve aeration and promote more efficient root growth, especially for high-value trees in disturbed areas.

Root Collar Excavations

Perform **root collar** excavations to 755 trees (51%) to lower risk of damaging conditions such as **girdling roots**, basal cankers, masking of root decay and lower-stem decay, and predisposing trees to various insect and disease pests.

Plant Health Care (PHC)

Implement Bartlett's PHC program to monitor pests and diseases on the subject trees. Treatments are therapeutic and preventive, and treatment timing is based on pest life cycle.

Pruning

Prune 1,334 trees (90%) for safety, health, structure, and appearance. Pruning will comply with current ANSI A300 standard practices for pruning.

Structural Support

Install new and/or inspect previously installed structural support systems in 374 trees (25%) to reduce risk of branch or whole tree failure. Structural support system installation and/or inspection will comply with current ANSI A300 standard practices for supplemental support systems.

Lightning Protection

Install new and/or inspect previously installed lightning protection systems in 40 trees (3%) to try and intercept lightning strikes and conduct them to the ground. Lightning protection system installation and/or inspection will comply with current ANSI A300 standard practices for lightning protection systems.

Removals

Remove 67 trees (5%) due to condition or because of their location in relation to other trees to try and prevent competition or damage to infrastructure.

Advanced Tree Risk Assessments (Level 3)

Perform an advanced tree risk assessment for 71 trees (5%) to evaluate the impact of wood decay in **stems** and **buttress roots** that show potential for failure.

Vine Removal

Remove vines from 17 trees (1%) to prevent them from hiding defects.

INTRODUCTION

In April, 2015, Providence College in Providence, RI retained Bartlett Tree Experts to perform an inventory of trees on campus. Team members Jordan Endahl, Nicholas Martin, Paul Tribuna, and James Riddle visited the site from April 13-17 to conduct the inventory.

The inventory included:

- identifying trees species and attaching identification tags to each tree. Previously tagged trees were inventoried using their existing tag numbers (Tags 1-1,205), and newly inventoried trees were assigned new tag numbers (Tags 1,206 – 1,456);
- identifying the trees' condition, health, and vigor;
- recommending risk evaluations and removals of appropriate trees;
- recommending pruning, soil care and fertilization, and pest management treatments to promote tree safety, health, appearance, and longevity; and
- mapping the trees using GPSr hardware, Geographic Information System (GIS) software, and Bartlett Tree Experts' ArborScope™ web-based management system.

The methods and procedures we used to make the above determinations and recommendations are detailed in the following sections.

GOALS & OBJECTIVES

An effective management plan communicates clear goals and the specific objectives designed to carry out those goals. We intend “goal” to mean the overall aim or result we expect to achieve for the client in producing the inventory and management plan. The objectives are the specific actions taken or recommended to support goal completion. Table 1 below describes each goal and its corresponding objective(s).

Table 1: GOALS & OBJECTIVES

GOAL	OBJECTIVES TO ACCOMPLISH GOAL
Establish the tree inventory (per numbers agreed) at Providence College	Using Trimble® Geo GPSr hardware and ArborScope™ Inventory Management Tools, collect data such as tree name, location, size, age class, and condition class. Place tag on each tree or group of trees inventoried.
Provide mechanism for managing inventory, recommendations, and related budget planning.	Provide map or maps of the inventoried trees or tree groupings to assist the client in managing property areas. Submit a comprehensive management plan that documents and organizes findings and provides other resources to assist the client in efficient use of the information.
Maximize client understanding and implementation of management plan.	Include in management plan specific explanations and visuals related to plan recommendations. Provide appended resources that address health, procedures, and standards related to tree care. Make periodic contact with client to follow up and answer any questions about the management plan's contents.
Maximize immediate and long-term tree health and aesthetics.	Implement recommended plant healthcare program that uses <ul style="list-style-type: none"> • integrated pest management • soil care and fertilization • maintenance pruning
Manage immediate and long-term risk associated with trees in high-use areas.	Implement recommended risk mitigation measures that include <ul style="list-style-type: none"> • risk reduction pruning • required removals • tree structure evaluations

DATA COLLECTION & TREE INSPECTION METHODOLOGY

In conducting the inventory, we used specialized equipment and software and followed specific procedures to determine tree characteristics, risk evaluations, and recommendations. The following explanation will assist the reader in interpreting the findings of this management plan.

Data Collection Equipment & Attribute Data

The Inventory Team used Trimble® Geo GPSr hardware units, TerraSync™ and GPS Pathfinder® Office GIS software, ESRI ArcMap GIS software, and Bartlett Tree Experts' ArborScope™ web-based management system to inventory the trees. The attribute data we collected on site are listed below.

- botanical name and regional common name according to local ISA Chapter Tree Species List
- tree location based on GPS coordinate system
- tag number
- diameter at breast height (**DBH**)
- canopy radius

- age class
- height class
- condition class
- root zone infringement, based on **dripline** and estimated **grayscale** (e.g., sidewalks) impact on root zone
- priority of tree and shrub care (based on 3-year management plan)
- pruning
- need for new installation and/or inspection of existing structural support systems
- need for new installation and/or inspection of existing lightning protection systems
- need for advanced tree risk assessments (Level 3)
- tree removals
- soil care and fertilization recommendations
- plant health care recommendations
- noted defects/observations
- observed pests/diseases

Specifications/Definitions

Age Class

New Planting	Tree not yet established.
Young	Established tree but not in the landscape for many years.
Semi-mature	Established tree but has not yet reached full growth potential.
Mature	Tree within its full growth potential.
Over-mature	Tree that is declining or beginning to decline due to its age.

Height Class

Small	Less than 15 feet
Medium	15 to 40 feet
Large	Greater than 40 feet

Condition Class

Dead	
Poor	Most of the canopy displays dieback and undesirable leaf color, inappropriate leaf size or inadequate new growth. Tree or parts of tree are in the process of failure.
Fair	Parts of canopy display undesirable leaf color, inappropriate leaf size, and inadequate new growth. Parts of the tree are likely to fail.
Good	Tree health and condition are acceptable.

Tree and Shrub Care Priority

Priority class recommendations are based on a three-year management plan that takes into consideration tree species, condition, location, age, and proximity to infrastructure. We intend that this rating system assist decision makers in prioritizing tree pruning, cabling and bracing, and tree lightning protection recommendations. *Trees with a priority of 1 and an Overall Risk Rating of Extreme or High (see definitions in the next section) should be addressed immediately.* Prioritization does not take into account any budgetary or financial considerations.

Recommendations for Priorities 1, 2, and 3 are all based on observations by the inventory arborist. The following additional information clarifies each priority class:

- Priority 1** To be addressed in years 1 or 2 of the management cycle. Priority 1 may include trees with large dead wood, structural defects, located in exposed sites, high aesthetic value, and/or parts that are currently negatively interacting with infrastructure, such as branches that touch buildings, interfere with signage or lighting, or obstruct pathways.
- Priority 2** To be addressed in years 2 or 3 of the management cycle. Priority 2 may include trees with small dead wood, developing structural defects, located in semi-exposed sites, moderate esthetic value, and/or parts that are anticipated to negatively interact with infrastructure, such as branches that touch buildings, interfere with signage or lighting, or obstruct pathways.
- Priority 3** To be addressed in year 3 of the management cycle. Priority 3 may include trees with small dead wood, developing structural defects, located in lesser used sites, and/or parts that are anticipated to negatively interact with infrastructure, such as branches that rub on buildings, interfere with signage or lighting, or obstruct pathways.

Pruning

Each of the following is a selective pruning technique to achieve the pruning goal described:

- Clean** Remove one or more of dead, diseased, and/or broken branches.
- Raise** Provide vertical clearance.
- Thin** Reduce density of live branches.
- Reduce** Reduce height or spread, sometimes for a particular branch (overextended or co-dominant).
- Structural** Select live branches and stems to influence orientation, spacing, growth rate, strength of attachment, and ultimate size of branches and stems; possibly to reduce defects or space main branches on mature trees.
- Vista** A combination of thinning and reduction pruning to enhance the view from a vantage point to an area of interest while minimizing negative impacts on tree structure and health.

Tree Risk Assessments, Limitations & Glossary

In accordance with industry standards, tree risk ratings are derived from a combination of three factors: the *likelihood of failure*, the *likelihood of the failed tree part impacting a target*, and the *consequences* of the target being struck. The guidelines used to classify each of these factors are presented in the *ISA's BMP for Tree Risk Assessment* and guidelines developed by the Bartlett Tree Research Laboratories. *These factors are then used to categorize tree risk as Extreme, High, Moderate or Low.* The factors used to define your risk ratings are identified in this report. An explanation of terms used in this report appears in the glossary located in the appendix. The information provided in this report is based on the conditions identified at the time of inspection. Tree conditions do change over time so reassessment is recommended annually and after major storm events.

Limitations of Tree Risk Assessments

It is important for the tree owner or manager to know and understand that all trees pose some degree of risk from failure or other conditions. The information and recommendations within this report have been derived from the level of tree risk assessment identified in this report, using the information and practices outlined in the *International Society of Arboriculture's Best Management Practices for Tree Risk Assessment*, as well as the information available at the time of the inspection. However, the overall risk rating, the mitigation recommendations, or any other conclusions do not preclude the possibility of failure from undetected conditions, weather events, or other acts of man or nature. Trees can unpredictably fail even if no defects or other conditions are present. It is the responsibility of the tree owner or manager to schedule repeat or advanced assessments, determine actions, and implement follow up recommendations, monitoring and/or mitigation.

Bartlett Tree Experts can make no warranty or guarantee whatsoever regarding the safety of any tree, trees, or parts of trees, regardless of the level of tree risk assessment provided, the risk rating, or the residual risk rating after mitigation. The information in this report should not be considered as making safety, legal, architectural, engineering, landscape architectural, land surveying advice or other professional advice. This information is solely for the use of the tree owner and manager to assist in the decision making process regarding the management of their tree or trees. Tree risk assessments are simply tools which should be used in conjunction with the owner or tree manager's knowledge, other information and observations related to the specific tree or trees discussed, and sound decision making.

Glossary

Tree risk assessment has a unique set of terms with specific meanings. Definitions of all specific terms may be found in the *International Society of Arboriculture's Best Management Practice for Tree Risk Assessment*. Definitions of some of these terms used in this report are as follows:

The *likelihood of failure* may be categorized as imminent meaning that failure has started or could occur at any time; probable meaning that failure may be expected under normal weather conditions within the next 3 years; possible meaning that failure could occur, but is unlikely under normal weather conditions during that time frame; and improbable meaning that failure is not likely under normal weather conditions, and may not occur in severe weather conditions during that time frame.

The *likelihood of the failed tree part impacting a target* may be categorized as high meaning that a failed tree or tree part will most likely impact a target; medium meaning that a failed tree or tree part may or may not impact a target with equal likelihood; low meaning that the failed tree or tree part is not likely to impact a target; and very low meaning that the chance of a failed tree or tree part impacting the target is remote.

The *Likelihood of Failure and Impact* is defined by Table 2, the Likelihood Matrix:

Table 2: LIKELIHOOD OF FAILURE AND IMPACT

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

The *consequences* of a known target being struck may be categorized as severe meaning that impact could involve serious personal injury or death, damage to high value property, or disruption to important activities; significant meaning that the impact may involve personal injury, property damage of moderate to high value, or considerable disruption; minor meaning that impact could cause low to moderate property damage, small disruptions to traffic or a communication utility, or minor injury; and negligible meaning that impact may involve low value property damage, disruption that can be replaced or repaired, and do not involve personal injury.

Targets are people, property, or activities that could be injured, damaged or disrupted by a tree failure.

Levels of assessment 1) *Limited visual assessments* are conducted to identify obvious defects. 2) *Basic assessments* are visual inspections done by walking around the tree looking at the site, buttress roots, trunk and branches. It may include the use of simple tools to gain information about the tree or defects. 3) *Advanced assessments* are performed to provide detailed information about specific tree parts, defects, targets of site conditions. Drilling to detect decay is an advanced assessment technique.

Tree Risk Ratings are terms used to communicate the level of risk rating. They are defined in Table 3, the Risk Matrix, as a combination of Likelihood and Consequences:

Table 3: ISA RISK MATRIX

Likelihood of Failure & Impact	Consequences of the Tree Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Overall tree risk rating is the highest individual risk identified for the tree. The *residual risk* is the level of risk the tree should pose after the recommended mitigation.

STAND DYNAMICS RESULTS



STAND DYNAMICS RESULTS

In reviewing the results and recommendations, the reader will find useful the specifications and definitions detailed on pages 2-6 above. We used the following categories to organize the stand dynamics results, which are displayed in tables:

- **Tree Risk Assessment Report and Mitigation**
- **Subject Trees Summarized According to:**
 - Tree Species Identified
 - Tree Groupings
 - Condition Class
 - Age Class
 - Tree Size per DBH
 - Estimated Value

Where appropriate, we have included explanations, photos, drawings, or other information to illuminate the table contents.

Tree Risk Assessment Report and Mitigation

As part of the inventory process, the Inventory Team conducts a basic assessment (Level 2) from the ground. While every tree poses a risk, typically *Low*, the trees in the following table were assigned *likelihood of failure, likelihood of the failed tree part impacting a target, and consequences* ratings in the field. The Inventory Team found conditions with these trees that posed a hazardous situation, prompting the arborists to go through the steps outlined in the Tree Risk Assessments, Limitations, and Glossary section of this plan. Risk ratings were then assigned to these trees.

Table 4 summarizes the inventoried trees that were observed posing a hazardous situation during the course of the inventory. The table is organized first by Risk Rating (highest to lowest), then by Tree Work Priority (ascending order), and finally by Tree ID (ascending order).

Table 4: TREE RISK ASSESSMENT REPORT AND MITIGATION (246 Trees)

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
548	Beech-European	40	High	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-branch • Fungi/conks
562	Maple-Norway	26	High	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-stem • Cavity-branch
576	Maple-Norway	21	High	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Overextended branch • Dead branches >2 • Cavity-stem • Wound-root
593	Maple-Norway	23	High	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Hanger • Dead branches >2

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
615	Oak- Black	36	High	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-stem • Cavity-branch • Cut roots
674	Maple-Norway	21	High	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
691	Maple-Norway	21	High	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-branch • Seam
803	Maple-Sugar	19	High	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Hanger • Co-dominant leaders • Girdling roots present
885	Pine-Eastern White	31	High	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Poor branch structure • Dead branches >2 • Cavity-stem • Cut roots
975	Oak-White	30	High	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Cavity-root flare • Dead branches >2 • Hanger • Would-branch
1202	Oak-White	45	High	1	Yes	Yes	...	...	Building	<ul style="list-style-type: none"> • Dead branches >2

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
793	Maple-Norway	28	High	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Cavity-branch • Dead branches >2 • Hanger • Overextended branch
45	Oak-Pin	44	Moderate	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Hanger • Dead branches >2 • Overextended branch
208	Cherry-Black	19	Moderate	1	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Dead branches >2 • Hanger • Co-dominant leaders • Included bark • Fungi/conks
211	Oak - Scarlet	26	Moderate	1	Yes	Yes	...	Yes	Playground	<ul style="list-style-type: none"> • Hanger • Dead branches >2 • Co-dominant leaders • Included bark • Cavity-branch • Girdling roots present
250	Pear-Callery	15	Moderate	1	...	...	Remove	...	Building	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
286	Maple-Norway	23	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Hanger • Dead branches >2 • Poor branch structure
293	Maple-Norway	21	Moderate	1	Yes	...	...	...	Building	<ul style="list-style-type: none"> • Wound-root flare • Poor branch structure • Dead branches >2

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
310	Maple-Norway	14	Moderate	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Wound-stem • Wound-branch • Dead branches >2 • Co-dominant leaders
314	Maple-Red	20	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Hanger • Co-dominant leaders • Included bark • Dead branches >2
320	Maple-Norway	21	Moderate	1	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Cavity-branch • Rib • Co-dominant leaders • Included bark • Dead branches >2 • Poor branch structure
326	Maple-Norway	17	Moderate	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Hanger • Co-dominant leaders • Included bark • Cavity-branch • Dead branches >2
329	Maple-Norway	13	Moderate	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Hanger • Cavity-stem • Poor branch structure
345	Maple-Norway	25	Moderate	1	Yes	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark
380	Maple-Sugar	22	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Hanger • Dead branches >2 • Poor branch structure

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
436	Oak-White	36	Moderate	1	Yes	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-branch • Cavity-stem • Overextended branch
437	Oak - Scarlet	30	Moderate	1	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Sidewalk lifting-major • Dead branches >2 • Overextended branch • Co-dominant leaders
470	Maple-Norway	32	Moderate	1	...	...	Remove	...	Parking	<ul style="list-style-type: none"> • Wound-stem • Cavity-stem • Co-dominant leaders • Included bark • Rib • Dead branches >2
472	Maple-Norway	37	Moderate	1	...	...	Remove	...	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Cavity-branch • Dead branches >2 • Overextended branch
483	Maple-Norway	39	Moderate	1	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Wound-stem • Co-dominant leaders • Included bark • Overextended branch • Girdling roots present
497	Crabapple	30	Moderate	1	Yes	Yes	...	...	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Cut roots

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
506	Honeylocust-Thornless Common	11	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Wound-stem • Hanger • Cut roots
521	Oak-White	40	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
563	Oak- Black	45	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Poor branch structure • Dead branches >2 • Wound-stem • Wound-root flare
583	Maple-Norway	23	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Cavity-branch • Wound-root flare • Girdling roots present
588	Maple-Norway	28	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Poor branch structure • Cavity-branch • Dead branches >2 • Hanger • Seam
597	Oak-White	40	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Overextended branch

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
614	Oak-White	34	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-stem • Cut roots
617	Maple-Norway	17	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
621	Oak-White	42	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Wound-stem • Dead branches >2
675	Maple-Norway	17	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
690	Maple-Norway	14	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Wound-stem
693	Oak-White	32	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Poor branch structure • Overextended branch • Dead branches >2 • Cavity-stem • Wound-stem • Butt swell
703	Falsecypress-Sawara (11)	12	Moderate	1	Yes	...	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Crack-stem
719	Maple-Norway	26	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-stem • Wound-stem

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
720	Maple-Norway	18	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Cavity-stem • Co-dominant leaders
721	Oak- Northern Red	45	Moderate	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Cavity-branch • Wound-stem • Hanger • Dead branches >2
722	Oak- Northern Red	24	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2
723	Oak- Northern Red	19	Moderate	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-root flare • Cavity-stem • Dead branches >2
724	Oak- Northern Red	24	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Wound-branch
730	Maple-Red	5	Moderate	1	...	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
736	Oak- Black	32	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Overextended branches • Dead branches >2
760	Oak- Northern Red	22	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-branch

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
773	Maple-Norway	25	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Dead branches >2 • Hanger • Rib • Crack-branch
774	Maple-Norway	16	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Crack-branch • Rib • Dead branches >2 • Wound-stem
800	Maple-Norway	28	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Crack-branch • Dead branches >2 • Cavity-stem • Wound-stem • Fungi/conks
802	Maple-Sugar	30	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-stem • Cavity-branch
854	Oak- Black	31	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Overextended branch • Dead branches >2

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
863	Oak-Pin	26	Moderate	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Overextended branch • Dead branches >2 • Wound-root flare
864	Maple-Norway	24	Moderate	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Dead branches >2 • Hanger • Cavity-branch
869	Pine-Eastern White	23	Moderate	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Uneven crown • Wound-stem • Burl
870	Maple-Norway	23	Moderate	1	Yes	Yes	...	Yes	Driveway	<ul style="list-style-type: none"> • Wound-stem • Seam • Dead branches >2 • Hanger • Overextended branches • Cavity-stem
879	Pine-Eastern White	30	Moderate	1	Yes	Yes	...	...	Driveway	<ul style="list-style-type: none"> • Seam • Poor branch structure • Overextended branch • Dead branches >2
882	Pine-Eastern White	27	Moderate	1	Yes	Yes	...	Yes	Driveway	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Wound-root flare
883	Pine-Eastern White	24	Moderate	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Seam

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
889	Pine-Eastern White	29	Moderate	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Burl
963	Falsecypress-Sawara	20	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark
978	Honeylocust-Thornless Common	14	Moderate	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2
1001	Horsechestnut-Common	28	Moderate	1	Yes	Yes	...	Yes	Picnic table	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Cavity-stem • Included bark
1003	Oak- Black	21	Moderate	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Overextended branch • Wound-stem
1004	Oak- Black	23	Moderate	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch • Hanger
1026	Oak- Black	26	Moderate	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders
1027	Oak- Black	36	Moderate	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Overextended branch • Wound-branch
1030	Pine-Eastern White	30	Moderate	1	Yes	...	...	Yes	Driveway	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
1042	Sweetgum	30	Moderate	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Wound-branch
1098	Oak-White	54	Moderate	1	Yes	...	...	Yes	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Overextended branch • Cavity-stem • Fungi/conks
1107	Pine-Eastern White	48	Moderate	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Wound-stem • Overextended branch • Dead branches >2 • Poor branch structure
1110	Oak- Black	19	Moderate	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Hanger • Dead branches >2 • Co-dominant leaders • Included bark • Wound-branch
1115	Pine-Eastern White	32	Moderate	1	Yes	Yes	...	...	Play area	<ul style="list-style-type: none"> • Hanger • Dead branches >2 • Wound-stem
1129	Oak- Northern Red	57	Moderate	1	Yes	Yes	...	Yes	Driveway	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Poor branch structure • Overextended branch • Dead branches >2 • Cavity-branch

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
1135	Hemlock-Canadian	27	Moderate	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Wound-stem
1162	Oak- Black	30	Moderate	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch
1315	Maple-Norway	28	Moderate	1	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Hanger • Cavity-stem • Cavity-branch • Dead branches >2 • Co-dominant leaders
1410	Oak- Black	18	Moderate	1	Yes	Yes	...	...	Building	<ul style="list-style-type: none"> • Co-dominant leaders • Hanger • Dead branches >2 • Lean
1413	Oak- Black	21	Moderate	1	Yes	Yes	...	...	Building	<ul style="list-style-type: none"> • Lean • Dead branches >2 • Co-dominant leaders
1186	Maple-Silver	34	Moderate	3	...	Yes	...	...	Street	<ul style="list-style-type: none"> • Cavity-stem • Co-dominant leaders
12	Spruce-Colorado Blue	18	Low	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2
23	Spruce-Colorado Blue	25	Low	1	Yes	Yes	...	Yes	Wall	<ul style="list-style-type: none"> • Co-dominant stems • Included bark • Co-dominant leaders
28	Maple-Norway	30	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-branch • Dead branches >2 • Girdling roots present

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
35	Spruce-Colorado Blue	21	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Seam • Dead branches >2
41	Oak- Black	30	Low	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Construction damage • Dead branches >2 • Uneven crown
47	Maple-Norway	27	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Cavity-branch • Dead branches >2 • Girdling roots present
61	Spruce-Colorado Blue	22	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Dead branches >2
72	Spruce-Colorado Blue	21	Low	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches <=2
87	Mimosa	21	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Wound-stem • Cavity-stem • Co-dominant leaders • Overextended branch • Dead branches >2
91	Oak- Black	30	Low	1	Yes	Yes	...	Yes	Other	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Construction damage
92	Oak- Black	37	Low	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
96	Maple-Norway	22	Low	1	Yes	...	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Girdling roots present • Cavity-stem
100	Maple-Norway	27	Low	1	Yes	Yes	...	Yes	Bench	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Overextended branch
105	Oak - Scarlet	39	Low	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches <=2 • Butt swell • Overextended branch
108	Maple-Norway	29	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Crack-stem
129	Oak - Scarlet	22	Low	1	Yes	...	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2
131	Elm-American	24	Low	1	Yes	Yes	...	...	Street	<ul style="list-style-type: none"> • Dead branches >2 • Uneven crown
166	Oak - Scarlet	13	Low	1	Yes	...	...	...	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cut roots
214	Pine-Eastern White	12	Low	1	Yes	...	...	...	Playground	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Girdling roots present

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
216	Pine-Eastern White	15	Low	1	Yes	Yes	...	Yes	Playground	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Girdling roots present
221	Pine-Eastern White	15	Low	1	Yes	Yes	...	Yes	Playground	<ul style="list-style-type: none"> • Dead branches <=2 • Co-dominant leaders • Included bark
223	Pine-Eastern White	17	Low	1	Yes	Yes	...	Yes	Playground	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2
224	Pine-Eastern White	17	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2
227	Maple-Norway	27	Low	1	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Seam • Girdling roots present • Co-dominant leaders • Included bark • Dead branches >2
251	Pear-Callery	15	Low	1	...	...	Remove	...	Building	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2
269	Pine-Eastern White	14	Low	1	Yes	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2
281	Oak - Scarlet	29	Low	1	Yes	Yes	...	Yes	Building	<ul style="list-style-type: none"> • Butt swell • Cut roots • Co-dominant leaders • Included bark • Dead branches <=2

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
284	Beech-European	35	Low	1	Yes	Yes	...	Yes	Building	<ul style="list-style-type: none"> • Cavity-stem • Dead branches >2 • Overextended branch • Included bark
292	Honeylocust-Thornless Common	20	Low	1	Yes	...	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches <=2 • Poor branch structure
294	Honeylocust-Thornless Common	19	Low	1	Yes	...	...	...	Play area	<ul style="list-style-type: none"> • Dead branches >2 • Poor branch structure
298	Honeylocust-Thornless Common	15	Low	1	...	...	Remove	...	Building	<ul style="list-style-type: none"> • Cavity-stem • Dead branches <=2 • Poor branch structure • Overextended branch • Fungi/conks
311	Oak - Scarlet	50	Low	1	Yes	Yes	...	Yes	Walking path	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2 • Overextended branch • Cavity-branch
313	Maple-Red	18	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Poor branch structure • Dead branches <=2
315	Oak- Black	30	Low	1	Yes	Yes	...	...	Street	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch • Poor branch structure
316	Oak- Black	21	Low	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
318	Oak- Black	24	Low	1	Yes	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Overextended branch
344	Beech- European	29	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Co-dominant leaders • Included bark • Dead branches >2
349	Maple-Norway	26	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Co-dominant leaders • Included bark • Dead branches >2
350	Oak - Scarlet	30	Low	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Butt swell • Dead branches >2
351	Maple-Norway	21	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Rib • Dead branches >2 • Poor branch structure
352	Maple-Norway	25	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Dead branches >2
365	Spruce- Colorado Blue	16	Low	1	Yes	...	...	...	Play area	<ul style="list-style-type: none"> • Dead branches >2 • Wound-stem
381	Oak - Scarlet	24	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
382	Oak - Scarlet	22	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant stems • Included bark • Overextended branch • Wound-root flare • Dead branches >2
394	Oak - Scarlet	26	Low	1	Yes	...	...	Yes	Parking	<ul style="list-style-type: none"> • Wound-stem • Co-dominant leaders • Included bark • Dead branches >2
400	Oak - Scarlet	19	Low	1	Yes	...	...	...	Parking	<ul style="list-style-type: none"> • Wound-stem • Construction damage • Dead branches >2
404	Oak - Scarlet	27	Low	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Poor branch structure • Dead branches >2
406	Oak - Scarlet	35	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Overextended branch
413	Oak - Scarlet	21	Low	1	Yes	...	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark
431	Oak-White	33	Low	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders
434	Oak-White	30	Low	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Wound-root flare • Dead branches <=2 • Co-dominant leaders • Planting material

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
435	Maple-Norway	22	Low	1	Yes	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2 • Girdling roots present • Cavity-stem
442	Oak - Scarlet	33	Low	1	Yes	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Overextended branch
443	Oak-White	33	Low	1	Yes	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Dead branches <=2 • Co-dominant leaders • Overextended branch
444	Oak-White	29	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2 • Wound-root flare
446	Oak-White	38	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Construction damage • Wound-branch • Wound-stem
447	Oak-White	32	Low	1	Yes	Yes	...	Yes	Picnic table	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark
448	Maple-Norway	19	Low	1	...	...	Remove	...	Picnic table	<ul style="list-style-type: none"> • Co-dominant leaders • Hanger • Dead branches >2 • Wound-stem

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
453	Maple-Norway	29	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches <=2 • Construction damage • Cavity-branch
454	Spruce-Colorado Blue	13	Low	1	...	...	Remove	...	Parking	<ul style="list-style-type: none"> • Wound-root flare • Wound-stem • Construction damage
456	Maple-Red	24	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Poor branch structure
457	Maple-Norway	26	Low	1	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Cavity-stem • Cavity-branch • Co-dominant leaders • Dead branches <=2
467	Maple-Norway	20	Low	1	...	Yes	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
468	Maple-Norway	33	Low	1	...	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
469	Spruce-Colorado Blue	14	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2
477	Maple-Red	33	Low	1	...	...	Remove	...	Parking	<ul style="list-style-type: none"> • Cavity-stem • Co-dominant leaders • Included bark • Overextended branch • Rib • Dead branches <=2

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
485	Crimson King Maple	13	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Wound-stem • Co-dominant leaders • Included bark • Dead branches <=2
492	Cherry	30	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Poor branch structure • Cavity-stem
494	Cherry	29	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Fungi/conks • Crack-stem
499	Maple-Red	32	Low	1	...	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
509	Pear-Callery	19	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Overextended branch • Poor branch structure • Cut roots
511	Birch-Paper	11	Low	1	Yes	...	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cut roots
542	Oak- Northern Red	34	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
544	Maple-Norway	21	Low	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-stem • Burl

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
545	Maple-Norway	19	Low	1	Yes	...	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches <=2 • Crack-branch
553	Cherry	14	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem
554	Weeping Cherry	16	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem
559	Maple-Norway	20	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem
561	Maple-Norway	27	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-branch • Cavity-stem • Dead branches >2 • Rib • Fungi/conks
570	Fir-White	21	Low	1	Yes	...	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Seam • Dead branches >2
571	Maple-Norway	21	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-branch • Wound-stem
589	Maple-Norway	23	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Lean
592	Maple-Norway	25	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Cavity-branch • Co-dominant leaders

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
623	Maple-Norway	34	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Wound-stem • Wound-branch • Dead branches >2 • Overextended branch
678	Linden-Littleleaf	17	Low	1	...	...	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Wound-stem
699	Beech-European	45	Low	1	Yes	Yes	...	Yes	Bench	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Overextended branch • Cavity-branch
706	Maple-Norway	18	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Rib
707	Oak-White	46	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-stem
714	Oak- Black	43	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Overextended branch • Dead branches >2 • Cut roots
717	Maple-Norway	24	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem
718	Maple-Norway	20	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-branch

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
725	Oak- Black	27	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2
740	Oak-White	37	Low	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
741	Oak- Black	48	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches <=2
746	Spruce-Colorado Blue	16	Low	1	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2
752	Oak- Northern Red	18	Low	1	...	...	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Girdling roots present
753	Oak- Northern Red	17	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
756	Oak- Black	27	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant stems • Included bark • Dead branches >2 • Hanger • Cavity-branch • Overextended branch
758	Oak-White	19	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
759	Oak- Northern Red	22	Low	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Wound-stem
763	Oak- Black	35	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Cavity-stem

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
764	Oak- Black	32	Low	1	Yes	Yes	...	Yes	Other	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
766	Oak- Northern Red	33	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Overextended branch • Dead branches >2
770	Pear-Callery	11	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
779	Maple-Norway	19	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem
783	Maple-Norway	17	Low	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Overextended branch • Dead branches >2 • Wound-stem • Wound-branch • Crack-branch
786	Tree of Heaven	25	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Rib • Butt swell
794	Maple-Norway	28	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Rib • Cavity-stem • Cavity-branch
920	Pear-Callery	15	Low	1	...	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant stems • Included bark

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
934	Maple-Norway	22	Low	1	Yes	Yes	...	Yes	Driveway	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Crack-branch • Wound-stem
935	Maple-Norway	16	Low	1	Yes	Yes	...	Yes	Driveway	<ul style="list-style-type: none"> • Co-dominant stems • Included bark • Girdling roots suspected • Overextended branch • Dead branches >2 • Wound-stem
943	Purple Leaf Plum	4	Low	1	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Wound-root flare
983	Pine-Eastern White	22	Low	1	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Overextended branch • Dead branches >2
995	Catalpa-Northern	23	Low	1	Yes	Yes	...	Yes	Driveway	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Wound-stem
999	Oak-White	42	Low	1	Yes	Yes	...	Yes	Driveway	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch • Cavity-root flare
1000	Oak-White	34	Low	1	Yes	Yes	...	...	Driveway	<ul style="list-style-type: none"> • Dead branches >2
1002	Catalpa-Northern	19	Low	1	Yes	Yes	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch • Wound-stem

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
1005	Pine-Eastern White	27	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch • Poor branch structure • Wound-stem • Cavity-stem • Co-dominant leaders
1007	Pine-Eastern White	24	Low	1	...	...	Remove	...	Parking	<ul style="list-style-type: none"> • Wound-branch • Wound-stem • Poor branch structure • Dead branches >2
1029	Pine-Eastern White	24	Low	1	Yes	...	...	Yes	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders
1068	Oak- Northern Red	56	Low	1	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Wound-bark • Dead branches >2
1205	Oak- Black	21	Low	1	Yes	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Hanger
1414	Mulberry- White	14	Low	1	...	...	Remove	...	Building	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Lean
39	Spruce- Colorado Blue	19	Low	2	Yes	...	...	...	Parking	<ul style="list-style-type: none"> • Wound-root flare • Sweep • Dead branches <=2
132	Oak - Scarlet	34	Low	2	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Uneven crown • Construction damage

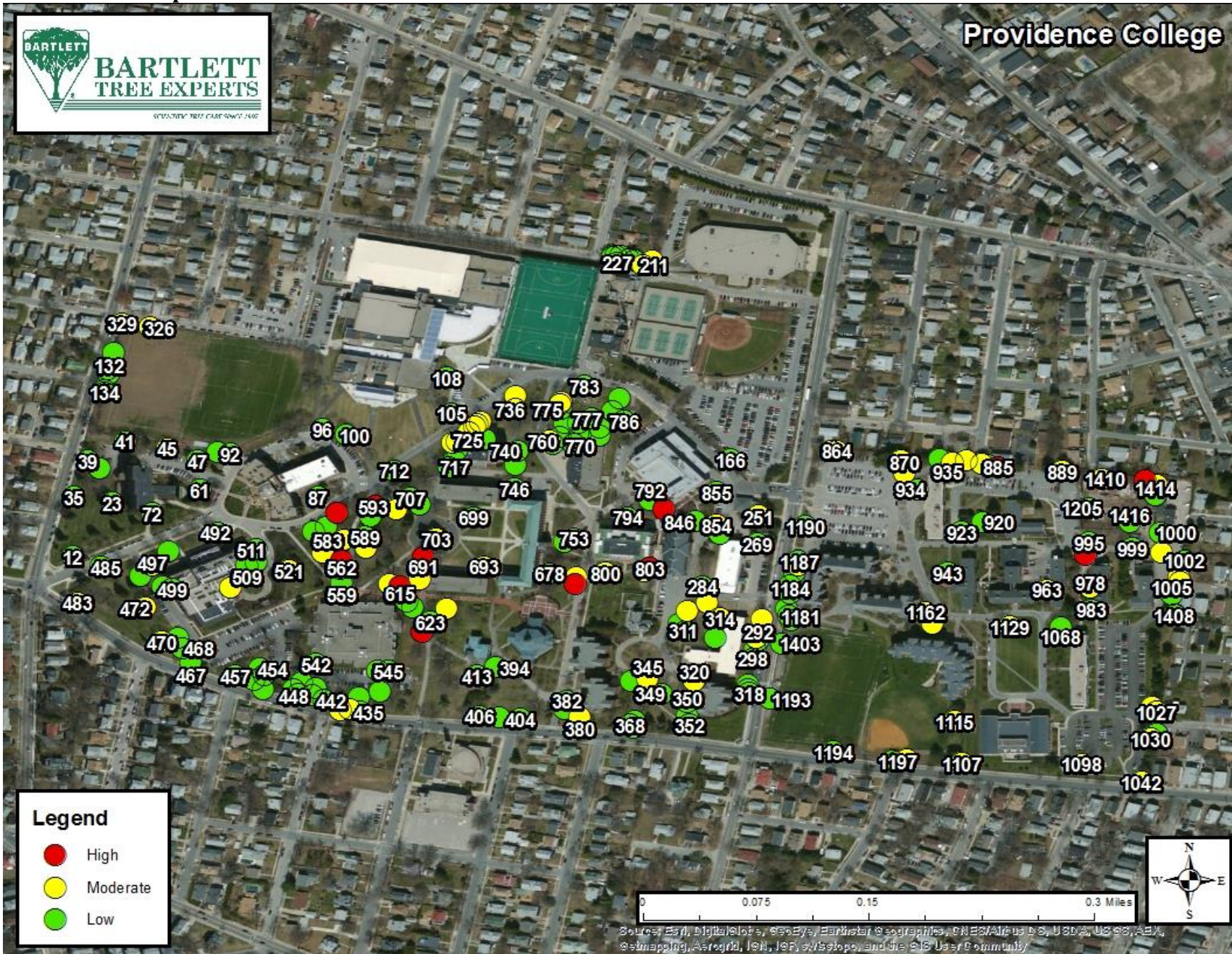
Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
133	Oak - Scarlet	26	Low	2	Yes	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches <=2 • Uneven crown • Construction damage
134	Oak - Scarlet	48	Low	2	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches <=2 • Uneven crown • Girdling roots present • Construction damage
309	Spruce-Norway	12	Low	2	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Cavity-stem • Wound-branch • Suppressed
367	Spruce-Colorado Blue	13	Low	2	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Cavity-stem • Dead branches >2 • Wound-root flare
368	Spruce-Colorado Blue	14	Low	2	...	...	Remove	...	Street	<ul style="list-style-type: none"> • Cavity-stem • Dead branches >2
452	Maple-Norway	16	Low	2	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2
498	Maple-Red	22	Low	2	...	Yes	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
510	Pear-Callery	19	Low	2	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Cavity-branch • Cut roots • Poor branch structure
573	Spruce-Colorado Blue	17	Low	2	Yes	...	...	...	Parking	<ul style="list-style-type: none"> • Dead branches >2 • Butt swell • Wound-stem

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
712	Maple-Norway	24	Low	2	...	...	Remove	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Rib • Cavity-stem • Cavity-branch • Crack-branch
775	Maple-Norway	15	Low	2	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2
777	Maple-Norway	18	Low	2	Yes	Yes	...	Yes	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Wound-stem • Wound-root flare
778	Maple-Norway	18	Low	2	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Cavity-stem
792	Maple-Sycamore	19	Low	2	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Wound-branch • Included bark
846	Lilac-Japanese Tree	8	Low	2	Yes	...	...	Yes	Parking	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Wound-stem • Dead branches <=2
855	Redbud-Eastern	13	Low	2	...	...	Remove	...	Parking	<ul style="list-style-type: none"> • Wound-stem • Dead branches >2 • Cavity-stem • Uneven crown
877	Pine-Austrian	26	Low	2	Yes	...	...	...	Driveway	<ul style="list-style-type: none"> • Dead branches >2
884	Pine-Eastern White	21	Low	2	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Dead branches >2 • Wound-stem • Uneven crown

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
923	Birch-Gray	12	Low	2	Yes	Yes	...	...	Sidewalk	<ul style="list-style-type: none"> • Cavity-stem • Co-dominant leaders • Dead branches <=2 • Hanger
1408	Maple-Norway	10	Low	2	...	...	Remove	...	Deck	<ul style="list-style-type: none"> • Wound-stem
1416	Boxelder	15	Low	2	...	...	Remove	...	Driveway	<ul style="list-style-type: none"> • Lean • Wound-stem • Co-dominant leaders
767	Pear-Callery	13	Low	3	...	...	Remove	...	Fence	<ul style="list-style-type: none"> • Cavity-stem • Co-dominant leaders • Included bark • Lean
1180	Maple-Silver	32	Low	3	...	Yes	...	...	Street	<ul style="list-style-type: none"> • Cavity-stem • Overextended branch
1181	Maple-Norway	19	Low	3	Yes	...	...	...	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Uneven crown
1182	Maple-Norway	23	Low	3	Yes	...	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders • Uneven crown
1183	Cherry	14	Low	3	...	...	...	...	Walking path	<ul style="list-style-type: none"> • Overextended branch
1184	Maple-Norway	21	Low	3	...	Yes	...	...	Street	<ul style="list-style-type: none"> • Crack-stem • Uneven crown
1185	Cherry	12	Low	3	...	...	...	...	Walking path	<ul style="list-style-type: none"> • Overextended branch
1187	Cherry	12	Low	3	...	...	...	...	Sidewalk	<ul style="list-style-type: none"> • Overextended branch
1190	Oak- Black	27	Low	3	...	Yes	...	...	Parking	<ul style="list-style-type: none"> • Uneven crown • Overextended branch
1193	Oak- Black	24	Low	3	...	Yes	...	...	Parking	<ul style="list-style-type: none"> • Construction damage • Uneven crown
1194	Maple-Silver	32	Low	3	...	Yes	...	...	Street	<ul style="list-style-type: none"> • Overextended branch

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Reduce	Removal	Cable	Primary Target	Defect or Observation
1196	Oak- Black	22	Low	3	Yes	...	...	Yes	Street	<ul style="list-style-type: none"> • Co-dominant leaders
1197	Oak- Black	21	Low	3	Yes	...	...	...	Street	<ul style="list-style-type: none"> • ...
1403	Maple-Norway	24	Low	3	...	...	...	...	Street	<ul style="list-style-type: none"> • Cavity-stem • Uneven crown • Construction damage

Map 1: INVENTORIED TREES ASSIGNED RISK RATINGS AT THE TIME OF DATA COLLECTION



Stand Dynamics

Tree Species Identified

Our inventory revealed 82 species of trees, as detailed in the following table:

Table 5: TREE SPECIES IDENTIFIED

Genus	Species	Common Name	Count	% Distribution Total
Abies	<i>balsamea</i>	Fir-Balsam	3	<1%
	<i>concolor</i>	Fir-White	2	<1%
Abies Total			5	<1%
Acer	<i>griseum</i>	Maple-Paperbark	11	1%
	<i>negundo</i>	Boxelder	1	<1%
	<i>palmatum</i>	Maple-Japanese	20	1%
	<i>platanoides</i> 'Crimson King'	Crimson King Maple	15	1%
	<i>platanoides</i>	Maple-Norway	159	11%
	<i>pseudoplatanus</i>	Maple-Sycamore	1	<1%
	<i>rubrum</i>	Maple-Red	48	3%
	<i>saccharinum</i>	Maple-Silver	6	<1%
	<i>saccharum</i>	Maple-Sugar	15	1%
<i>x freemanii</i>	Maple-Freeman's	1	<1%	
Acer Total			277	19%
Aesculus	<i>hippocastanum</i>	Horsechestnut-Common	4	<1%
Ailanthus	<i>altissima</i>	Tree of Heaven	1	<1%
Albizia	<i>julibrissin</i>	Mimosa	1	<1%
Amelanchier	<i>canadensis</i>	Serviceberry	16	1%
Betula	<i>nigra</i>	Birch-River	4	<1%
	<i>papyrifera</i>	Birch-Paper	15	1%
	<i>pendula</i>	Birch-European White	1	<1%
	<i>populifolia</i>	Birch-Gray	1	<1%
Betula Total			21	1%
Carpinus	<i>betulus</i>	Hornbeam-European	1	<1%
	<i>caroliniana</i>	Hornbeam-American	1	<1%
Carpinus Total			2	<1%
Catalpa	sp.	Catalpa	1	<1%
	<i>speciosa</i>	Catalpa-Northern	4	<1%
Catalpa Total			5	<1%
Cedrus	<i>atlantica</i>	Cedar-Atlas	12	1%
Cercis	<i>canadensis</i>	Redbud-Eastern	3	<1%
Chamaecyparis	<i>pisifera</i>	Falsecypress-Sawara	26	2%
Cornus	<i>florida</i>	Dogwood-Flowering	45	3%

Genus	Species	Common Name	Count	% Distribution Total
	<i>kousa</i>	Dogwood-Kousa	35	2%
	<i>mas</i>	Dogwood-Corneliancherry	2	<1%
Cornus Total			82	6%
Crataegus	sp.	Hawthorn	2	<1%
Euonymus	<i>alatus</i>	Burning Bush	1	<1%
Fagus	<i>sylvatica</i>	Beech-European	10	1%
Fraxinus	<i>americana</i>	Ash-White	16	1%
	<i>pennsylvanica</i>	Ash-Green	8	1%
Fraxinus Total			24	2%
Ginkgo	<i>biloba</i>	Ginkgo	14	1%
Gleditsia	<i>triacanthos</i> 'var. inermis'	Honeylocust-Thornless Common	50	3%
Ilex	<i>opaca</i>	Holly-American	8	1%
Liquidambar	<i>styraciflua</i>	Sweetgum	1	<1%
Liriodendron	<i>tulipifera</i>	Tuliptree	9	1%
Magnolia	<i>stellata</i>	Magnolia-Star	8	1%
	<i>virginiana</i>	Magnolia-Sweetbay	2	<1%
	<i>x soulangiana</i>	Magnolia-Saucer	6	<1%
Magnolia Total			16	1%
Malus	sp.	Crabapple	44	3%
Morus	<i>alba</i>	Mulberry-White	3	<1%
Nyssa	<i>sylvatica</i>	Tupelo-Black	1	<1%
Oxydendrum	<i>arboreum</i>	Sourwood	1	<1%
Picea	<i>abies</i>	Spruce-Norway	8	1%
	<i>glauca</i>	Spruce-White	12	1%
	<i>pungens</i>	Spruce-Colorado Blue	64	4%
Picea Total			84	6%
Pinus	<i>nigra</i>	Pine-Austrian	18	1%
	<i>strobus</i>	Pine-Eastern White	102	7%
	<i>sylvestris</i>	Pine-Scotch	8	1%
Pinus Total			128	9%
Platanus	<i>occidentalis</i>	Sycamore-American	1	<1%
	<i>x acerifolia</i>	Planetree-London	12	1%
Platanus Total			13	1%
Populus	<i>nigra</i>	Poplar-Lombardy	8	1%
Prunus	<i>cerasifera</i>	Purple Leaf Plum	23	2%
	<i>serotina</i>	Cherry-Black	1	<1%
	sp.	Cherry	52	3%
	<i>subhirtella</i>	Weeping Cherry	14	1%

Genus	Species	Common Name	Count	% Distribution Total
Prunus Total			90	6%
<i>Pseudotsuga</i>	<i>menziesii</i>	Fir-Douglas	1	<1%
<i>Pyrus</i>	<i>calleryana</i>	Pear-Callery	61	4%
<i>Quercus</i>	<i>alba</i>	Oak-White	30	2%
	<i>bicolor</i>	Oak-Swamp White	1	<1%
	<i>coccinea</i>	Oak - Scarlet	45	3%
	<i>macrocarpa</i>	Oak-Bur	1	<1%
	<i>palustris</i>	Oak-Pin	17	1%
	<i>robur</i>	Oak-English	11	1%
	<i>rubra</i>	Oak- Northern Red	22	1%
	<i>velutina</i>	Oak- Black	48	3%
Quercus Total			175	12%
<i>Syringa</i>	<i>reticulata</i>	Lilac-Japanese Tree	14	1%
	<i>vulgaris</i>	Lilac-Common	11	1%
Syringa Total			25	2%
<i>Taxodium</i>	<i>ascendens</i>	Pondcypress	1	<1%
<i>Taxus</i>	sp.	Yew	1	<1%
<i>Thuja</i>	<i>occidentalis</i>	Arborvitae-Eastern	180	12%
	<i>plicata</i>	Western Redcedar	3	<1%
Thuja Total			183	12%
<i>Tilia</i>	<i>cordata</i>	Linden-Littleleaf	19	1%
<i>Tsuga</i>	<i>canadensis</i>	Hemlock-Canadian	9	1%
<i>Ulmus</i>	<i>americana</i>	Elm-American	1	<1%
	<i>parvifolia</i>	Elm-Chinese	5	<1%
	<i>rubra</i>	Elm-Slippery	1	<1%
	sp.	Elm	17	1%
Ulmus Total			24	2%
<i>Zelkova</i>	<i>serrata</i>	Zelkova-Japanese	28	2%
Grand Total			1489	100%

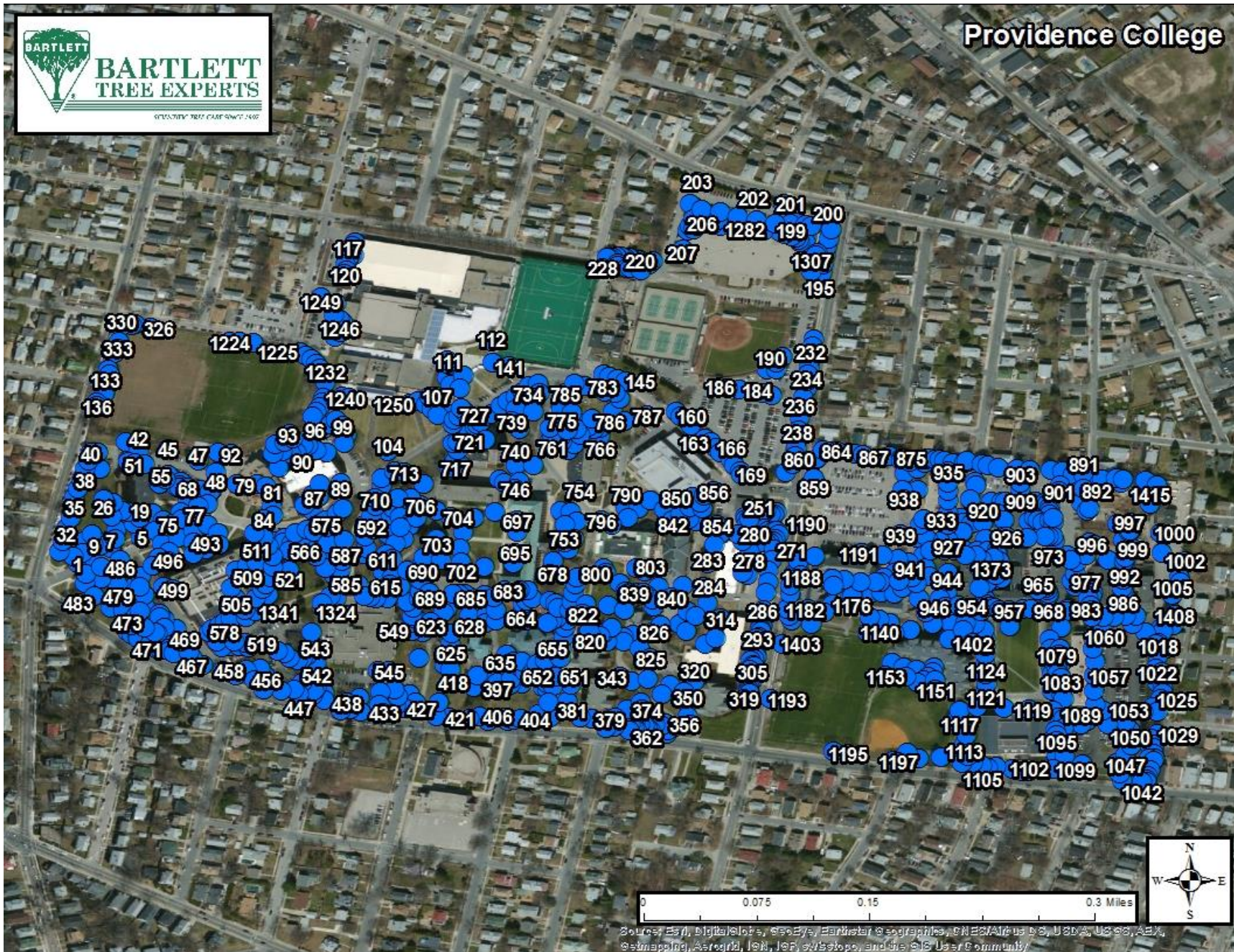
Tree Groupings

The following table displays inventoried trees that were recorded as groupings. Throughout the management plan, those trees recorded as groupings will be displayed with the number of plantings in parentheses after the common name, as displayed in the following table:

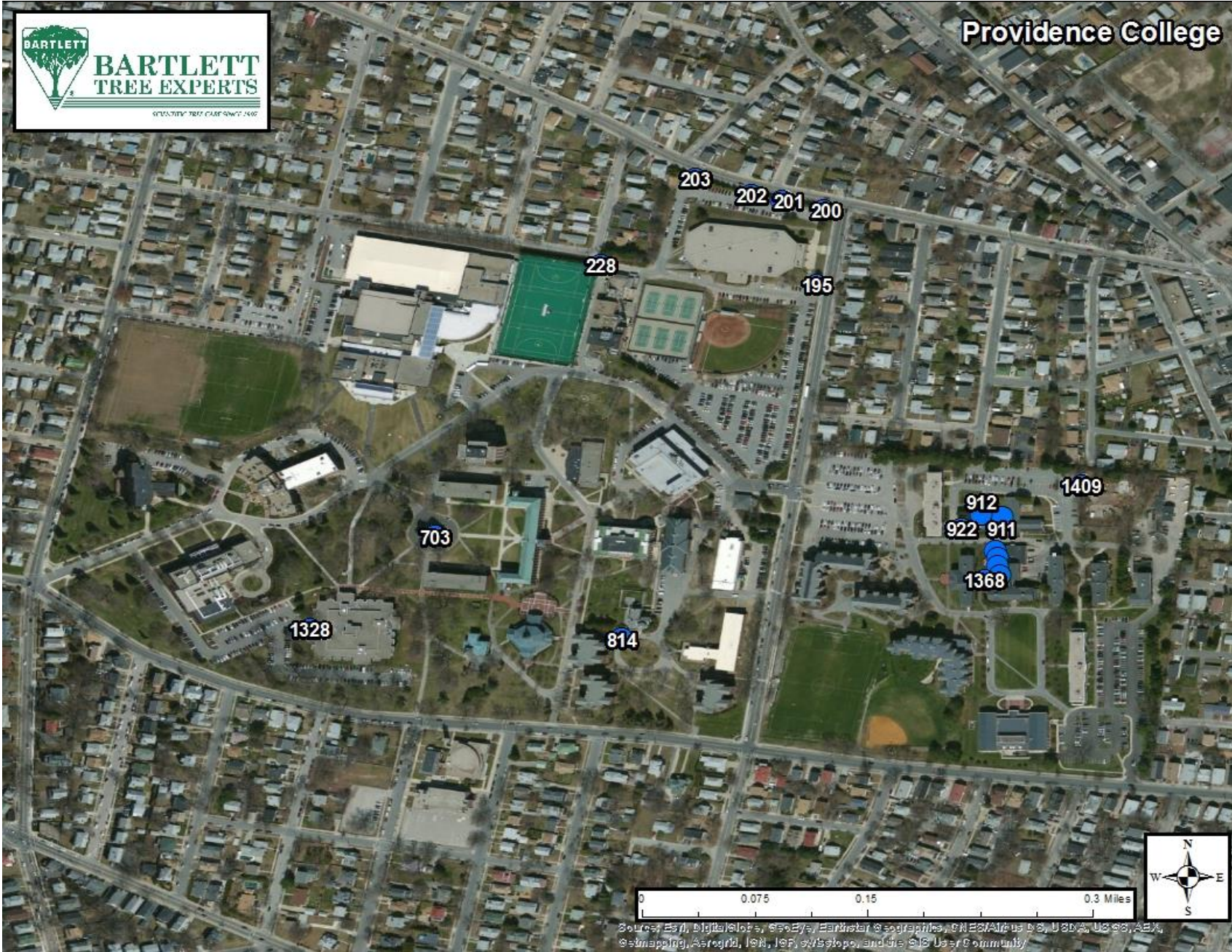
Table 6: INVENTORIED TREES RECORDED AS GROUPINGS

Tree ID	Common Name	Number of Plantings
195	Holly-American (8)	8
200	Arborvitae-Eastern (15)	15
201	Arborvitae-Eastern (15)	15
202	Arborvitae-Eastern (15)	15
203	Arborvitae-Eastern (15)	15
228	Arborvitae-Eastern (50)	50
703	Falsecypress-Sawara (11)	11
814	Spruce-Norway (3)	3
911	Western Redcedar (3)	3
912	Pine-Eastern White (7)	7
922	Hemlock-Canadian (3)	3
1328	Serviceberry (8)	8
1362	Arborvitae-Eastern (2)	2
1363	Arborvitae-Eastern (4)	4
1364	Arborvitae-Eastern (9)	9
1367	Falsecypress-Sawara (3)	3
1368	Arborvitae-Eastern (21)	21
1409	Arborvitae-Eastern (23)	23

Map 2: 2015 TREE INVENTORY



Map 3: INVENTORIED TREES RECORDED AS GROUPINGS



Condition Class

The breakdown of tree condition follows:

Table 7: CONDITION CLASS BREAKDOWN

Condition Class	Quantity	% of Total
Good	585	39%
Fair	814	55%
Poor	89	6%
Dead	1	< 1%

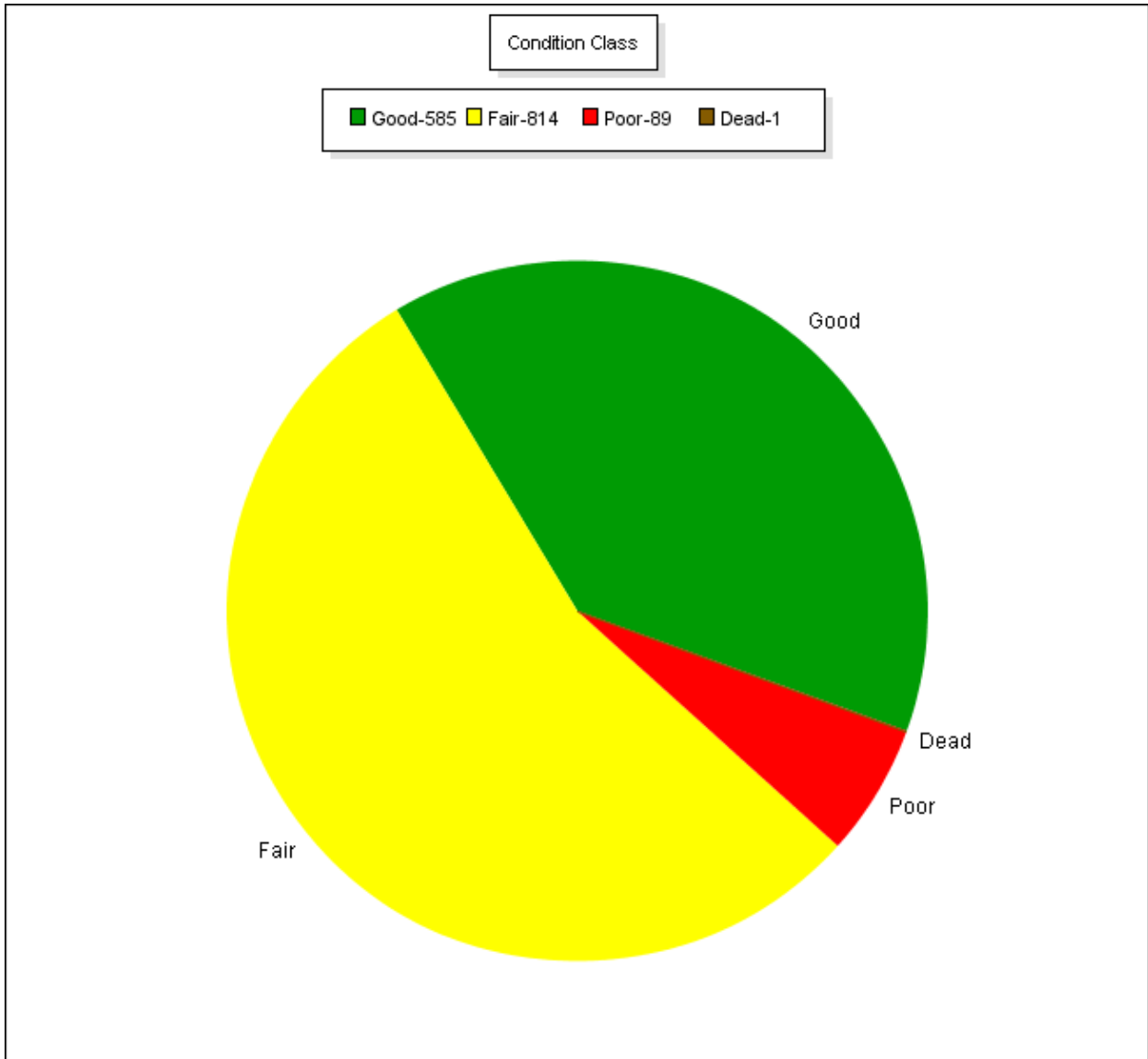
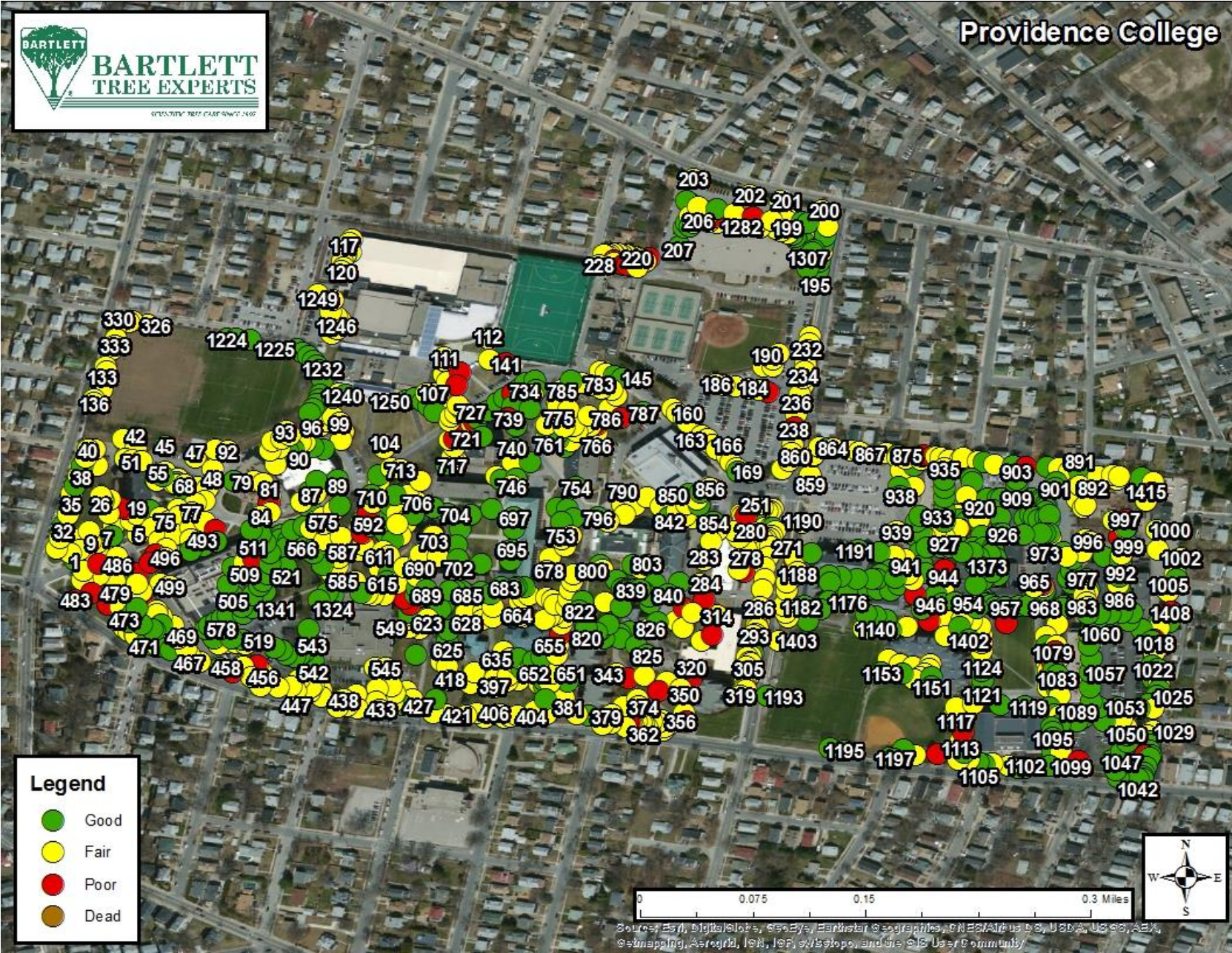


Figure 1: Condition class breakdown.

Map 4: INVENTORIED TREES BY CONDITION CLASS



Age Class

The breakdown of tree age class follows:

Table 8: AGE CLASS BREAKDOWN

Age Class	Quantity	% of Total
Over-mature	10	1%
Mature	592	40%
Semi-mature	584	39%
Young	303	20%

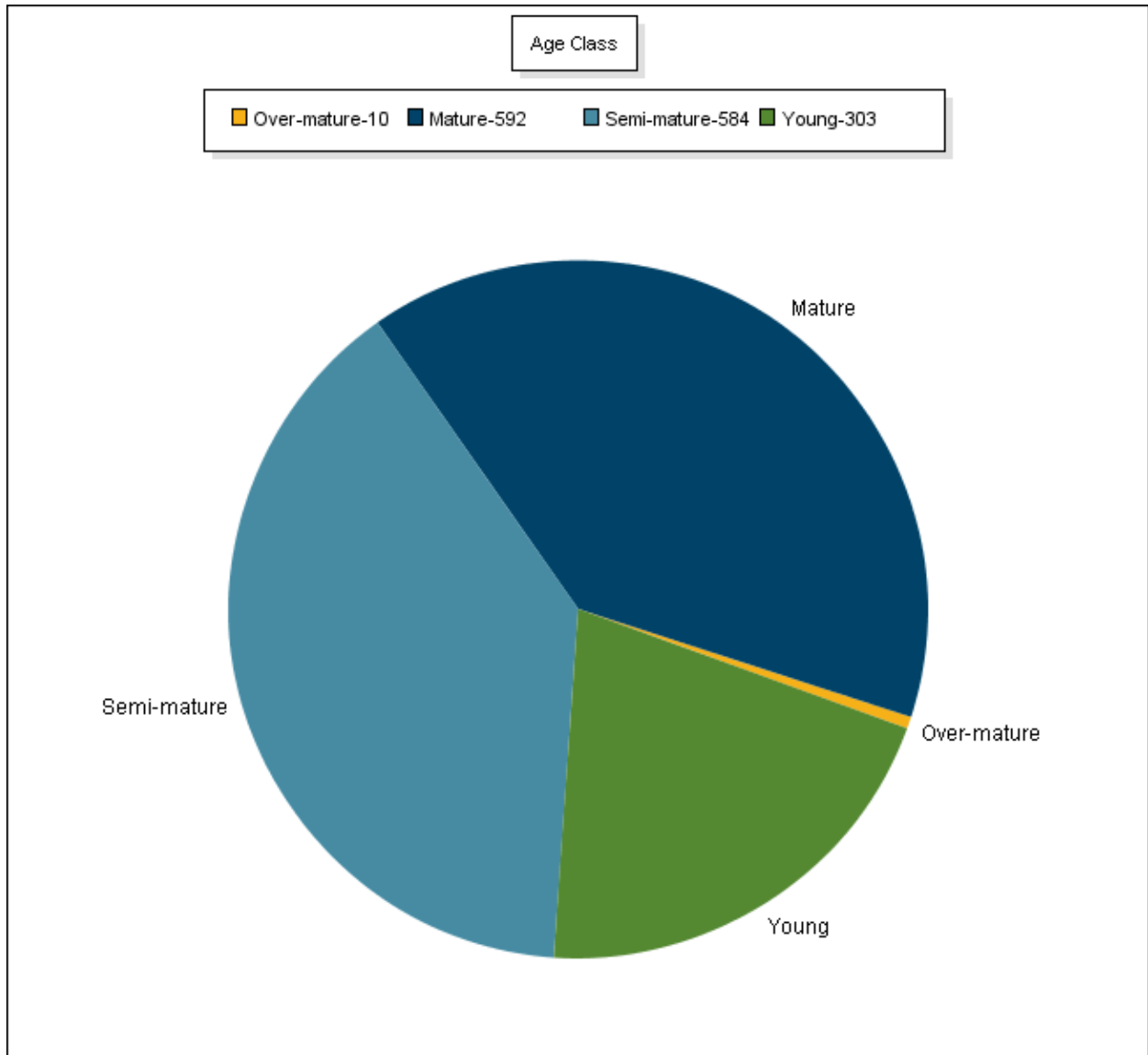
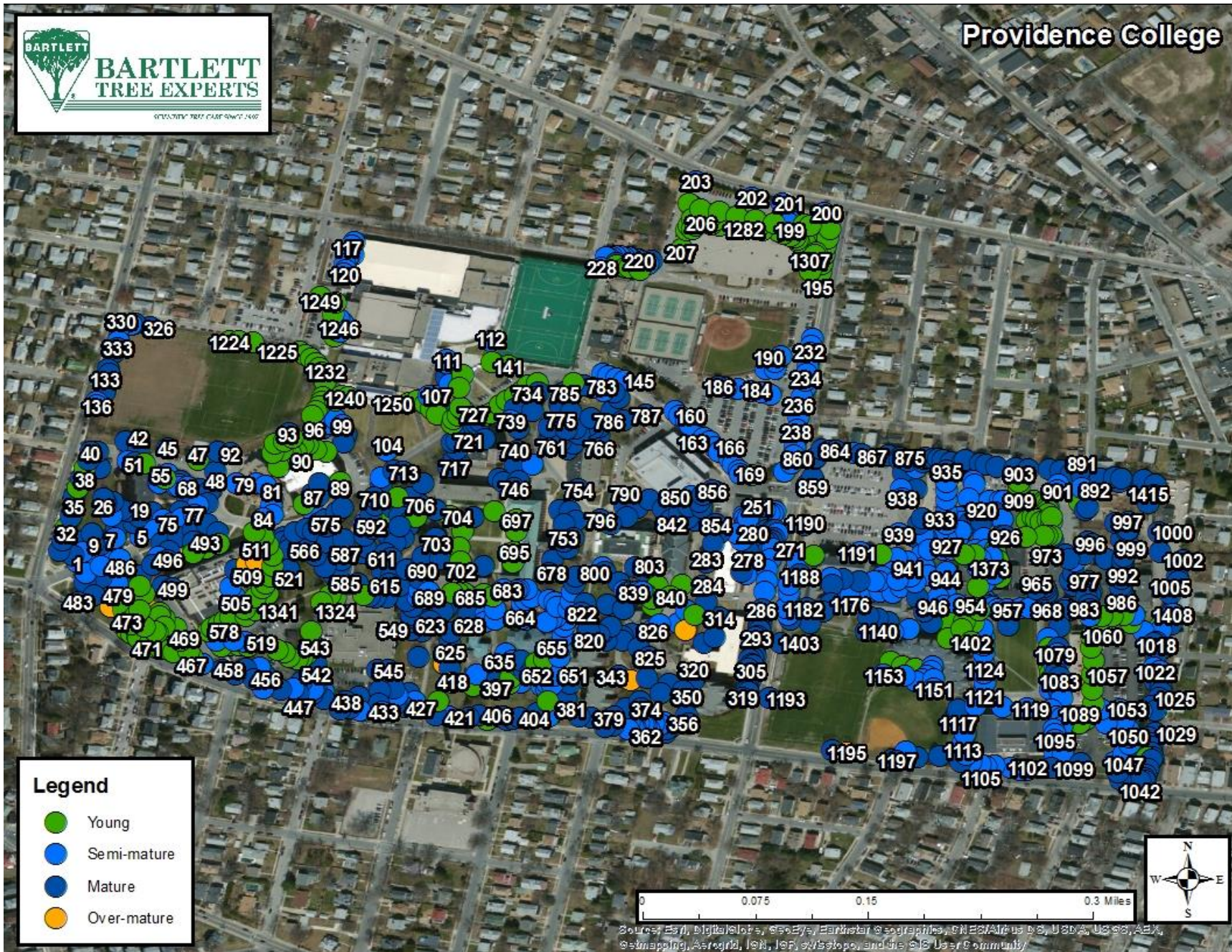


Figure 2: Age class breakdown.

Map 5: INVENTORIED TREES BY AGE CLASS



Tree Size (DBH)

The following chart illustrates numbers of trees according to size per DBH:

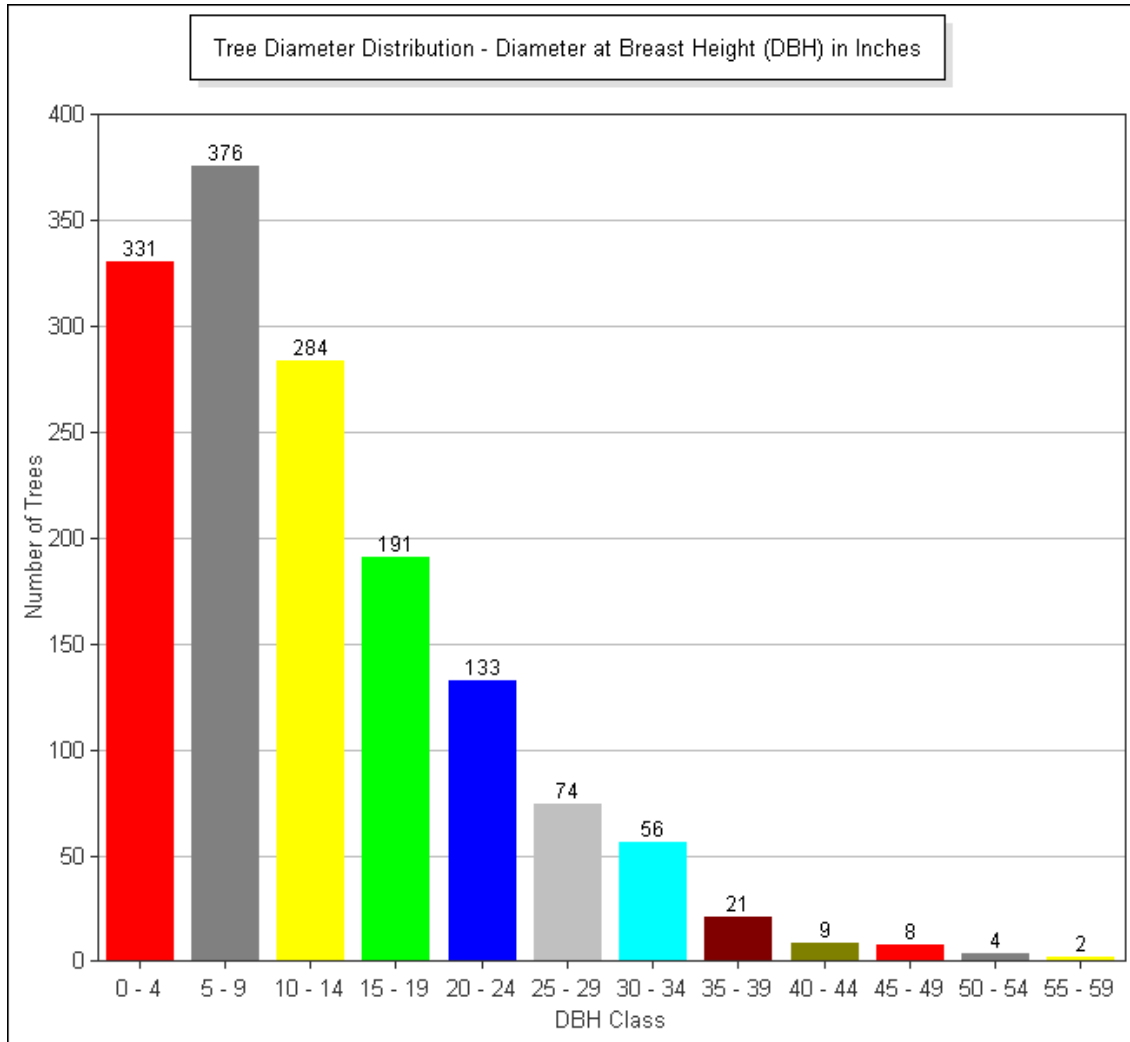


Figure 3: Number of trees according to DBH.

Estimated Value

As part of the Bartlett inventory process, we have included an estimated value for each tree and a cumulative total for all trees inventoried. To calculate the estimated value, we use a modified version¹ of the Trunk Formula Method published by the Council of Tree and Landscape Appraisers in *The Guide for Plant Appraisal*, 9th Edition (CTLA, 2000).

The following data fields are used in this formula:

Table 9: DATA FIELDS FOR DETERMINING ESTIMATED TREE VALUE

Data Field	Description
Size	Based on tree DBH (4.5 feet above grade)
Species Factor	Relative species desirability based on 100% for the tree in that geographical location. In most cases, species desirability ratings, published by the local chapter of the International Society of Arboriculture, are used for adjustment.
Condition Factor	Rating of the tree's structure and health based on 100%
Location Factor	Average rating for the site and the tree's contribution and placement, based on 100%

$$\text{Estimated Value} = \text{Size} * \text{Species Factor} * \text{Condition Factor} * \text{Location Factor}$$

The estimated cumulative total value for all trees inventoried is **\$6,346,458.96**. The following table lists the ten trees with the highest estimated values:

Table 10: TOP TEN INVENTORIED TREES - HIGHEST ESTIMATED VALUE

Tree ID	Common Name	Genus	Species	DBH	Estimated Value
614	Oak-White	<i>Quercus</i>	<i>alba</i>	34	\$63,942.01
737	Oak- Black	<i>Quercus</i>	<i>velutina</i>	51	\$58,688.94
1202	Oak-White	<i>Quercus</i>	<i>alba</i>	45	\$50,390.38
699	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	45	\$50,390.38
714	Oak- Black	<i>Quercus</i>	<i>velutina</i>	43	\$47,424.58
1068	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	56	\$46,370.18
999	Oak-White	<i>Quercus</i>	<i>alba</i>	42	\$45,904.26
621	Oak-White	<i>Quercus</i>	<i>alba</i>	42	\$45,904.26
622	Oak-White	<i>Quercus</i>	<i>alba</i>	42	\$45,904.26
1195	Oak- Black	<i>Quercus</i>	<i>velutina</i>	41	\$44,358.98

¹ This version does not consider cost of purchase and installation of the largest available "like tree."

Map 6: TOP 10 INVENTORIED TREES - HIGHEST ESTIMATED VALUE



RECOMMENDATIONS



RECOMMENDATIONS

In reviewing the results and recommendations, the reader will find useful the specifications and definitions detailed on pages 2-6 above. We used the following categories to organize the recommendations, which are displayed in tables:

- **Recommendations**
 - Soil Care and Fertilization
 - Plant Health Care
 - Tree Pruning
 - Structural Support Systems
 - Lightning Protection Systems
 - Tree Removal
 - Advanced Tree Risk Assessments (Level 3)
 - Vine Removal

Soil Care and Fertilization

Healthy soil is critical to the health and longevity of trees. Soil provides trees with the essential nutrients required for their growth. Many secondary problems such as reduced vigor, inadequate growth, branch dieback, and pest or disease concerns are related to the primary stress of poor soil conditions. Undisturbed, native forest soils generally contain adequate levels of organic matter, soil microbes, and nutrients. Urban, suburban, and landscape soils (as opposed to forest soils) usually lack these qualities, and are often compacted. In many cases, trees in a landscaped environment suffer from inadequate soil fertility, soil compaction, root zone competition with turf grasses, and inadequate total soil volume. Soil care recommendations are intended to correct these concerns and improve or maintain overall plant health.

Bartlett Tree Experts recommends several procedures and treatments that address soil quality. Taking soil samples is perhaps the most important. Proper tree care cannot be initiated unless it is known what type of soil environment the trees are growing in. Soil testing results can help to create a path forward for improved tree health. We address some of these below.

Soil Sampling

Collecting soil samples and having them tested helps determine nutrients that may be lacking, unfavorable soil pH values, and adequacy of soil organic matter. Laboratory tests and analyses can determine the need for soil amendments.

Bulk Density

Compacted soils are regrettably common in the urban setting. A bulk density test, which requires an undisturbed core sample, measures the level of soil compaction. Arborists can use the results to diagnose problems or to determine what size holes to dig for planting. If soil density exceeds a measured threshold for a given soil type and tree species, we recommend Bartlett's Root Invigoration program.

Soil Rx[®]

Bartlett's Soil Rx[®] program, which is a prescription fertilization program, aims to correct nutrient deficiencies and optimize soil conditions for designated trees.

Root Invigoration[™]

The aim of Bartlett's patented Root Invigoration[™] Program is to improve soil conditions by addressing soil compaction and promoting efficient root growth, especially for high-value trees in disturbed areas. The process includes taking soil samples to determine what nutrients are deficient, performing a root collar excavation, "air-tilling" a portion of the root zone to find fine roots, incorporating organic matter, fertilizing (based on soil sample), and applying mulch. The area of the root system treated can vary by tree. For the Root Invigoration[™] Program to be successful, proper watering techniques must be employed after the process is complete.

The following inventoried trees are recommended for Soil Rx® or for Root Invigoration™ because of possible nutrient deficiencies or poor soil quality:



Figure 4: Tree #281 recommended for Root Invigoration™ due to compaction of the root zone.

Table 11: INVENTORIED TREES RECOMMENDED FOR ROOT INVIGORATION™ (800 Trees)

Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
1	Crimson King Maple	9	20	Pine-Scotch	17
2	Crimson King Maple	14	21	Pine-Scotch	31
3	Crimson King Maple	14	22	Fir-Douglas	8
5	Crimson King Maple	10	23	Spruce-Colorado Blue	25
7	Weeping Cherry	15	24	Spruce-Colorado Blue	23
8	Cherry	16	25	Spruce-Colorado Blue	17
9	Weeping Cherry	15	26	Spruce-Colorado Blue	19
10	Weeping Cherry	14	28	Maple-Norway	30
12	Spruce-Colorado Blue	18	29	Maple-Norway	20
13	Spruce-Colorado Blue	19	30	Spruce-Colorado Blue	18
14	Spruce-Colorado Blue	22	31	Spruce-Colorado Blue	26
15	Spruce-Colorado Blue	23	33	Spruce-Colorado Blue	29
17	Dogwood-Kousa	6	35	Spruce-Colorado Blue	21
19	Dogwood-Kousa	11	37	Spruce-Colorado Blue	14

Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
39	Spruce-Colorado Blue	19	129	Oak - Scarlet	22
40	Pine-Austrian	21	131	Elm-American	24
41	Oak- Black	30	132	Oak - Scarlet	34
42	Oak- Black	31	133	Oak - Scarlet	26
43	Maple-Norway	22	134	Oak - Scarlet	48
47	Maple-Norway	27	142	Oak - Scarlet	11
48	Spruce-Colorado Blue	18	143	Oak - Scarlet	13
49	Pine-Eastern White	17	144	Oak - Scarlet	12
52	Dogwood-Flowering	4	145	Oak - Scarlet	10
53	Dogwood-Flowering	5	157	Oak - Scarlet	20
54	Dogwood-Flowering	6	158	Oak - Scarlet	12
61	Spruce-Colorado Blue	22	159	Oak - Scarlet	14
62	Elm-Slippery	24	160	Oak - Scarlet	15
63	Crabapple	6	162	Oak - Scarlet	15
64	Linden-Littleleaf	17	163	Oak - Scarlet	16
67	Pine-Scotch	13	164	Oak - Scarlet	9
68	Spruce-Colorado Blue	27	165	Oak - Scarlet	15
69	Sourwood	7	166	Oak - Scarlet	13
72	Spruce-Colorado Blue	21	167	Oak - Scarlet	15
73	Crabapple	12	168	Oak - Scarlet	19
74	Crimson King Maple	15	169	Oak - Scarlet	15
75	Crimson King Maple	17	187	Spruce-White	8
76	Crimson King Maple	15	188	Spruce-White	8
77	Crimson King Maple	17	189	Spruce-White	11
85	Dogwood-Kousa	9	190	Spruce-White	11
87	Mimosa	21	198	Pine-Austrian	14
88	Cedar-Atlas	18	199	Pine-Austrian	14
91	Oak- Black	30	204	Pine-Austrian	12
92	Oak- Black	37	205	Pine-Austrian	15
96	Maple-Norway	22	206	Pine-Austrian	12
97	Birch-Paper	10	207	Arborvitae-Eastern	6
98	Maple-Norway	10	209	Pine-Eastern White	15
99	Cherry	23	211	Oak - Scarlet	26
100	Maple-Norway	27	247	Dogwood-Flowering	10
101	Purple Leaf Plum	20	255	Poplar-Lombardy	17
104	Maple-Norway	12	256	Poplar-Lombardy	16
105	Oak - Scarlet	39	257	Poplar-Lombardy	13
107	Maple-Norway	10	258	Poplar-Lombardy	15
108	Maple-Norway	29	259	Poplar-Lombardy	16

Tree ID	Common Name	DBH
260	Poplar-Lombardy	16
261	Poplar-Lombardy	14
262	Poplar-Lombardy	18
265	Pine-Eastern White	13
266	Pine-Eastern White	14
268	Pine-Eastern White	14
269	Pine-Eastern White	14
270	Pine-Eastern White	13
271	Honeylocust-Thornless Common	13
272	Honeylocust-Thornless Common	12
273	Honeylocust-Thornless Common	14
274	Honeylocust-Thornless Common	14
275	Honeylocust-Thornless Common	11
276	Dogwood-Kousa	7
278	Crabapple	12
279	Crabapple	9
280	Crabapple	5
281	Oak - Scarlet	29
282	Pine-Austrian	15
283	Planetree-London	20
284	Beech-European	35
311	Oak - Scarlet	50
312	Dogwood-Flowering	12
314	Maple-Red	20
326	Maple-Norway	17
327	Maple-Norway	17
328	Maple-Norway	15
329	Maple-Norway	13
330	Maple-Norway	18
332	Maple-Norway	15
333	Maple-Norway	18
343	Birch-Paper	7
344	Beech-European	29
345	Maple-Norway	25
346	Maple-Norway	20
347	Maple-Norway	22
350	Oak - Scarlet	30
351	Maple-Norway	21
353	Spruce-Colorado Blue	19

Tree ID	Common Name	DBH
354	Maple-Sugar	21
355	Spruce-Colorado Blue	15
356	Spruce-Colorado Blue	16
357	Spruce-Colorado Blue	12
358	Maple-Norway	19
359	Spruce-Colorado Blue	15
360	Spruce-Colorado Blue	16
362	Spruce-Colorado Blue	15
363	Spruce-Colorado Blue	16
364	Spruce-Colorado Blue	14
365	Spruce-Colorado Blue	16
366	Maple-Norway	21
369	Spruce-Colorado Blue	9
370	Maple-Norway	17
372	Maple-Silver	25
373	Maple-Silver	30
374	Catalpa	25
375	Maple-Norway	24
376	Spruce-Colorado Blue	17
379	Maple-Sugar	22
380	Maple-Sugar	22
381	Oak - Scarlet	24
382	Oak - Scarlet	22
383	Oak - Scarlet	24
384	Spruce-Colorado Blue	12
385	Oak - Scarlet	36
395	Spruce-Colorado Blue	23
396	Dogwood-Flowering	8
397	Spruce-Colorado Blue	20
400	Oak - Scarlet	19
401	Oak - Scarlet	25
402	Oak - Scarlet	29
403	Oak - Scarlet	22
404	Oak - Scarlet	27
406	Oak - Scarlet	35
407	Oak - Scarlet	31
415	Maple-Norway	31
416	Oak - Scarlet	33
422	Oak - Scarlet	29

Tree ID	Common Name	DBH
425	Spruce-Colorado Blue	20
426	Elm	9
427	Spruce-Colorado Blue	17
428	Oak-White	31
429	Maple-Norway	13
430	Oak-White	28
431	Oak-White	33
432	Oak-White	24
434	Oak-White	30
436	Oak-White	36
438	Spruce-Colorado Blue	21
442	Oak - Scarlet	33
443	Oak-White	33
445	Maple-Norway	18
446	Oak-White	38
447	Oak-White	32
458	Maple-Norway	22
459	Pear-Callery	4
460	Pear-Callery	3
461	Pear-Callery	3
462	Pear-Callery	3
466	Spruce-Colorado Blue	14
469	Spruce-Colorado Blue	14
475	Spruce-Norway	22
476	Spruce-Colorado Blue	23
480	Weeping Cherry	17
481	Spruce-Colorado Blue	25
484	Crimson King Maple	9
505	Honeylocust-Thornless Common	10
506	Honeylocust-Thornless Common	11
511	Birch-Paper	11
512	Crabapple	14
513	Dogwood-Kousa	6
514	Sycamore-American	18
515	Dogwood-Flowering	6
516	Dogwood-Flowering	6
517	Fir-White	19
519	Dogwood-Flowering	4
521	Oak-White	40

Tree ID	Common Name	DBH
524	Dogwood-Flowering	4
526	Dogwood-Flowering	4
544	Maple-Norway	21
545	Maple-Norway	19
546	Beech-European	27
548	Beech-European	40
549	Dogwood-Flowering	6
550	Dogwood-Flowering	6
551	Dogwood-Flowering	8
552	Oak-Pin	30
555	Cherry	7
556	Birch-Paper	11
557	Birch-Paper	10
558	Dogwood-Flowering	6
560	Maple-Norway	21
561	Maple-Norway	27
562	Maple-Norway	26
563	Oak- Black	45
564	Dogwood-Flowering	7
565	Dogwood-Flowering	6
566	Dogwood-Flowering	5
567	Dogwood-Flowering	6
568	Maple-Japanese	8
569	Dogwood-Flowering	6
570	Fir-White	21
571	Maple-Norway	21
573	Spruce-Colorado Blue	17
574	Dogwood-Flowering	12
575	Crabapple	6
576	Maple-Norway	21
578	Maple-Japanese	5
579	Maple-Japanese	6
583	Maple-Norway	23
585	Maple-Norway	21
587	Maple-Norway	26
588	Maple-Norway	28
590	Yew	11
591	Maple-Norway	7
593	Maple-Norway	23

Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
594	Maple-Japanese	4	642	Crabapple	7
597	Oak-White	40	643	Crabapple	6
598	Oak-White	34	644	Crabapple	9
602	Birch-Paper	15	645	Maple-Norway	12
603	Spruce-Colorado Blue	16	646	Crabapple	6
604	Spruce-Colorado Blue	23	647	Crabapple	6
606	Spruce-Colorado Blue	15	648	Crabapple	6
607	Oak-White	38	649	Crabapple	7
608	Oak-White	38	650	Maple-Norway	12
609	Maple-Norway	24	651	Maple-Norway	12
610	Spruce-Colorado Blue	20	653	Purple Leaf Plum	3
611	Spruce-Colorado Blue	18	654	Maple-Norway	10
612	Oak- Black	30	655	Maple-Norway	11
613	Oak- Black	39	656	Maple-Norway	9
614	Oak-White	34	657	Maple-Norway	10
615	Oak- Black	36	658	Maple-Norway	10
616	Cherry	7	671	Maple-Norway	9
617	Maple-Norway	17	672	Maple-Norway	9
618	Maple-Norway	14	673	Maple-Norway	11
619	Maple-Norway	17	674	Maple-Norway	21
620	Cherry	7	675	Maple-Norway	17
621	Oak-White	42	677	Beech-European	33
622	Oak-White	42	678	Linden-Littleleaf	17
623	Maple-Norway	34	683	Cherry	5
625	Dogwood-Flowering	5	685	Oak-Pin	6
626	Dogwood-Flowering	6	686	Oak-Pin	6
628	Maple-Norway	20	687	Oak-Pin	6
629	Dogwood-Flowering	6	688	Oak-Pin	5
630	Maple-Norway	11	689	Cherry	6
631	Maple-Norway	12	690	Maple-Norway	14
632	Maple-Norway	9	691	Maple-Norway	21
633	Maple-Norway	12	692	Maple-Norway	24
634	Maple-Norway	11	693	Oak-White	32
635	Maple-Norway	11	694	Honeylocust-Thornless Common	5
636	Maple-Norway	10	695	Honeylocust-Thornless Common	5
637	Purple Leaf Plum	6	696	Honeylocust-Thornless Common	6
639	Purple Leaf Plum	7	697	Honeylocust-Thornless Common	5
640	Crabapple	6	698	Maple-Red	4
641	Crabapple	8	699	Beech-European	45

Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
700	Honeylocust-Thornless Common	5	747	Honeylocust-Thornless Common	17
701	Honeylocust-Thornless Common	5	748	Tuliptree	18
702	Maple-Red	4	749	Oak- Northern Red	18
703	Falsecypress-Sawara (11)	12	750	Oak- Northern Red	20
704	Maple-Red	4	751	Tuliptree	16
705	Oak- Northern Red	28	752	Oak- Northern Red	18
707	Oak-White	46	753	Oak- Northern Red	17
710	Maple-Japanese	7	754	Birch-Paper	10
711	Oak- Northern Red	39	756	Oak- Black	27
713	Cherry	13	757	Oak-White	17
714	Oak- Black	43	758	Oak-White	19
716	Maple-Norway	16	759	Oak- Northern Red	22
717	Maple-Norway	24	760	Oak- Northern Red	22
718	Maple-Norway	20	761	Oak- Northern Red	24
719	Maple-Norway	26	762	Oak- Northern Red	20
720	Maple-Norway	18	764	Oak- Black	32
722	Oak- Northern Red	24	765	Oak- Black	32
724	Oak- Northern Red	24	766	Oak- Northern Red	33
725	Oak- Black	27	773	Maple-Norway	25
726	Maple-Red	4	774	Maple-Norway	16
727	Maple-Red	5	775	Maple-Norway	15
728	Maple-Red	6	776	Maple-Norway	16
729	Maple-Red	6	777	Maple-Norway	18
730	Maple-Red	5	778	Maple-Norway	18
731	Maple-Red	6	779	Maple-Norway	19
732	Maple-Red	6	780	Maple-Norway	16
733	Maple-Red	6	781	Maple-Norway	10
735	Weeping Cherry	8	782	Maple-Norway	10
736	Oak- Black	32	783	Maple-Norway	17
737	Oak- Black	51	785	Maple-Norway	22
738	Oak- Black	37	787	Maple-Japanese	32
739	Hornbeam-European	6	790	Maple-Norway	18
740	Oak-White	37	791	Maple-Norway	19
741	Oak- Black	48	792	Maple-Sycamore	19
742	Spruce-Colorado Blue	9	794	Maple-Norway	28
743	Crabapple	7	795	Maple-Norway	18
744	Crabapple	5	796	Pine-Austrian	15
745	Beech-European	28	800	Maple-Norway	28
746	Spruce-Colorado Blue	16	801	Cherry	9

Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
802	Maple-Sugar	30	884	Pine-Eastern White	21
803	Maple-Sugar	19	885	Pine-Eastern White	31
807	Crabapple	14	886	Pine-Eastern White	28
813	Magnolia-Saucer	13	888	Pine-Eastern White	29
817	Falsecypress-Sawara	19	889	Pine-Eastern White	29
818	Falsecypress-Sawara	17	890	Pine-Eastern White	27
819	Falsecypress-Sawara	23	891	Oak- Black	34
821	Cherry	9	892	Ash-White	7
822	Cherry	7	893	Ash-White	5
823	Maple-Japanese	10	894	Horsechestnut-Common	26
826	Cedar-Atlas	12	896	Falsecypress-Sawara	13
849	Maple-Red	17	897	Falsecypress-Sawara	14
852	Cherry	23	898	Falsecypress-Sawara	8
854	Oak- Black	31	899	Falsecypress-Sawara	22
856	Redbud-Eastern	9	900	Honeylocust-Thornless Common	8
857	Oak- Black	16	901	Honeylocust-Thornless Common	8
858	Oak- Black	17	902	Honeylocust-Thornless Common	4
859	Oak- Black	17	903	Honeylocust-Thornless Common	5
860	Oak- Black	25	904	Honeylocust-Thornless Common	8
861	Oak- Black	16	905	Honeylocust-Thornless Common	6
862	Oak- Black	33	906	Maple-Norway	8
863	Oak-Pin	26	907	Oak- Northern Red	11
864	Maple-Norway	24	908	Hemlock-Canadian	8
865	Maple-Norway	15	909	Hemlock-Canadian	9
866	Oak- Black	29	910	Spruce-Norway	29
867	Pine-Eastern White	19	911	Western Redcedar (3)	6
868	Pine-Eastern White	26	912	Pine-Eastern White (7)	6
869	Pine-Eastern White	23	913	Pine-Eastern White	14
870	Maple-Norway	23	914	Pine-Eastern White	11
871	Maple-Norway	9	915	Pine-Eastern White	9
872	Pine-Austrian	23	916	Pine-Eastern White	10
873	Pine-Austrian	24	917	Pine-Eastern White	14
877	Pine-Austrian	26	918	Spruce-Colorado Blue	12
878	Pine-Eastern White	24	919	Pear-Callery	17
879	Pine-Eastern White	30	920	Pear-Callery	15
880	Pine-Eastern White	22	921	Maple-Japanese	4
881	Pine-Eastern White	20	923	Birch-Gray	12
882	Pine-Eastern White	27	924	Maple-Norway	14
883	Pine-Eastern White	24	925	Dogwood-Kousa	4

Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
926	Dogwood-Kousa	6	970	Honeylocust-Thornless Common	13
927	Pear-Callery	8	971	Magnolia-Saucer	12
928	Pear-Callery	7	972	Mulberry-White	6
929	Dogwood-Flowering	7	973	Pine-Scotch	16
930	Purple Leaf Plum	17	975	Oak-White	30
931	Cherry	5	976	Spruce-White	8
932	Cherry	13	977	Honeylocust-Thornless Common	14
933	Cherry	14	978	Honeylocust-Thornless Common	14
934	Maple-Norway	22	979	Pine-Scotch	14
935	Maple-Norway	16	980	Pine-Scotch	12
937	Cherry	8	981	Pine-Scotch	16
938	Cherry	9	982	Pine-Eastern White	16
939	Cedar-Atlas	9	983	Pine-Eastern White	22
940	Zelkova-Japanese	7	984	Pine-Eastern White	17
941	Zelkova-Japanese	8	985	Pine-Eastern White	15
942	Zelkova-Japanese	8	986	Pine-Eastern White	13
944	Purple Leaf Plum	5	987	Pine-Eastern White	15
945	Zelkova-Japanese	8	988	Pine-Eastern White	17
946	Zelkova-Japanese	7	989	Pine-Eastern White	13
947	Zelkova-Japanese	7	991	Pine-Eastern White	15
948	Zelkova-Japanese	7	992	Pine-Eastern White	12
949	Maple-Norway	6	993	Pine-Eastern White	14
950	Zelkova-Japanese	8	994	Pine-Eastern White	15
952	Cherry	9	995	Catalpa-Northern	23
953	Cherry	7	996	Spruce-Colorado Blue	18
954	Falsecypress-Sawara	22	997	Maple-Japanese	6
955	Zelkova-Japanese	8	998	Maple-Japanese	5
956	Crabapple	6	999	Oak-White	42
957	Crabapple	6	1000	Oak-White	34
958	Crabapple	6	1001	Horsechestnut-Common	28
959	Crabapple	5	1002	Catalpa-Northern	19
960	Magnolia-Saucer	9	1003	Oak- Black	21
961	Falsecypress-Sawara	27	1004	Oak- Black	23
962	Falsecypress-Sawara	16	1005	Pine-Eastern White	27
963	Falsecypress-Sawara	20	1008	Pine-Austrian	21
965	Arborvitae-Eastern	9	1009	Pine-Eastern White	29
967	Pine-Eastern White	21	1010	Oak-Pin	7
968	Pine-Eastern White	17	1011	Cedar-Atlas	10
969	Honeylocust-Thornless Common	13	1012	Maple-Red	8

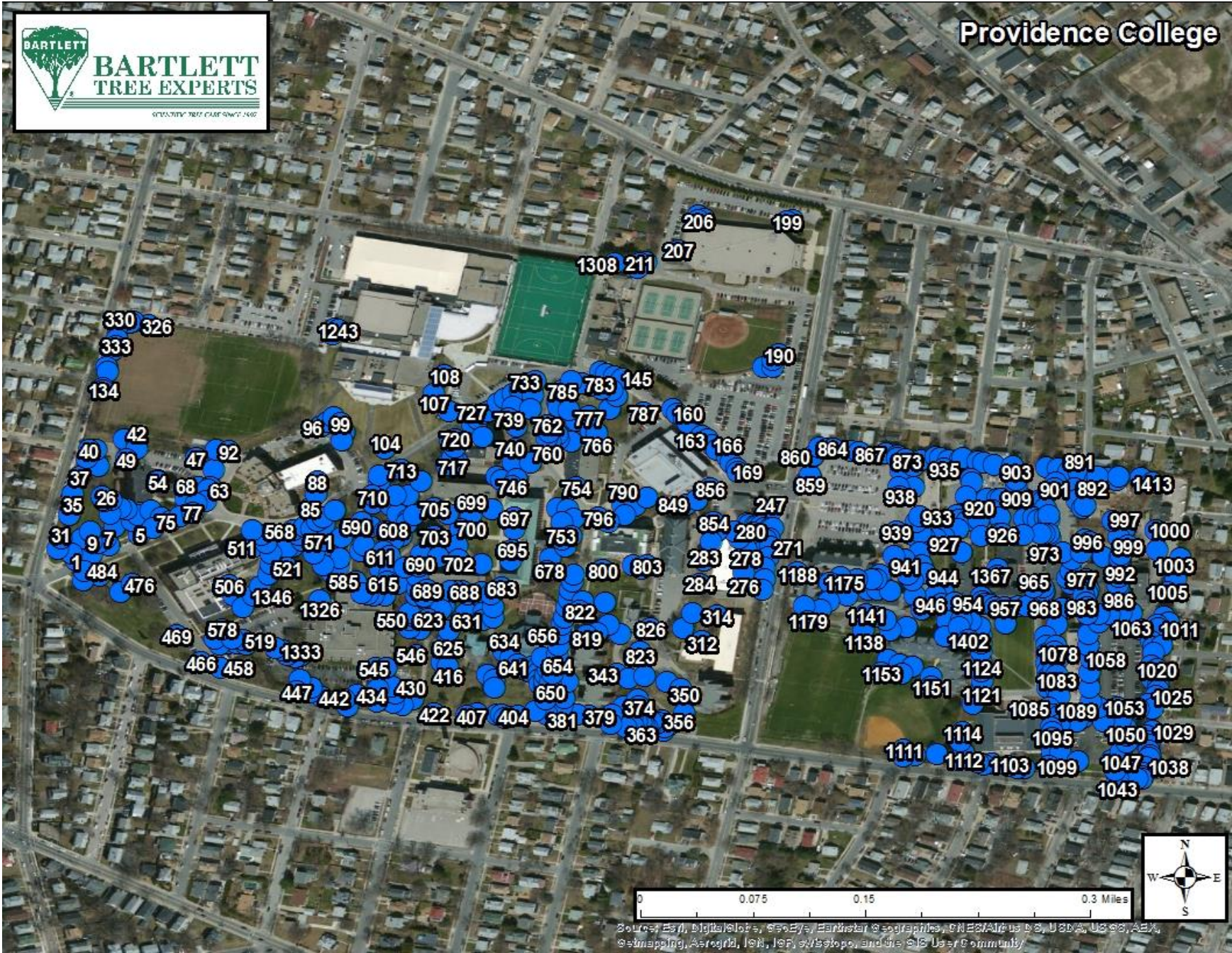
Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
1015	Pine-Eastern White	22	1055	Maple-Norway	7
1016	Pine-Eastern White	28	1056	Maple-Norway	7
1017	Pine-Eastern White	22	1057	Maple-Norway	8
1018	Spruce-Norway	23	1058	Maple-Norway	8
1019	Cedar-Atlas	11	1059	Maple-Norway	7
1020	Cedar-Atlas	13	1060	Maple-Norway	7
1021	Cedar-Atlas	11	1061	Maple-Red	6
1022	Pine-Eastern White	24	1062	Maple-Red	7
1023	Pine-Eastern White	28	1063	Maple-Red	10
1024	Pine-Eastern White	24	1064	Maple-Red	7
1025	Pine-Eastern White	26	1065	Maple-Red	7
1026	Oak- Black	26	1066	Maple-Red	7
1027	Oak- Black	36	1067	Maple-Red	9
1028	Zelkova-Japanese	6	1068	Oak- Northern Red	56
1029	Pine-Eastern White	24	1069	Linden-Littleleaf	11
1030	Pine-Eastern White	30	1070	Linden-Littleleaf	9
1031	Maple-Red	5	1071	Linden-Littleleaf	9
1032	Pine-Eastern White	16	1072	Linden-Littleleaf	9
1033	Pine-Eastern White	16	1073	Linden-Littleleaf	9
1034	Pine-Eastern White	13	1074	Linden-Littleleaf	10
1035	Pine-Eastern White	16	1075	Linden-Littleleaf	12
1037	Pine-Eastern White	18	1076	Purple Leaf Plum	8
1038	Pine-Eastern White	18	1077	Purple Leaf Plum	6
1039	Pine-Eastern White	25	1078	Purple Leaf Plum	7
1040	Pine-Eastern White	17	1080	Purple Leaf Plum	8
1041	Pine-Eastern White	22	1081	Purple Leaf Plum	8
1042	Sweetgum	30	1082	Purple Leaf Plum	8
1043	Purple Leaf Plum	8	1083	Purple Leaf Plum	8
1044	Purple Leaf Plum	9	1084	Maple-Freeman's	16
1045	Zelkova-Japanese	7	1085	Cherry	8
1046	Purple Leaf Plum	7	1086	Cherry	10
1047	Zelkova-Japanese	8	1087	Cherry	11
1048	Zelkova-Japanese	6	1088	Elm	8
1049	Zelkova-Japanese	7	1089	Elm	7
1050	Zelkova-Japanese	6	1090	Elm	10
1051	Zelkova-Japanese	7	1091	Crabapple	5
1052	Oak-Pin	12	1092	Elm	10
1053	Cherry	8	1093	Crabapple	5
1054	Zelkova-Japanese	7	1094	Crabapple	5

Tree ID	Common Name	DBH	Tree ID	Common Name	DBH
1095	Elm	10	1141	Dogwood-Kousa	8
1096	Crabapple	5	1142	Maple-Red	7
1097	Elm	7	1143	Maple-Red	6
1098	Oak-White	54	1144	Maple-Red	7
1099	Pine-Eastern White	31	1150	Zelkova-Japanese	13
1100	Spruce-White	8	1151	Zelkova-Japanese	12
1101	Spruce-White	7	1152	Zelkova-Japanese	11
1102	Maple-Red	7	1153	Zelkova-Japanese	12
1103	Maple-Red	8	1154	Birch-Paper	6
1104	Spruce-White	10	1157	Honeylocust-Thornless Common	11
1105	Spruce-White	9	1158	Honeylocust-Thornless Common	9
1106	Spruce-White	11	1159	Honeylocust-Thornless Common	11
1107	Pine-Eastern White	48	1161	Oak-English	13
1108	Spruce-Norway	32	1162	Oak- Black	30
1109	Oak- Black	21	1163	Ash-White	7
1110	Oak- Black	19	1164	Maple-Norway	11
1111	Linden-Littleleaf	11	1165	Maple-Norway	9
1112	Maple-Red	7	1166	Maple-Norway	8
1113	Maple-Red	6	1167	Oak- Northern Red	11
1114	Maple-Red	7	1169	Purple Leaf Plum	7
1118	Oak- Northern Red	12	1170	Honeylocust-Thornless Common	10
1121	Linden-Littleleaf	13	1171	Honeylocust-Thornless Common	9
1122	Linden-Littleleaf	8	1172	Zelkova-Japanese	17
1123	Linden-Littleleaf	12	1173	Zelkova-Japanese	14
1124	Linden-Littleleaf	11	1175	Zelkova-Japanese	15
1125	Linden-Littleleaf	11	1176	Zelkova-Japanese	17
1126	Linden-Littleleaf	11	1177	Zelkova-Japanese	16
1127	Linden-Littleleaf	10	1178	Zelkova-Japanese	17
1128	Linden-Littleleaf	10	1179	Tuliptree	17
1129	Oak- Northern Red	57	1188	Cherry	11
1130	Ash-White	8	1198	Catalpa-Northern	26
1131	Ash-White	8	1199	Hemlock-Canadian	20
1132	Ash-White	8	1200	Pine-Austrian	20
1134	Ash-White	8	1201	Oak-White	26
1136	Linden-Littleleaf	15	1202	Oak-White	45
1137	Zelkova-Japanese	14	1203	Oak-White	34
1138	Spruce-Colorado Blue	17	1204	Oak- Black	21
1139	Dogwood-Kousa	5	1205	Oak- Black	21
1140	Dogwood-Kousa	5	1241	Ash-White	5

Tree ID	Common Name	DBH
1242	Ash-White	4
1243	Dogwood-Kousa	7
1308	Pine-Eastern White	5
1311	Pine-Eastern White	9
1316	Maple-Norway	4
1317	Maple-Red	3
1318	Pear-Callery	4
1320	Maple-Paperbark	4
1321	Maple-Paperbark	4
1322	Dogwood-Flowering	5
1323	Dogwood-Flowering	4
1326	Maple-Paperbark	4
1327	Magnolia-Star	6
1329	Dogwood-Flowering	3
1330	Dogwood-Flowering	3
1331	Dogwood-Flowering	3
1332	Dogwood-Flowering	3
1333	Dogwood-Flowering	3
1334	Dogwood-Flowering	3
1345	Lilac-Common	3
1346	Lilac-Common	3
1347	Horsechestnut-Common	3
1349	Lilac-Common	4
1350	Lilac-Common	4
1351	Lilac-Common	3
1352	Lilac-Common	3
1353	Lilac-Common	3
1354	Lilac-Common	3
1365	Cedar-Atlas	12
1367	Falsecypress-Sawara (3)	4
1381	Maple-Paperbark	3
1383	Hawthorn	4
1384	Ginkgo	3
1386	Birch-European White	3
1388	Fir-Balsam	4
1390	Oak-Bur	3
1391	Lilac-Common	3
1392	Lilac-Common	3
1393	Lilac-Common	3

Tree ID	Common Name	DBH
1394	Maple-Paperbark	2
1395	Crabapple	2
1396	Crabapple	2
1397	Crabapple	2
1398	Birch-Paper	2
1400	Magnolia-Star	8
1401	Crabapple	4
1402	Crabapple	3
1410	Oak- Black	18
1412	Pine-Austrian	19
1413	Oak- Black	21

Map 7: INVENTORIED TREES RECOMMENDED FOR ROOT INVIGORATION™



Mulch Application

Proper mulching (Figure 5 and Figure 6) provides many benefits to trees and shrubs. It moderates soil temperatures, reduces soil moisture loss, reduces soil compaction, provides nutrients, and improves soil structure. This practice results in more root growth and healthier plants. Figure 7 illustrates root growth density under grass versus mulch. Mulch is frequently applied incorrectly (Figure 8), so we recommend that readers inspect the technical report on mulch application guidelines that appears in the Appendix.

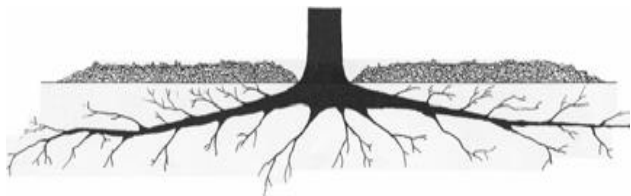


Figure 5: Example of how mulch should be installed, 2-4 inches thick and not against the trunk.

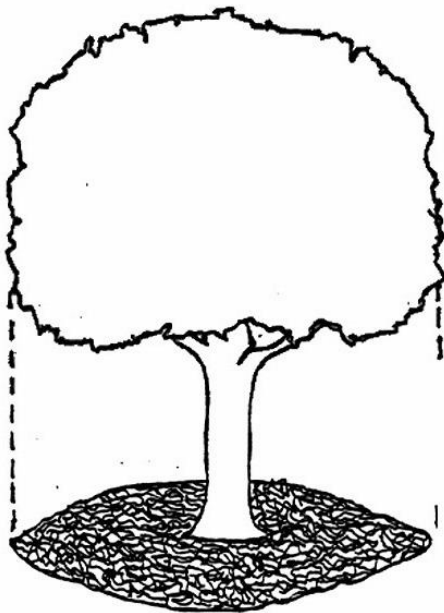


Figure 6: Example of how mulch should be applied from the trunk to the dripline.

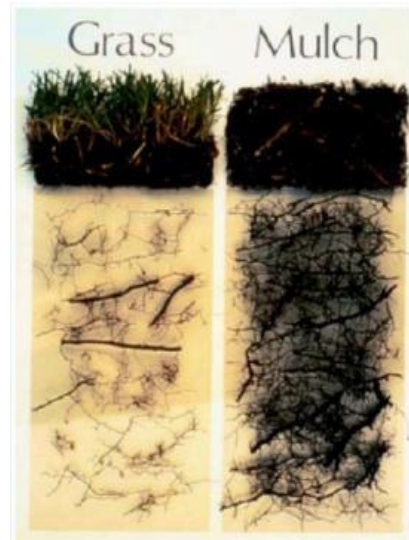


Figure 7: Example of root density under grass versus mulch.



Figure 8: Example of improper mulch application, known as "volcano mulch".

Root Collar Excavation

Excavating the root collar is necessary for trees whose buttress roots are covered by excess soil or mulch. Buried root collars can contribute to tree health problems, including girdling roots, basal cankers, and masking root and lower stem decay.

Figure 9 shows a buried root collar and Figure 10 shows an exposed root collar.



Figure 9: Example of a buried root collar.



Figure 10: Example of exposed root collar.

Girdling Roots

Girdling roots (Figure 11) restrict water and nutrient movement throughout the tree. If left untreated they can cause the tree to decline, fail (Figure 12), and eventually die in severe cases. Girdling roots should be removed as soon as possible, unless removal will significantly impact the condition of the tree. In some cases, the presence of significant or severe girdling roots may cause the tree to be recommended for removal.



Figure 11: Examples of girdling roots.



Figure 12: Example of tree failure from girdling roots.

The following inventoried trees are recommended for a root collar excavation:

Table 12: INVENTORIED TREES RECOMMENDED FOR A ROOT COLLAR EXCAVATION (755 Trees)

Tree ID	Common Name	DBH	Girdling Roots
1	Crimson King Maple	9	Girdling roots present
2	Crimson King Maple	14	Girdling roots present
3	Crimson King Maple	14	Girdling roots present
5	Crimson King Maple	10	Girdling roots present
7	Weeping Cherry	15	Girdling roots present
8	Cherry	16	Girdling roots present
10	Weeping Cherry	14	Girdling roots present
12	Spruce-Colorado Blue	18	...
13	Spruce-Colorado Blue	19	...
14	Spruce-Colorado Blue	22	...
15	Spruce-Colorado Blue	23	...
17	Dogwood-Kousa	6	...
19	Dogwood-Kousa	11	...
20	Pine-Scotch	17	Girdling roots present
21	Pine-Scotch	31	Girdling roots present
22	Fir-Douglas	8	...
23	Spruce-Colorado Blue	25	...
24	Spruce-Colorado Blue	23	...
25	Spruce-Colorado Blue	17	...
26	Spruce-Colorado Blue	19	...
28	Maple-Norway	30	Girdling roots present
29	Maple-Norway	20	...
30	Spruce-Colorado Blue	18	...
31	Spruce-Colorado Blue	26	...
32	Spruce-Colorado Blue	5	...
33	Spruce-Colorado Blue	29	...
34	Spruce-Colorado Blue	5	...
35	Spruce-Colorado Blue	21	...
36	Spruce-Colorado Blue	5	...
37	Spruce-Colorado Blue	14	...
38	Spruce-Colorado Blue	4	...
39	Spruce-Colorado Blue	19	...
40	Pine-Austrian	21	...
41	Oak- Black	30	...
42	Oak- Black	31	...
43	Maple-Norway	22	Girdling roots present

Tree ID	Common Name	DBH	Girdling Roots
47	Maple-Norway	27	Girdling roots present
48	Spruce-Colorado Blue	18	...
49	Pine-Eastern White	17	Girdling roots present
51	Spruce-Colorado Blue	3	...
52	Dogwood-Flowering	4	...
53	Dogwood-Flowering	5	...
54	Dogwood-Flowering	6	...
58	Dogwood-Kousa	6	...
59	Dogwood-Kousa	5	...
60	Dogwood-Kousa	6	...
61	Spruce-Colorado Blue	22	...
62	Elm-Slippery	24	Girdling roots present
63	Crabapple	6	...
64	Linden-Littleleaf	17	Girdling roots present
67	Pine-Scotch	13	Girdling roots present
68	Spruce-Colorado Blue	27	...
69	Sourwood	7	...
72	Spruce-Colorado Blue	21	...
73	Crabapple	12	...
74	Crimson King Maple	15	...
75	Crimson King Maple	17	Girdling roots present
76	Crimson King Maple	15	Girdling roots present
77	Crimson King Maple	17	Girdling roots present
79	Dogwood-Flowering	7	...
80	Dogwood-Flowering	12	...
81	Dogwood-Flowering	11	...
82	Dogwood-Flowering	5	...
83	Dogwood-Flowering	8	...
85	Dogwood-Kousa	9	...
86	Dogwood-Kousa	11	...
87	Mimosa	21	...
88	Cedar-Atlas	18	...
89	Oak - Scarlet	5	...
90	Maple-Japanese	8	...
91	Oak- Black	30	...
92	Oak- Black	37	...
96	Maple-Norway	22	Girdling roots present
97	Birch-Paper	10	...
98	Maple-Norway	10	...

Tree ID	Common Name	DBH	Girdling Roots
99	Cherry	23	...
100	Maple-Norway	27	...
101	Purple Leaf Plum	20	...
104	Maple-Norway	12	...
105	Oak - Scarlet	39	...
107	Maple-Norway	10	Girdling roots present
109	Cherry	7	...
111	Cherry	10	...
112	Cherry	6	...
114	Pear-Callery	6	...
115	Pear-Callery	6	...
117	Pear-Callery	6	...
118	Pear-Callery	6	...
119	Pear-Callery	6	...
129	Oak - Scarlet	22	...
131	Elm-American	24	...
132	Oak - Scarlet	34	...
133	Oak - Scarlet	26	...
134	Oak - Scarlet	48	Girdling roots present
140	Ash-White	6	...
141	Ash-White	4	...
142	Oak - Scarlet	11	...
143	Oak - Scarlet	13	...
144	Oak - Scarlet	12	...
145	Oak - Scarlet	10	...
157	Oak - Scarlet	20	...
158	Oak - Scarlet	12	...
159	Oak - Scarlet	14	...
160	Oak - Scarlet	15	...
162	Oak - Scarlet	15	...
163	Oak - Scarlet	16	...
164	Oak - Scarlet	9	...
165	Oak - Scarlet	15	...
166	Oak - Scarlet	13	...
167	Oak - Scarlet	15	...
168	Oak - Scarlet	19	...
169	Oak - Scarlet	15	...
181	Pear-Callery	11	...
182	Pear-Callery	10	...

Tree ID	Common Name	DBH	Girdling Roots
183	Pear-Callery	11	...
184	Pear-Callery	11	...
185	Pear-Callery	10	...
187	Spruce-White	8	...
188	Spruce-White	8	...
189	Spruce-White	11	...
190	Spruce-White	11	...
195	Holly-American (8)	12	...
198	Pine-Austrian	14	Girdling roots present
199	Pine-Austrian	14	...
204	Pine-Austrian	12	Girdling roots present
206	Pine-Austrian	12	Girdling roots present
207	Arborvitae-Eastern	6	...
209	Pine-Eastern White	15	...
211	Oak - Scarlet	26	Girdling roots present
229	Elm	9	...
230	Elm	8	...
231	Elm	7	...
232	Elm	7	...
233	Maple-Sugar	5	...
234	Maple-Sugar	5	...
235	Maple-Sugar	6	...
236	Oak-Pin	6	...
237	Oak-Pin	5	...
238	Oak-Pin	6	...
239	Oak-Pin	6	...
240	Oak-Pin	6	...
241	Oak-Pin	6	...
246	Dogwood-Flowering	7	...
247	Dogwood-Flowering	10	...
252	Dogwood-Kousa	12	...
255	Poplar-Lombardy	17	...
256	Poplar-Lombardy	16	...
257	Poplar-Lombardy	13	...
258	Poplar-Lombardy	15	...
259	Poplar-Lombardy	16	...
260	Poplar-Lombardy	16	...
261	Poplar-Lombardy	14	...
262	Poplar-Lombardy	18	...

Tree ID	Common Name	DBH	Girdling Roots
271	Honeylocust-Thornless Common	13	...
275	Honeylocust-Thornless Common	11	...
276	Dogwood-Kousa	7	...
280	Crabapple	5	...
282	Pine-Austrian	15	...
284	Beech-European	35	...
289	Honeylocust-Thornless Common	17	...
291	Honeylocust-Thornless Common	20	...
292	Honeylocust-Thornless Common	20	...
293	Maple-Norway	21	...
294	Honeylocust-Thornless Common	19	...
295	Honeylocust-Thornless Common	20	...
296	Honeylocust-Thornless Common	17	...
299	Honeylocust-Thornless Common	15	...
300	Honeylocust-Thornless Common	18	Girdling roots present
301	Honeylocust-Thornless Common	13	...
303	Honeylocust-Thornless Common	21	...
305	Honeylocust-Thornless Common	17	...
326	Maple-Norway	17	...
327	Maple-Norway	17	...
328	Maple-Norway	15	...
329	Maple-Norway	13	...
330	Maple-Norway	18	...
332	Maple-Norway	15	...
333	Maple-Norway	18	...
344	Beech-European	29	...
345	Maple-Norway	25	...
346	Maple-Norway	20	...
347	Maple-Norway	22	...
350	Oak - Scarlet	30	...
357	Spruce-Colorado Blue	12	...
358	Maple-Norway	19	Girdling roots present
359	Spruce-Colorado Blue	15	...
360	Spruce-Colorado Blue	16	...
364	Spruce-Colorado Blue	14	...
365	Spruce-Colorado Blue	16	...
369	Spruce-Colorado Blue	9	...
370	Maple-Norway	17	...
372	Maple-Silver	25	...

Tree ID	Common Name	DBH	Girdling Roots
373	Maple-Silver	30	...
374	Catalpa	25	...
375	Maple-Norway	24	...
379	Maple-Sugar	22	Girdling roots present
380	Maple-Sugar	22	...
382	Oak - Scarlet	22	...
384	Spruce-Colorado Blue	12	...
392	Maple-Norway	15	...
394	Oak - Scarlet	26	...
397	Spruce-Colorado Blue	20	...
398	Dogwood-Kousa	5	...
399	Maple-Sugar	4	...
405	Maple-Norway	7	...
407	Oak - Scarlet	31	Girdling roots present
412	Maple-Norway	4	...
421	Maple-Norway	10	...
426	Elm	9	...
427	Spruce-Colorado Blue	17	...
429	Maple-Norway	13	...
430	Oak-White	28	...
431	Oak-White	33	...
433	Maple-Norway	16	Girdling roots present
441	Maple-Norway	19	...
445	Maple-Norway	18	...
446	Oak-White	38	...
458	Maple-Norway	22	...
459	Pear-Callery	4	...
460	Pear-Callery	3	...
461	Pear-Callery	3	...
462	Pear-Callery	3	...
466	Spruce-Colorado Blue	14	...
469	Spruce-Colorado Blue	14	...
471	Spruce-Colorado Blue	13	...
473	Maple-Sugar	7	...
479	Dogwood-Flowering	9	Girdling roots present
481	Spruce-Colorado Blue	25	...
484	Crimson King Maple	9	...
486	Crimson King Maple	14	...
488	Crimson King Maple	22	Girdling roots present

Tree ID	Common Name	DBH	Girdling Roots
489	Crimson King Maple	21	...
490	Crimson King Maple	24	...
491	Crimson King Maple	24	...
493	Maple-Japanese	28	...
496	Crabapple	14	...
505	Honeylocust-Thornless Common	10	...
506	Honeylocust-Thornless Common	11	...
511	Birch-Paper	11	...
512	Crabapple	14	Girdling roots present
513	Dogwood-Kousa	6	...
515	Dogwood-Flowering	6	...
516	Dogwood-Flowering	6	...
517	Fir-White	19	...
519	Dogwood-Flowering	4	...
521	Oak-White	40	...
524	Dogwood-Flowering	4	...
526	Dogwood-Flowering	4	...
545	Maple-Norway	19	...
546	Beech-European	27	...
549	Dogwood-Flowering	6	...
550	Dogwood-Flowering	6	...
551	Dogwood-Flowering	8	...
555	Cherry	7	...
557	Birch-Paper	10	...
558	Dogwood-Flowering	6	...
560	Maple-Norway	21	...
561	Maple-Norway	27	...
562	Maple-Norway	26	...
563	Oak- Black	45	...
564	Dogwood-Flowering	7	...
565	Dogwood-Flowering	6	...
566	Dogwood-Flowering	5	...
567	Dogwood-Flowering	6	...
568	Maple-Japanese	8	...
569	Dogwood-Flowering	6	...
571	Maple-Norway	21	...
573	Spruce-Colorado Blue	17	...
574	Dogwood-Flowering	12	...
575	Crabapple	6	...

Tree ID	Common Name	DBH	Girdling Roots
576	Maple-Norway	21	...
578	Maple-Japanese	5	...
579	Maple-Japanese	6	...
583	Maple-Norway	23	Girdling roots present
585	Maple-Norway	21	...
587	Maple-Norway	26	...
590	Yew	11	...
591	Maple-Norway	7	...
593	Maple-Norway	23	...
594	Maple-Japanese	4	...
602	Birch-Paper	15	...
603	Spruce-Colorado Blue	16	...
604	Spruce-Colorado Blue	23	...
606	Spruce-Colorado Blue	15	...
609	Maple-Norway	24	Girdling roots present
610	Spruce-Colorado Blue	20	...
611	Spruce-Colorado Blue	18	...
614	Oak-White	34	...
615	Oak- Black	36	...
616	Cherry	7	...
617	Maple-Norway	17	...
618	Maple-Norway	14	...
619	Maple-Norway	17	...
620	Cherry	7	...
621	Oak-White	42	...
622	Oak-White	42	...
625	Dogwood-Flowering	5	...
626	Dogwood-Flowering	6	...
628	Maple-Norway	20	Girdling roots present (moderate)
629	Dogwood-Flowering	6	...
630	Maple-Norway	11	Girdling roots present
631	Maple-Norway	12	Girdling roots present
632	Maple-Norway	9	...
633	Maple-Norway	12	Girdling roots present
634	Maple-Norway	11	Girdling roots suspected
635	Maple-Norway	11	Girdling roots suspected
636	Maple-Norway	10	Girdling roots suspected
637	Purple Leaf Plum	6	...
639	Purple Leaf Plum	7	...

Tree ID	Common Name	DBH	Girdling Roots
641	Crabapple	8	...
642	Crabapple	7	...
643	Crabapple	6	...
644	Crabapple	9	...
645	Maple-Norway	12	Girdling roots suspected
646	Crabapple	6	...
647	Crabapple	6	...
648	Crabapple	6	...
649	Crabapple	7	...
650	Maple-Norway	12	Girdling roots present
651	Maple-Norway	12	Girdling roots present
652	Purple Leaf Plum	3	...
653	Purple Leaf Plum	3	...
654	Maple-Norway	10	Girdling roots suspected
655	Maple-Norway	11	...
656	Maple-Norway	9	Girdling roots present (severe)
657	Maple-Norway	10	...
658	Maple-Norway	10	...
659	Pear-Callery	8	...
660	Pear-Callery	8	...
661	Pear-Callery	9	...
662	Pear-Callery	9	...
663	Pear-Callery	8	...
664	Pear-Callery	7	...
665	Pear-Callery	9	...
666	Pear-Callery	10	...
667	Pear-Callery	9	...
668	Pear-Callery	10	...
669	Pear-Callery	9	...
670	Pear-Callery	9	...
671	Maple-Norway	9	Girdling roots suspected
672	Maple-Norway	9	...
673	Maple-Norway	11	...
674	Maple-Norway	21	...
675	Maple-Norway	17	...
680	Dogwood-Corneliancherry	4	...
682	Cherry	6	...
683	Cherry	5	...
685	Oak-Pin	6	...

Tree ID	Common Name	DBH	Girdling Roots
686	Oak-Pin	6	...
687	Oak-Pin	6	...
688	Oak-Pin	5	...
689	Cherry	6	...
690	Maple-Norway	14	...
691	Maple-Norway	21	...
693	Oak-White	32	...
695	Honeylocust-Thornless Common	5	...
696	Honeylocust-Thornless Common	6	...
698	Maple-Red	4	...
699	Beech-European	45	...
701	Honeylocust-Thornless Common	5	...
702	Maple-Red	4	...
704	Maple-Red	4	...
705	Oak- Northern Red	28	...
707	Oak-White	46	...
710	Maple-Japanese	7	...
713	Cherry	13	...
714	Oak- Black	43	...
717	Maple-Norway	24	...
719	Maple-Norway	26	...
720	Maple-Norway	18	...
722	Oak- Northern Red	24	...
724	Oak- Northern Red	24	...
726	Maple-Red	4	...
727	Maple-Red	5	...
728	Maple-Red	6	...
729	Maple-Red	6	...
730	Maple-Red	5	...
731	Maple-Red	6	...
732	Maple-Red	6	...
733	Maple-Red	6	...
735	Weeping Cherry	8	...
736	Oak- Black	32	...
741	Oak- Black	48	...
742	Spruce-Colorado Blue	9	...
743	Crabapple	7	...
744	Crabapple	5	...
748	Tuliptree	18	...

Tree ID	Common Name	DBH	Girdling Roots
750	Oak- Northern Red	20	Girdling roots present
752	Oak- Northern Red	18	Girdling roots present
753	Oak- Northern Red	17	...
755	Crabapple	12	...
756	Oak- Black	27	...
757	Oak-White	17	...
758	Oak-White	19	...
759	Oak- Northern Red	22	...
761	Oak- Northern Red	24	...
764	Oak- Black	32	...
766	Oak- Northern Red	33	...
768	Pear-Callery	11	...
772	Pear-Callery	9	...
774	Maple-Norway	16	...
775	Maple-Norway	15	...
776	Maple-Norway	16	...
779	Maple-Norway	19	...
781	Maple-Norway	10	...
782	Maple-Norway	10	Girdling roots present
783	Maple-Norway	17	...
787	Maple-Japanese	32	Girdling roots present
790	Maple-Norway	18	...
792	Maple-Sycamore	19	...
795	Maple-Norway	18	...
796	Pine-Austrian	15	...
801	Cherry	9	...
803	Maple-Sugar	19	Girdling roots present
806	Weeping Cherry	9	...
807	Crabapple	14	...
808	Cherry	15	...
809	Magnolia-Star	4	...
810	Purple Leaf Plum	4	...
811	Maple-Japanese	6	...
812	Maple-Japanese	4	...
813	Magnolia-Saucer	13	...
814	Spruce-Norway (3)	5	...
815	Cherry	7	...
816	Cherry	6	...
820	Cherry	7	...

Tree ID	Common Name	DBH	Girdling Roots
821	Cherry	9	...
822	Cherry	7	...
823	Maple-Japanese	10	Girdling roots suspected
825	Dogwood-Kousa	9	...
826	Cedar-Atlas	12	...
828	Planetree-London	4	...
830	Oak-English	5	...
831	Oak-English	5	...
832	Oak-English	5	...
833	Oak-English	5	...
834	Oak-English	5	...
835	Oak-English	5	...
836	Oak-English	5	...
837	Oak-English	5	...
838	Oak-English	5	...
839	Oak-English	5	...
840	Beech-European	5	...
842	Lilac-Japanese Tree	8	...
843	Lilac-Japanese Tree	8	...
844	Lilac-Japanese Tree	7	Girdling roots suspected
845	Lilac-Japanese Tree	7	Girdling roots present
846	Lilac-Japanese Tree	8	...
847	Beech-European	18	Girdling roots present
848	Birch-Paper	14	...
849	Maple-Red	17	Girdling roots present (moderate)
850	Birch-Paper	5	...
851	Maple-Japanese	6	...
852	Cherry	23	...
853	Spruce-Colorado Blue	15	...
854	Oak- Black	31	...
856	Redbud-Eastern	9	...
857	Oak- Black	16	...
858	Oak- Black	17	...
859	Oak- Black	17	...
860	Oak- Black	25	...
861	Oak- Black	16	...
862	Oak- Black	33	...
869	Pine-Eastern White	23	...
870	Maple-Norway	23	...

Tree ID	Common Name	DBH	Girdling Roots
871	Maple-Norway	9	...
873	Pine-Austrian	24	...
889	Pine-Eastern White	29	...
891	Oak- Black	34	...
892	Ash-White	7	...
893	Ash-White	5	...
894	Horsechestnut-Common	26	...
896	Falsecypress-Sawara	13	...
897	Falsecypress-Sawara	14	...
898	Falsecypress-Sawara	8	...
899	Falsecypress-Sawara	22	...
900	Honeylocust-Thornless Common	8	...
901	Honeylocust-Thornless Common	8	...
902	Honeylocust-Thornless Common	4	...
903	Honeylocust-Thornless Common	5	...
904	Honeylocust-Thornless Common	8	...
905	Honeylocust-Thornless Common	6	...
906	Maple-Norway	8	...
908	Hemlock-Canadian	8	...
909	Hemlock-Canadian	9	...
912	Pine-Eastern White (7)	6	...
913	Pine-Eastern White	14	...
914	Pine-Eastern White	11	...
915	Pine-Eastern White	9	...
916	Pine-Eastern White	10	...
917	Pine-Eastern White	14	...
919	Pear-Callery	17	...
920	Pear-Callery	15	...
921	Maple-Japanese	4	...
924	Maple-Norway	14	Girdling roots present
926	Dogwood-Kousa	6	...
927	Pear-Callery	8	...
928	Pear-Callery	7	...
929	Dogwood-Flowering	7	...
931	Cherry	5	...
935	Maple-Norway	16	Girdling roots suspected
937	Cherry	8	...
938	Cherry	9	...
939	Cedar-Atlas	9	...

Tree ID	Common Name	DBH	Girdling Roots
940	Zelkova-Japanese	7	...
941	Zelkova-Japanese	8	...
942	Zelkova-Japanese	8	...
944	Purple Leaf Plum	5	...
945	Zelkova-Japanese	8	...
946	Zelkova-Japanese	7	...
947	Zelkova-Japanese	7	...
948	Zelkova-Japanese	7	...
950	Zelkova-Japanese	8	...
952	Cherry	9	...
953	Cherry	7	...
955	Zelkova-Japanese	8	...
961	Falsecypress-Sawara	27	...
962	Falsecypress-Sawara	16	...
963	Falsecypress-Sawara	20	...
965	Arborvitae-Eastern	9	...
966	Pine-Eastern White	15	Girdling roots present (moderate)
967	Pine-Eastern White	21	Girdling roots present (moderate)
968	Pine-Eastern White	17	Girdling roots present (moderate)
972	Mulberry-White	6	...
979	Pine-Scotch	14	Girdling roots present
995	Catalpa-Northern	23	Girdling roots present
997	Maple-Japanese	6	...
999	Oak-White	42	...
1000	Oak-White	34	...
1003	Oak- Black	21	...
1004	Oak- Black	23	...
1008	Pine-Austrian	21	Girdling roots present
1010	Oak-Pin	7	...
1011	Cedar-Atlas	10	...
1012	Maple-Red	8	...
1017	Pine-Eastern White	22	...
1019	Cedar-Atlas	11	...
1020	Cedar-Atlas	13	...
1021	Cedar-Atlas	11	Girdling roots suspected
1023	Pine-Eastern White	28	Girdling roots present
1024	Pine-Eastern White	24	Girdling roots present
1026	Oak- Black	26	...
1028	Zelkova-Japanese	6	...

Tree ID	Common Name	DBH	Girdling Roots
1029	Pine-Eastern White	24	...
1030	Pine-Eastern White	30	...
1031	Maple-Red	5	...
1033	Pine-Eastern White	16	...
1035	Pine-Eastern White	16	...
1038	Pine-Eastern White	18	...
1042	Sweetgum	30	...
1044	Purple Leaf Plum	9	...
1045	Zelkova-Japanese	7	...
1046	Purple Leaf Plum	7	...
1047	Zelkova-Japanese	8	...
1048	Zelkova-Japanese	6	...
1049	Zelkova-Japanese	7	...
1050	Zelkova-Japanese	6	...
1051	Zelkova-Japanese	7	...
1052	Oak-Pin	12	...
1053	Cherry	8	...
1054	Zelkova-Japanese	7	...
1055	Maple-Norway	7	...
1056	Maple-Norway	7	Girdling roots suspected
1057	Maple-Norway	8	Girdling roots present
1058	Maple-Norway	8	...
1059	Maple-Norway	7	...
1060	Maple-Norway	7	...
1061	Maple-Red	6	Girdling roots present (moderate)
1062	Maple-Red	7	Girdling roots suspected
1063	Maple-Red	10	...
1064	Maple-Red	7	...
1065	Maple-Red	7	...
1066	Maple-Red	7	Girdling roots suspected
1069	Linden-Littleleaf	11	...
1070	Linden-Littleleaf	9	...
1071	Linden-Littleleaf	9	...
1072	Linden-Littleleaf	9	...
1073	Linden-Littleleaf	9	...
1074	Linden-Littleleaf	10	...
1075	Linden-Littleleaf	12	...
1077	Purple Leaf Plum	6	...
1078	Purple Leaf Plum	7	...

Tree ID	Common Name	DBH	Girdling Roots
1084	Maple-Freeman's	16	...
1088	Elm	8	Girdling roots present (moderate)
1089	Elm	7	Girdling roots present
1091	Crabapple	5	...
1092	Elm	10	...
1093	Crabapple	5	...
1094	Crabapple	5	...
1095	Elm	10	Girdling roots present (moderate)
1096	Crabapple	5	...
1097	Elm	7	Girdling roots present (moderate)
1098	Oak-White	54	...
1099	Pine-Eastern White	31	...
1100	Spruce-White	8	...
1101	Spruce-White	7	...
1102	Maple-Red	7	Girdling roots present (moderate)
1103	Maple-Red	8	Girdling roots present
1104	Spruce-White	10	...
1105	Spruce-White	9	...
1106	Spruce-White	11	...
1111	Linden-Littleleaf	11	...
1112	Maple-Red	7	Girdling roots present (moderate)
1113	Maple-Red	6	...
1114	Maple-Red	7	Girdling roots present (severe)
1118	Oak- Northern Red	12	...
1121	Linden-Littleleaf	13	...
1122	Linden-Littleleaf	8	...
1123	Linden-Littleleaf	12	...
1124	Linden-Littleleaf	11	...
1125	Linden-Littleleaf	11	...
1126	Linden-Littleleaf	11	...
1127	Linden-Littleleaf	10	...
1128	Linden-Littleleaf	10	...
1131	Ash-White	8	...
1134	Ash-White	8	...
1137	Zelkova-Japanese	14	...
1138	Spruce-Colorado Blue	17	Girdling roots suspected
1139	Dogwood-Kousa	5	...
1140	Dogwood-Kousa	5	...
1141	Dogwood-Kousa	8	...

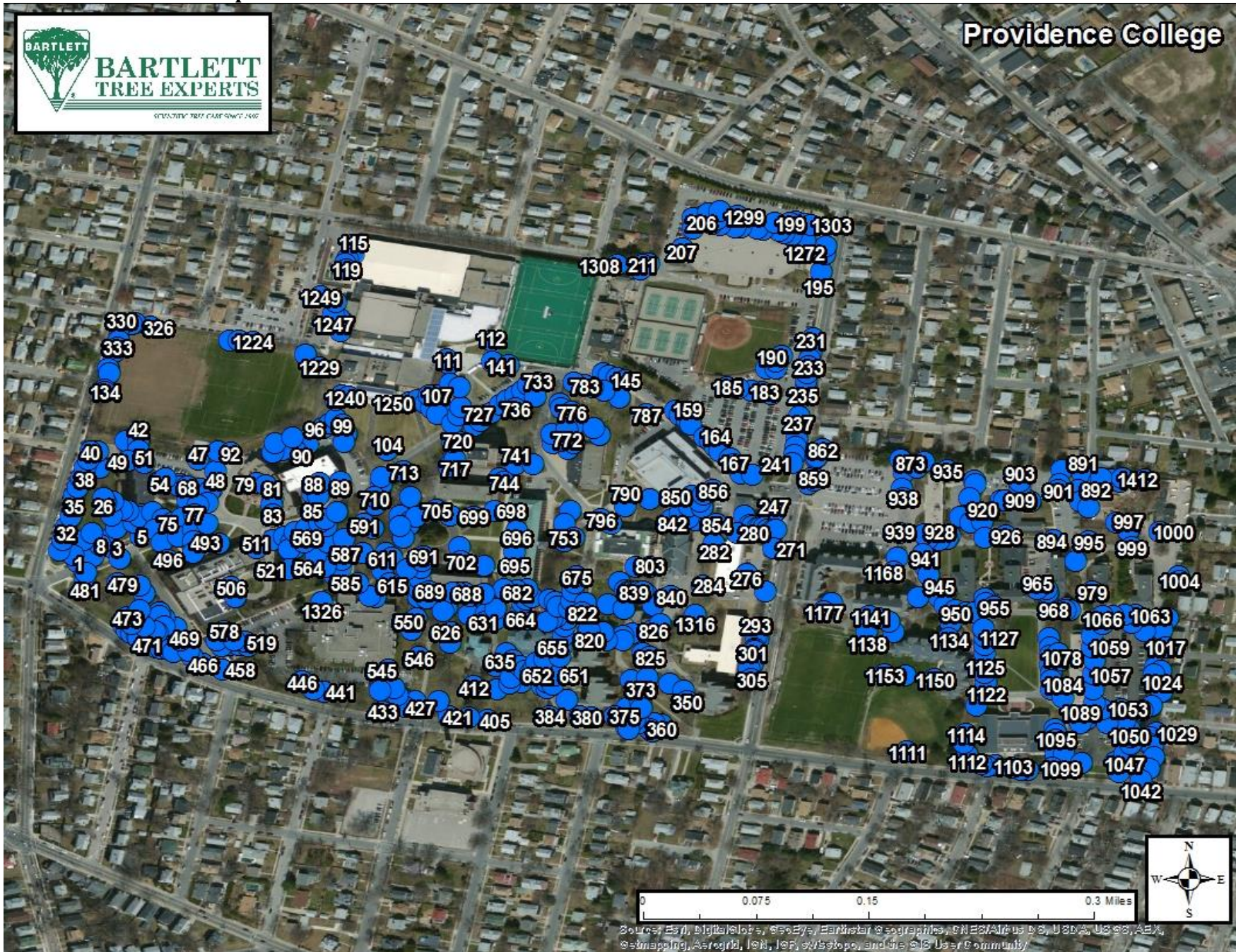
Tree ID	Common Name	DBH	Girdling Roots
1150	Zelkova-Japanese	13	...
1152	Zelkova-Japanese	11	...
1153	Zelkova-Japanese	12	...
1161	Oak-English	13	...
1167	Oak- Northern Red	11	...
1168	Honeylocust-Thornless Common	10	...
1176	Zelkova-Japanese	17	...
1177	Zelkova-Japanese	16	Girdling roots suspected
1198	Catalpa-Northern	26	...
1199	Hemlock-Canadian	20	...
1200	Pine-Austrian	20	...
1201	Oak-White	26	...
1202	Oak-White	45	...
1203	Oak-White	34	...
1205	Oak- Black	21	...
1207	Spruce-Colorado Blue	4	...
1209	Dogwood-Kousa	1	...
1212	Dogwood-Kousa	4	...
1214	Cherry	4	...
1217	Cherry	5	...
1218	Cherry	4	...
1219	Cherry	5	...
1221	Cherry	4	...
1222	Maple-Red	4	...
1223	Maple-Red	4	...
1224	Maple-Red	4	...
1226	Ginkgo	2	...
1229	Ginkgo	2	...
1238	Maple-Red	3	...
1239	Purple Leaf Plum	3	...
1240	Maple-Red	3	...
1243	Dogwood-Kousa	7	...
1244	Birch-Paper	5	...
1245	Dogwood-Kousa	5	...
1246	Dogwood-Kousa	5	...
1247	Ash-White	3	...
1248	Ash-White	3	...
1249	Ash-White	3	...
1250	Tuliptree	3	...

Tree ID	Common Name	DBH	Girdling Roots
1251	Tuliptree	3	...
1252	Tuliptree	3	...
1253	Tuliptree	3	...
1254	Tuliptree	3	...
1255	Dogwood-Kousa	6	...
1257	Dogwood-Kousa	5	...
1259	Maple-Paperbark	8	...
1260	Dogwood-Kousa	6	...
1261	Maple-Paperbark	4	...
1263	Ash-White	4	...
1264	Maple-Red	2	...
1265	Elm	3	...
1267	Elm	3	...
1268	Elm	3	...
1271	Maple-Sugar	4	...
1272	Crabapple	2	...
1276	Cedar-Atlas	3	...
1277	Lilac-Japanese Tree	3	...
1278	Lilac-Japanese Tree	3	...
1279	Lilac-Japanese Tree	3	...
1280	Lilac-Japanese Tree	3	...
1281	Lilac-Japanese Tree	3	...
1282	Lilac-Japanese Tree	3	...
1283	Lilac-Japanese Tree	4	...
1284	Lilac-Japanese Tree	2	...
1285	Planetree-London	3	...
1291	Lilac-Japanese Tree	3	Girdling roots present
1292	Dogwood-Kousa	4	...
1294	Dogwood-Kousa	4	...
1296	Crabapple	1	...
1298	Elm-Chinese	3	...
1299	Elm-Chinese	3	...
1301	Elm-Chinese	4	...
1302	Planetree-London	3	...
1303	Planetree-London	3	...
1308	Pine-Eastern White	5	...
1311	Pine-Eastern White	9	...
1312	Maple-Sugar	5	...
1313	Maple-Sugar	4	...

Tree ID	Common Name	DBH	Girdling Roots
1316	Maple-Norway	4	...
1317	Maple-Red	3	...
1319	Pear-Callery	5	...
1320	Maple-Paperbark	4	...
1322	Dogwood-Flowering	5	...
1326	Maple-Paperbark	4	...
1410	Oak- Black	18	...
1412	Pine-Austrian	19	...
1419	Cherry	6	...
1421	Magnolia-Star	2	...
1424	Fir-Balsam	2	...
1425	Spruce-White	2	...
1426	Ash-Green	3	...
1427	Pine-Eastern White	2	...
1428	Hornbeam-American	3	...
1429	Hawthorn	3	...
1430	Tuliptree	3	...
1431	Oak-Swamp White	3	...
1432	Pine-Eastern White	2	...
1433	Pine-Eastern White	2	...
1434	Birch-River	2	...
1435	Spruce-White	3	...
1436	Pear-Callery	4	...
1437	Pear-Callery	3	...
1438	Pear-Callery	3	...
1439	Pear-Callery	6	...
1440	Pear-Callery	6	...
1441	Pear-Callery	6	...
1442	Pear-Callery	5	...
1443	Pear-Callery	5	...
1444	Fir-Balsam	2	...
1445	Magnolia-Sweetbay	2	...
1446	Magnolia-Sweetbay	2	...
1447	Birch-River	2	...
1448	Tupelo-Black	2	...
1449	Dogwood-Flowering	2	...
1450	Serviceberry	2	...
1451	Serviceberry	2	...
1452	Serviceberry	2	...

Tree ID	Common Name	DBH	Girdling Roots
1454	Maple-Japanese	10	...
1456	Hemlock-Canadian	4	...

Map 8: INVENTORIED TREES RECOMMENDED FOR A ROOT COLLAR EXCAVATION



Plant Health Care

The Inventory Team also recommends Plant Health Care (PHC) programs for trees in the formal landscape. In addition, an Integrated Pest Management (IPM) program monitors for potentially damaging insects, diseases and cultural problems that are often seasonal and may not have been evident during our inventory visit. These pests and diseases include, but are not limited to, the following:

- Anthracnose – on a variety of species
- Aphids – on a variety of species
- Bacterial Leaf Scorch – on trees within red oak group
- Bagworms – on a variety of tree species
- Boring Insects – on a variety of tree species
- Caterpillar Defoliators – on a variety of tree species, especially oak
- Diplodia Tip Blight – on pines and spruces
- Gall Insects – on a variety of species
- Lacebugs – on a variety of species
- Suspected Phytophthora Root Rot and Canker – on a variety of tree species, especially beech species
- Scab and Rust Fungi – on crabapple and apple species.
- Scale Insects – on a variety of tree species, especially oak
- Spider Mites – on a variety of tree species
- Winter Moth – on a variety of tree species



Figure 13 : Tree #574 with borer damage.

We identified pests or diseases on the following inventoried trees at the time of the inventory:

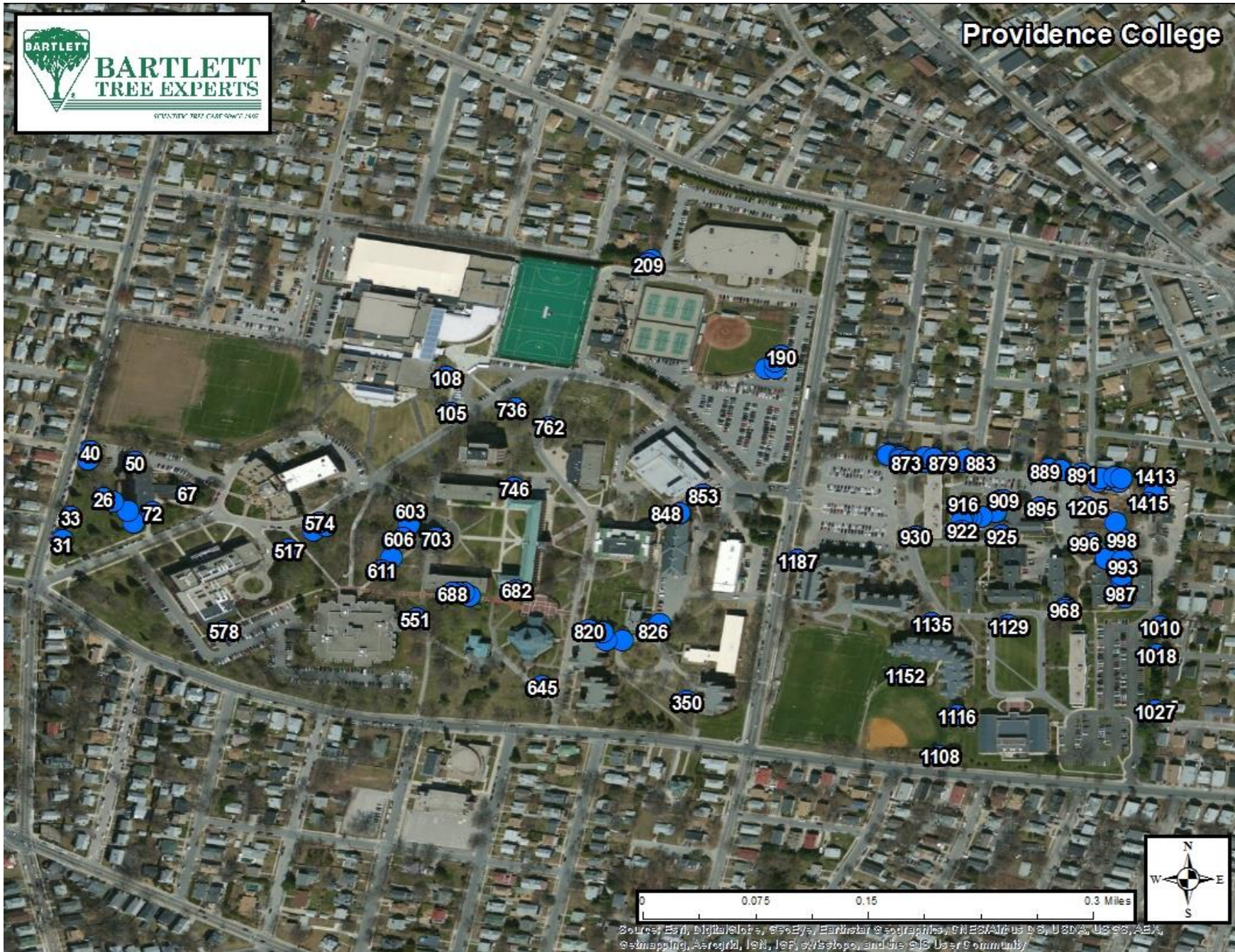
Table 13: INVENTORIED TREES IDENTIFIED WITH PESTS OR DISEASES (119 Trees)

Tree ID	Common Name	DBH	Pest or Disease	Pest or Disease	Pest or Disease
15	Spruce-Colorado Blue	23	Borers	...	...
20	Pine-Scotch	17	Borers	...	...
23	Spruce-Colorado Blue	25	Borers	...	...
26	Spruce-Colorado Blue	19	Borers	...	...
31	Spruce-Colorado Blue	26	Borers	...	...
33	Spruce-Colorado Blue	29	Borers	...	...
39	Spruce-Colorado Blue	19	Borers	...	...
40	Pine-Austrian	21	Borers	...	...
50	Maple-Sugar	16	Phytophthora (suspected)	...	...
67	Pine-Scotch	13	Borers	...	...
72	Spruce-Colorado Blue	21	Borers	...	...
105	Oak - Scarlet	39	Phytophthora (suspected)	...	...
108	Maple-Norway	29	Phytophthora (suspected)	...	...
189	Spruce-White	11	Borers		...
190	Spruce-White	11	Borers		...
208	Cherry-Black	19	Cankers	...	...
209	Pine-Eastern White	15	Borers	...	...
350	Oak - Scarlet	30	Phytophthora (suspected)	...	...
517	Fir-White	19	Diplodia tip blight	...	...
551	Dogwood-Flowering	8	Borers	...	...
570	Fir-White	21	Diplodia tip blight	...	...
573	Spruce-Colorado Blue	17	Diplodia tip blight	Borers	Resinosis
574	Dogwood-Flowering	12	Borers	...	...
578	Maple-Japanese	5	Bagworms	...	...
603	Spruce-Colorado Blue	16	Resinosis	...	...
604	Spruce-Colorado Blue	23	Needlecast	...	...
606	Spruce-Colorado Blue	15	Needlecast	...	...
610	Spruce-Colorado Blue	20	Needlecast	Resinosis	...
611	Spruce-Colorado Blue	18	Needlecast	Resinosis	...
645	Maple-Norway	12	Phytophthora (suspected)	...	...

Tree ID	Common Name	DBH	Pest or Disease	Pest or Disease	Pest or Disease
682	Cherry	6	Gumosis	...	...
685	Oak-Pin	6	Scale	...	...
686	Oak-Pin	6	Scale	...	...
687	Oak-Pin	6	Scale	...	...
688	Oak-Pin	5	Scale	...	...
703	Falsecypress-Sawara (11)	12	Needlecast	...	...
736	Oak- Black	32	Borers	...	...
746	Spruce-Colorado Blue	16	Needlecast	...	...
762	Oak- Northern Red	20	Phytophthora (suspected)	...	...
814	Spruce-Norway (3)	5	Mites	...	...
815	Cherry	7	Scale	...	...
816	Cherry	6	Scale	...	...
820	Cherry	7	Scale	...	...
826	Cedar-Atlas	12	Needlecast	...	...
848	Birch-Paper	14	Cankers	...	...
853	Spruce-Colorado Blue	15	Mites	...	...
867	Pine-Eastern White	19	Needlecast	...	...
868	Pine-Eastern White	26	Needlecast	Adelgid	...
869	Pine-Eastern White	23	Needlecast	Adelgid	...
872	Pine-Austrian	23	Diplodia tip blight	Sapsucker	...
873	Pine-Austrian	24	Diplodia tip blight	...	...
874	Pine-Austrian	12	Diplodia tip blight	...	...
875	Pine-Austrian	26	Diplodia tip blight	...	...
876	Pine-Austrian	21	Diplodia tip blight	...	...
879	Pine-Eastern White	30	Needlecast	...	...
880	Pine-Eastern White	22	Needlecast	...	...
882	Pine-Eastern White	27	Needlecast	...	...
883	Pine-Eastern White	24	Needlecast	...	...
889	Pine-Eastern White	29	Needlecast	...	...
895	Spruce-Colorado Blue	18	Needlecast	...	...
908	Hemlock-Canadian	8	Mites	...	...
909	Hemlock-Canadian	9	Mites	...	...
910	Spruce-Norway	29	Mites	...	...
912	Pine-Eastern White (7)	6	Needlecast	...	...

Tree ID	Common Name	DBH	Pest or Disease	Pest or Disease	Pest or Disease
913	Pine-Eastern White	14	Adelgid	...	...
914	Pine-Eastern White	11	Adelgid	...	...
916	Pine-Eastern White	10	Adelgid	...	...
918	Spruce-Colorado Blue	12	Mites	...	...
922	Hemlock-Canadian (3)	5	Mites	...	...
925	Dogwood-Kousa	4	Scale	...	...
930	Purple Leaf Plum	17	Black knot	...	...
966	Pine-Eastern White	15	Adelgid	...	...
967	Pine-Eastern White	21	Adelgid	...	...
968	Pine-Eastern White	17	Adelgid	...	...
976	Spruce-White	8	Gall insects	Mites	...
984	Pine-Eastern White	17	Adelgid	Needlecast	...
985	Pine-Eastern White	15	Adelgid	Needlecast	...
986	Pine-Eastern White	13	Adelgid	...	...
987	Pine-Eastern White	15	Adelgid	...	...
988	Pine-Eastern White	17	Adelgid	...	...
989	Pine-Eastern White	13	Needlecast	...	...
991	Pine-Eastern White	15	Adelgid	Needlecast	...
992	Pine-Eastern White	12	Adelgid	Needlecast	...
993	Pine-Eastern White	14	Adelgid	...	...
996	Spruce-Colorado Blue	18	Mites	...	...
998	Maple-Japanese	5	Phytophthora (suspected)	...	...
1010	Oak-Pin	7	Scale	...	...
1018	Spruce-Norway	23	Mites	...	...
1027	Oak- Black	36	Phytophthora (suspected)	...	...
1108	Spruce-Norway	32	Mites	...	...
1116	Pine-Eastern White	22	Needlecast	...	...
1129	Oak- Northern Red	57	Phytophthora (suspected)	...	...
1135	Hemlock-Canadian	27	Woolly adelgid	...	...
1152	Zelkova-Japanese	11	Scale	...	...
1187	Cherry	12	Scale	...	...
1205	Oak- Black	21	Phytophthora (suspected)	...	...
1386	Birch-European White	3	Borers	...	...
1455	Spruce-Colorado Blue	4	Needlecast	...	...
1456	Hemlock-Canadian	4	Woolly adelgid	...	...

Map 9: INVENTORIED TREES IDENTIFIED WITH PESTS OR DISEASES



Tree Pruning

A commonly offered service among tree companies, pruning trees is one of the most poorly executed practices by tree workers who lack training in the basics of tree biology. “Lion’s tailing,” topping, and flush cuts are a few examples, and these can lead to hazardous conditions over time.

Because this practice is so misunderstood, and because specific standards exist to perform pruning correctly, the Inventory Team decided to include some explanation in the main body of this management plan.

Tree owners and tree-care practitioners should always keep in mind that *any pruning cut is a wound*. Informed tree-care professionals have learned to manage that wounding to preserve the health, safety, and integrity of the tree.

Improper Pruning Practices

A few of the most common pruning abuses are

- Lion’s Tailing – pruning that removes interior branches along the stem and scaffold branches. This encourages poor branch taper, poor wind load distribution, and risk of branch failure. It also deprives the tree of foliage it needs to produce **photosynthates**. See Figure 14.
- Topping – pruning cuts that reduce a tree’s size by using heading cuts that shorten branches to a predetermined size. Topping substantially reduces the functional benefits a tree is capable of providing and predisposes trees to structural defects that can contribute to failures in the future. It also reduces the value of the trees substantially and deprives the tree of adequate foliage. See Figure 15.
- Flush Cuts – pruning cut through the **branch collar**, flush against the trunk or parent stem, causing unnecessary injury. See Figure 16.
- Using Climbing Spikes Inappropriately – Using climbing spikes on a healthy tree, for example, wounds healthy stem tissues and can lead to infection by fungal pathogens.



Figure 14: Example of Lion's tailing.



Figure 15: Examples of topping



Figure 16: Examples of flush cuts

Correct Pruning Practices

For specific standards on pruning practices, readers will find an ANSI A300 standard practice document in the Appendix. We have, however, included below some key pruning categories and diagrams to illustrate the goal of each.

Cleaning

Selective pruning to remove one or more of the following parts: dead, diseased, and/or broken branches.

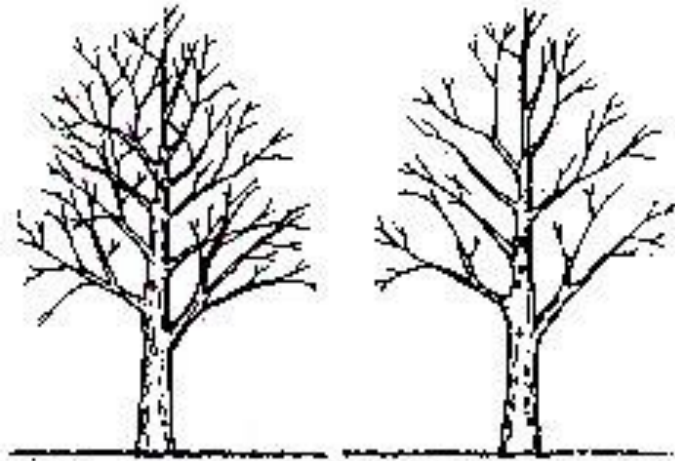


Figure 17: Illustration of crown cleaning

Raising

Selectively pruning to provide vertical clearance.

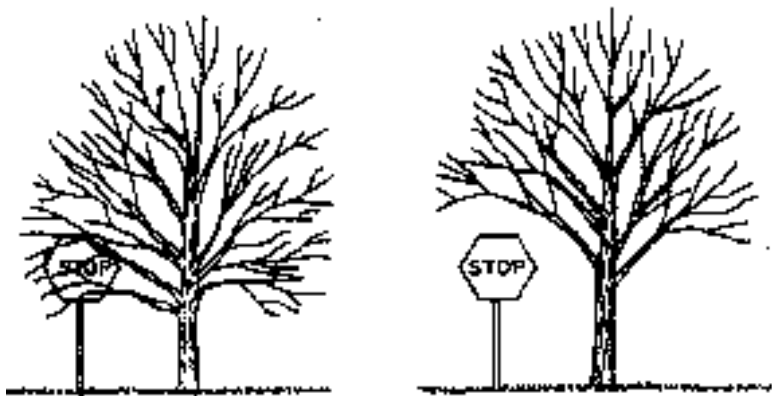


Figure 18: Illustration of crown raising

Thinning

Selective pruning to reduce density of live branches.



Figure 19: Illustration of thinning

Reducing (Reduction Pruning)

Selective pruning to reduce height or spread.



Figure 20: Illustration of reduction pruning

Structural

Selective pruning of live branches and stems to influence orientation, spacing, growth rate, or strength of attachment, and ultimate size of branches and stems.

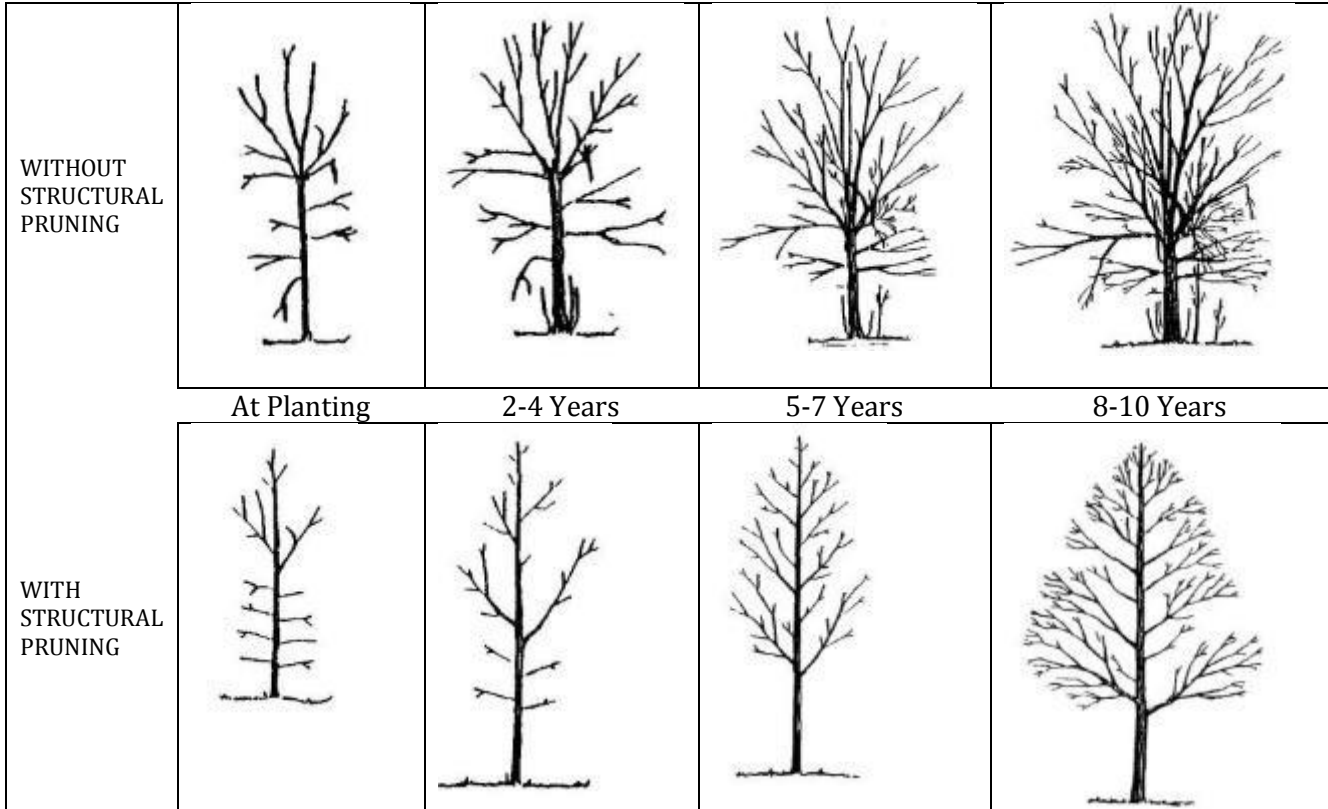


Figure 21: Illustration of structural pruning

Vista Pruning

Vista pruning is a combination of thinning and reduction pruning to enhance the view from a vantage point to an area of interest while minimizing negative impacts on tree structure and health.

We recommended pruning on the following inventoried trees:

Table 14: INVENTORIED TREES RECOMMENDED FOR PRUNING (1334 Trees)

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
548	Beech-European	40	High	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
562	Maple-Norway	26	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
576	Maple-Norway	21	High	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
593	Maple-Norway	23	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
615	Oak- Black	36	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
674	Maple-Norway	21	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
691	Maple-Norway	21	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
803	Maple-Sugar	19	High	1	Yes	...	...	...	...	...	...	...	Yes
885	Pine-Eastern White	31	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
975	Oak-White	30	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1202	Oak-White	45	High	1	Yes	...	...	...	Yes	Branch weight	...	...	...
45	Oak-Pin	44	Moderate	1	Yes	...	...	...	Yes	Lighting	Branch weight	...	...
211	Oak - Scarlet	26	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
286	Maple-Norway	23	Moderate	1	Yes	...	...	...	...	...	...	...	Yes
293	Maple-Norway	21	Moderate	1	Yes	...	...	...	...	...	...	...	Yes
314	Maple-Red	20	Moderate	1	Yes	...	...	...	...	...	...	...	Yes
326	Maple-Norway	17	Moderate	1	Yes	...	...	...	Yes	Overhead lines	...	...	Yes
329	Maple-Norway	13	Moderate	1	Yes	...	...	...	Yes	Overhead lines	...	...	Yes
345	Maple-Norway	25	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
380	Maple-Sugar	22	Moderate	1	Yes	...	...	...	...	...	...	...	Yes
436	Oak-White	36	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
497	Crabapple	30	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	Yes	Yes
506	Honeylocust-Thornless Common	11	Moderate	1	Yes	...	...	...	...	...	...	Yes	...
521	Oak-White	40	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
563	Oak- Black	45	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
583	Maple-Norway	23	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
588	Maple-Norway	28	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
597	Oak-White	40	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
614	Oak-White	34	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
617	Maple-Norway	17	Moderate	1	Yes	...	...	...	Yes	Lighting	Branch weight	...	...
621	Oak-White	42	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
675	Maple-Norway	17	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
690	Maple-Norway	14	Moderate	1	Yes	...	...	...	...	...	...	...	Yes
693	Oak-White	32	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
703	Falsecypress-Sawara (11)	12	Moderate	1	Yes	...	...	...	...	...	...	...	Yes
719	Maple-Norway	26	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
720	Maple-Norway	18	Moderate	1	Yes	...	...	...	...	...	...	...	...
722	Oak- Northern Red	24	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
724	Oak- Northern Red	24	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
730	Maple-Red	5	Moderate	1	...	...	...	...	...	...	...	...	Yes
736	Oak- Black	32	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
760	Oak- Northern Red	22	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
773	Maple-Norway	25	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
774	Maple-Norway	16	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
800	Maple-Norway	28	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
802	Maple-Sugar	30	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
854	Oak- Black	31	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
863	Oak-Pin	26	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
864	Maple-Norway	24	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
869	Pine-Eastern White	23	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
870	Maple-Norway	23	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
879	Pine-Eastern White	30	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
882	Pine-Eastern White	27	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
883	Pine-Eastern White	24	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
889	Pine-Eastern White	29	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
963	Falsecypress-Sawara	20	Moderate	1	Yes	...	...	...	...	...	...	...	Yes
978	Honeylocust-Thornless Common	14	Moderate	1	Yes	...	...	...	...	...	...	...	...
1001	Horsechestnut-Common	28	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1003	Oak- Black	21	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1004	Oak- Black	23	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1026	Oak- Black	26	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
1027	Oak- Black	36	Moderate	1	Yes	...	...	...	Yes	Branch weight	Lighting	...	...
1030	Pine-Eastern White	30	Moderate	1	Yes	...	...	...	...	...	...	...	...
1042	Sweetgum	30	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1098	Oak-White	54	Moderate	1	Yes	...	...	...	...	...	...	...	...
1107	Pine-Eastern White	48	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1110	Oak- Black	19	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1115	Pine-Eastern White	32	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1129	Oak- Northern Red	57	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1162	Oak- Black	30	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1410	Oak- Black	18	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1413	Oak- Black	21	Moderate	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1186	Maple-Silver	34	Moderate	3	...	...	...	...	Yes	Overhead lines	...	Yes	...
12	Spruce-Colorado Blue	18	Low	1	Yes	...	...	...	...	...	...	...	...
23	Spruce-Colorado Blue	25	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
28	Maple-Norway	30	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
35	Spruce-Colorado Blue	21	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
41	Oak- Black	30	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
47	Maple-Norway	27	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
61	Spruce-Colorado Blue	22	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
72	Spruce-Colorado Blue	21	Low	1	Yes	...	...	...	...	...	...	...	...
87	Mimosa	21	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
91	Oak- Black	30	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
92	Oak- Black	37	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
96	Maple-Norway	22	Low	1	Yes	...	...	...	...	...	...	...	...
100	Maple-Norway	27	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
105	Oak - Scarlet	39	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
108	Maple-Norway	29	Low	1	...	...	...	...	Yes	Branch weight	Lighting	...	...
129	Oak - Scarlet	22	Low	1	Yes	...	...	...	...	...	...	...	...
131	Elm-American	24	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
166	Oak - Scarlet	13	Low	1	Yes	...	...	...	...	...	...	...	Yes
214	Pine-Eastern White	12	Low	1	Yes	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
216	Pine-Eastern White	15	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
221	Pine-Eastern White	15	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
223	Pine-Eastern White	17	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
224	Pine-Eastern White	17	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
269	Pine-Eastern White	14	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
281	Oak - Scarlet	29	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
284	Beech-European	35	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
292	Honeylocust-Thornless Common	20	Low	1	Yes	...	...	...	...	...	...	...	Yes
294	Honeylocust-Thornless Common	19	Low	1	Yes	...	...	...	...	...	...	...	Yes
311	Oak - Scarlet	50	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
315	Oak- Black	30	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
316	Oak- Black	21	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
318	Oak- Black	24	Low	1	Yes	...	...	...	Yes	Branch weight	Building	...	Yes
344	Beech-European	29	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
350	Oak - Scarlet	30	Low	1	Yes	...	...	...	Yes	Building	Branch weight	...	...
351	Maple-Norway	21	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
365	Spruce-Colorado Blue	16	Low	1	Yes	...	...	...	...	...	...	...	...
381	Oak - Scarlet	24	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
382	Oak - Scarlet	22	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
394	Oak - Scarlet	26	Low	1	Yes	...	...	...	...	...	...	...	Yes
400	Oak - Scarlet	19	Low	1	Yes	...	...	...	...	...	...	...	Yes
404	Oak - Scarlet	27	Low	1	Yes	...	...	...	...	...	...	...	Yes
406	Oak - Scarlet	35	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
413	Oak - Scarlet	21	Low	1	Yes	...	...	...	...	...	...	...	Yes
431	Oak-White	33	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
434	Oak-White	30	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
435	Maple-Norway	22	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
442	Oak - Scarlet	33	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
443	Oak-White	33	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
444	Oak-White	29	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
446	Oak-White	38	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
447	Oak-White	32	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
453	Maple-Norway	29	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
456	Maple-Red	24	Low	1	...	...	...	...	Yes	Branch weight	...	...	Yes
467	Maple-Norway	20	Low	1	...	...	...	...	Yes	Branch weight	...	...	...
468	Maple-Norway	33	Low	1	...	...	...	...	Yes	Branch weight	...	...	Yes
469	Spruce-Colorado Blue	14	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
492	Cherry	30	Low	1	...	Yes	Sidewalk	...	Yes	Branch weight	...	...	Yes
494	Cherry	29	Low	1	...	...	...	...	Yes	Branch weight	...	...	Yes
499	Maple-Red	32	Low	1	...	...	...	...	Yes	Branch weight	Building	...	Yes
509	Pear-Callery	19	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
511	Birch-Paper	11	Low	1	Yes	...	...	...	...	...	...	Yes	...
542	Oak- Northern Red	34	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
544	Maple-Norway	21	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
545	Maple-Norway	19	Low	1	Yes	...	...	...	...	...	...	...	...
561	Maple-Norway	27	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
570	Fir-White	21	Low	1	Yes	...	...	...	...	...	...	...	...
571	Maple-Norway	21	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
623	Maple-Norway	34	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
678	Linden-Littleleaf	17	Low	1	...	...	...	...	...	...	...	Yes	...
699	Beech-European	45	Low	1	Yes	...	...	...	Yes	Branch weight	Lighting	...	...
707	Oak-White	46	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
714	Oak- Black	43	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
717	Maple-Norway	24	Low	1	...	...	...	...	Yes	Branch weight	...	...	...
718	Maple-Norway	20	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
725	Oak- Black	27	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
740	Oak-White	37	Low	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
741	Oak- Black	48	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
746	Spruce-Colorado Blue	16	Low	1	Yes	Yes	Sidewalk	...	...	...	...	...	...
752	Oak- Northern Red	18	Low	1	...	...	...	...	...	...	...	...	Yes
753	Oak- Northern Red	17	Low	1	...	...	...	...	Yes	Branch weight	...	...	Yes
756	Oak- Black	27	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
758	Oak-White	19	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
759	Oak- Northern Red	22	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
763	Oak- Black	35	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
764	Oak- Black	32	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
766	Oak- Northern Red	33	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
770	Pear-Callery	11	Low	1	...	...	...	...	Yes	Branch weight	...	...	...
779	Maple-Norway	19	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
783	Maple-Norway	17	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
794	Maple-Norway	28	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
920	Pear-Callery	15	Low	1	...	...	...	...	Yes	Branch weight	...	...	...
934	Maple-Norway	22	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
935	Maple-Norway	16	Low	1	Yes	...	...	...	Yes	Branch weight	Building	...	...
983	Pine-Eastern White	22	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
995	Catalpa-Northern	23	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
999	Oak-White	42	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1000	Oak-White	34	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1002	Catalpa-Northern	19	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1005	Pine-Eastern White	27	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1029	Pine-Eastern White	24	Low	1	Yes	...	...	...	...	...	...	...	...
1068	Oak- Northern Red	56	Low	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
1205	Oak- Black	21	Low	1	Yes	...	...	...	Yes	Branch weight	...	...	...
39	Spruce-Colorado Blue	19	Low	2	Yes	...	...	...	...	...	...	...	...
132	Oak - Scarlet	34	Low	2	Yes	...	...	...	...	...	...	...	Yes
133	Oak - Scarlet	26	Low	2	Yes	...	...	...	...	...	...	...	Yes
134	Oak - Scarlet	48	Low	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
498	Maple-Red	22	Low	2	...	...	...	...	Yes	Branch weight	Building	...	Yes
573	Spruce-Colorado Blue	17	Low	2	Yes	...	...	...	...	...	...	...	...
775	Maple-Norway	15	Low	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
777	Maple-Norway	18	Low	2	Yes	...	...	...	Yes	Branch weight	...	...	...
778	Maple-Norway	18	Low	2	Yes	...	...	...	Yes	Branch weight	...	...	...
792	Maple-Sycamore	19	Low	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
846	Lilac-Japanese Tree	8	Low	2	Yes	...	...	...	...	...	...	...	Yes
877	Pine-Austrian	26	Low	2	Yes	...	...	...	...	...	...	...	...
884	Pine-Eastern White	21	Low	2	Yes	...	...	...	Yes	Branch weight	...	...	...
923	Birch-Gray	12	Low	2	Yes	...	...	...	Yes	Branch weight	...	...	...
1180	Maple-Silver	32	Low	3	...	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1181	Maple-Norway	19	Low	3	Yes	...	...	...	...	...	...	...	...
1182	Maple-Norway	23	Low	3	Yes	...	...	...	...	...	...	...	...
1183	Cherry	14	Low	3	...	Yes	Sidewalk	...	...	...	...	Yes	...
1184	Maple-Norway	21	Low	3	...	...	...	...	Yes	Branch weight	...	Yes	...
1185	Cherry	12	Low	3	...	Yes	Sidewalk	...	...	...	...	Yes	...
1187	Cherry	12	Low	3	...	Yes	Sidewalk	...	...	...	...	Yes	...
1190	Oak- Black	27	Low	3	...	...	...	...	Yes	Parking	...	...	...
1193	Oak- Black	24	Low	3	...	...	...	...	Yes	Branch weight	...	Yes	...
1194	Maple-Silver	32	Low	3	...	...	...	...	Yes	Branch weight	...	...	...
1196	Oak- Black	22	Low	3	Yes	...	...	...	...	...	...	...	...
1197	Oak- Black	21	Low	3	Yes	...	...	...	...	...	...	...	...
1403	Maple-Norway	24	Low	3	...	...	...	...	...	...	...	Yes	Yes
8	Cherry	16	...	1	...	...	...	...	Yes	Branch weight	...	...	...
13	Spruce-Colorado Blue	19	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
14	Spruce-Colorado Blue	22	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
15	Spruce-Colorado Blue	23	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
20	Pine-Scotch	17	...	1	Yes	...	...	...	Yes	Building	...	...	Yes
21	Pine-Scotch	31	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
29	Maple-Norway	20	...	1	Yes	...	...	...	...	...	...	...	...
31	Spruce-Colorado Blue	26	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
40	Pine-Austrian	21	...	1	Yes	...	...	...	...	...	...	...	...
42	Oak- Black	31	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
49	Pine-Eastern White	17	...	1	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
50	Maple-Sugar	16	...	1	...	...	...	...	...	...	...	...	Yes
55	Maple-Norway	8	...	1	...	...	...	...	...	...	...	...	Yes
56	Maple-Sugar	19	...	1	...	...	...	...	Yes	Branch weight	...	...	...
62	Elm-Slippery	24	...	1	...	...	...	...	Yes	Branch weight	Street	...	...
64	Linden-Littleleaf	17	...	1	Yes	...	...	...	Yes	Lighting	Branch weight	...	Yes
74	Crimson King Maple	15	...	1	...	...	...	...	...	...	...	...	Yes
77	Crimson King Maple	17	...	1	...	...	...	...	...	...	...	...	Yes
93	Oak - Scarlet	53	...	1	...	...	...	...	Yes	Branch weight	...	...	...
98	Maple-Norway	10	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
99	Cherry	23	...	1	...	...	...	...	Yes	Branch weight	...	Yes	Yes
101	Purple Leaf Plum	20	...	1	...	...	...	...	Yes	Branch weight	...	...	...
144	Oak - Scarlet	12	...	1	Yes	...	...	...	...	...	...	...	...
157	Oak - Scarlet	20	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
158	Oak - Scarlet	12	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
165	Oak - Scarlet	15	...	1	...	...	...	...	...	...	...	...	Yes
181	Pear-Callery	11	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
182	Pear-Callery	10	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
183	Pear-Callery	11	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
184	Pear-Callery	11	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
185	Pear-Callery	10	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
205	Pine-Austrian	15	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
207	Arborvitae-Eastern	6	...	1	...	...	...	...	...	...	...	...	Yes
233	Maple-Sugar	5	...	1	...	...	...	...	Yes	Fence	...	...	Yes
234	Maple-Sugar	5	...	1	...	...	...	...	Yes	Fence	...	...	Yes
235	Maple-Sugar	6	...	1	...	...	...	...	Yes	Fence	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
240	Oak-Pin	6	...	1	...	...	...	...	Yes	Fence	...	...	Yes
255	Poplar-Lombardy	17	...	1	Yes	...	...	...	...	...	...	...	Yes
261	Poplar-Lombardy	14	...	1	...	...	...	...	...	...	...	...	Yes
271	Honeylocust-Thornless Common	13	...	1	Yes	...	...	...	Yes	Overhead lines	...	...	Yes
272	Honeylocust-Thornless Common	12	...	1	Yes	Yes	Parking	...	Yes	Overhead lines	...	...	Yes
276	Dogwood-Kousa	7	...	1	...	...	...	...	Yes	Building	...	...	Yes
277	Dogwood-Kousa	7	...	1	Yes	Yes	Parking	...	Yes	Branch weight	Building	...	Yes
285	Maple-Norway	15	...	1	...	...	...	...	Yes	Branch weight	...	...	...
300	Honeylocust-Thornless Common	18	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
302	Maple-Silver	23	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
303	Honeylocust-Thornless Common	21	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
304	Honeylocust-Thornless Common	15	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
305	Honeylocust-Thornless Common	17	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
317	Oak- Black	15	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
319	Oak- Black	24	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
327	Maple-Norway	17	...	1	...	...	...	...	Yes	Overhead lines	Building	...	Yes
328	Maple-Norway	15	...	1	...	...	...	...	Yes	Overhead lines	...	...	...
346	Maple-Norway	20	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
347	Maple-Norway	22	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
358	Maple-Norway	19	...	1	Yes	Yes	Street	...	Yes	Branch weight	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
366	Maple-Norway	21	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
372	Maple-Silver	25	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
373	Maple-Silver	30	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
374	Catalpa	25	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
375	Maple-Norway	24	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
376	Spruce-Colorado Blue	17	...	1	Yes	...	...	...	...	...	...	...	Yes
385	Oak - Scarlet	36	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
397	Spruce-Colorado Blue	20	...	1	Yes	...	...	...	Yes	Branch weight	Lighting	...	Yes
401	Oak - Scarlet	25	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
407	Oak - Scarlet	31	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
416	Oak - Scarlet	33	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
422	Oak - Scarlet	29	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
425	Spruce-Colorado Blue	20	...	1	Yes	...	...	...	...	...	...	...	...
428	Oak-White	31	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
433	Maple-Norway	16	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
441	Maple-Norway	19	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
451	Maple-Norway	28	...	1	...	...	...	...	Yes	Branch weight	...	...	...
455	Maple-Norway	28	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
458	Maple-Norway	22	...	1	Yes	...	...	...	...	...	...	...	Yes
466	Spruce-Colorado Blue	14	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
474	Maple-Norway	35	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
484	Crimson King Maple	9	...	1	...	...	...	...	...	...	...	...	Yes
489	Crimson King Maple	21	...	1	...	...	...	...	Yes	Branch weight	Lighting	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
490	Crimson King Maple	24	...	1	...	...	...	...	Yes	Branch weight	...	...	...
491	Crimson King Maple	24	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
493	Maple-Japanese	28	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
495	Cherry	15	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
546	Beech-European	27	...	1	Yes	...	...	...	...	...	...	...	Yes
552	Oak-Pin	30	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
556	Birch-Paper	11	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
557	Birch-Paper	10	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
560	Maple-Norway	21	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
585	Maple-Norway	21	...	1	...	...	...	...	Yes	Branch weight	...	...	...
587	Maple-Norway	26	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
607	Oak-White	38	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
609	Maple-Norway	24	...	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
612	Oak- Black	30	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
613	Oak- Black	39	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
622	Oak-White	42	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
628	Maple-Norway	20	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
630	Maple-Norway	11	...	1	...	Yes	Sidewalk	...	...	...	...	...	Yes
631	Maple-Norway	12	...	1	Yes	Yes	Sidewalk	...	...	...	...	...	Yes
632	Maple-Norway	9	...	1	...	...	...	...	...	...	...	...	Yes
633	Maple-Norway	12	...	1	...	...	...	...	...	...	...	...	Yes
634	Maple-Norway	11	...	1	...	Yes	Driveway	...	...	...	...	...	Yes
635	Maple-Norway	11	...	1	...	Yes	Driveway	...	...	...	...	...	Yes
636	Maple-Norway	10	...	1	...	Yes	Driveway	...	...	...	...	...	Yes
645	Maple-Norway	12	...	1	...	Yes	Street	...	...	...	...	...	Yes
650	Maple-Norway	12	...	1	...	Yes	Street	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
651	Maple-Norway	12	...	1	...	Yes	Street	...	Yes	Lighting	...	...	Yes
654	Maple-Norway	10	...	1	...	Yes	Street	...	...	...	...	...	Yes
655	Maple-Norway	11	...	1	...	...	...	...	...	...	...	...	Yes
658	Maple-Norway	10	...	1	...	Yes	Sign blockage	...	...	...	...	...	Yes
671	Maple-Norway	9	...	1	...	...	...	...	Yes	Lighting	...	...	Yes
672	Maple-Norway	9	...	1	...	...	...	...	...	...	...	...	Yes
673	Maple-Norway	11	...	1	...	Yes	Parking	...	...	...	...	...	Yes
677	Beech-European	33	...	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
711	Oak- Northern Red	39	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
716	Maple-Norway	16	...	1	...	...	...	...	Yes	Branch weight	...	...	...
737	Oak- Black	51	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
738	Oak- Black	37	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
745	Beech-European	28	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
762	Oak- Northern Red	20	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
790	Maple-Norway	18	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
808	Cherry	15	...	1	...	Yes	Fence	Sitting area	Yes	Branch weight	...	...	...
819	Falsecypress-Sawara	23	...	1	Yes	...	...	...	...	...	...	...	...
826	Cedar-Atlas	12	...	1	Yes	...	...	...	Yes	Building	...	...	Yes
847	Beech-European	18	...	1	...	...	...	...	...	...	...	...	Yes
848	Birch-Paper	14	...	1	...	...	...	...	Yes	Branch weight	...	...	...
849	Maple-Red	17	...	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
852	Cherry	23	...	1	Yes	...	...	...	Yes	Branch weight	...	Yes	...
859	Oak- Black	17	...	1	Yes	...	...	...	Yes	Branch weight	Overhead lines	...	Yes
866	Oak- Black	29	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
878	Pine-Eastern White	24	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
896	Falsecypress-Sawara	13	...	1	Yes	...	...	...	...	...	...	...	Yes
899	Falsecypress-Sawara	22	...	1	Yes	...	...	...	Yes	Building	...	...	...
919	Pear-Callery	17	...	1	...	...	...	...	...	...	...	Yes	...
927	Pear-Callery	8	...	1	...	Yes	Driveway	...	...	...	...	...	Yes
928	Pear-Callery	7	...	1	...	...	...	...	Yes	Building	...	...	Yes
954	Falsecypress-Sawara	22	...	1	Yes	...	...	...	Yes	Building	Branch weight	...	...
957	Crabapple	6	...	1	...	...	...	...	Yes	Lighting	...	...	Yes
958	Crabapple	6	...	1	Yes	...	...	...	Yes	Lighting	...	...	Yes
961	Falsecypress-Sawara	27	...	1	Yes	...	...	...	...	...	...	...	...
962	Falsecypress-Sawara	16	...	1	Yes	Yes	Sidewalk	...	...	...	...	...	Yes
968	Pine-Eastern White	17	...	1	Yes	...	...	...	...	...	...	...	...
987	Pine-Eastern White	15	...	1	Yes	...	...	...	...	...	...	...	...
992	Pine-Eastern White	12	...	1	Yes	...	...	...	...	...	...	...	Yes
994	Pine-Eastern White	15	...	1	Yes	...	...	...	...	...	...	...	...
1017	Pine-Eastern White	22	...	1	Yes	...	...	...	...	...	...	...	...
1023	Pine-Eastern White	28	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1052	Oak-Pin	12	...	1	...	...	...	...	Yes	Lighting	...	...	Yes
1053	Cherry	8	...	1	...	...	...	...	Yes	Lighting	...	...	Yes
1055	Maple-Norway	7	...	1	...	...	...	...	...	...	...	...	Yes
1056	Maple-Norway	7	...	1	...	...	...	...	...	...	...	...	Yes
1057	Maple-Norway	8	...	1	...	...	...	...	Yes	Lighting	...	...	Yes
1058	Maple-Norway	8	...	1	...	...	...	...	...	...	...	...	Yes
1059	Maple-Norway	7	...	1	...	...	...	...	...	...	...	...	Yes
1060	Maple-Norway	7	...	1	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1061	Maple-Red	6	...	1	...	...	...	...	...	...	...	...	Yes
1062	Maple-Red	7	...	1	...	...	...	...	...	...	...	...	Yes
1063	Maple-Red	10	...	1	...	...	...	...	...	...	...	...	Yes
1064	Maple-Red	7	...	1	...	...	...	...	...	...	...	...	Yes
1065	Maple-Red	7	...	1	...	...	...	...	...	...	...	...	Yes
1066	Maple-Red	7	...	1	...	...	...	...	...	...	...	...	Yes
1067	Maple-Red	9	...	1	...	...	...	...	...	...	...	...	Yes
1069	Linden-Littleleaf	11	...	1	...	...	...	...	...	...	...	...	Yes
1071	Linden-Littleleaf	9	...	1	...	...	...	...	...	...	...	...	Yes
1072	Linden-Littleleaf	9	...	1	...	...	...	...	...	...	...	...	Yes
1073	Linden-Littleleaf	9	...	1	...	...	...	...	...	...	...	...	Yes
1074	Linden-Littleleaf	10	...	1	...	...	...	...	...	...	...	...	Yes
1075	Linden-Littleleaf	12	...	1	Yes	...	...	...	...	...	...	...	Yes
1084	Maple-Freeman's	16	...	1	...	...	...	...	...	...	...	...	Yes
1087	Cherry	11	...	1	...	Yes	Driveway	...	...	...	...	...	Yes
1090	Elm	10	...	1	...	...	...	...	...	...	...	...	Yes
1091	Crabapple	5	...	1	...	...	...	...	Yes	Building	Lighting	...	Yes
1092	Elm	10	...	1	...	...	...	...	Yes	Building	...	...	Yes
1095	Elm	10	...	1	...	...	...	...	Yes	Building	Lighting	...	Yes
1097	Elm	7	...	1	...	...	...	...	...	...	...	...	Yes
1102	Maple-Red	7	...	1	...	...	...	...	Yes	Fence	...	...	Yes
1103	Maple-Red	8	...	1	...	...	...	...	Yes	Fence	...	...	Yes
1106	Spruce-White	11	...	1	...	...	...	...	...	...	...	...	Yes
1108	Spruce-Norway	32	...	1	Yes	...	...	...	Yes	Branch weight	...	...	Yes
1109	Oak- Black	21	...	1	...	...	...	...	Yes	Branch weight	...	...	Yes
1116	Pine-Eastern White	22	...	1	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1117	Pine-Eastern White	21	...	1	Yes	...	...	...	...	...	...	...	...
1118	Oak- Northern Red	12	...	1	...	...	...	...	...	...	...	...	Yes
1125	Linden-Littleleaf	11	...	1	...	...	...	...	...	...	...	...	Yes
1130	Ash-White	8	...	1	...	...	...	...	...	...	...	...	Yes
1131	Ash-White	8	...	1	...	...	...	...	...	...	...	...	Yes
1132	Ash-White	8	...	1	...	...	...	...	...	...	...	...	Yes
1134	Ash-White	8	...	1	...	...	...	...	...	...	...	...	Yes
1136	Linden-Littleleaf	15	...	1	...	...	...	...	...	...	...	...	Yes
1139	Dogwood-Kousa	5	...	1	...	...	...	...	Yes	Lighting	...	...	...
1145	Weeping Cherry	7	...	1	...	...	...	...	Yes	Lighting	...	...	Yes
1147	Weeping Cherry	9	...	1	...	...	...	...	Yes	Lighting	...	...	Yes
1163	Ash-White	7	...	1	...	...	...	...	...	...	...	...	Yes
1164	Maple-Norway	11	...	1	...	...	...	...	...	...	...	...	Yes
1167	Oak- Northern Red	11	...	1	...	...	...	...	...	...	...	...	Yes
1188	Cherry	11	...	1	...	...	...	...	Yes	Building	Branch weight	...	...
1204	Oak- Black	21	...	1	Yes	...	...	...	Yes	Branch weight	Lighting	...	...
1312	Maple-Sugar	5	...	1	...	...	...	...	Yes	Fence	...	...	Yes
1415	Mulberry-White	14	...	1	Yes	...	...	...	Yes	Branch weight	...	...	...
1431	Oak-Swamp White	3	...	1	...	...	...	...	...	...	...	...	Yes
1434	Birch-River	2	...	1	...	...	...	...	...	...	...	...	Yes
1	Crimson King Maple	9	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
2	Crimson King Maple	14	...	2	...	...	...	...	...	...	...	...	Yes
3	Crimson King Maple	14	...	2	...	...	...	...	...	...	...	...	Yes
5	Crimson King Maple	10	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
7	Weeping Cherry	15	...	2	Yes	...	...	...	...	...	...	Yes	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
9	Weeping Cherry	15	...	2	Yes	...	...	...	...	...	...	Yes	Yes
10	Weeping Cherry	14	...	2	Yes	...	...	...	...	...	...	Yes	Yes
11	Honeylocust-Thornless Common	8	...	2	Yes	...	...	...	...	...	...	...	Yes
17	Dogwood-Kousa	6	...	2	...	...	...	...	Yes	Lighting	Sidewalk	...	...
18	Dogwood-Kousa	9	...	2	...	...	...	...	Yes	Branch weight	...	...	...
19	Dogwood-Kousa	11	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
22	Fir-Douglas	8	...	2	...	...	...	...	...	...	...	...	Yes
24	Spruce-Colorado Blue	23	...	2	Yes	...	...	...	...	...	...	...	...
25	Spruce-Colorado Blue	17	...	2	Yes	...	...	...	...	...	...	...	...
26	Spruce-Colorado Blue	19	...	2	Yes	...	...	...	...	...	...	...	...
30	Spruce-Colorado Blue	18	...	2	Yes	...	...	...	...	...	...	...	...
33	Spruce-Colorado Blue	29	...	2	Yes	...	...	...	...	...	...	...	...
37	Spruce-Colorado Blue	14	...	2	Yes	...	...	...	...	...	...	...	Yes
43	Maple-Norway	22	...	2	Yes	...	...	...	...	...	...	...	...
48	Spruce-Colorado Blue	18	...	2	Yes	...	...	...	...	...	...	...	...
60	Dogwood-Kousa	6	...	2	...	...	...	...	...	...	...	...	Yes
63	Crabapple	6	...	2	Yes	...	...	...	...	...	...	Yes	Yes
67	Pine-Scotch	13	...	2	Yes	...	...	...	...	...	...	...	...
68	Spruce-Colorado Blue	27	...	2	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
69	Sourwood	7	...	2	...	...	...	...	...	...	...	...	Yes
70	Weeping Cherry	16	...	2	Yes	...	...	...	...	...	...	...	Yes
73	Crabapple	12	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
75	Crimson King Maple	17	...	2	...	...	...	...	...	...	...	...	Yes
76	Crimson King Maple	15	...	2	...	...	...	...	...	...	...	...	Yes
78	Maple-Japanese	6	...	2	...	...	...	...	...	...	...	...	Yes
79	Dogwood-Flowering	7	...	2	Yes	...	...	...	...	...	...	...	Yes
80	Dogwood-Flowering	12	...	2	...	...	...	...	...	...	...	...	Yes
81	Dogwood-Flowering	11	...	2	Yes	...	...	...	...	...	...	...	Yes
82	Dogwood-Flowering	5	...	2	Yes	...	...	...	...	...	...	...	Yes
83	Dogwood-Flowering	8	...	2	...	...	...	...	...	...	...	...	Yes
85	Dogwood-Kousa	9	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
86	Dogwood-Kousa	11	...	2	...	...	...	...	...	...	...	...	Yes
90	Maple-Japanese	8	...	2	...	...	...	...	Yes	Branch weight	...	...	...
97	Birch-Paper	10	...	2	...	...	...	...	Yes	Branch weight	...	...	...
104	Maple-Norway	12	...	2	Yes	...	...	...	...	...	...	...	Yes
107	Maple-Norway	10	...	2	...	...	...	...	Yes	Sidewalk	Statue	...	Yes
111	Cherry	10	...	2	...	...	...	...	...	...	...	...	Yes
112	Cherry	6	...	2	...	...	...	...	...	...	...	...	Yes
113	Pear-Callery	6	...	2	...	...	...	...	...	...	...	...	Yes
114	Pear-Callery	6	...	2	...	...	...	...	...	...	...	...	Yes
115	Pear-Callery	6	...	2	...	...	...	...	...	...	...	...	Yes
116	Pear-Callery	6	...	2	...	...	...	...	...	...	...	...	Yes
117	Pear-Callery	6	...	2	...	...	...	...	...	...	...	...	Yes
119	Pear-Callery	6	...	2	...	...	...	...	...	...	...	...	Yes
120	Pear-Callery	7	...	2	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
135	Oak - Scarlet	19	...	2	Yes	...	...	...	...	...	...	...	Yes
136	Ash-Green	14	...	2	Yes	...	...	...	...	...	...	...	Yes
140	Ash-White	6	...	2	...	...	...	...	...	...	...	...	Yes
142	Oak - Scarlet	11	...	2	Yes	...	...	...	...	...	...	...	...
143	Oak - Scarlet	13	...	2	...	...	...	...	...	...	...	...	Yes
159	Oak - Scarlet	14	...	2	Yes	...	...	...	...	...	...	...	Yes
160	Oak - Scarlet	15	...	2	...	...	...	...	...	...	...	...	Yes
162	Oak - Scarlet	15	...	2	...	...	...	...	...	...	...	...	Yes
164	Oak - Scarlet	9	...	2	...	...	...	...	...	...	...	...	Yes
167	Oak - Scarlet	15	...	2	...	...	...	...	...	...	...	...	Yes
168	Oak - Scarlet	19	...	2	...	...	...	...	...	...	...	...	Yes
169	Oak - Scarlet	15	...	2	...	...	...	...	...	...	...	...	Yes
198	Pine-Austrian	14	...	2	Yes	...	...	...	...	...	...	...	...
199	Pine-Austrian	14	...	2	Yes	...	...	...	...	...	...	...	...
200	Arborvitae-Eastern (15)	10	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
201	Arborvitae-Eastern (15)	10	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
203	Arborvitae-Eastern (15)	10	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
204	Pine-Austrian	12	...	2	Yes	...	...	...	...	...	...	...	Yes
206	Pine-Austrian	12	...	2	Yes	...	...	...	...	...	...	...	...
209	Pine-Eastern White	15	...	2	Yes	...	...	...	...	...	...	...	Yes
210	Pine-Eastern White	11	...	2	Yes	...	...	...	...	...	...	...	...
212	Pine-Eastern White	8	...	2	Yes	...	...	...	...	...	...	...	...
213	Pine-Eastern White	17	...	2	Yes	...	...	...	...	...	...	...	...
215	Pine-Eastern White	14	...	2	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
217	Pine-Eastern White	16	...	2	Yes	...	...	...	...	...	...	...	...
218	Pine-Eastern White	8	...	2	Yes	...	...	...	...	...	...	...	...
219	Pine-Eastern White	12	...	2	Yes	...	...	...	...	...	...	...	...
222	Pine-Eastern White	12	...	2	Yes	...	...	...	...	...	...	...	...
225	Pine-Eastern White	13	...	2	Yes	...	...	...	...	...	...	...	...
226	Pine-Eastern White	17	...	2	Yes	...	...	...	...	...	...	...	...
229	Elm	9	...	2	...	...	...	...	Yes	Fence	...	...	Yes
230	Elm	8	...	2	...	...	...	...	Yes	Fence	...	...	Yes
231	Elm	7	...	2	...	...	...	...	Yes	Fence	...	...	Yes
232	Elm	7	...	2	...	...	...	...	Yes	Fence	...	...	Yes
236	Oak-Pin	6	...	2	...	...	...	...	Yes	Fence	...	...	Yes
237	Oak-Pin	5	...	2	...	...	...	...	Yes	Fence	...	...	Yes
238	Oak-Pin	6	...	2	...	...	...	...	Yes	Fence	...	...	Yes
239	Oak-Pin	6	...	2	...	...	...	...	Yes	Fence	...	...	Yes
241	Oak-Pin	6	...	2	...	...	...	...	Yes	Fence	...	...	Yes
246	Dogwood-Flowering	7	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
247	Dogwood-Flowering	10	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
248	Dogwood-Flowering	9	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
249	Dogwood-Flowering	6	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
252	Dogwood-Kousa	12	...	2	Yes	...	...	...	...	...	...	...	Yes
253	Dogwood-Kousa	10	...	2	Yes	...	...	...	...	...	...	...	Yes
254	Dogwood-Kousa	10	...	2	Yes	...	...	...	...	...	...	...	Yes
256	Poplar-Lombardy	16	...	2	Yes	...	...	...	...	...	...	...	...
257	Poplar-Lombardy	13	...	2	Yes	...	...	...	...	...	...	...	...
258	Poplar-Lombardy	15	...	2	Yes	...	...	...	...	...	...	...	...
263	Arborvitae-Eastern	5	...	2	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
264	Pine-Eastern White	16	...	2	...	...	...	...	Yes	Overhead lines	...	...	...
270	Pine-Eastern White	13	...	2	Yes	...	...	...	...	...	...	...	...
273	Honeylocust-Thornless Common	14	...	2	Yes	Yes	Parking	...	Yes	Branch weight	Sign blockage	...	Yes
274	Honeylocust-Thornless Common	14	...	2	Yes	Yes	Parking	...	Yes	Branch weight	...	...	Yes
275	Honeylocust-Thornless Common	11	...	2	Yes	Yes	Parking	...	Yes	Branch weight	...	...	Yes
278	Crabapple	12	...	2	Yes	Yes	Street	...	Yes	Branch weight	...	...	Yes
279	Crabapple	9	...	2	Yes	Yes	Street	Sidewalk	Yes	Branch weight	...	...	Yes
280	Crabapple	5	...	2	Yes	Yes	Sidewalk	...	...	...	...	...	Yes
283	Planetree-London	20	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
287	Honeylocust-Thornless Common	15	...	2	Yes	...	...	...	...	...	...	...	Yes
288	Honeylocust-Thornless Common	19	...	2	Yes	...	...	...	...	...	...	...	Yes
289	Honeylocust-Thornless Common	17	...	2	Yes	...	...	...	...	...	...	...	Yes
290	Honeylocust-Thornless Common	12	...	2	Yes	...	...	...	...	...	...	...	Yes
291	Honeylocust-Thornless Common	20	...	2	Yes	...	...	...	...	...	...	...	Yes
295	Honeylocust-Thornless Common	20	...	2	Yes	...	...	...	...	...	...	...	Yes
296	Honeylocust-Thornless Common	17	...	2	Yes	...	...	...	...	...	...	...	Yes
299	Honeylocust-Thornless Common	15	...	2	Yes	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
301	Honeylocust-Thornless Common	13	...	2	Yes	...	...	...	...	...	...	...	Yes
312	Dogwood-Flowering	12	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
330	Maple-Norway	18	...	2	...	...	...	...	...	...	...	...	Yes
332	Maple-Norway	15	...	2	Yes	...	...	...	...	...	...	...	Yes
333	Maple-Norway	18	...	2	Yes	...	...	...	...	...	...	...	Yes
343	Birch-Paper	7	...	2	Yes	...	...	...	...	...	...	...	Yes
353	Spruce-Colorado Blue	19	...	2	Yes	...	...	...	...	...	...	...	Yes
354	Maple-Sugar	21	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
355	Spruce-Colorado Blue	15	...	2	Yes	...	...	...	...	...	...	...	...
360	Spruce-Colorado Blue	16	...	2	Yes	...	...	...	...	...	...	...	...
364	Spruce-Colorado Blue	14	...	2	Yes	...	...	...	...	...	...	...	Yes
370	Maple-Norway	17	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
377	Maple-Norway	18	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
379	Maple-Sugar	22	...	2	...	...	...	...	...	...	...	...	Yes
392	Maple-Norway	15	...	2	...	...	...	...	...	...	...	...	Yes
396	Dogwood-Flowering	8	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
398	Dogwood-Kousa	5	...	2	...	...	...	...	...	...	...	...	Yes
399	Maple-Sugar	4	...	2	...	...	...	...	...	...	...	...	Yes
402	Oak - Scarlet	29	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
403	Oak - Scarlet	22	...	2	Yes	...	...	...	...	...	...	...	Yes
405	Maple-Norway	7	...	2	...	...	...	...	...	...	...	...	Yes
412	Maple-Norway	4	...	2	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
415	Maple-Norway	31	...	2	...	...	...	...	...	...	...	...	Yes
418	Beech-European	38	...	2	Yes	...	...	...	...	...	...	...	...
421	Maple-Norway	10	...	2	...	...	...	...	...	...	...	...	Yes
426	Elm	9	...	2	...	...	...	...	...	...	...	...	Yes
429	Maple-Norway	13	...	2	Yes	...	...	...	...	...	...	...	Yes
430	Oak-White	28	...	2	Yes	...	...	...	...	...	...	...	Yes
432	Oak-White	24	...	2	Yes	...	...	...	...	...	...	...	Yes
438	Spruce-Colorado Blue	21	...	2	Yes	...	...	...	...	...	...	...	...
445	Maple-Norway	18	...	2	...	...	...	...	...	...	...	...	Yes
459	Pear-Callery	4	...	2	...	...	...	...	...	...	...	...	Yes
460	Pear-Callery	3	...	2	...	...	...	...	...	...	...	...	Yes
461	Pear-Callery	3	...	2	...	...	...	...	...	...	...	...	Yes
462	Pear-Callery	3	...	2	...	...	...	...	...	...	...	...	Yes
481	Spruce-Colorado Blue	25	...	2	Yes	...	...	...	...	...	...	...	...
486	Crimson King Maple	14	...	2	...	...	...	...	...	...	...	...	Yes
488	Crimson King Maple	22	...	2	...	...	...	...	...	...	...	...	Yes
496	Crabapple	14	...	2	Yes	...	...	...	...	...	...	...	Yes
505	Honeylocust-Thornless Common	10	...	2	Yes	...	...	...	...	...	...	Yes	...
508	Magnolia-Saucer	10	...	2	...	...	...	...	Yes	Building	Branch weight	Yes	Yes
512	Crabapple	14	...	2	Yes	...	...	...	...	...	...	Yes	...
514	Sycamore-American	18	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
515	Dogwood-Flowering	6	...	2	Yes	...	...	...	...	...	...	...	Yes
555	Cherry	7	...	2	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
558	Dogwood-Flowering	6	...	2	Yes	...	...	...	Yes	Building	Branch weight	...	...
564	Dogwood-Flowering	7	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
569	Dogwood-Flowering	6	...	2	Yes	Yes	Sign blockage	...	...	...	...	...	Yes
574	Dogwood-Flowering	12	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
575	Crabapple	6	...	2	Yes	...	...	...	Yes	Branch weight	Lighting	Yes	Yes
578	Maple-Japanese	5	...	2	Yes	...	...	...	...	...	...	Yes	Yes
591	Maple-Norway	7	...	2	...	...	...	...	...	...	...	...	Yes
598	Oak-White	34	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
602	Birch-Paper	15	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
603	Spruce-Colorado Blue	16	...	2	Yes	...	...	...	...	...	...	...	...
604	Spruce-Colorado Blue	23	...	2	Yes	...	...	...	...	...	...	...	...
608	Oak-White	38	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
616	Cherry	7	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
618	Maple-Norway	14	...	2	Yes	...	...	...	...	...	...	...	Yes
619	Maple-Norway	17	...	2	Yes	...	...	...	...	...	...	...	Yes
620	Cherry	7	...	2	...	Yes	Sidewalk	...	...	...	...	...	Yes
629	Dogwood-Flowering	6	...	2	...	...	...	...	...	...	...	...	Yes
637	Purple Leaf Plum	6	...	2	...	...	...	...	...	...	...	Yes	Yes
638	Purple Leaf Plum	7	...	2	...	...	...	...	Yes	Building	...	Yes	Yes
639	Purple Leaf Plum	7	...	2	Yes	...	...	...	...	...	...	Yes	Yes
640	Crabapple	6	...	2	...	...	...	...	...	...	...	Yes	...
641	Crabapple	8	...	2	...	...	...	...	...	...	...	Yes	...
642	Crabapple	7	...	2	...	...	...	...	...	...	...	Yes	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
643	Crabapple	6	...	2	...	...	...	...	...	...	...	Yes	...
644	Crabapple	9	...	2	...	...	...	...	...	...	...	Yes	...
646	Crabapple	6	...	2	...	...	...	...	...	...	...	Yes	...
647	Crabapple	6	...	2	...	...	...	...	...	...	...	Yes	...
648	Crabapple	6	...	2	...	...	...	...	...	...	...	Yes	...
649	Crabapple	7	...	2	...	...	...	...	...	...	...	Yes	...
656	Maple-Norway	9	...	2	...	...	...	...	...	...	...	...	Yes
657	Maple-Norway	10	...	2	...	...	...	...	...	...	...	...	Yes
659	Pear-Callery	8	...	2	...	...	...	...	...	...	...	...	Yes
660	Pear-Callery	8	...	2	...	Yes	Bench	...	...	...	...	...	Yes
661	Pear-Callery	9	...	2	...	...	...	...	Yes	Building	...	...	Yes
662	Pear-Callery	9	...	2	...	...	...	...	Yes	Building	...	...	Yes
663	Pear-Callery	8	...	2	...	...	...	...	...	...	...	...	Yes
664	Pear-Callery	7	...	2	...	...	...	...	...	...	...	...	Yes
665	Pear-Callery	9	...	2	...	...	...	...	...	...	...	...	Yes
666	Pear-Callery	10	...	2	...	...	...	...	...	...	...	...	Yes
667	Pear-Callery	9	...	2	...	...	...	...	...	...	...	...	Yes
668	Pear-Callery	10	...	2	...	...	...	...	...	...	...	...	Yes
669	Pear-Callery	9	...	2	...	...	...	...	...	...	...	...	Yes
670	Pear-Callery	9	...	2	...	...	...	...	...	...	...	...	Yes
680	Dogwood-Corneliancherry	4	...	2	...	...	...	...	Yes	Sidewalk	...	...	Yes
682	Cherry	6	...	2	...	...	...	...	Yes	Building	...	...	Yes
683	Cherry	5	...	2	...	...	...	...	...	...	...	...	Yes
687	Oak-Pin	6	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
689	Cherry	6	...	2	...	...	...	...	Yes	Branch weight	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
692	Maple-Norway	24	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
694	Honeylocust-Thornless Common	5	...	2	...	...	...	...	...	...	...	...	Yes
696	Honeylocust-Thornless Common	6	...	2	...	...	...	...	...	...	...	...	Yes
697	Honeylocust-Thornless Common	5	...	2	...	...	...	...	...	...	...	...	Yes
700	Honeylocust-Thornless Common	5	...	2	...	...	...	...	...	...	...	...	Yes
701	Honeylocust-Thornless Common	5	...	2	...	...	...	...	...	...	...	...	Yes
705	Oak- Northern Red	28	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
710	Maple-Japanese	7	...	2	...	...	...	...	Yes	Branch weight	...	...	...
713	Cherry	13	...	2	...	...	...	...	Yes	Branch weight	...	Yes	...
726	Maple-Red	4	...	2	...	...	...	...	...	...	...	...	Yes
728	Maple-Red	6	...	2	...	...	...	...	...	...	...	...	Yes
729	Maple-Red	6	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
731	Maple-Red	6	...	2	...	...	...	...	...	...	...	...	Yes
732	Maple-Red	6	...	2	...	...	...	...	...	...	...	...	Yes
733	Maple-Red	6	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
735	Weeping Cherry	8	...	2	...	...	...	...	...	...	...	Yes	...
739	Hornbeam-European	6	...	2	...	...	...	...	...	...	...	...	Yes
747	Honeylocust-Thornless Common	17	...	2	Yes	...	...	...	...	...	...	Yes	...
749	Oak- Northern Red	18	...	2	Yes	...	...	...	Yes	Branch weight	...	...	Yes
750	Oak- Northern Red	20	...	2	...	...	...	...	Yes	Branch weight	...	...	...
751	Tuliptree	16	...	2	Yes	...	...	...	...	...	...	...	Yes
754	Birch-Paper	10	...	2	Yes	...	...	...	...	...	...	Yes	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
757	Oak-White	17	...	2	...	...	...	...	...	...	...	...	Yes
761	Oak- Northern Red	24	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
771	Pear-Callery	12	...	2	...	...	...	...	Yes	Branch weight	...	...	...
772	Pear-Callery	9	...	2	...	...	...	...	Yes	Branch weight	...	...	...
776	Maple-Norway	16	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
780	Maple-Norway	16	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
781	Maple-Norway	10	...	2	...	...	...	...	...	...	...	...	Yes
782	Maple-Norway	10	...	2	...	...	...	...	...	...	...	...	Yes
785	Maple-Norway	22	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
787	Maple-Japanese	32	...	2	Yes	...	...	...	...	...	...	Yes	...
791	Maple-Norway	19	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
795	Maple-Norway	18	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
801	Cherry	9	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
806	Weeping Cherry	9	...	2	...	...	...	...	...	...	...	Yes	...
807	Crabapple	14	...	2	Yes	...	...	...	Yes	Branch weight	...	Yes	...
809	Magnolia-Star	4	...	2	...	...	...	...	Yes	Fence	...	Yes	Yes
810	Purple Leaf Plum	4	...	2	...	...	...	...	...	...	...	...	Yes
813	Magnolia-Saucer	13	...	2	Yes	...	...	...	Yes	Branch weight	...	Yes	...
814	Spruce-Norway (3)	5	...	2	...	Yes	Wall	...	...	...	...	...	...
815	Cherry	7	...	2	...	...	...	...	Yes	Branch weight	...	Yes	Yes
817	Falsecypress-Sawara	19	...	2	Yes	...	...	...	...	...	...	...	Yes
818	Falsecypress-Sawara	17	...	2	Yes	...	...	...	...	...	...	...	...
821	Cherry	9	...	2	...	Yes	Street	Sidewalk	Yes	Branch weight	...	...	...
822	Cherry	7	...	2	...	Yes	Street	Sidewalk	Yes	Branch weight	Lighting	...	...
823	Maple-Japanese	10	...	2	Yes	...	...	...	...	...	...	Yes	...
842	Lilac-Japanese Tree	8	...	2	Yes	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
843	Lilac-Japanese Tree	8	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
844	Lilac-Japanese Tree	7	...	2	Yes	...	...	...	...	...	...	...	Yes
845	Lilac-Japanese Tree	7	...	2	Yes	...	...	...	...	...	...	...	Yes
850	Birch-Paper	5	...	2	Yes	Yes	Sidewalk	...	...	...	...	Yes	...
853	Spruce-Colorado Blue	15	...	2	...	Yes	Fence	...	Yes	Lighting	...	...	Yes
856	Redbud-Eastern	9	...	2	...	...	...	...	Yes	Branch weight	...	...	...
857	Oak- Black	16	...	2	...	...	...	...	Yes	Overhead lines	Lighting	...	...
858	Oak- Black	17	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
860	Oak- Black	25	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
861	Oak- Black	16	...	2	Yes	...	...	...	Yes	Branch weight	...	Yes	...
862	Oak- Black	33	...	2	...	...	...	...	Yes	Branch weight	...	Yes	...
868	Pine-Eastern White	26	...	2	Yes	...	...	...	...	...	...	...	...
871	Maple-Norway	9	...	2	...	Yes	Sign blockage	...	...	...	...	...	Yes
880	Pine-Eastern White	22	...	2	Yes	...	...	...	...	...	...	...	...
881	Pine-Eastern White	20	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
886	Pine-Eastern White	28	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
888	Pine-Eastern White	29	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
890	Pine-Eastern White	27	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
891	Oak- Black	34	...	2	Yes	...	...	...	Yes	Branch weight	Pole/post	...	...
893	Ash-White	5	...	2	...	...	...	...	...	...	...	...	Yes
894	Horsechestnut-Common	26	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
897	Falsecypress-Sawara	14	...	2	Yes	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
900	Honeylocust-Thornless Common	8	...	2	Yes	...	...	...	...	...	...	...	Yes
901	Honeylocust-Thornless Common	8	...	2	...	...	...	...	...	...	...	...	Yes
902	Honeylocust-Thornless Common	4	...	2	...	...	...	...	...	...	...	...	Yes
903	Honeylocust-Thornless Common	5	...	2	...	...	...	...	...	...	...	...	Yes
904	Honeylocust-Thornless Common	8	...	2	...	...	...	...	...	...	...	...	Yes
905	Honeylocust-Thornless Common	6	...	2	...	...	...	...	...	...	...	...	Yes
906	Maple-Norway	8	...	2	...	...	...	...	...	...	...	...	Yes
907	Oak- Northern Red	11	...	2	...	...	...	...	...	...	...	...	Yes
910	Spruce-Norway	29	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
912	Pine-Eastern White (7)	6	...	2	Yes	...	...	...	Yes	Walking path	...	...	Yes
913	Pine-Eastern White	14	...	2	Yes	...	...	...	Yes	Sidewalk	...	...	...
914	Pine-Eastern White	11	...	2	Yes	...	...	...	Yes	Sidewalk	...	...	Yes
915	Pine-Eastern White	9	...	2	Yes	...	...	...	...	...	...	...	Yes
916	Pine-Eastern White	10	...	2	Yes	...	...	...	Yes	Lighting	Sidewalk	...	...
917	Pine-Eastern White	14	...	2	Yes	Yes	Sidewalk	...	Yes	Lighting	Sign blockage	...	...
918	Spruce-Colorado Blue	12	...	2	...	...	...	...	Yes	Sign blockage	...	...	...
921	Maple-Japanese	4	...	2	Yes	...	...	...	...	...	...	Yes	...
924	Maple-Norway	14	...	2	...	...	...	...	...	...	...	...	Yes
926	Dogwood-Kousa	6	...	2	...	...	...	...	Yes	Pole/post	...	...	...
930	Purple Leaf Plum	17	...	2	Yes	...	...	...	Yes	Branch weight	Building	Yes	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
932	Cherry	13	...	2	...	...	...	...	Yes	Branch weight	...	...	...
933	Cherry	14	...	2	...	...	...	...	Yes	Branch weight	...	...	Yes
939	Cedar-Atlas	9	...	2	Yes	...	...	...	...	...	...	...	Yes
949	Maple-Norway	6	...	2	...	...	...	...	...	...	...	...	Yes
956	Crabapple	6	...	2	...	...	...	...	...	...	...	...	Yes
959	Crabapple	5	...	2	...	...	...	...	...	...	...	...	Yes
965	Arborvitae-Eastern	9	...	2	...	...	...	...	...	...	...	...	Yes
967	Pine-Eastern White	21	...	2	Yes	...	...	...	Yes	Lighting	...	...	...
969	Honeylocust-Thornless Common	13	...	2	Yes	...	...	...	Yes	Building	...	...	...
971	Magnolia-Saucer	12	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
977	Honeylocust-Thornless Common	14	...	2	Yes	...	...	...	...	...	...	...	...
980	Pine-Scotch	12	...	2	Yes	...	...	...	...	...	...	...	...
984	Pine-Eastern White	17	...	2	Yes	...	...	...	Yes	Building	...	...	...
985	Pine-Eastern White	15	...	2	Yes	...	...	...	...	...	...	...	...
988	Pine-Eastern White	17	...	2	Yes	...	...	...	...	...	...	...	Yes
996	Spruce-Colorado Blue	18	...	2	Yes	...	...	...	...	...	...	...	...
1008	Pine-Austrian	21	...	2	Yes	...	...	...	...	...	...	...	...
1009	Pine-Eastern White	29	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
1012	Maple-Red	8	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
1016	Pine-Eastern White	28	...	2	Yes	...	...	...	...	...	...	...	...
1020	Cedar-Atlas	13	...	2	...	...	...	...	...	...	...	...	Yes
1039	Pine-Eastern White	25	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
1043	Purple Leaf Plum	8	...	2	Yes	Yes	Fence	...	...	...	...	Yes	...
1044	Purple Leaf Plum	9	...	2	Yes	...	...	...	Yes	Pole/post	...	Yes	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1051	Zelkova-Japanese	7	...	2	...	...	...	...	...	...	...	...	Yes
1070	Linden-Littleleaf	9	...	2	...	...	...	...	...	...	...	...	Yes
1076	Purple Leaf Plum	8	...	2	...	...	...	...	...	...	...	Yes	Yes
1077	Purple Leaf Plum	6	...	2	Yes	...	...	...	...	...	...	Yes	Yes
1078	Purple Leaf Plum	7	...	2	Yes	...	...	...	...	...	...	Yes	...
1086	Cherry	10	...	2	...	Yes	Driveway	...	...	...	...	...	Yes
1088	Elm	8	...	2	...	...	...	...	...	...	...	...	Yes
1089	Elm	7	...	2	...	...	...	...	...	...	...	...	Yes
1093	Crabapple	5	...	2	...	...	...	...	Yes	Building	...	...	Yes
1094	Crabapple	5	...	2	...	...	...	...	Yes	Sidewalk	...	...	Yes
1096	Crabapple	5	...	2	...	...	...	...	Yes	Sidewalk	...	...	Yes
1099	Pine-Eastern White	31	...	2	Yes	...	...	...	Yes	Branch weight	...	...	...
1111	Linden-Littleleaf	11	...	2	...	...	...	...	...	...	...	...	Yes
1112	Maple-Red	7	...	2	...	...	...	...	...	...	...	...	Yes
1113	Maple-Red	6	...	2	...	...	...	...	...	...	...	...	Yes
1114	Maple-Red	7	...	2	...	...	...	...	...	...	...	...	Yes
1119	Crabapple	4	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
1120	Crabapple	4	...	2	...	...	...	...	...	...	...	...	Yes
1121	Linden-Littleleaf	13	...	2	...	...	...	...	...	...	...	...	Yes
1122	Linden-Littleleaf	8	...	2	...	...	...	...	...	...	...	...	Yes
1123	Linden-Littleleaf	12	...	2	...	...	...	...	...	...	...	...	Yes
1124	Linden-Littleleaf	11	...	2	...	...	...	...	...	...	...	...	Yes
1126	Linden-Littleleaf	11	...	2	Yes	...	...	...	...	...	...	...	Yes
1127	Linden-Littleleaf	10	...	2	...	...	...	...	...	...	...	...	Yes
1128	Linden-Littleleaf	10	...	2	...	...	...	...	...	...	...	...	Yes
1141	Dogwood-Kousa	8	...	2	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1142	Maple-Red	7	...	2	...	...	...	...	...	...	...	...	Yes
1143	Maple-Red	6	...	2	...	...	...	...	...	...	...	...	Yes
1144	Maple-Red	7	...	2	...	...	...	...	...	...	...	...	Yes
1158	Honeylocust-Thornless Common	9	...	2	...	...	...	...	Yes	Branch weight	...	...	...
1159	Honeylocust-Thornless Common	11	...	2	...	...	...	...	Yes	Branch weight	...	...	...
1165	Maple-Norway	9	...	2	...	...	...	...	...	...	...	...	Yes
1169	Purple Leaf Plum	7	...	2	...	...	...	...	...	...	...	Yes	Yes
1170	Honeylocust-Thornless Common	10	...	2	...	...	...	...	Yes	Branch weight	...	Yes	...
1206	Maple-Japanese	6	...	2	...	...	...	...	...	...	...	...	Yes
1213	Cherry	5	...	2	...	...	...	...	...	...	...	...	Yes
1241	Ash-White	5	...	2	...	...	...	...	Yes	Lighting	...	...	Yes
1242	Ash-White	4	...	2	...	...	...	...	...	...	...	...	Yes
1244	Birch-Paper	5	...	2	...	...	...	...	Yes	Branch weight	...	Yes	...
1262	Ash-White	4	...	2	...	...	...	...	...	...	...	...	Yes
1263	Ash-White	4	...	2	...	...	...	...	...	...	...	...	Yes
1271	Maple-Sugar	4	...	2	...	...	...	...	...	...	...	...	Yes
1294	Dogwood-Kousa	4	...	2	Yes	...	...	...	...	...	...	...	Yes
1313	Maple-Sugar	4	...	2	...	...	...	...	Yes	Fence	...	...	Yes
1316	Maple-Norway	4	...	2	...	...	...	...	...	...	...	...	Yes
1365	Cedar-Atlas	12	...	2	Yes	...	...	...	...	...	...	...	...
1407	Pine-Scotch	16	...	2	Yes	...	...	...	Yes	Building	...	...	...
1417	Maple-Norway	11	...	2	...	...	...	...	Yes	Branch weight	...	...	...
1418	Catalpa-Northern	17	...	2	Yes	...	...	...	...	...	...	...	Yes
1430	Tuliptree	3	...	2	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1454	Maple-Japanese	10	...	2	...	...	...	...	...	...	...	...	Yes
53	Dogwood-Flowering	5	...	3	Yes	...	...	...	...	...	...	...	...
54	Dogwood-Flowering	6	...	3	Yes	...	...	...	...	...	...	...	...
57	Pine-Eastern White	17	...	3	...	...	...	...	Yes	Building	...	...	...
58	Dogwood-Kousa	6	...	3	Yes	...	...	...	...	...	...	...	Yes
59	Dogwood-Kousa	5	...	3	Yes	...	...	...	...	...	...	...	Yes
84	Maple-Japanese	5	...	3	...	...	...	...	...	...	...	...	Yes
88	Cedar-Atlas	18	...	3	Yes	...	...	...	...	...	...	...	...
89	Oak - Scarlet	5	...	3	...	...	...	...	...	...	...	...	Yes
109	Cherry	7	...	3	...	...	...	...	...	...	...	...	Yes
110	Cherry	6	...	3	...	...	...	...	...	...	...	...	Yes
124	Maple-Paperbark	3	...	3	...	...	...	...	...	...	...	...	Yes
141	Ash-White	4	...	3	...	...	...	...	...	...	...	...	Yes
180	Dogwood-Flowering	7	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
202	Arborvitae-Eastern (15)	10	...	3	Yes	...	...	...	Yes	Branch weight	...	...	Yes
228	Arborvitae-Eastern (50)	4	...	3	Yes	...	...	...	Yes	Branch weight	...	...	Yes
265	Pine-Eastern White	13	...	3	Yes	...	...	...	...	...	...	...	...
266	Pine-Eastern White	14	...	3	Yes	...	...	...	...	...	...	...	...
267	Pine-Eastern White	10	...	3	Yes	...	...	...	...	...	...	...	...
268	Pine-Eastern White	14	...	3	Yes	...	...	...	...	...	...	...	...
282	Pine-Austrian	15	...	3	Yes	...	...	...	...	...	...	...	...
356	Spruce-Colorado Blue	16	...	3	Yes	...	...	...	...	...	...	...	...
357	Spruce-Colorado Blue	12	...	3	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
359	Spruce-Colorado Blue	15	...	3	Yes	...	...	...	...	...	...	...	...
362	Spruce-Colorado Blue	15	...	3	Yes	...	...	...	...	...	...	...	...
363	Spruce-Colorado Blue	16	...	3	Yes	...	...	...	...	...	...	...	...
369	Spruce-Colorado Blue	9	...	3	Yes	...	...	...	...	...	...	...	...
383	Oak - Scarlet	24	...	3	Yes	...	...	...	...	...	...	...	...
384	Spruce-Colorado Blue	12	...	3	Yes	...	...	...	...	...	...	...	...
471	Spruce-Colorado Blue	13	...	3	Yes	...	...	...	...	...	...	...	...
473	Maple-Sugar	7	...	3	...	...	...	...	...	...	...	...	Yes
479	Dogwood-Flowering	9	...	3	Yes	...	...	...	...	...	...	...	Yes
480	Weeping Cherry	17	...	3	Yes	...	...	...	...	...	...	...	Yes
513	Dogwood-Kousa	6	...	3	...	...	...	...	...	...	...	...	Yes
516	Dogwood-Flowering	6	...	3	Yes	...	...	...	...	...	...	...	Yes
517	Fir-White	19	...	3	Yes	...	...	...	...	...	...	...	...
519	Dogwood-Flowering	4	...	3	...	...	...	...	...	...	...	...	Yes
524	Dogwood-Flowering	4	...	3	...	...	...	...	...	...	...	...	Yes
526	Dogwood-Flowering	4	...	3	...	...	...	...	...	...	...	...	Yes
549	Dogwood-Flowering	6	...	3	...	...	...	...	...	...	...	...	Yes
566	Dogwood-Flowering	5	...	3	Yes	...	...	...	...	...	...	...	Yes
567	Dogwood-Flowering	6	...	3	Yes	...	...	...	...	...	...	...	Yes
568	Maple-Japanese	8	...	3	Yes	...	...	...	...	...	...	...	Yes
606	Spruce-Colorado Blue	15	...	3	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
610	Spruce-Colorado Blue	20	...	3	Yes	...	...	...	...	...	...	...	Yes
611	Spruce-Colorado Blue	18	...	3	Yes	...	...	...	...	...	...	...	...
625	Dogwood-Flowering	5	...	3	Yes	...	...	...	...	...	...	...	Yes
626	Dogwood-Flowering	6	...	3	...	...	...	...	...	...	...	...	Yes
652	Purple Leaf Plum	3	...	3	...	...	...	...	...	...	...	...	Yes
653	Purple Leaf Plum	3	...	3	...	...	...	...	...	...	...	...	Yes
681	Dogwood-Corneliancherry	4	...	3	...	...	...	...	Yes	Building	...	...	Yes
685	Oak-Pin	6	...	3	Yes	...	...	...	...	...	...	...	Yes
686	Oak-Pin	6	...	3	...	...	...	...	...	...	...	...	Yes
688	Oak-Pin	5	...	3	...	...	...	...	...	...	...	...	Yes
695	Honeylocust-Thornless Common	5	...	3	...	...	...	...	...	...	...	...	Yes
698	Maple-Red	4	...	3	...	...	...	...	...	...	...	...	Yes
702	Maple-Red	4	...	3	...	...	...	...	...	...	...	...	Yes
704	Maple-Red	4	...	3	...	...	...	...	...	...	...	...	Yes
727	Maple-Red	5	...	3	...	...	...	...	...	...	...	...	Yes
734	Magnolia-Saucer	7	...	3	...	...	...	...	...	...	...	Yes	...
742	Spruce-Colorado Blue	9	...	3	...	...	...	...	...	...	...	...	Yes
743	Crabapple	7	...	3	...	...	...	...	...	...	...	Yes	...
744	Crabapple	5	...	3	...	Yes	Sidewalk	...	...	...	...	Yes	...
748	Tuliptree	18	...	3	...	...	...	...	...	...	...	...	Yes
755	Crabapple	12	...	3	...	...	...	...	...	...	...	Yes	...
765	Oak- Black	32	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
768	Pear-Callery	11	...	3	...	...	...	...	Yes	Branch weight	...	...	...
769	Pear-Callery	11	...	3	...	...	...	...	Yes	Branch weight	...	...	...
796	Pine-Austrian	15	...	3	...	Yes	Sidewalk	...	...	...	...	...	...
804	Planetree-London	5	...	3	...	...	...	...	Yes	Lighting	...	...	Yes
805	Planetree-London	4	...	3	...	...	...	...	...	...	...	...	Yes
811	Maple-Japanese	6	...	3	...	...	...	...	Yes	Building	...	Yes	...
812	Maple-Japanese	4	...	3	...	...	...	...	Yes	Building	...	Yes	...
816	Cherry	6	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
820	Cherry	7	...	3	...	...	...	...	Yes	Branch weight	...	Yes	...
824	Maple-Japanese	9	...	3	...	...	...	...	...	...	...	Yes	...
825	Dogwood-Kousa	9	...	3	...	...	...	...	...	...	...	Yes	Yes
828	Planetree-London	4	...	3	...	...	...	...	...	...	...	...	Yes
829	Planetree-London	5	...	3	...	...	...	...	...	...	...	...	Yes
830	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
831	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
832	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
833	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
834	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
835	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
836	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
837	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
838	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
839	Oak-English	5	...	3	...	...	...	...	...	...	...	...	Yes
840	Beech-European	5	...	3	...	...	...	...	...	...	...	...	Yes
851	Maple-Japanese	6	...	3	...	...	...	...	...	...	...	Yes	...
865	Maple-Norway	15	...	3	Yes	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
867	Pine-Eastern White	19	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
872	Pine-Austrian	23	...	3	Yes	...	...	...	...	...	...	...	...
873	Pine-Austrian	24	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
892	Ash-White	7	...	3	...	Yes	Parking	...	...	...	...	...	Yes
898	Falsecypress-Sawara	8	...	3	Yes	...	...	...	...	...	...	...	...
929	Dogwood-Flowering	7	...	3	Yes	...	...	...	...	...	...	...	...
931	Cherry	5	...	3	...	...	...	...	...	...	...	...	Yes
937	Cherry	8	...	3	...	...	...	...	...	...	...	...	Yes
938	Cherry	9	...	3	...	...	...	...	...	...	...	...	Yes
940	Zelkova-Japanese	7	...	3	...	...	...	...	...	...	...	...	Yes
941	Zelkova-Japanese	8	...	3	...	...	...	...	...	...	...	...	Yes
942	Zelkova-Japanese	8	...	3	...	...	...	...	...	...	...	...	Yes
944	Purple Leaf Plum	5	...	3	...	...	...	...	...	...	...	Yes	...
945	Zelkova-Japanese	8	...	3	...	...	...	...	...	...	...	...	Yes
946	Zelkova-Japanese	7	...	3	...	...	...	...	...	...	...	...	Yes
947	Zelkova-Japanese	7	...	3	...	...	...	...	...	...	...	...	Yes
948	Zelkova-Japanese	7	...	3	...	...	...	...	...	...	...	...	Yes
950	Zelkova-Japanese	8	...	3	...	...	...	...	...	...	...	...	Yes
952	Cherry	9	...	3	...	...	...	...	...	...	...	...	Yes
953	Cherry	7	...	3	...	...	...	...	...	...	...	...	Yes
955	Zelkova-Japanese	8	...	3	...	...	...	...	...	...	...	...	Yes
960	Magnolia-Saucer	9	...	3	...	...	...	...	...	...	...	Yes	...
970	Honeylocust-Thornless Common	13	...	3	Yes	...	...	...	...	...	...	...	...
972	Mulberry-White	6	...	3	Yes	...	...	...	...	...	...	Yes	...
973	Pine-Scotch	16	...	3	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
979	Pine-Scotch	14	...	3	Yes	...	...	...	...	...	...	...	...
981	Pine-Scotch	16	...	3	Yes	...	...	...	...	...	...	...	...
982	Pine-Eastern White	16	...	3	Yes	...	...	...	...	...	...	...	...
986	Pine-Eastern White	13	...	3	Yes	...	...	...	...	...	...	...	...
989	Pine-Eastern White	13	...	3	Yes	...	...	...	...	...	...	...	...
991	Pine-Eastern White	15	...	3	Yes	...	...	...	...	...	...	...	...
993	Pine-Eastern White	14	...	3	Yes	...	...	...	...	...	...	...	...
998	Maple-Japanese	5	...	3	Yes	...	...	...	...	...	...	...	...
1010	Oak-Pin	7	...	3	...	...	...	...	...	...	...	...	Yes
1011	Cedar-Atlas	10	...	3	...	...	...	...	...	...	...	...	Yes
1015	Pine-Eastern White	22	...	3	Yes	...	...	...	...	...	...	...	...
1018	Spruce-Norway	23	...	3	Yes	...	...	...	...	...	...	...	...
1019	Cedar-Atlas	11	...	3	...	...	...	...	...	...	...	...	Yes
1021	Cedar-Atlas	11	...	3	...	...	...	...	...	...	...	...	Yes
1022	Pine-Eastern White	24	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
1024	Pine-Eastern White	24	...	3	Yes	...	...	...	...	...	...	...	...
1025	Pine-Eastern White	26	...	3	Yes	...	...	...	...	...	...	...	...
1028	Zelkova-Japanese	6	...	3	...	...	...	...	...	...	...	...	Yes
1031	Maple-Red	5	...	3	...	...	...	...	...	...	...	...	Yes
1033	Pine-Eastern White	16	...	3	...	...	...	...	Yes	Building	...	...	...
1034	Pine-Eastern White	13	...	3	...	...	...	...	...	...	...	...	Yes
1035	Pine-Eastern White	16	...	3	Yes	...	...	...	...	...	...	...	...
1037	Pine-Eastern White	18	...	3	Yes	...	...	...	...	...	...	...	...
1038	Pine-Eastern White	18	...	3	...	Yes	Lighting	...	...	...	...	...	...
1040	Pine-Eastern White	17	...	3	Yes	...	...	...	...	...	...	...	...
1041	Pine-Eastern White	22	...	3	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1045	Zelkova-Japanese	7	...	3	...	...	...	...	...	...	...	...	Yes
1046	Purple Leaf Plum	7	...	3	...	...	...	...	...	...	...	Yes	...
1047	Zelkova-Japanese	8	...	3	...	...	...	...	...	...	...	...	Yes
1048	Zelkova-Japanese	6	...	3	...	...	...	...	...	...	...	...	Yes
1049	Zelkova-Japanese	7	...	3	...	...	...	...	...	...	...	...	Yes
1050	Zelkova-Japanese	6	...	3	Yes	...	...	...	...	...	...	...	...
1054	Zelkova-Japanese	7	...	3	...	...	...	...	...	...	...	...	Yes
1080	Purple Leaf Plum	8	...	3	Yes	...	...	...	...	...	...	Yes	Yes
1081	Purple Leaf Plum	8	...	3	Yes	...	...	...	...	...	...	Yes	Yes
1082	Purple Leaf Plum	8	...	3	...	...	...	...	...	...	...	Yes	Yes
1083	Purple Leaf Plum	8	...	3	Yes	...	...	...	Yes	Branch weight	...	Yes	...
1085	Cherry	8	...	3	...	...	...	...	...	...	...	...	Yes
1101	Spruce-White	7	...	3	Yes	...	...	...	...	...	...	...	...
1105	Spruce-White	9	...	3	Yes	...	...	...	...	...	...	...	...
1133	Magnolia-Saucer	4	...	3	...	Yes	Sidewalk	...	...	...	...	Yes	...
1138	Spruce-Colorado Blue	17	...	3	Yes	...	...	...	...	...	...	...	...
1140	Dogwood-Kousa	5	...	3	...	...	...	...	...	...	...	...	Yes
1146	Weeping Cherry	7	...	3	...	...	...	...	...	...	...	...	Yes
1148	Weeping Cherry	8	...	3	...	...	...	...	...	...	...	...	Yes
1149	Weeping Cherry	7	...	3	...	...	...	...	...	...	...	Yes	...
1151	Zelkova-Japanese	12	...	3	...	...	...	...	...	...	...	...	Yes
1152	Zelkova-Japanese	11	...	3	...	...	...	...	...	...	...	Yes	...
1153	Zelkova-Japanese	12	...	3	...	...	...	...	...	...	...	...	Yes
1156	Birch-Paper	5	...	3	...	...	...	...	...	...	...	...	Yes
1157	Honeylocust-Thornless Common	11	...	3	...	...	...	...	Yes	Branch weight	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1160	Honeylocust-Thornless Common	8	...	3	...	...	...	...	...	...	...	...	Yes
1161	Oak-English	13	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
1166	Maple-Norway	8	...	3	...	...	...	...	...	...	...	...	Yes
1168	Honeylocust-Thornless Common	10	...	3	...	...	...	...	...	...	...	...	Yes
1171	Honeylocust-Thornless Common	9	...	3	...	...	...	...	...	...	...	Yes	...
1172	Zelkova-Japanese	17	...	3	...	...	...	...	...	...	...	Yes	...
1174	Crabapple	5	...	3	...	...	...	...	...	...	...	...	Yes
1179	Tuliptree	17	...	3	...	...	...	...	...	...	...	...	Yes
1189	Crabapple	5	...	3	...	...	...	...	...	...	...	Yes	Yes
1191	Maple-Norway	12	...	3	...	...	...	...	...	...	...	Yes	...
1192	Maple-Norway	8	...	3	...	...	...	...	...	...	...	...	Yes
1195	Oak- Black	41	...	3	Yes	...	...	...	...	...	...	...	...
1198	Catalpa-Northern	26	...	3	Yes	...	...	...	...	...	...	...	...
1199	Hemlock-Canadian	20	...	3	Yes	...	...	...	...	...	...	...	...
1200	Pine-Austrian	20	...	3	Yes	...	...	...	...	...	...	...	...
1201	Oak-White	26	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
1203	Oak-White	34	...	3	Yes	...	...	...	Yes	Branch weight	...	...	...
1208	Maple-Paperbark	3	...	3	...	...	...	...	...	...	...	...	Yes
1209	Dogwood-Kousa	1	...	3	...	...	...	...	...	...	...	...	Yes
1210	Dogwood-Kousa	4	...	3	...	...	...	...	...	...	...	...	Yes
1211	Dogwood-Kousa	4	...	3	...	...	...	...	...	...	...	...	Yes
1212	Dogwood-Kousa	4	...	3	...	...	...	...	...	...	...	...	Yes
1214	Cherry	4	...	3	...	...	...	...	...	...	...	...	Yes
1215	Cherry	4	...	3	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1216	Maple-Paperbark	4	...	3	...	...	...	...	...	...	...	...	Yes
1217	Cherry	5	...	3	...	...	...	...	...	...	...	...	Yes
1218	Cherry	4	...	3	...	...	...	...	...	...	...	...	Yes
1219	Cherry	5	...	3	...	...	...	...	...	...	...	...	Yes
1220	Cherry	4	...	3	...	...	...	...	...	...	...	...	Yes
1221	Cherry	4	...	3	...	...	...	...	...	...	...	...	Yes
1238	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1239	Purple Leaf Plum	3	...	3	...	...	...	...	...	...	...	...	Yes
1240	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1243	Dogwood-Kousa	7	...	3	Yes	...	...	...	...	...	...	...	Yes
1245	Dogwood-Kousa	5	...	3	Yes	...	...	...	...	...	...	...	Yes
1246	Dogwood-Kousa	5	...	3	...	...	...	...	...	...	...	...	Yes
1247	Ash-White	3	...	3	...	...	...	...	...	...	...	...	Yes
1248	Ash-White	3	...	3	...	...	...	...	...	...	...	...	Yes
1249	Ash-White	3	...	3	...	...	...	...	...	...	...	...	Yes
1250	Tuliptree	3	...	3	...	...	...	...	...	...	...	...	Yes
1251	Tuliptree	3	...	3	...	...	...	...	...	...	...	...	Yes
1252	Tuliptree	3	...	3	...	...	...	...	...	...	...	...	Yes
1253	Tuliptree	3	...	3	...	...	...	...	...	...	...	...	Yes
1254	Tuliptree	3	...	3	...	...	...	...	...	...	...	...	Yes
1255	Dogwood-Kousa	6	...	3	...	...	...	...	...	...	...	...	Yes
1256	Dogwood-Kousa	6	...	3	...	...	...	...	...	...	...	...	Yes
1257	Dogwood-Kousa	5	...	3	...	...	...	...	...	...	...	...	Yes
1258	Maple-Paperbark	5	...	3	...	...	...	...	...	...	...	...	Yes
1259	Maple-Paperbark	8	...	3	...	...	...	...	...	...	...	...	Yes
1260	Dogwood-Kousa	6	...	3	...	...	...	...	Yes	Sidewalk	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1261	Maple-Paperbark	4	...	3	...	...	...	...	...	...	...	...	Yes
1264	Maple-Red	2	...	3	...	...	...	...	...	...	...	...	Yes
1265	Elm	3	...	3	...	...	...	...	...	...	...	...	Yes
1266	Elm	3	...	3	...	...	...	...	...	...	...	...	Yes
1267	Elm	3	...	3	...	...	...	...	...	...	...	...	Yes
1268	Elm	3	...	3	...	...	...	...	...	...	...	...	Yes
1269	Elm	3	...	3	...	...	...	...	...	...	...	...	Yes
1270	Elm	3	...	3	...	...	...	...	...	...	...	...	Yes
1277	Lilac-Japanese Tree	3	...	3	...	...	...	...	...	...	...	...	Yes
1278	Lilac-Japanese Tree	3	...	3	...	...	...	...	...	...	...	...	Yes
1279	Lilac-Japanese Tree	3	...	3	...	...	...	...	...	...	...	...	Yes
1280	Lilac-Japanese Tree	3	...	3	...	...	...	...	...	...	...	...	Yes
1281	Lilac-Japanese Tree	3	...	3	...	...	...	...	...	...	...	...	Yes
1282	Lilac-Japanese Tree	3	...	3	...	...	...	...	...	...	...	...	Yes
1283	Lilac-Japanese Tree	4	...	3	...	...	...	...	...	...	...	...	Yes
1284	Lilac-Japanese Tree	2	...	3	...	...	...	...	...	...	...	...	Yes
1289	Crabapple	2	...	3	...	...	...	...	...	...	...	...	Yes
1290	Crabapple	2	...	3	...	...	...	...	...	...	...	...	Yes
1291	Lilac-Japanese Tree	3	...	3	...	...	...	...	...	...	...	...	Yes
1292	Dogwood-Kousa	4	...	3	...	...	...	...	...	...	...	...	Yes
1293	Dogwood-Kousa	3	...	3	...	...	...	...	...	...	...	...	Yes
1296	Crabapple	1	...	3	...	...	...	...	...	...	...	...	Yes
1297	Elm-Chinese	3	...	3	...	...	...	...	...	...	...	...	Yes
1298	Elm-Chinese	3	...	3	...	...	...	...	...	...	...	...	Yes
1299	Elm-Chinese	3	...	3	...	...	...	...	...	...	...	...	Yes
1301	Elm-Chinese	4	...	3	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1302	Planetree-London	3	...	3	...	...	...	...	...	...	...	...	Yes
1303	Planetree-London	3	...	3	...	...	...	...	...	...	...	...	Yes
1304	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1305	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1306	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1307	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1308	Pine-Eastern White	5	...	3	...	...	...	...	...	...	...	...	Yes
1311	Pine-Eastern White	9	...	3	...	...	...	...	...	...	...	...	Yes
1317	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1318	Pear-Callery	4	...	3	...	...	...	...	...	...	...	...	Yes
1319	Pear-Callery	5	...	3	...	...	...	...	...	...	...	...	Yes
1320	Maple-Paperbark	4	...	3	...	...	...	...	...	...	...	...	Yes
1321	Maple-Paperbark	4	...	3	...	...	...	...	...	...	...	...	Yes
1322	Dogwood-Flowering	5	...	3	...	...	...	...	...	...	...	...	Yes
1323	Dogwood-Flowering	4	...	3	...	...	...	...	...	...	...	...	Yes
1324	Birch-River	4	...	3	...	...	...	...	...	...	...	...	Yes
1325	Birch-River	3	...	3	...	...	...	...	...	...	...	...	Yes
1326	Maple-Paperbark	4	...	3	...	...	...	...	...	...	...	...	Yes
1327	Magnolia-Star	6	...	3	...	...	...	...	...	...	...	...	Yes
1328	Serviceberry (8)	1	...	3	...	...	...	...	...	...	...	...	Yes
1329	Dogwood-Flowering	3	...	3	...	...	...	...	...	...	...	...	Yes
1330	Dogwood-Flowering	3	...	3	...	...	...	...	...	...	...	...	Yes
1331	Dogwood-Flowering	3	...	3	...	...	...	...	...	...	...	...	Yes
1332	Dogwood-Flowering	3	...	3	...	...	...	...	...	...	...	...	Yes
1333	Dogwood-Flowering	3	...	3	...	...	...	...	...	...	...	...	Yes
1334	Dogwood-Flowering	3	...	3	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1335	Ash-Green	5	...	3	...	...	...	...	...	...	...	...	Yes
1336	Ash-Green	5	...	3	...	...	...	...	...	...	...	...	Yes
1337	Ash-Green	5	...	3	...	...	...	...	...	...	...	...	Yes
1338	Ash-Green	5	...	3	...	...	...	...	...	...	...	...	Yes
1339	Ash-Green	4	...	3	...	...	...	...	...	...	...	...	Yes
1340	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1341	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1342	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1343	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1344	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1345	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1346	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1347	Horsechestnut-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1348	Horsechestnut-Common	2	...	3	...	...	...	...	...	...	...	...	Yes
1349	Lilac-Common	4	...	3	...	...	...	...	...	...	...	...	Yes
1350	Lilac-Common	4	...	3	...	...	...	...	...	...	...	...	Yes
1351	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1352	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1353	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1354	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1355	Pear-Callery	9	...	3	Yes	...	...	...	...	...	...	...	Yes
1356	Pear-Callery	9	...	3	Yes	...	...	...	...	...	...	...	Yes
1357	Pear-Callery	9	...	3	Yes	...	...	...	...	...	...	...	Yes
1358	Pear-Callery	9	...	3	Yes	...	...	...	...	...	...	...	Yes
1359	Pear-Callery	10	...	3	Yes	...	...	...	...	...	...	...	Yes

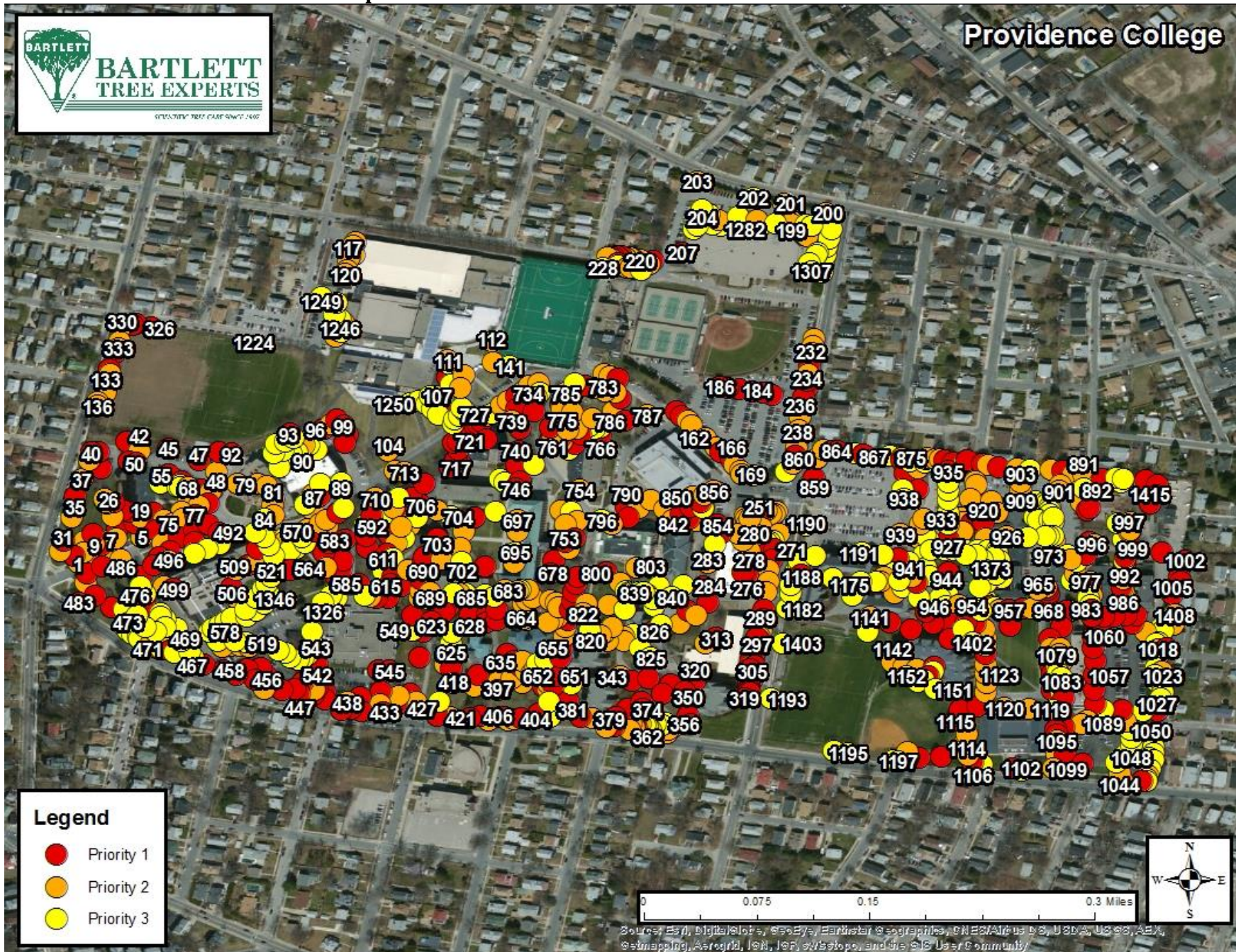
Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1360	Pear-Callery	9	...	3	Yes	...	...	...	...	...	...	...	Yes
1361	Pear-Callery	4	...	3	...	...	...	...	...	...	...	...	Yes
1362	Arborvitae-Eastern (2)	3	...	3	...	...	...	...	Yes	Building	...	...	...
1363	Arborvitae-Eastern (4)	2	...	3	...	...	...	...	Yes	Building	...	...	...
1364	Arborvitae-Eastern (9)	2	...	3	...	...	...	...	Yes	Building	...	...	...
1367	Falsecypress-Sawara (3)	4	...	3	Yes	...	...	...	...	...	...	...	...
1368	Arborvitae-Eastern (21)	3	...	3	...	...	...	...	Yes	Building	...	...	...
1369	Maple-Norway	10	...	3	...	...	...	...	...	...	...	...	Yes
1370	Maple-Norway	9	...	3	...	...	...	...	...	...	...	...	Yes
1371	Cherry	10	...	3	Yes	...	...	...	...	...	...	...	Yes
1372	Cherry	9	...	3	Yes	...	...	...	...	...	...	...	Yes
1373	Cherry	8	...	3	Yes	...	...	...	...	...	...	...	Yes
1374	Arborvitae-Eastern	8	...	3	...	...	...	...	Yes	Building	...	...	...
1375	Arborvitae-Eastern	10	...	3	...	...	...	...	Yes	Building	...	...	...
1376	Arborvitae-Eastern	4	...	3	...	...	...	...	Yes	Building	...	...	...
1377	Arborvitae-Eastern	4	...	3	...	...	...	...	Yes	Building	...	...	...
1378	Arborvitae-Eastern	5	...	3	...	...	...	...	Yes	Building	...	...	...
1379	Arborvitae-Eastern	5	...	3	...	...	...	...	Yes	Building	...	...	...
1380	Arborvitae-Eastern	6	...	3	...	...	...	...	Yes	Building	...	...	...
1381	Maple-Paperbark	3	...	3	...	...	...	...	...	...	...	...	Yes
1382	Maple-Red	3	...	3	...	...	...	...	...	...	...	...	Yes
1383	Hawthorn	4	...	3	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1384	Ginkgo	3	...	3	...	...	...	...	...	...	...	...	Yes
1385	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1386	Birch-European White	3	...	3	...	...	...	...	...	...	...	...	Yes
1387	Planetree-London	3	...	3	...	...	...	...	...	...	...	...	Yes
1389	Ash-Green	3	...	3	...	...	...	...	...	...	...	...	Yes
1390	Oak-Bur	3	...	3	...	...	...	...	...	...	...	...	Yes
1391	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1392	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1393	Lilac-Common	3	...	3	...	...	...	...	...	...	...	...	Yes
1394	Maple-Paperbark	2	...	3	...	...	...	...	...	...	...	...	Yes
1395	Crabapple	2	...	3	...	...	...	...	...	...	...	...	Yes
1396	Crabapple	2	...	3	...	...	...	...	...	...	...	...	Yes
1397	Crabapple	2	...	3	...	...	...	...	...	...	...	...	Yes
1398	Birch-Paper	2	...	3	...	...	...	...	...	...	...	...	Yes
1399	Magnolia-Star	2	...	3	...	...	...	...	...	...	...	...	Yes
1400	Magnolia-Star	8	...	3	...	...	...	...	...	...	...	...	Yes
1401	Crabapple	4	...	3	...	...	...	...	...	...	...	...	Yes
1402	Crabapple	3	...	3	...	...	...	...	...	...	...	...	Yes
1404	Honeylocust-Thornless Common	9	...	3	...	...	...	...	...	...	...	...	Yes
1405	Magnolia-Star	3	...	3	...	...	...	...	...	...	...	Yes	...
1406	Magnolia-Star	2	...	3	...	...	...	...	Yes	Building	...	...	...
1409	Arborvitae-Eastern (23)	2	...	3	...	...	...	...	Yes	Building	...	...	...
1411	Arborvitae-Eastern	18	...	3	Yes	...	...	...	...	...	...	...	...
1412	Pine-Austrian	19	...	3	Yes	...	...	...	...	...	...	...	...

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1419	Cherry	6	...	3	...	...	...	...	...	...	...	...	Yes
1420	Magnolia-Star	2	...	3	...	...	...	...	...	...	...	...	Yes
1421	Magnolia-Star	2	...	3	...	...	...	...	...	...	...	...	Yes
1423	Redbud-Eastern	1	...	3	...	...	...	...	...	...	...	...	Yes
1424	Fir-Balsam	2	...	3	Yes	...	...	...	...	...	...	...	...
1425	Spruce-White	2	...	3	Yes	...	...	...	...	...	...	...	...
1426	Ash-Green	3	...	3	...	...	...	...	...	...	...	...	Yes
1427	Pine-Eastern White	2	...	3	...	...	...	...	...	...	...	...	Yes
1428	Hornbeam-American	3	...	3	...	...	...	...	...	...	...	...	Yes
1429	Hawthorn	3	...	3	...	...	...	...	...	...	...	...	Yes
1432	Pine-Eastern White	2	...	3	...	...	...	...	...	...	...	...	Yes
1433	Pine-Eastern White	2	...	3	...	...	...	...	...	...	...	...	Yes
1435	Spruce-White	3	...	3	...	...	...	...	...	...	...	...	Yes
1436	Pear-Callery	4	...	3	...	...	...	...	...	...	...	...	Yes
1437	Pear-Callery	3	...	3	...	...	...	...	...	...	...	...	Yes
1438	Pear-Callery	3	...	3	...	...	...	...	...	...	...	...	Yes
1439	Pear-Callery	6	...	3	...	...	...	...	...	...	...	...	Yes
1440	Pear-Callery	6	...	3	...	...	...	...	...	...	...	...	Yes
1441	Pear-Callery	6	...	3	...	...	...	...	...	...	...	...	Yes
1442	Pear-Callery	5	...	3	...	...	...	...	...	...	...	...	Yes
1443	Pear-Callery	5	...	3	...	...	...	...	...	...	...	...	Yes
1444	Fir-Balsam	2	...	3	Yes	...	...	...	...	...	...	...	...
1445	Magnolia-Sweetbay	2	...	3	...	...	...	...	...	...	...	...	Yes
1447	Birch-River	2	...	3	...	...	...	...	...	...	...	...	Yes
1448	Tupelo-Black	2	...	3	...	...	...	...	...	...	...	...	Yes
1449	Dogwood-Flowering	2	...	3	...	...	...	...	...	...	...	...	Yes

Tree ID	Common Name	DBH	Risk Rating	Tree Care Priority	Clean	Raise	Raise from	Raise from	Reduce	Reduce from	Reduce from	Thin	Structural
1450	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1451	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1452	Serviceberry	2	...	3	...	...	...	...	...	...	...	...	Yes
1453	Burning Bush	4	...	3	...	...	...	...	...	...	...	...	Yes
1456	Hemlock-Canadian	4	...	3	Yes	...	...	...	...	...	...	...	...

Map 10: INVENTORIED TREES BY TREE CARE PRIORITY



Structural Support Systems

Structural support systems can reduce risk of tree or tree part(s) failure by limiting movement of stems or branches in certain situations. Examples include co-dominant stems or overextended branches with heavy foliage loads. For specific standards on structural support systems, readers will find an ANSI A300 standard practice document in the Appendix.

Cabling

Cabling is the process of connecting two or more upright stems or leaders to one another to add stability and reduce the likelihood of failure. In some instances, a lateral branch may be secured to the central leader using a cabling system to support the weight of the branch.

Bracing

Bracing is the process of securing the union of two co-dominant leaders or stems using high strength steel rods to alleviate stresses at the union and reduce the likelihood of failure. Bracing may also be used to reinforce trees that have a partial failure and are likely to benefit from bracing.

Guying

Guying is the process of anchoring a tree's stem to the ground or another immovable object to reduce the likelihood of root failure. Guying can be temporary or permanent and is most often used for establishing a tree in the landscape.

Propping

Propping is the process of using rigid structures that are built on or into the ground to help support the trunk or branch(s) that are oriented near the ground in a horizontal position to reduce the likelihood of failure from the weight or defect of the tree part being supported.



Figure 22: Tree #344 recommended for cabling due to the presence of co-dominant leaders.

We recommend that the following inventoried trees have structural support systems installed, inspected, and/or repaired:

Table 15: INVENTORIED TREES RECOMMENDED FOR NEW, INSPECTION OF, AND/OR REPAIR OF STRUCTURAL SUPPORT SYSTEMS (374 Trees)

Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
8	Cherry	16	1	Inspect	Yes
13	Spruce-Colorado Blue	19	1	New_1	Yes
21	Pine-Scotch	31	1	New_2	Yes

Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
23	Spruce-Colorado Blue	25	1	New_1	Yes
28	Maple-Norway	30	1	New_1	...
31	Spruce-Colorado Blue	26	1	New_1	...
35	Spruce-Colorado Blue	21	1	New_1	Yes
45	Oak-Pin	44	1	New_2	...
47	Maple-Norway	27	1	New_1	...
49	Pine-Eastern White	17	1	New_1	...
50	Maple-Sugar	16	1	New_1	Yes
56	Maple-Sugar	19	1	Inspect	...
61	Spruce-Colorado Blue	22	1	New_1	...
62	Elm-Slippery	24	1	Inspect	...
64	Linden-Littleleaf	17	1	New_2	...
74	Crimson King Maple	15	1	New_1	...
87	Mimosa	21	1	New_3	...
91	Oak- Black	30	1	New_1	...
93	Oak - Scarlet	53	1	Inspect	...
96	Maple-Norway	22	1	New_1	...
99	Cherry	23	1	New_2	...
100	Maple-Norway	27	1	New_2	...
108	Maple-Norway	29	1	Inspect	...
129	Oak - Scarlet	22	1	New_1	...
157	Oak - Scarlet	20	1	New_2	...
158	Oak - Scarlet	12	1	New_1	...
165	Oak - Scarlet	15	1	New_1	...
205	Pine-Austrian	15	1	New_2	Yes
211	Oak - Scarlet	26	1	New_2	...
216	Pine-Eastern White	15	1	New_1	Yes
221	Pine-Eastern White	15	1	New_1	Yes
223	Pine-Eastern White	17	1	New_1	Yes
224	Pine-Eastern White	17	1	New_1	...
255	Poplar-Lombardy	17	1	New_1	...
261	Poplar-Lombardy	14	1	New_1	...
269	Pine-Eastern White	14	1	New_1	Yes
277	Dogwood-Kousa	7	1	New_1	...
281	Oak - Scarlet	29	1	New_1	...
284	Beech-European	35	1	New_1	...
285	Maple-Norway	15	1	New_1	...
292	Honeylocust-Thornless Common	20	1	New_1	...

Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
300	Honeylocust-Thornless Common	18	1	New_1	...
311	Oak - Scarlet	50	1	New_2	...
318	Oak- Black	24	1	New_2	Yes
319	Oak- Black	24	1	New_2	...
327	Maple-Norway	17	1	New_1	...
344	Beech-European	29	1	New_1	Yes
345	Maple-Norway	25	1	Inspect	...
346	Maple-Norway	20	1	New_3	...
347	Maple-Norway	22	1	New_3	...
351	Maple-Norway	21	1	New_1	...
358	Maple-Norway	19	1	New_3	...
366	Maple-Norway	21	1	New_1	...
372	Maple-Silver	25	1	New_1	...
373	Maple-Silver	30	1	New_2	...
375	Maple-Norway	24	1	New_1	...
381	Oak - Scarlet	24	1	New_1	...
382	Oak - Scarlet	22	1	New_1	...
385	Oak - Scarlet	36	1	Inspect	...
394	Oak - Scarlet	26	1	New_1	...
397	Spruce-Colorado Blue	20	1	New_1	...
406	Oak - Scarlet	35	1	New_2	...
407	Oak - Scarlet	31	1	New_1	...
416	Oak - Scarlet	33	1	New_1	...
422	Oak - Scarlet	29	1	New_1	...
428	Oak-White	31	1	New_2	...
433	Maple-Norway	16	1	New_1	...
435	Maple-Norway	22	1	New_1	...
436	Oak-White	36	1	New_2	...
441	Maple-Norway	19	1	New_1	...
442	Oak - Scarlet	33	1	New_1	...
443	Oak-White	33	1	New_2	...
444	Oak-White	29	1	New_1	...
446	Oak-White	38	1	New_1	...
447	Oak-White	32	1	New_1	...
451	Maple-Norway	28	1	Inspect	...
453	Maple-Norway	29	1	New_3	...
455	Maple-Norway	28	1	New_2	...
456	Maple-Red	24	1	New_1	...

Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
466	Spruce-Colorado Blue	14	1	New_1	...
467	Maple-Norway	20	1	New_3	...
468	Maple-Norway	33	1	New_2	...
469	Spruce-Colorado Blue	14	1	New_1	...
474	Maple-Norway	35	1	New_4	...
489	Crimson King Maple	21	1	New_1	...
490	Crimson King Maple	24	1	New_1	Yes
491	Crimson King Maple	24	1	New_1	...
492	Cherry	30	1	New_3	...
493	Maple-Japanese	28	1	New_1	...
494	Cherry	29	1	New_2	...
495	Cherry	15	1	New_1	...
497	Crabapple	30	1	New_1	Yes
499	Maple-Red	32	1	New_2	...
509	Pear-Callery	19	1	New_3	...
511	Birch-Paper	11	1	New_1	...
521	Oak-White	40	1	New_2	...
542	Oak- Northern Red	34	1	New_2	...
545	Maple-Norway	19	1	New_1	...
548	Beech-European	40	1	New_2	...
552	Oak-Pin	30	1	New_2	...
556	Birch-Paper	11	1	New_1	...
557	Birch-Paper	10	1	New_2	...
560	Maple-Norway	21	1	New_1	...
561	Maple-Norway	27	1	New_1	...
562	Maple-Norway	26	1	New_1	...
563	Oak- Black	45	1	New_4	...
570	Fir-White	21	1	New_1	...
571	Maple-Norway	21	1	New_3	...
576	Maple-Norway	21	1	New_2	...
583	Maple-Norway	23	1	New_2	...
585	Maple-Norway	21	1	Inspect	...
587	Maple-Norway	26	1	New_3	...
588	Maple-Norway	28	1	New_3	...
593	Maple-Norway	23	1	New_1	...
597	Oak-White	40	1	Inspect/New	...
607	Oak-White	38	1	New_2	...
609	Maple-Norway	24	1	New_1	...

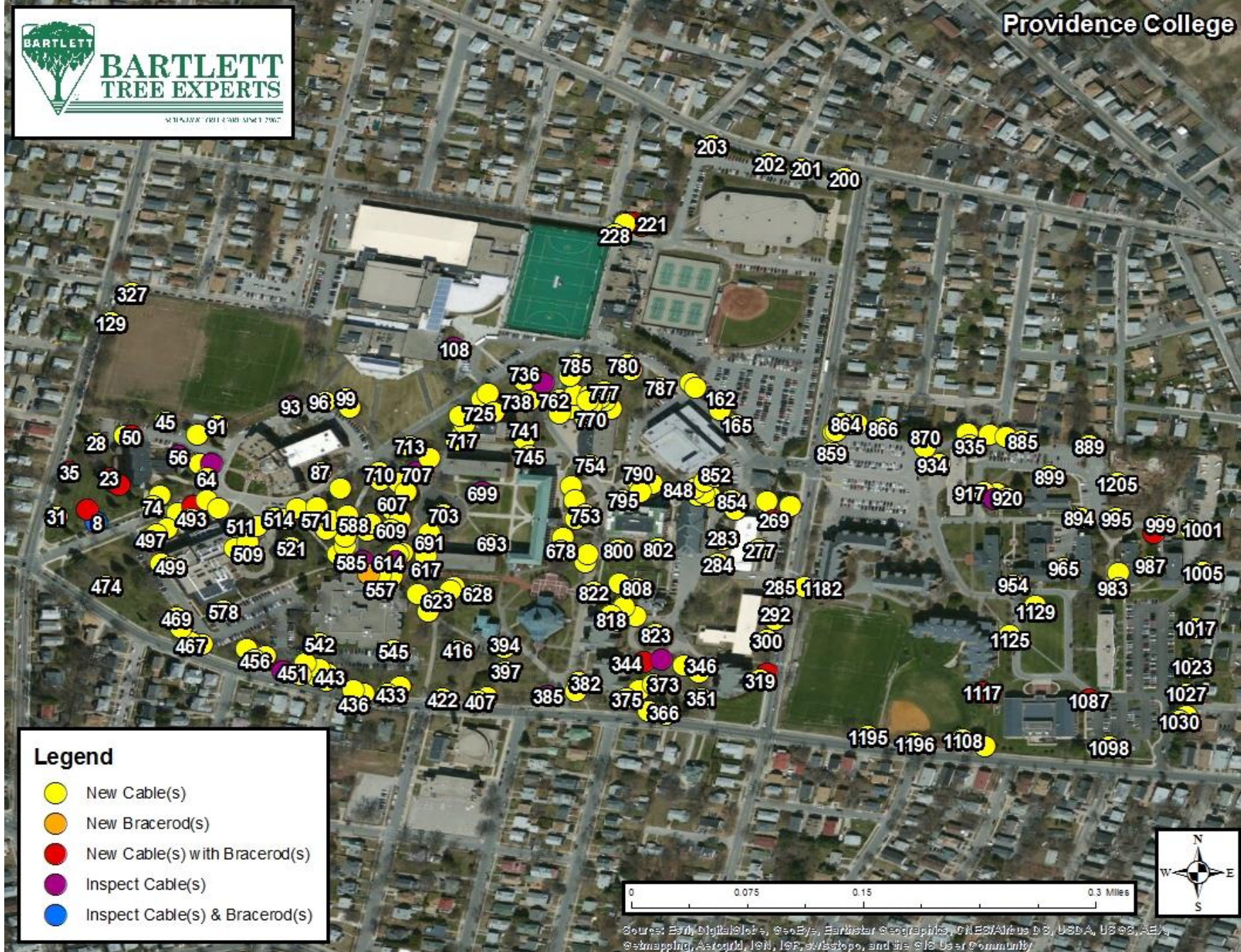
Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
612	Oak- Black	30	1	New_1	...
613	Oak- Black	39	1	New_3	...
614	Oak-White	34	1	Inspect	...
617	Maple-Norway	17	1	New_1	...
621	Oak-White	42	1	New_3	...
622	Oak-White	42	1	New_3	...
623	Maple-Norway	34	1	New_3	...
628	Maple-Norway	20	1	New_3	...
674	Maple-Norway	21	1	New_1	...
675	Maple-Norway	17	1	New_1	...
677	Beech-European	33	1	New_3	...
678	Linden-Littleleaf	17	1	New_3	...
691	Maple-Norway	21	1	New_1	...
693	Oak-White	32	1	New_2	...
699	Beech-European	45	1	Inspect	...
703	Falsecypress-Sawara (11)	12	1	New_3	...
707	Oak-White	46	1	Inspect	...
711	Oak- Northern Red	39	1	New_3	...
714	Oak- Black	43	1	New_4	...
717	Maple-Norway	24	1	New_3	...
718	Maple-Norway	20	1	New_3	...
719	Maple-Norway	26	1	New_3	...
722	Oak- Northern Red	24	1	New_1	...
724	Oak- Northern Red	24	1	New_1	...
725	Oak- Black	27	1	New_1	...
736	Oak- Black	32	1	New_2	...
737	Oak- Black	51	1	Inspect/New	...
738	Oak- Black	37	1	New_3	...
741	Oak- Black	48	1	New_1	...
745	Beech-European	28	1	New_4	...
752	Oak- Northern Red	18	1	New_1	...
753	Oak- Northern Red	17	1	New_1	...
756	Oak- Black	27	1	New_2	...
758	Oak-White	19	1	New_1	...
760	Oak- Northern Red	22	1	New_1	...
762	Oak- Northern Red	20	1	New_1	...
763	Oak- Black	35	1	New_2	...
764	Oak- Black	32	1	New_3	...

Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
766	Oak- Northern Red	33	1	New_3	...
770	Pear-Callery	11	1	New_3	...
773	Maple-Norway	25	1	New_3	...
774	Maple-Norway	16	1	New_1	...
779	Maple-Norway	19	1	New_1	...
790	Maple-Norway	18	1	New_3	...
794	Maple-Norway	28	1	New_3	...
800	Maple-Norway	28	1	New_3	...
802	Maple-Sugar	30	1	New_3	...
808	Cherry	15	1	New_2	...
847	Beech-European	18	1	New_1	...
848	Birch-Paper	14	1	New_2	...
849	Maple-Red	17	1	New_1	...
852	Cherry	23	1	New_3	...
854	Oak- Black	31	1	New_3	...
859	Oak- Black	17	1	New_2	...
863	Oak-Pin	26	1	New_1	...
864	Maple-Norway	24	1	New_3	...
866	Oak- Black	29	1	New_1	...
870	Maple-Norway	23	1	New_1	...
878	Pine-Eastern White	24	1	New_1	...
882	Pine-Eastern White	27	1	New_1	...
883	Pine-Eastern White	24	1	New_1	...
885	Pine-Eastern White	31	1	New_1	...
889	Pine-Eastern White	29	1	New_1	...
899	Falsecypress-Sawara	22	1	New_3	...
919	Pear-Callery	17	1	Inspect	...
920	Pear-Callery	15	1	New_2	...
934	Maple-Norway	22	1	New_1	...
935	Maple-Norway	16	1	New_1	...
954	Falsecypress-Sawara	22	1	New_1	...
983	Pine-Eastern White	22	1	New_1	...
987	Pine-Eastern White	15	1	New_1	...
994	Pine-Eastern White	15	1	New_1	Yes
995	Catalpa-Northern	23	1	New_1	...
999	Oak-White	42	1	New_1	...
1001	Horsechestnut-Common	28	1	New_1	...
1005	Pine-Eastern White	27	1	New_1	...

Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
1017	Pine-Eastern White	22	1	New_1	...
1023	Pine-Eastern White	28	1	New_1	...
1027	Oak- Black	36	1	New_2	...
1029	Pine-Eastern White	24	1	New_1	...
1030	Pine-Eastern White	30	1	New_1	...
1087	Cherry	11	1	New_1	Yes
1098	Oak-White	54	1	New_3	...
1107	Pine-Eastern White	48	1	New_3	...
1108	Spruce-Norway	32	1	New_3	...
1117	Pine-Eastern White	21	1	New_1	Yes
1125	Linden-Littleleaf	11	1	New_1	...
1129	Oak- Northern Red	57	1	New_3	...
1204	Oak- Black	21	1	New_1	...
1205	Oak- Black	21	1	New_2	...
73	Crabapple	12	2	New_1	...
162	Oak - Scarlet	15	2	New_1	...
200	Arborvitae-Eastern (15)	10	2	New_1	...
201	Arborvitae-Eastern (15)	10	2	New_1	...
203	Arborvitae-Eastern (15)	10	2	New_1	...
283	Planetree-London	20	2	New_1	...
498	Maple-Red	22	2	New_1	...
508	Magnolia-Saucer	10	2	New_1	...
512	Crabapple	14	2	New_1	...
514	Sycamore-American	18	2	New_1	...
578	Maple-Japanese	5	2	New_2	...
598	Oak-White	34	2	New_1	...
602	Birch-Paper	15	2	New_1	...
608	Oak-White	38	2	New_1	...
710	Maple-Japanese	7	2	New_1	...
713	Cherry	13	2	New_2	...
747	Honeylocust-Thornless Common	17	2	New_1	...
750	Oak- Northern Red	20	2	New_1	...
754	Birch-Paper	10	2	New_3	...
771	Pear-Callery	12	2	New_3	...
777	Maple-Norway	18	2	New_1	...
780	Maple-Norway	16	2	New_3	...
785	Maple-Norway	22	2	New_1	...
787	Maple-Japanese	32	2	New_4	...

Tree ID	Common Name	DBH	Tree Care Priority	Cable	Brace Rod
791	Maple-Norway	19	2	New_1	...
795	Maple-Norway	18	2	New_1	...
807	Crabapple	14	2	New_1	...
813	Magnolia-Saucer	13	2	New_3	...
815	Cherry	7	2	New_1	...
817	Falsecypress-Sawara	19	2	New_3	...
818	Falsecypress-Sawara	17	2	New_1	...
822	Cherry	7	2	New_1	...
823	Maple-Japanese	10	2	New_3	...
843	Lilac-Japanese Tree	8	2	New_1	...
846	Lilac-Japanese Tree	8	2	New_1	...
860	Oak- Black	25	2	New_1	...
861	Oak- Black	16	2	New_1	...
862	Oak- Black	33	2	New_2	...
894	Horsechestnut-Common	26	2	New_1	...
913	Pine-Eastern White	14	2	New_1	...
917	Pine-Eastern White	14	2	New_1	...
965	Arborvitae-Eastern	9	2	New_1	...
980	Pine-Scotch	12	2	New_1	...
202	Arborvitae-Eastern (15)	10	3	New_1	...
228	Arborvitae-Eastern (50)	4	3	New_4	...
568	Maple-Japanese	8	3	New_1	...
768	Pear-Callery	11	3	New_3	...
769	Pear-Callery	11	3	New_3	...
816	Cherry	6	3	New_1	...
1182	Maple-Norway	23	3	New_3	...
1196	Oak- Black	22	3	New_1	...
1327	Magnolia-Star	6	3	...	Yes

Map 11: INVENTORIED TREES RECOMMENDED FOR NEW, INSPECTION OF, AND/OR REPAIR OF STRUCTURAL SUPPORT SYSTEMS



Lightning Protection Systems

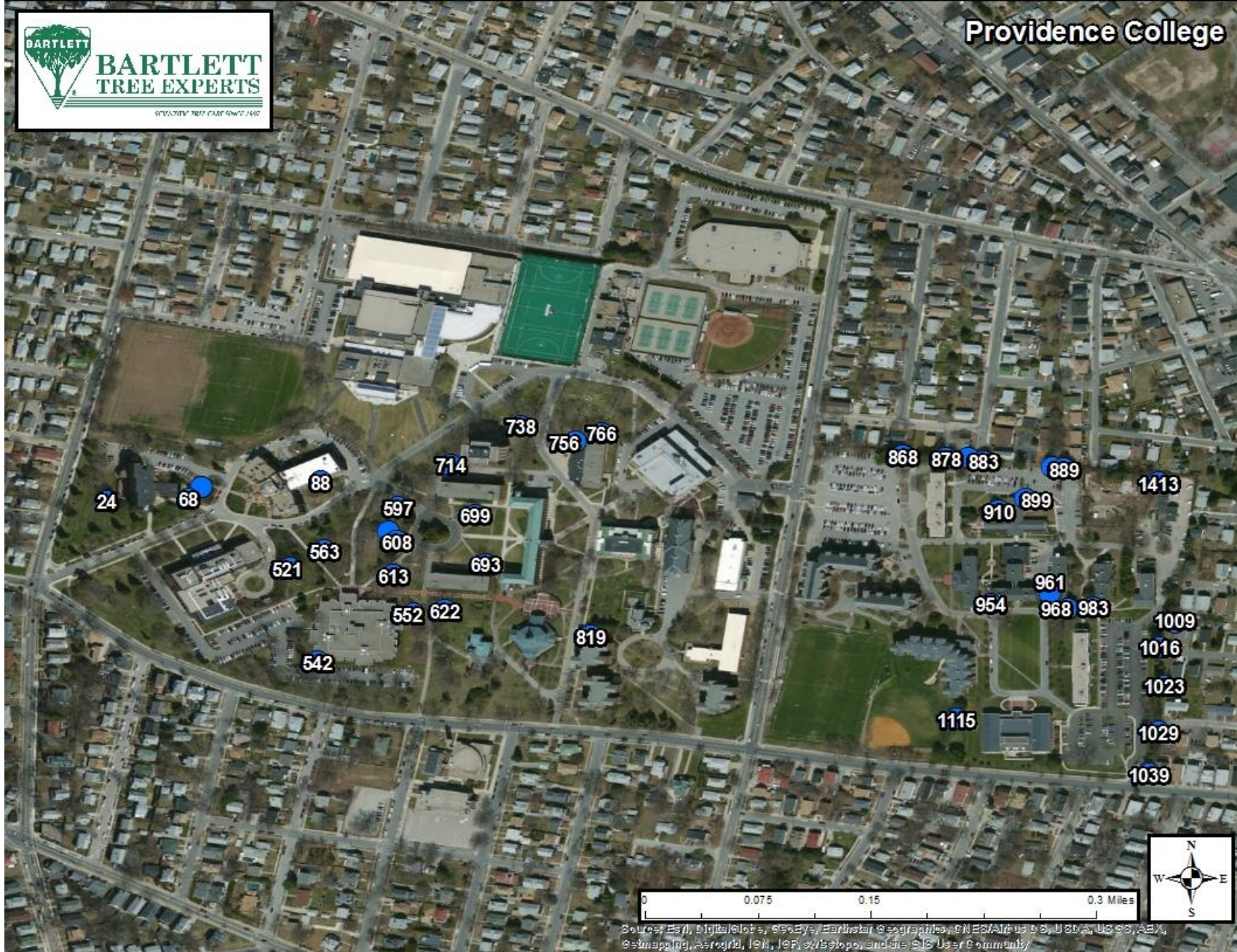
Lightning strikes kill many people each year and can cause significant damage to objects on the property. Lightning protection systems are designed to provide a preferred path for lightning to the ground in a manner that minimizes tree damage; adjacent tree damage; and also to buildings, property, animals, and people near the tree. Tree species that are naturally more susceptible to lightning strikes, valuable to the landscape, and trees that are within 10 feet of, taller than, or have limbs that are extending over a structure are recommended for lightning protection systems due to the possibility of damage, “sideflashes”, and step voltage. For specific standards on lightning protection systems, readers will find an ANSI A300 standard practice document in the Appendix.

Table 16: INVENTORIED TREES RECOMMENDED FOR NEW LIGHTNING PROTECTION SYSTEMS (40 Trees)

Tree ID	Common Name	DBH
24	Spruce-Colorado Blue	23
61	Spruce-Colorado Blue	22
68	Spruce-Colorado Blue	27
88	Cedar-Atlas	18
311	Oak - Scarlet	50
521	Oak-White	40
542	Oak- Northern Red	34
552	Oak-Pin	30
563	Oak- Black	45
597	Oak-White	40
607	Oak-White	38
608	Oak-White	38
613	Oak- Black	39
622	Oak-White	42
693	Oak-White	32
699	Beech-European	45
714	Oak- Black	43
738	Oak- Black	37
756	Oak- Black	27
766	Oak- Northern Red	33

Tree ID	Common Name	DBH
819	Falsecypress-Sawara	23
868	Pine-Eastern White	26
878	Pine-Eastern White	24
882	Pine-Eastern White	27
883	Pine-Eastern White	24
888	Pine-Eastern White	29
889	Pine-Eastern White	29
899	Falsecypress-Sawara	22
910	Spruce-Norway	29
954	Falsecypress-Sawara	22
961	Falsecypress-Sawara	27
968	Pine-Eastern White	17
983	Pine-Eastern White	22
1009	Pine-Eastern White	29
1016	Pine-Eastern White	28
1023	Pine-Eastern White	28
1029	Pine-Eastern White	24
1039	Pine-Eastern White	25
1115	Pine-Eastern White	32
1413	Oak- Black	21

Map 12: INVENTORIED TREES RECOMMENDED FOR NEW LIGHTNING PROTECTION SYSTEMS



Tree Removal

In some cases, the inspector may determine need for removal while assessing the tree. Trees may be recommended for removal during the inventory for several reasons:

- The tree is dead;
- The tree is in poor condition and thought to be beyond rehabilitation;
- The tree is over-mature and will continue to decline in condition;
- The tree has significant structural weaknesses that cannot be addressed;
- The tree is already or will interfere with infrastructure (overhead lines for example);
- The location value for the tree is poor or unacceptable (for example, large maturing tree growing directly under overhead lines); and/or,
- The tree species has been declared an invasive for the given area or region.



Figure 23: Tree #472 recommended for removal due to multiple defects, including co-dominant leaders, stem cavities and overextended branches.

The inventoried trees listed in Table 17 are recommended for removal.

Table 17: INVENTORIED TREES RECOMMENDED FOR REMOVAL (67 Trees)

Tree ID	Common Name	DBH	Condition	Tree Care Priority	Risk Rating
793	Maple-Norway	28	Fair	1	High
208	Cherry-Black	19	Poor	1	Moderate

Tree ID	Common Name	DBH	Condition	Tree Care Priority	Risk Rating
250	Pear-Callery	15	Fair	1	Moderate
310	Maple-Norway	14	Poor	1	Moderate
320	Maple-Norway	21	Poor	1	Moderate
437	Oak - Scarlet	30	Fair	1	Moderate
470	Maple-Norway	32	Poor	1	Moderate
472	Maple-Norway	37	Poor	1	Moderate
483	Maple-Norway	39	Poor	1	Moderate
721	Oak- Northern Red	45	Poor	1	Moderate
723	Oak- Northern Red	19	Poor	1	Moderate
1135	Hemlock-Canadian	27	Poor	1	Moderate
1315	Maple-Norway	28	Poor	1	Moderate
227	Maple-Norway	27	Poor	1	Low
251	Pear-Callery	15	Fair	1	Low
298	Honeylocust-Thornless Common	15	Fair	1	Low
313	Maple-Red	18	Poor	1	Low
349	Maple-Norway	26	Poor	1	Low
352	Maple-Norway	25	Poor	1	Low
448	Maple-Norway	19	Fair	1	Low
454	Spruce-Colorado Blue	13	Poor	1	Low
457	Maple-Norway	26	Poor	1	Low
477	Maple-Red	33	Poor	1	Low
485	Crimson King Maple	13	Poor	1	Low
553	Cherry	14	Poor	1	Low
554	Weeping Cherry	16	Poor	1	Low
559	Maple-Norway	20	Poor	1	Low
589	Maple-Norway	23	Poor	1	Low
592	Maple-Norway	25	Poor	1	Low
706	Maple-Norway	18	Fair	1	Low
786	Tree of Heaven	25	Poor	1	Low
943	Purple Leaf Plum	4	Poor	1	Low
1007	Pine-Eastern White	24	Poor	1	Low
1414	Mulberry-White	14	Poor	1	Low
309	Spruce-Norway	12	Fair	2	Low
367	Spruce-Colorado Blue	13	Poor	2	Low
368	Spruce-Colorado Blue	14	Poor	2	Low
452	Maple-Norway	16	Fair	2	Low
510	Pear-Callery	19	Poor	2	Low
712	Maple-Norway	24	Fair	2	Low

Tree ID	Common Name	DBH	Condition	Tree Care Priority	Risk Rating
855	Redbud-Eastern	13	Poor	2	Low
1408	Maple-Norway	10	Poor	2	Low
1416	Boxelder	15	Poor	2	Low
767	Pear-Callery	13	Poor	3	Low
186	Pear-Callery	15	Fair	1	...
482	Maple-Norway	37	Poor	1	...
1366	Birch-Paper	12	Dead	1	...
220	Pine-Eastern White	5	Poor	2	...
875	Pine-Austrian	26	Poor	2	...
876	Pine-Austrian	21	Poor	2	...
895	Spruce-Colorado Blue	18	Poor	2	...
922	Hemlock-Canadian (3)	5	Poor	2	...
964	Falsecypress-Sawara	8	Poor	2	...
990	Pine-Eastern White	12	Poor	2	...
1013	Oak- Northern Red	16	Poor	2	...
1079	Purple Leaf Plum	8	Poor	2	...
1300	Elm-Chinese	3	Poor	2	...
1309	Pine-Eastern White	8	Poor	2	...
1310	Pine-Eastern White	7	Poor	2	...
1314	Dogwood-Flowering	8	Poor	2	...
543	Weeping Cherry	14	Poor	3	...
874	Pine-Austrian	12	Poor	3	...
887	Oak-Pin	17	Poor	3	...
1014	Pine-Austrian	20	Poor	3	...
1036	Oak-Pin	5	Poor	3	...

Advanced Tree Risk Assessments (Level 3)

As part of the inventory process, the Inventory Team conducts a *basic assessment* (Level 2) from the ground. During this assessment the inspector can determine whether some aspect of tree structure or health indicates that a more comprehensive tree structure evaluation (Level 3 *advanced assessment*) is needed to more thoroughly evaluate tree condition and risk of failure. Figure 24 provides an example of a tree defect that merits a Level 3 *advanced assessment*.



Figure 24: Included bark on Tree #108 necessitates a Level 3 *advanced assessment* to more thoroughly assess risk of failure.

In such cases, we may recommend Level 3 *advanced assessments* of the roots, stem, or crown. These assessments may include climbing inspections, examination of the root system using a compressed-air tool (that avoids damage to roots and underground utilities), or one or more of the following: resistance drilling; using the resistograph (a precision drilling instrument that provides graphical output); or sonic tomography that produces a visual representation of internal conditions based on how sound moved through the tree. The goal is to use the appropriate method to evaluate impact of wood decay in stems and buttress roots that show potential for failure and to determine presence and condition of the root system.

Once we complete such *advanced assessments*, we can then recommend appropriate measures, such as remediation, maintenance, or removal.

The inventoried trees listed in Table 18 below met the conditions for Level 3 *advanced assessments*.

Table 18: INVENTORIED TREES RECOMMENDED FOR LEVEL 3 *ADVANCED ASSESSMENTS* (71 Trees)

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
562	Maple-Norway	26	1	High	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-stem • Cavity-branch
615	Oak- Black	36	1	High	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-stem • Cavity-branch • Cut roots
885	Pine-Eastern White	31	1	High	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Poor branch structure • Dead branches >2 • Cavity-stem • Cut roots
975	Oak-White	30	1	High	...	Yes	...	<ul style="list-style-type: none"> • Cavity-stem • Cavity-root flare • Dead branches >2 • Hanger • Wound-branch
1202	Oak-White	45	1	High	...	Yes	...	<ul style="list-style-type: none"> • Dead branches >2 • Girdling wire
211	Oak - Scarlet	26	1	Moderate	Yes	...	...	<ul style="list-style-type: none"> • Hanger • Dead branches <=2 • Co-dominant leaders • Included bark • Girdling roots present

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
293	Maple-Norway	21	1	Moderate	...	...	Yes	<ul style="list-style-type: none"> • Wound-root flare • Poor branch structure • Dead branches <=2
436	Oak-White	36	1	Moderate	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-branch • Cavity-stem • Overextended branch
563	Oak- Black	45	1	Moderate	Yes	Yes	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Wound-root flare • Dead branches >2 • Wound-stem
693	Oak-White	32	1	Moderate	Yes	Yes	Yes	<ul style="list-style-type: none"> • Poor branch structure • Butt swell • Dead branches >2 • Cavity-stem • Wound-stem
773	Maple-Norway	25	1	Moderate	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Dead branches >2 • Hanger • Crack-branch
800	Maple-Norway	28	1	Moderate	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Crack-branch • Dead branches >2 • Cavity-stem • Fungi/conks

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
802	Maple-Sugar	30	1	Moderate	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-stem • Cavity-branch
864	Maple-Norway	24	1	Moderate	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Dead branches >2 • Hanger • Cavity-branch
879	Pine-Eastern White	30	1	Moderate	Yes	...	...	<ul style="list-style-type: none"> • Seam • Poor branch structure • Overextended branch • Dead branches >2
883	Pine-Eastern White	24	1	Moderate	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Seam
1098	Oak-White	54	1	Moderate	Yes	...	...	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Fungi/conks • Cavity-stem
1129	Oak-Northern Red	57	1	Moderate	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-branch • Overextended branch • Dead branches >2

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
61	Spruce-Colorado Blue	22	1	Low	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Dead branches >2
87	Mimosa	21	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Wound-stem • Cavity-stem • Co-dominant leaders • Overextended branches • Dead branches >2
105	Oak - Scarlet	39	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Dead branches <=2 • Butt swell • Overextended branch
108	Maple-Norway	29	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Cavity-stem • Crack-stem
281	Oak - Scarlet	29	1	Low	...	...	Yes	<ul style="list-style-type: none"> • Butt swell • Cut roots • Co-dominant leaders • Included bark • Dead branches <=2
284	Beech-European	35	1	Low	Yes	Yes	...	<ul style="list-style-type: none"> • Cavity-stem • Dead branches >2 • Overextended branch • Included bark
292	Honeylocust-Thornless Common	20	1	Low	...	...	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches <=2 • Poor branch structure

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
311	Oak - Scarlet	50	1	Low	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2 • Overextended branch • Cavity-branch
344	Beech-European	29	1	Low	Yes	Yes	...	<ul style="list-style-type: none"> • Cavity-stem • Co-dominant leaders • Included bark • Dead branches >2
350	Oak - Scarlet	30	1	Low	...	Yes	Yes	<ul style="list-style-type: none"> • Butt swell • Dead branches >2
351	Maple-Norway	21	1	Low	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Rib • Dead branches >2 • Poor branch structure
382	Oak - Scarlet	22	1	Low	...	...	Yes	<ul style="list-style-type: none"> • Co-dominant stems • Included bark • Overextended branch • Would-root flare • Dead branches <=2
400	Oak - Scarlet	19	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Wound-stem • Construction damage • Dead branches >2
406	Oak - Scarlet	35	1	Low	Yes	Yes	...	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Overextended branch

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
434	Oak-White	30	1	Low	...	...	Yes	<ul style="list-style-type: none"> • Wound-root flare • Dead branches <=2 • Co-dominant leaders • Planting material
435	Maple-Norway	22	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches <=2 • Girdling roots present • Cavity-stem
443	Oak-White	33	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Dead branches <=2 • Co-dominant leaders • Overextended branch
446	Oak-White	38	1	Low	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Construction damage • Wound-stem
468	Maple-Norway	33	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark
544	Maple-Norway	21	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-stem • Burl
561	Maple-Norway	27	1	Low	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-branch • Cavity-stem • Dead branches >2 • Fungi/conks

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
570	Fir-White	21	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Seam • Dead branches >2
571	Maple-Norway	21	1	Low	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Cavity-branch • Wound-stem
707	Oak-White	46	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-stem
717	Maple-Norway	24	1	Low	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem
741	Oak- Black	48	1	Low	Yes	Yes	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches <=2 • Cavity-stem • Burl • Cavity-root flare
763	Oak- Black	35	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Dead branches >2 • Co-dominant leaders • Included bark • Cavity-stem
1005	Pine-Eastern White	27	1	Low	...	Yes	...	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branches • Co-dominant leaders • Wound-stem • Cavity-stem

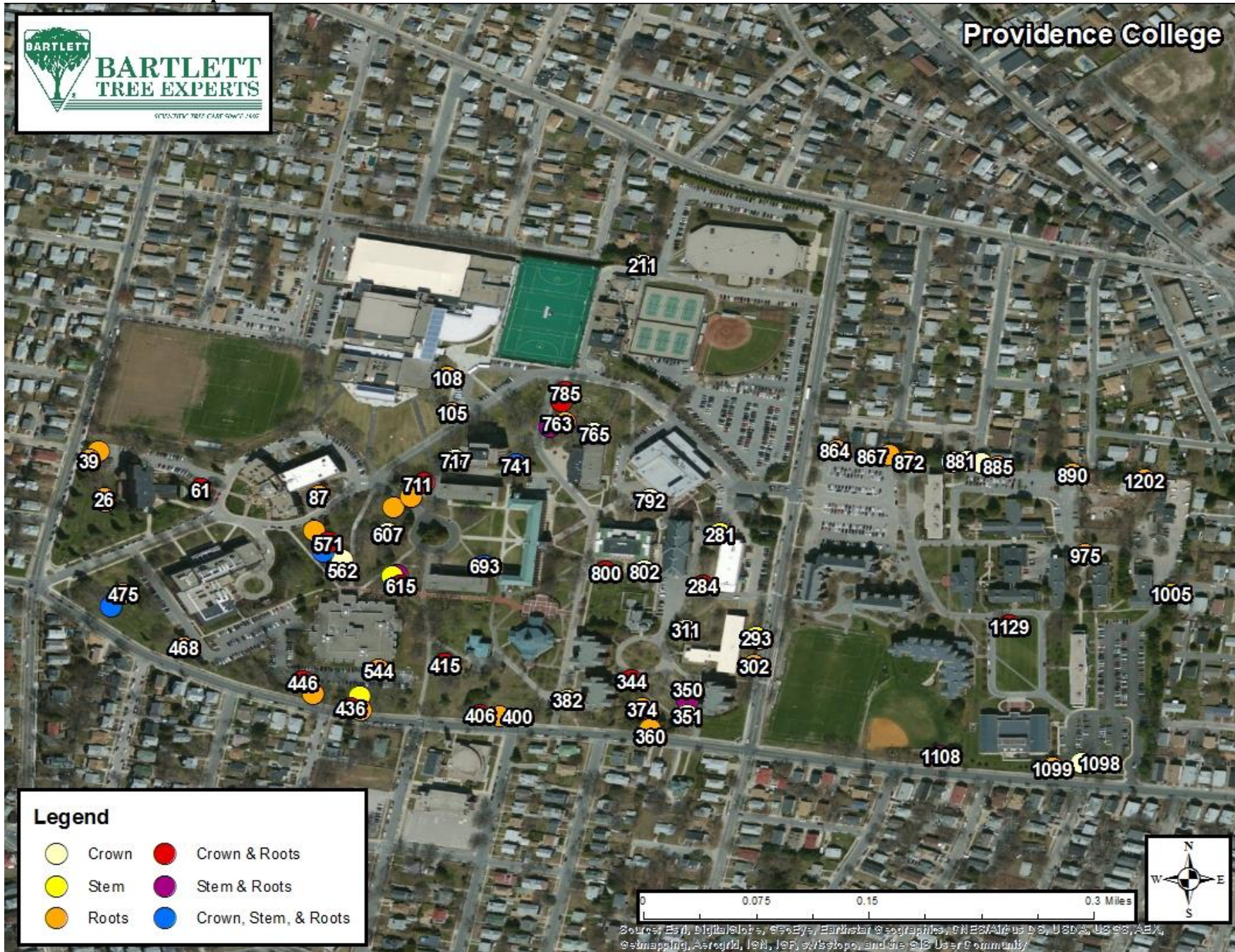
Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
39	Spruce-Colorado Blue	19	2	Low	...	Yes	...	<ul style="list-style-type: none"> • Wound-root flare • Sweep • Dead branches <=2
792	Maple-Sycamore	19	2	Low	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Wound-branch • Included bark
29	Maple-Norway	20	1	...	...	Yes	...	<ul style="list-style-type: none"> • Hanger • Dead branches >2 • Cavity-stem
302	Maple-Silver	23	1	...	...	Yes	...	<ul style="list-style-type: none"> • Dead branches <=2 • Poor branch structure
374	Catalpa	25	1	...	...	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Wound-stem • Dead branches <=2
474	Maple-Norway	35	1	...	Yes	Yes	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Overextended branch • Dead branches >2 • Cavity-stem
607	Oak-White	38	1	...	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches >2 • Fungi/conks • Overextended branch • Cavity-stem

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
612	Oak- Black	30	1	...	...	Yes	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Supressed • Cavity-branch • Wound-stem • Dead branches >2
613	Oak- Black	39	1	...	...	...	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Hanger
711	Oak- Northern Red	39	1	...	Yes	Yes	...	<ul style="list-style-type: none"> • Overextended branch • Cavity-stem • Cavity-branch • Fungi/conks • Dead branches <=2
762	Oak- Northern Red	20	1	...	...	Yes	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Crack-branch • Cavity-stem • Wound-stem • Cut roots
1108	Spruce- Norway	32	1	...	...	Yes	Yes	<ul style="list-style-type: none"> • Co-dominant leaders • Included bark • Dead branches >2 • Cavity-root flare • Wound-root flare
25	Spruce- Colorado Blue	17	2	...	...	Yes	...	<ul style="list-style-type: none"> • Wound-stem • Cavity-stem • Dead branches >2

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
26	Spruce-Colorado Blue	19	2	...	...	Yes	...	<ul style="list-style-type: none"> • Cavity-stem • Wound-stem • Dead branches >2
360	Spruce-Colorado Blue	16	2	...	...	Yes	...	<ul style="list-style-type: none"> • Dead branches <=2
415	Maple-Norway	31	2	...	Yes	Yes	...	<ul style="list-style-type: none"> • Poor branch structure • Wound-branch • Wound-stem
598	Oak-White	34	2	...	...	Yes	...	<ul style="list-style-type: none"> • Seam • Co-dominant leaders • Dead branches >2 • Cavity-branch
785	Maple-Norway	22	2	...	Yes	Yes	...	<ul style="list-style-type: none"> • Co-dominant leaders • Dead branches <=2 • Cavity-stem • Wound-stem
881	Pine-Eastern White	20	2	...	Yes	...	...	<ul style="list-style-type: none"> • Wound-stem • Cavity-stem • Sweep
890	Pine-Eastern White	27	2	...	...	Yes	...	<ul style="list-style-type: none"> • Dead branches >2 • Poor branch structure • Wound-root flare • Cavity-stem
1099	Pine-Eastern White	31	2	...	...	Yes	...	<ul style="list-style-type: none"> • Dead branches >2 • Overextended branch • Cavity-stem • Co-dominant leaders

Tree ID	Common Name	DBH	Tree Care Priority	Risk Rating	Advanced Assessment Crown	Advanced Assessment Stem	Advanced Assessment Root	Defect or Observation
475	Spruce-Norway	22	3	...	...	Yes	...	<ul style="list-style-type: none"> • Wound-root flare • Girdling roots present
765	Oak- Black	32	3	...	Yes	...	...	<ul style="list-style-type: none"> • Co-dominant leaders • Cavity-stem • Dead branches <=2
867	Pine-Eastern White	19	3	...	...	Yes	...	<ul style="list-style-type: none"> • Cavity-stem • Uneven crown • Wound-stem • Dead branches <=2
872	Pine-Austrian	23	3	...	...	Yes	...	<ul style="list-style-type: none"> • Wound-stem • Uneven crown • Lean • Dead branches >2

Map 14: INVENTORIED TREES RECOMMENDED FOR LEVEL 3 ADVANCED ASSESSMENTS



Vine Removal

The following inventoried trees were recommended for removal of vines. Vines and suckers can cover the trunk of a tree and hide defects that may be present.

Table 19: INVENTORIED TREES RECOMMENDED FOR VINE REMOVAL (17 Trees)

Tree ID	Common Name	DBH	Poisonous Plants
187	Spruce-White	8	...
188	Spruce-White	8	...
189	Spruce-White	11	...
190	Spruce-White	11	...
888	Pine-Eastern White	29	...
889	Pine-Eastern White	29	...
891	Oak- Black	34	...
1198	Catalpa-Northern	26	Yes
1199	Hemlock-Canadian	20	...
1200	Pine-Austrian	20	...
1203	Oak-White	34	...
1410	Oak- Black	18	Yes
1411	Arborvitae-Eastern	18	...
1412	Pine-Austrian	19	...
1413	Oak- Black	21	...
1414	Mulberry-White	14	...
1415	Mulberry-White	14	...

Map 15: INVENTORIED TREES RECOMMENDED FOR VINE REMOVAL



DEDICATED OR MEMORIAL TREES



DEDICATED OR MEMORIAL TREES

The following table displays the inventoried dedicated trees on the Providence College campus.

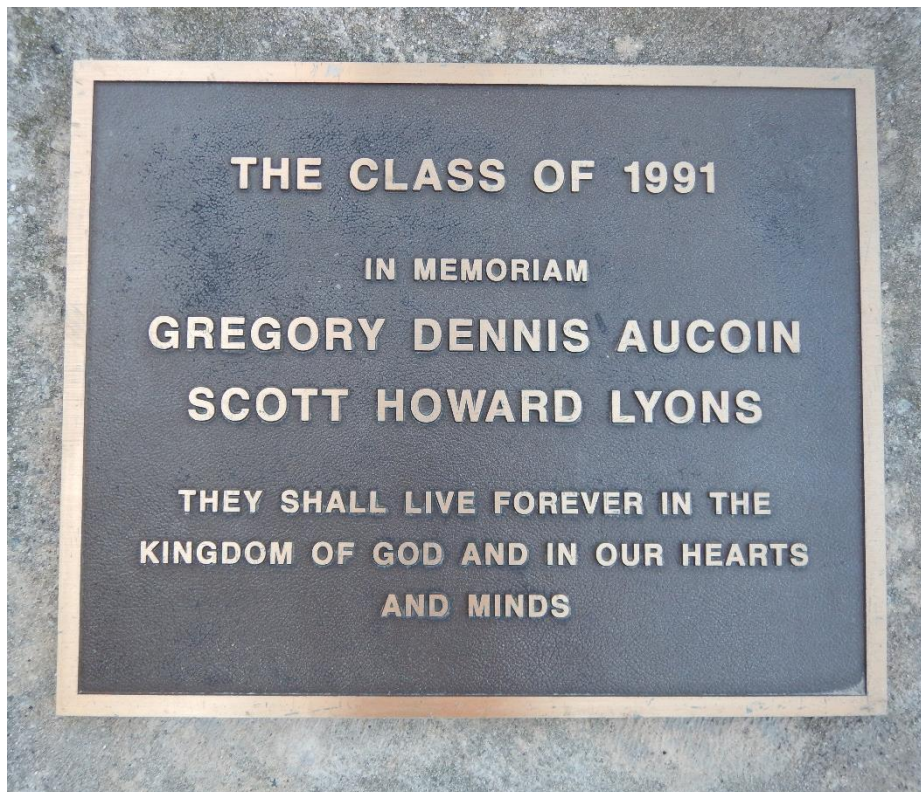


Figure 25: Dedicated tree #343.

Table 20: INVENTORIED DEDICATED TREES ON THE PROVIDENCE COLLEGE CAMPUS

Tree ID	Common Name	Honoree	Contributor	Dedication Year	Dedication Notes
343	Birch-Paper	Gregory Dennis Aucoin & Scott Howard Lyons	The Class of 1991	...	In memoriam... They shall live forever in the kingdom of god and in our hearts and minds
801	Cherry	Professor Rodney Delasanta	...	2007	To the memory of Professor Rodney Delasanta

Map 16: INVENTORIED DEDICATED TREES ON THE PROVIDENCE COLLEGE CAMPUS



DEFECTS OR OBSERVATIONS



DEFECTS OR OBSERVATIONS

Table 21 lists inventoried trees for which we noted defects, observations, or other structural issues. Figure 26 provides an example of a tree with a wound on the stem.



Figure 26: Tree #470 exhibiting a wound on the stem.

Table 21: LIST OF INVENTORIED TREES WITH DEFECTS, OBSERVATIONS, OR OTHER STRUCTURAL ISSUES (1144 Trees)

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1	Crimson King Maple	9	Girdling roots present	Co-dominant leaders	...	...	...
2	Crimson King Maple	14	Girdling roots present	Co-dominant leaders	Included bark	...	...
3	Crimson King Maple	14	Cavity-stem	Co-dominant leaders	Rib	Included bark	Girdling roots present
5	Crimson King Maple	10	Co-dominant leaders	Included bark	Girdling roots present	...	...
7	Weeping Cherry	15	Dead branches <=2	Girdling roots present	Poor branch structure	...	...
8	Cherry	16	Co-dominant leaders	Included bark	Girdling roots present	...	...
9	Weeping Cherry	15	Dead branches <=2	Poor branch structure	...	...	...
10	Weeping Cherry	14	Dead branches <=2	Poor branch structure	Girdling roots present	...	...
11	Honeylocust-Thornless Common	8	Poor branch structure	Dead branches <=2	Wound-root flare	...	...
12	Spruce-Colorado Blue	18	Dead branches >2	...	...	...	...
13	Spruce-Colorado Blue	19	Co-dominant leaders	Dead branches <=2	Included bark	...	...
14	Spruce-Colorado Blue	22	Dead branches >2	Co-dominant leaders	Included bark	Sweep	...
15	Spruce-Colorado Blue	23	Co-dominant leaders	Dead branches >2	...	...	...
17	Dogwood-Kousa	6	Co-dominant leaders	Included bark	...	...	...
18	Dogwood-Kousa	9	Co-dominant leaders	Cavity-stem	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
19	Dogwood-Kousa	11	Crack-branch	Dead branches <=2	Cavity-root flare	Poor branch structure	Co-dominant leaders
20	Pine-Scotch	17	Dead branches >2	Co-dominant leaders	Included bark	Girdling roots present	...
21	Pine-Scotch	31	Co-dominant stems	Included bark	Dead branches >2	Girdling roots present	...
22	Fir-Douglas	8	Co-dominant leaders	Included bark	...	...	...
23	Spruce-Colorado Blue	25	Co-dominant stems	Included bark	Co-dominant leaders	...	...
24	Spruce-Colorado Blue	23	Topping/heading cuts	Co-dominant leaders	Included bark	Dead branches <=2	...
25	Spruce-Colorado Blue	17	Wound-stem	Cavity-stem	Dead branches >2	...	...
26	Spruce-Colorado Blue	19	Cavity-stem	Wound-stem	Dead branches >2	...	...
28	Maple-Norway	30	Co-dominant leaders	Included bark	Cavity-branch	Dead branches >2	Girdling roots present
29	Maple-Norway	20	Hanger	Dead branches >2	Cavity-stem	...	...
30	Spruce-Colorado Blue	18	Dead branches <=2	...	...	...	...
31	Spruce-Colorado Blue	26	Co-dominant leaders	Dead branches <=2	...	...	...
33	Spruce-Colorado Blue	29	Dead branches >2	...	...	...	...
35	Spruce-Colorado Blue	21	Co-dominant leaders	Included bark	Seam	Dead branches <=2	...
37	Spruce-Colorado Blue	14	Co-dominant leaders	Included bark	Dead branches <=2	...	...
39	Spruce-Colorado Blue	19	Wound-root flare	Sweep	Dead branches <=2	...	...
40	Pine-Austrian	21	Dead branches >2	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
41	Oak- Black	30	Construction damage	Dead branches >2	Uneven crown	...	...
42	Oak- Black	31	Dead branches >2	Construction damage	Uneven crown	...	...
43	Maple-Norway	22	Cavity-stem	Girdling roots present	Dead branches <=2	...	...
45	Oak-Pin	44	Hanger	Dead branches >2	Overextended branch	...	...
47	Maple-Norway	27	Co-dominant leaders	Included bark	Cavity-stem	Cavity-branch	Dead branches >2
48	Spruce-Colorado Blue	18	Dead branches >2	...	...	...	...
49	Pine-Eastern White	17	Co-dominant leaders	Included bark	Girdling roots present	...	...
50	Maple-Sugar	16	Wound-root flare	Co-dominant leaders	Included bark	...	...
53	Dogwood-Flowering	5	Dead branches <=2	...	...	...	...
54	Dogwood-Flowering	6	Dead branches <=2	...	...	...	...
55	Maple-Norway	8	Co-dominant leaders	Included bark	...	...	...
56	Maple-Sugar	19	Co-dominant leaders	Included bark	Crack-branch	Girdling roots present	Overextended branch
58	Dogwood-Kousa	6	Dead branches <=2	...	...	...	...
59	Dogwood-Kousa	5	Dead branches <=2	...	...	...	...
60	Dogwood-Kousa	6	Co-dominant leaders	Included bark	...	...	...
61	Spruce-Colorado Blue	22	Co-dominant leaders	Included bark	Cavity-stem	Dead branches >2	...
62	Elm-Slippery	24	Co-dominant leaders	Included bark	Girdling roots present	...	...
63	Crabapple	6	Poor branch structure	Dead branches <=2	...	...	...
64	Linden-Littleleaf	17	Co-dominant leaders	Poor branch structure	Dead branches <=2	Girdling roots present	...
67	Pine-Scotch	13	Girdling roots present	Dead branches <=2	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
68	Spruce-Colorado Blue	27	Dead branches <=2	...	...	...	...
69	Sourwood	7	Co-dominant leaders	Poor branch structure	...	...	...
70	Weeping Cherry	16	Co-dominant leaders	Poor branch structure	Dead branches <=2	...	...
72	Spruce-Colorado Blue	21	Dead branches <=2	...	...	...	...
73	Crabapple	12	Co-dominant leaders	Dead branches <=2	Cavity-stem	...	...
74	Crimson King Maple	15	Co-dominant leaders	...	...	...	...
75	Crimson King Maple	17	Girdling roots present	Co-dominant leaders	Rib	...	...
76	Crimson King Maple	15	Girdling roots present	Co-dominant leaders	...	...	...
77	Crimson King Maple	17	Girdling roots present	Co-dominant leaders	...	...	...
78	Maple-Japanese	6	Poor branch structure	...	...	...	...
79	Dogwood-Flowering	7	Co-dominant leaders	Dead branches <=2	...	...	...
80	Dogwood-Flowering	12	Co-dominant leaders	Poor branch structure	...	...	...
81	Dogwood-Flowering	11	Dead branches <=2	Co-dominant leaders	...	...	...
82	Dogwood-Flowering	5	Co-dominant leaders	Dead branches >2	...	...	...
83	Dogwood-Flowering	8	Co-dominant leaders	...	...	...	...
84	Maple-Japanese	5	Wound-stem	Poor branch structure	...	...	...
85	Dogwood-Kousa	9	Co-dominant leaders	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
86	Dogwood-Kousa	11	Co-dominant leaders	Included bark	Poor branch structure	...	...
87	Mimosa	21	Wound-stem	Cavity-stem	Co-dominant leaders	Overextended branch	Dead branches >2
88	Cedar-Atlas	18	Dead branches <=2	...	...	...	...
89	Oak - Scarlet	5	Co-dominant leaders	...	...	...	...
90	Maple-Japanese	8	Co-dominant stems	...	...	...	...
91	Oak- Black	30	Co-dominant leaders	Included bark	Dead branches >2	Construction damage	...
92	Oak- Black	37	Dead branches >2	Overextended branch	...	...	...
93	Oak - Scarlet	53	Co-dominant stems	...	...	...	...
96	Maple-Norway	22	Dead branches >2	Co-dominant leaders	Included bark	Girdling roots present	Cavity-stem
97	Birch-Paper	10	Co-dominant leaders	Included bark	...	...	...
98	Maple-Norway	10	Dead branches >2	Co-dominant leaders	Included bark	...	...
99	Cherry	23	Co-dominant leaders	Included bark	Poor branch structure	...	...
100	Maple-Norway	27	Dead branches >2	Co-dominant leaders	Included bark	Overextended branch	...
101	Purple Leaf Plum	20	Co-dominant leaders	Included bark	Overextended branch	...	...
104	Maple-Norway	12	Co-dominant leaders	Wound-branch	Rib	Included bark	...
105	Oak - Scarlet	39	Dead branches <=2	Butt swell	Overextended branch	...	...
107	Maple-Norway	10	Co-dominant leaders	Included bark	Girdling roots present	...	...
108	Maple-Norway	29	Co-dominant leaders	Included bark	Cavity-stem	Crack-stem	...
109	Cherry	7	Poor branch structure	...	...	...	...
110	Cherry	6	Poor branch structure	...	...	...	...
111	Cherry	10	Co-dominant leaders	Included bark	Poor branch structure	...	...
112	Cherry	6	Co-dominant leaders	Included bark	...	...	...
113	Pear-Callery	6	Poor branch structure	Included bark	...	...	...
114	Pear-Callery	6	Poor branch structure	Wound-stem	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
115	Pear-Callery	6	Poor branch structure	...	...	...	...
116	Pear-Callery	6	Poor branch structure	...	...	...	...
117	Pear-Callery	6	Poor branch structure	...	...	...	...
118	Pear-Callery	6	Poor branch structure	...	...	...	...
119	Pear-Callery	6	Poor branch structure	...	...	...	...
120	Pear-Callery	7	Poor branch structure	...	...	...	...
124	Maple-Paperbark	3	Co-dominant leaders	...	...	...	...
129	Oak - Scarlet	22	Co-dominant leaders	Included bark	Dead branches >2	...	...
131	Elm-American	24	Dead branches >2	Uneven crown	...	...	...
132	Oak - Scarlet	34	Dead branches >2	Uneven crown	Construction damage	...	...
133	Oak - Scarlet	26	Dead branches <=2	Uneven crown	Construction damage	...	...
134	Oak - Scarlet	48	Dead branches <=2	Uneven crown	Girdling roots present	Construction damage	...
135	Oak - Scarlet	19	Dead branches <=2	...	...	...	...
136	Ash-Green	14	Co-dominant leaders	Included bark	Dead branches <=2	...	...
140	Ash-White	6	Poor branch structure	...	...	...	...
141	Ash-White	4	Topping/heading cuts	...	...	...	...
142	Oak - Scarlet	11	Dead branches <=2	...	...	...	...
143	Oak - Scarlet	13	Co-dominant leaders	Included bark	...	...	...
144	Oak - Scarlet	12	Hanger	Dead branches >2	...	...	...
157	Oak - Scarlet	20	Co-dominant leaders	Included bark	Cut roots	...	...
158	Oak - Scarlet	12	Co-dominant leaders	Included bark	Uneven crown	Cut roots	...
159	Oak - Scarlet	14	Uneven crown	Dead branches <=2	Cut roots	...	...
160	Oak - Scarlet	15	Co-dominant leaders	Uneven crown	Cut roots	Wound-stem	...
162	Oak - Scarlet	15	Co-dominant leaders	Included bark	Cut roots	Cavity-stem	Uneven crown
163	Oak - Scarlet	16	Cut roots	...	...	...	...
164	Oak - Scarlet	9	Co-dominant leaders	Included bark	Cut roots	...	...
165	Oak - Scarlet	15	Co-dominant leaders	Included bark	Cut roots	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
166	Oak - Scarlet	13	Co-dominant leaders	Dead branches <=2	Cut roots	...	...
167	Oak - Scarlet	15	Co-dominant leaders	Included bark	Cut roots	...	...
168	Oak - Scarlet	19	Co-dominant leaders	Included bark	Cut roots	...	...
169	Oak - Scarlet	15	Co-dominant leaders	Cut roots	...	...	...
180	Dogwood-Flowering	7	Co-dominant leaders	Dead branches <=2	...	...	...
181	Pear-Callery	11	Co-dominant leaders	Included bark	Poor branch structure	...	...
182	Pear-Callery	10	Co-dominant leaders	Included bark	Poor branch structure	...	...
183	Pear-Callery	11	Co-dominant leaders	Included bark	Poor branch structure	...	...
184	Pear-Callery	11	Co-dominant leaders	Included bark	Poor branch structure	...	...
185	Pear-Callery	10	Co-dominant leaders	Included bark	Poor branch structure	...	...
186	Pear-Callery	15	Co-dominant leaders	Included bark	Poor branch structure	...	...
195	Holly-American (8)	12	Co-dominant leaders	...	...	...	...
198	Pine-Austrian	14	Dead branches >2	Girdling roots present	...	...	...
199	Pine-Austrian	14	Dead branches <=2	...	...	...	...
200	Arborvitae-Eastern (15)	10	Co-dominant leaders	Included bark	...	...	...
201	Arborvitae-Eastern (15)	10	Co-dominant leaders	Included bark	...	...	...
202	Arborvitae-Eastern (15)	10	Co-dominant leaders	Included bark	...	...	...
203	Arborvitae-Eastern (15)	10	Co-dominant leaders	Included bark	...	...	...
204	Pine-Austrian	12	Poor branch structure	Girdling roots present	Dead branches <=2	...	...
205	Pine-Austrian	15	Co-dominant leaders	Included bark	Dead branches >2	...	...
206	Pine-Austrian	12	Dead branches <=2	Cavity-stem	Girdling roots present	...	...
207	Arborvitae-Eastern	6	Co-dominant leaders	Included bark	Construction damage	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
208	Cherry-Black	19	Dead branches >2	Hanger	Co-dominant leaders	Included bark	Fungi/conks
209	Pine-Eastern White	15	Dead branches <=2	...	...	...	...
210	Pine-Eastern White	11	Dead branches <=2	...	...	...	...
211	Oak - Scarlet	26	Hanger	Dead branches <=2	Co-dominant leaders	Included bark	Girdling roots present
212	Pine-Eastern White	8	Dead branches <=2	Supressed	...	...	...
213	Pine-Eastern White	17	Dead branches <=2	Girdling roots present	...	...	...
214	Pine-Eastern White	12	Co-dominant leaders	Included bark	Girdling roots present	...	...
215	Pine-Eastern White	14	Dead branches <=2	Girdling roots present	...	...	...
216	Pine-Eastern White	15	Co-dominant leaders	Included bark	Dead branches <=2	Girdling roots present	...
217	Pine-Eastern White	16	Dead branches <=2	Girdling roots present	...	...	...
218	Pine-Eastern White	8	Dead branches <=2	Supressed	...	...	...
219	Pine-Eastern White	12	Dead branches <=2	Girdling roots present	...	...	...
220	Pine-Eastern White	5	Dead branches <=2	Supressed	...	...	...
221	Pine-Eastern White	15	Dead branches <=2	Co-dominant leaders	Included bark	...	...
222	Pine-Eastern White	12	Dead branches >2	Supressed	...	...	...
223	Pine-Eastern White	17	Co-dominant leaders	Included bark	Dead branches <=2	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
224	Pine-Eastern White	17	Co-dominant leaders	Included bark	Dead branches <=2	...	...
225	Pine-Eastern White	13	Dead branches <=2	...	...	...	...
226	Pine-Eastern White	17	Hanger	Dead branches <=2	...	...	...
227	Maple-Norway	27	Seam	Girdling roots present	Co-dominant leaders	Included bark	Dead branches >2
228	Arborvitae-Eastern (50)	4	Co-dominant leaders	Included bark	...	...	...
229	Elm	9	Poor branch structure	Wound-branch	...	...	...
230	Elm	8	Poor branch structure	Wound-branch	...	...	...
231	Elm	7	Poor branch structure	...	...	...	...
232	Elm	7	Poor branch structure	...	...	...	...
233	Maple-Sugar	5	Co-dominant leaders	Included bark	Planting material	...	...
234	Maple-Sugar	5	Co-dominant leaders	Included bark	Planting material	...	...
235	Maple-Sugar	6	Co-dominant leaders	Included bark	...	...	...
236	Oak-Pin	6	Poor branch structure	Planting material	...	...	...
237	Oak-Pin	5	Poor branch structure	Wound-root	Construction damage	...	...
238	Oak-Pin	6	Planting material	...	...	...	...
239	Oak-Pin	6	Planting material	Poor branch structure	...	...	...
240	Oak-Pin	6	Co-dominant leaders	Included bark	Planting material	...	...
241	Oak-Pin	6	Planting material	...	...	...	...
246	Dogwood-Flowering	7	Co-dominant leaders	Included bark	Cavity-branch	Dead branches <=2	...
247	Dogwood-Flowering	10	Co-dominant leaders	Dead branches <=2	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
248	Dogwood-Flowering	9	Co-dominant leaders	Dead branches <=2	...	...	...
249	Dogwood-Flowering	6	Co-dominant leaders	Dead branches <=2	...	...	...
250	Pear-Callery	15	Co-dominant leaders	Included bark	...	...	...
251	Pear-Callery	15	Co-dominant leaders	Included bark	Dead branches <=2	...	...
252	Dogwood-Kousa	12	Co-dominant leaders	Poor branch structure	Dead branches <=2	...	...
253	Dogwood-Kousa	10	Co-dominant leaders	Poor branch structure	Dead branches <=2	...	...
254	Dogwood-Kousa	10	Co-dominant stems	Poor branch structure	Dead branches <=2	...	...
255	Poplar-Lombardy	17	Co-dominant leaders	Included bark	Dead branches <=2	...	...
256	Poplar-Lombardy	16	Dead branches >2	...	...	...	...
257	Poplar-Lombardy	13	Dead branches >2	...	...	...	...
258	Poplar-Lombardy	15	Dead branches >2	...	...	...	...
259	Poplar-Lombardy	16	Wound-stem	...	...	...	...
261	Poplar-Lombardy	14	Co-dominant leaders	Included bark	...	...	...
263	Arborvitae-Eastern	5	Co-dominant leaders	...	...	...	...
264	Pine-Eastern White	16	Wound-branch	Girdling roots present	...	...	...
265	Pine-Eastern White	13	Dead branches <=2	Girdling roots present	...	...	...
266	Pine-Eastern White	14	Dead branches <=2	Girdling roots present	...	...	...
267	Pine-Eastern White	10	Dead branches <=2	...	...	...	...
268	Pine-Eastern White	14	Dead branches <=2	Girdling roots present	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
269	Pine-Eastern White	14	Co-dominant leaders	Included bark	Dead branches <=2	...	...
270	Pine-Eastern White	13	Dead branches <=2	Girdling roots present	...	...	...
271	Honeylocust-Thornless Common	13	Poor branch structure	Dead branches <=2	Wound-stem	...	...
272	Honeylocust-Thornless Common	12	Poor branch structure	Dead branches <=2	Wound-stem	...	...
273	Honeylocust-Thornless Common	14	Co-dominant leaders	Poor branch structure	Dead branches <=2	...	...
274	Honeylocust-Thornless Common	14	Co-dominant leaders	Poor branch structure	Dead branches <=2	...	...
275	Honeylocust-Thornless Common	11	Co-dominant leaders	Poor branch structure	Dead branches <=2	...	...
276	Dogwood-Kousa	7	Cavity-root flare	Poor branch structure	Soil heaving	...	...
277	Dogwood-Kousa	7	Co-dominant leaders	Included bark	Poor branch structure	Dead branches <=2	...
278	Crabapple	12	Co-dominant leaders	Included bark	Poor branch structure	Dead branches <=2	...
279	Crabapple	9	Co-dominant leaders	Included bark	Poor branch structure	Dead branches <=2	...
280	Crabapple	5	Co-dominant leaders	Poor branch structure	Dead branches <=2	...	...
281	Oak - Scarlet	29	Butt swell	Cut roots	Co-dominant leaders	Included bark	Dead branches <=2
282	Pine-Austrian	15	Dead branches <=2	...	...	...	...
283	Planetree-London	20	Co-dominant leaders	Dead branches <=2	...	...	...
284	Beech-European	35	Cavity-stem	Dead branches >2	Overextended branch	Included bark	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
285	Maple-Norway	15	Co-dominant leaders	Included bark	Rib	...	...
286	Maple-Norway	23	Hanger	Dead branches >2	Poor branch structure	...	...
287	Honeylocust-Thornless Common	15	Dead branches <=2	Poor branch structure	...	...	...
288	Honeylocust-Thornless Common	19	Dead branches <=2	Poor branch structure	...	...	...
289	Honeylocust-Thornless Common	17	Dead branches <=2	Poor branch structure	...	...	...
290	Honeylocust-Thornless Common	12	Dead branches <=2	Poor branch structure	...	...	...
291	Honeylocust-Thornless Common	20	Dead branches <=2	Poor branch structure	...	...	...
292	Honeylocust-Thornless Common	20	Co-dominant leaders	Dead branches <=2	Poor branch structure	...	...
293	Maple-Norway	21	Wound-root flare	Poor branch structure	Dead branches <=2	...	...
294	Honeylocust-Thornless Common	19	Dead branches >2	Poor branch structure	...	...	...
295	Honeylocust-Thornless Common	20	Dead branches <=2	Poor branch structure	...	...	...
296	Honeylocust-Thornless Common	17	Dead branches <=2	Poor branch structure	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
298	Honeylocust-Thornless Common	15	Cavity-stem	Dead branches <=2	Poor branch structure	Overextended branch	Fungi/conks
299	Honeylocust-Thornless Common	15	Dead branches <=2	Poor branch structure	...	...	...
300	Honeylocust-Thornless Common	18	Co-dominant leaders	Included bark	Dead branches <=2	Girdling roots present	...
301	Honeylocust-Thornless Common	13	Dead branches <=2	Poor branch structure	...	...	...
302	Maple-Silver	23	Dead branches <=2	Poor branch structure	...	...	...
303	Honeylocust-Thornless Common	21	Co-dominant leaders	Included bark	Dead branches <=2	...	...
304	Honeylocust-Thornless Common	15	Dead branches >2	Co-dominant leaders	Poor branch structure	...	...
305	Honeylocust-Thornless Common	17	Co-dominant leaders	Poor branch structure	Dead branches <=2	Overextended branch	...
309	Spruce-Norway	12	Cavity-stem	Wound-branch	Supressed	...	...
310	Maple-Norway	14	Wound-stem	Wound-branch	Dead branches >2	Co-dominant leaders	...
311	Oak - Scarlet	50	Co-dominant leaders	Included bark	Dead branches <=2	Overextended branch	Cavity-branch
312	Dogwood-Flowering	12	Co-dominant leaders	Included bark	Dead branches <=2	...	...
313	Maple-Red	18	Co-dominant leaders	Included bark	Poor branch structure	Dead branches <=2	...
314	Maple-Red	20	Hanger	Co-dominant leaders	Included bark	Dead branches >2	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
315	Oak- Black	30	Dead branches >2	Overextended branch	Poor branch structure	...	...
316	Oak- Black	21	Dead branches >2	Co-dominant leaders	...	...	...
317	Oak- Black	15	Dead branches <=2	Co-dominant leaders	Overextended branch	Supressed	...
318	Oak- Black	24	Dead branches >2	Co-dominant leaders	Included bark	Overextended branch	...
319	Oak- Black	24	Co-dominant leaders	Included bark	Dead branches <=2	...	...
320	Maple-Norway	21	Cavity-branch	Rib	Co-dominant leaders	Included bark	Dead branches >2
326	Maple-Norway	17	Hanger	Co-dominant leaders	Included bark	Cavity-branch	Dead branches >2
327	Maple-Norway	17	Co-dominant leaders	Included bark	Burl	...	...
328	Maple-Norway	15	Co-dominant leaders	Included bark	...	...	...
329	Maple-Norway	13	Hanger	Cavity-stem	Poor branch structure	...	...
330	Maple-Norway	18	Poor branch structure	...	...	...	...
332	Maple-Norway	15	Dead branches <=2	Co-dominant leaders	Included bark	...	...
333	Maple-Norway	18	Dead branches >2	Co-dominant leaders	Included bark	...	...
343	Birch-Paper	7	Cavity-stem	Poor branch structure	Dead branches <=2	...	...
344	Beech-European	29	Cavity-stem	Co-dominant leaders	Included bark	Dead branches >2	...
345	Maple-Norway	25	Dead branches >2	Co-dominant leaders	Included bark	...	...
346	Maple-Norway	20	Co-dominant leaders	Dead branches <=2	...	...	...
347	Maple-Norway	22	Dead branches <=2	Co-dominant leaders	Included bark	...	...
349	Maple-Norway	26	Cavity-stem	Co-dominant leaders	Included bark	Dead branches >2	...
350	Oak - Scarlet	30	Butt swell	Dead branches >2	...	...	...
351	Maple-Norway	21	Co-dominant leaders	Included bark	Rib	Dead branches >2	Poor branch structure
352	Maple-Norway	25	Co-dominant leaders	Included bark	Cavity-stem	Dead branches >2	...
353	Spruce-Colorado Blue	19	Dead branches <=2	Uneven crown	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
354	Maple-Sugar	21	Dead branches <=2	Overextended branch	...	...	...
355	Spruce-Colorado Blue	15	Dead branches <=2	...	...	...	...
356	Spruce-Colorado Blue	16	Dead branches <=2	...	...	...	...
357	Spruce-Colorado Blue	12	Dead branches <=2	...	...	...	...
358	Maple-Norway	19	Co-dominant leaders	Included bark	Dead branches >2	Girdling roots present	...
359	Spruce-Colorado Blue	15	Dead branches <=2	...	...	...	...
360	Spruce-Colorado Blue	16	Dead branches <=2	...	...	...	...
362	Spruce-Colorado Blue	15	Dead branches <=2	...	...	...	...
363	Spruce-Colorado Blue	16	Dead branches <=2	...	...	...	...
364	Spruce-Colorado Blue	14	Dead branches <=2	Co-dominant leaders	...	...	...
365	Spruce-Colorado Blue	16	Dead branches >2	Wound-stem	...	...	...
366	Maple-Norway	21	Co-dominant leaders	Included bark	Dead branches >2	...	...
367	Spruce-Colorado Blue	13	Cavity-stem	Dead branches >2	Wound-root flare	...	...
368	Spruce-Colorado Blue	14	Cavity-stem	Dead branches >2	...	...	...
369	Spruce-Colorado Blue	9	Dead branches <=2	...	...	...	...
370	Maple-Norway	17	Poor branch structure	Dead branches <=2	...	...	...
372	Maple-Silver	25	Co-dominant leaders	Included bark	Dead branches <=2	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
373	Maple-Silver	30	Co-dominant leaders	Included bark	Hanger	Dead branches <=2	...
374	Catalpa	25	Co-dominant leaders	Wound-stem	Dead branches <=2	...	...
375	Maple-Norway	24	Co-dominant leaders	Included bark	Dead branches <=2	...	...
376	Spruce-Colorado Blue	17	Dead branches <=2	Co-dominant leaders	...	...	...
377	Maple-Norway	18	Poor branch structure	Dead branches <=2	...	...	...
379	Maple-Sugar	22	Co-dominant leaders	Included bark	Girdling roots present	...	...
380	Maple-Sugar	22	Hanger	Dead branches >2	Poor branch structure	...	...
381	Oak - Scarlet	24	Co-dominant leaders	Included bark	Dead branches >2	...	...
382	Oak - Scarlet	22	Co-dominant stems	Included bark	Overextended branch	Wound-root flare	Dead branches <=2
383	Oak - Scarlet	24	Dead branches <=2	...	...	...	...
384	Spruce-Colorado Blue	12	Dead branches <=2	...	...	...	...
385	Oak - Scarlet	36	Co-dominant leaders	Included bark	Dead branches <=2	...	...
392	Maple-Norway	15	Poor branch structure	Wound-branch	...	...	...
394	Oak - Scarlet	26	Wound-stem	Co-dominant leaders	Included bark	Dead branches >2	...
396	Dogwood-Flowering	8	Co-dominant leaders	Included bark	Dead branches >2	...	...
397	Spruce-Colorado Blue	20	Co-dominant leaders	Included bark	Dead branches <=2	...	...
398	Dogwood-Kousa	5	Poor branch structure	...	...	...	...
399	Maple-Sugar	4	Co-dominant leaders	Included bark	Poor branch structure	...	...
400	Oak - Scarlet	19	Wound-stem	Construction damage	Dead branches >2	...	...
401	Oak - Scarlet	25	Dead branches >2	Co-dominant leaders	...	...	...
402	Oak - Scarlet	29	Dead branches <=2	Overextended branch	Co-dominant leaders	...	...
403	Oak - Scarlet	22	Dead branches <=2	Poor branch structure	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
404	Oak - Scarlet	27	Co-dominant leaders	Poor branch structure	Dead branches >2	...	...
405	Maple-Norway	7	Poor branch structure	...	...	...	...
406	Oak - Scarlet	35	Dead branches >2	Co-dominant leaders	Included bark	Overextended branch	...
407	Oak - Scarlet	31	Co-dominant leaders	Included bark	Dead branches <=2	Girdling roots present	...
412	Maple-Norway	4	Co-dominant leaders	Included bark	Poor branch structure	...	...
413	Oak - Scarlet	21	Dead branches >2	Co-dominant leaders	Included bark	...	...
415	Maple-Norway	31	Poor branch structure	Wound-branch	Wound-stem	...	...
416	Oak - Scarlet	33	Co-dominant leaders	Included bark	Cavity-stem	Dead branches <=2	...
418	Beech-European	38	Dead branches <=2	...	...	...	...
421	Maple-Norway	10	Poor branch structure	Cavity-branch	Wound-branch	...	...
422	Oak - Scarlet	29	Co-dominant leaders	Included bark	Dead branches >2	...	...
425	Spruce-Colorado Blue	20	Dead branches >2	...	...	...	...
426	Elm	9	Co-dominant leaders	Included bark	Poor branch structure	...	...
428	Oak-White	31	Co-dominant leaders	Included bark	Dead branches >2	...	...
429	Maple-Norway	13	Poor branch structure	Dead branches <=2	...	...	...
430	Oak-White	28	Co-dominant leaders	Dead branches <=2	...	...	...
431	Oak-White	33	Dead branches >2	Co-dominant leaders	...	...	...
432	Oak-White	24	Dead branches >2	Co-dominant leaders	...	...	...
433	Maple-Norway	16	Co-dominant leaders	Included bark	Overextended branch	Girdling roots present	...
434	Oak-White	30	Wound-root flare	Dead branches <=2	Co-dominant leaders	Planting material	...
435	Maple-Norway	22	Co-dominant leaders	Included bark	Dead branches <=2	Girdling roots present	Cavity-stem
436	Oak-White	36	Co-dominant leaders	Dead branches >2	Cavity-branch	Cavity-stem	Overextended branch
437	Oak - Scarlet	30	Sidewalk lifting-major	Dead branches >2	Overextended branch	Co-dominant leaders	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
438	Spruce-Colorado Blue	21	Dead branches <=2	...	...	...	...
441	Maple-Norway	19	Co-dominant leaders	Included bark	Planting material	...	...
442	Oak - Scarlet	33	Co-dominant leaders	Included bark	Dead branches >2	Overextended branch	...
443	Oak-White	33	Dead branches <=2	Co-dominant leaders	Overextended branch	...	...
444	Oak-White	29	Co-dominant leaders	Included bark	Dead branches <=2	Wound-root flare	...
445	Maple-Norway	18	Poor branch structure	Planting material	...	...	...
446	Oak-White	38	Co-dominant leaders	Included bark	Dead branches >2	Construction damage	Wound-branch
447	Oak-White	32	Dead branches >2	Co-dominant leaders	Included bark	...	...
448	Maple-Norway	19	Co-dominant leaders	Hanger	Dead branches >2	Wound-stem	...
451	Maple-Norway	28	Co-dominant leaders	Included bark	...	...	...
452	Maple-Norway	16	Co-dominant leaders	Included bark	Dead branches <=2	...	...
453	Maple-Norway	29	Co-dominant leaders	Dead branches <=2	Construction damage	Cavity-branch	...
454	Spruce-Colorado Blue	13	Wound-root flare	Wound-stem	Construction damage	...	...
455	Maple-Norway	28	Co-dominant leaders	Included bark	Dead branches <=2	...	...
456	Maple-Red	24	Co-dominant leaders	Included bark	Poor branch structure	...	...
457	Maple-Norway	26	Cavity-stem	Cavity-branch	Co-dominant leaders	Dead branches <=2	...
458	Maple-Norway	22	Hanger	Dead branches <=2	...	...	...
459	Pear-Callery	4	Co-dominant leaders	...	...	...	...
460	Pear-Callery	3	Co-dominant leaders	...	...	...	...
461	Pear-Callery	3	Co-dominant leaders	...	...	...	...
462	Pear-Callery	3	Co-dominant leaders	...	...	...	...
466	Spruce-Colorado Blue	14	Co-dominant stems	Included bark	Dead branches <=2	...	...
467	Maple-Norway	20	Co-dominant leaders	Included bark	...	...	...
468	Maple-Norway	33	Co-dominant leaders	Included bark	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
469	Spruce-Colorado Blue	14	Co-dominant leaders	Included bark	Dead branches <=2	...	...
470	Maple-Norway	32	Wound-stem	Cavity-stem	Co-dominant leaders	Included bark	Rib
471	Spruce-Colorado Blue	13	Dead branches <=2	...	...	...	...
472	Maple-Norway	37	Co-dominant leaders	Included bark	Cavity-stem	Cavity-branch	Dead branches <=2
473	Maple-Sugar	7	Co-dominant leaders	Included bark	Wound-root flare	...	...
474	Maple-Norway	35	Co-dominant leaders	Included bark	Overextended branch	Dead branches >2	Cavity-stem
475	Spruce-Norway	22	Wound-root flare	Girdling roots present	...	...	...
477	Maple-Red	33	Cavity-stem	Co-dominant leaders	Included bark	Overextended branch	Rib
479	Dogwood-Flowering	9	Co-dominant leaders	Dead branches <=2	Girdling roots present	...	...
480	Weeping Cherry	17	Co-dominant leaders	Dead branches <=2	...	...	...
481	Spruce-Colorado Blue	25	Dead branches <=2	...	...	...	...
482	Maple-Norway	37	Cavity-stem	Girdling roots present	Co-dominant leaders	Included bark	Overextended branch
483	Maple-Norway	39	Wound-stem	Co-dominant leaders	Included bark	Overextended branch	Girdling roots present
484	Crimson King Maple	9	Co-dominant leaders	Included bark	...	...	...
485	Crimson King Maple	13	Wound-stem	Co-dominant leaders	Included bark	Dead branches <=2	...
486	Crimson King Maple	14	Poor branch structure	...	...	...	...
488	Crimson King Maple	22	Poor branch structure	Girdling roots present	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
489	Crimson King Maple	21	Co-dominant leaders	Poor branch structure	...	...	...
490	Crimson King Maple	24	Co-dominant leaders	Included bark	Poor branch structure	...	...
491	Crimson King Maple	24	Co-dominant leaders	Included bark	Poor branch structure	...	...
492	Cherry	30	Co-dominant leaders	Included bark	Cavity-branch	Poor branch structure	Cavity-stem
493	Maple-Japanese	28	Co-dominant stems	Included bark	Poor branch structure	Dead branches <=2	...
494	Cherry	29	Co-dominant leaders	Fungi/conks	Crack-stem	...	...
495	Cherry	15	Crack-stem	Co-dominant leaders	Included bark	...	...
496	Crabapple	14	Co-dominant leaders	Dead branches <=2	...	...	...
497	Crabapple	30	Co-dominant leaders	Included bark	Cavity-stem	Cut roots	...
498	Maple-Red	22	Co-dominant leaders	Included bark	...	...	...
499	Maple-Red	32	Co-dominant leaders	Included bark	...	...	...
505	Honeylocust-Thornless Common	10	Wound-stem	Poor branch structure	Dead branches >2	Cut roots	...
506	Honeylocust-Thornless Common	11	Co-dominant leaders	Dead branches >2	Wound-stem	Hanger	Cut roots
508	Magnolia-Saucer	10	Co-dominant leaders	Included bark	...	...	...
509	Pear-Callery	19	Co-dominant leaders	Included bark	Overextended branch	...	Poor branch structure
510	Pear-Callery	19	Co-dominant leaders	Included bark	Cavity-stem	Cavity-branch	Cut roots
511	Birch-Paper	11	Co-dominant leaders	Included bark	Cut roots	...	...
512	Crabapple	14	Co-dominant leaders	Dead branches <=2	Girdling roots present	Wound-stem	...
513	Dogwood-Kousa	6	Co-dominant leaders	Wound-root flare	...	...	...
514	Sycamore-American	18	Co-dominant leaders	Dead branches >2	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
515	Dogwood-Flowering	6	Co-dominant leaders	Included bark	Dead branches <=2	Wound-root flare	...
516	Dogwood-Flowering	6	Co-dominant leaders	Included bark	Wound-root flare	Wound-stem	...
517	Fir-White	19	Dead branches <=2	...	...	...	...
519	Dogwood-Flowering	4	Wound-stem	...	...	...	...
521	Oak-White	40	Co-dominant leaders	Dead branches >2	...	...	...
542	Oak- Northern Red	34	Co-dominant leaders	Dead branches >2	...	...	...
543	Weeping Cherry	14	Cavity-stem	Burl	...	...	...
544	Maple-Norway	21	Co-dominant leaders	Dead branches >2	Cavity-stem	Burl	...
545	Maple-Norway	19	Co-dominant leaders	Dead branches <=2	Crack-branch	...	...
546	Beech-European	27	Co-dominant leaders	Hanger	Dead branches <=2	Cavity-branch	...
548	Beech-European	40	Co-dominant leaders	Included bark	Dead branches >2	Cavity-branch	Fungi/conks
549	Dogwood-Flowering	6	Cavity-stem	Cavity-root flare	...	...	...
550	Dogwood-Flowering	6	Co-dominant stems	Wound-stem	...	...	...
551	Dogwood-Flowering	8	Cavity-stem	Wound-stem	...	...	...
552	Oak-Pin	30	Co-dominant leaders	Included bark	Dead branches <=2	...	...
553	Cherry	14	Cavity-stem	...	...	...	...
554	Weeping Cherry	16	Cavity-stem	...	...	...	...
555	Cherry	7	Co-dominant leaders	...	...	...	...
556	Birch-Paper	11	Co-dominant stems	Included bark	...	...	...
557	Birch-Paper	10	Co-dominant stems	Included bark	Co-dominant leaders	...	...
558	Dogwood-Flowering	6	Co-dominant leaders	Cavity-stem	Cavity-root flare	...	...
559	Maple-Norway	20	Co-dominant leaders	Cavity-stem	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
560	Maple-Norway	21	Co-dominant leaders	Dead branches >2	...	...	...
561	Maple-Norway	27	Co-dominant leaders	Cavity-branch	Cavity-stem	Dead branches >2	Fungi/conks
562	Maple-Norway	26	Co-dominant leaders	Dead branches >2	Cavity-stem	Cavity-branch	...
563	Oak- Black	45	Co-dominant leaders	Included bark	Wound-root flare	Dead branches >2	Wound-stem
564	Dogwood-Flowering	7	Co-dominant leaders	Included bark	Wound-root flare	...	...
565	Dogwood-Flowering	6	Co-dominant leaders	Wound-stem	Wound-root flare	...	...
566	Dogwood-Flowering	5	Co-dominant leaders	Included bark	Wound-stem	...	...
567	Dogwood-Flowering	6	Co-dominant leaders	Included bark	Wound-branch	Dead branches <=2	...
568	Maple-Japanese	8	Co-dominant leaders	Crack-branch	...	...	...
569	Dogwood-Flowering	6	Co-dominant leaders	Included bark	Wound-branch	Wound-stem	...
570	Fir-White	21	Co-dominant leaders	Included bark	Seam	Dead branches >2	...
571	Maple-Norway	21	Co-dominant leaders	Dead branches >2	Cavity-branch	Wound-stem	...
573	Spruce-Colorado Blue	17	Dead branches >2	Butt swell	Wound-stem	...	...
574	Dogwood-Flowering	12	Wound-stem	Co-dominant leaders	...	...	...
575	Crabapple	6	Co-dominant leaders	Included bark	Wound-branch	...	...
576	Maple-Norway	21	Co-dominant leaders	Overextended branch	Dead branches >2	Cavity-stem	Wound-root
578	Maple-Japanese	5	Co-dominant leaders	Included bark	...	...	...
579	Maple-Japanese	6	Co-dominant leaders	Wound-branch	Wound-stem	...	...
583	Maple-Norway	23	Dead branches >2	Co-dominant leaders	Cavity-branch	Wound-root flare	Girdling roots present
585	Maple-Norway	21	Co-dominant leaders	Wound-stem	Wound-root flare	...	...
587	Maple-Norway	26	Co-dominant leaders	Wound-stem	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
588	Maple-Norway	28	Co-dominant leaders	Poor branch structure	Cavity-branch	Dead branches >2	Hanger
589	Maple-Norway	23	Cavity-stem	Lean	...	...	...
590	Yew	11	Co-dominant stems	...	...	...	...
591	Maple-Norway	7	Co-dominant leaders	...	...	...	...
592	Maple-Norway	25	Cavity-stem	Cavity-branch	Co-dominant leaders	...	...
593	Maple-Norway	23	Co-dominant leaders	Hanger	Dead branches >2	...	...
597	Oak-White	40	Co-dominant leaders	Included bark	Dead branches >2	Overextended branch	...
598	Oak-White	34	Seam	Co-dominant leaders	Dead branches >2	Cavity-branch	...
602	Birch-Paper	15	Co-dominant leaders	Wound-stem	...	...	...
603	Spruce-Colorado Blue	16	Dead branches >2	...	...	...	...
604	Spruce-Colorado Blue	23	Dead branches >2	...	...	...	...
606	Spruce-Colorado Blue	15	Dead branches >2	...	...	...	...
607	Oak-White	38	Co-dominant leaders	Dead branches >2	Fungi/conks	Overextended branch	Cavity-stem
608	Oak-White	38	Co-dominant leaders	Dead branches >2	Overextended branch	Wound-stem	...
609	Maple-Norway	24	Co-dominant leaders	Dead branches <=2	Cavity-branch	Cavity-stem	Girdling roots present
610	Spruce-Colorado Blue	20	Dead branches >2	Poor branch structure	...	...	...
611	Spruce-Colorado Blue	18	Dead branches >2	...	...	...	...
612	Oak- Black	30	Co-dominant leaders	Supressed	Cavity-branch	Wound-stem	Dead branches >2
613	Oak- Black	39	Co-dominant leaders	Included bark	Dead branches >2	Hanger	...
614	Oak-White	34	Co-dominant leaders	Included bark	Dead branches >2	Cavity-stem	Cut roots
615	Oak- Black	36	Co-dominant leaders	Dead branches >2	Cavity-stem	Cavity-branch	Cut roots
617	Maple-Norway	17	Co-dominant leaders	Dead branches >2	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
618	Maple-Norway	14	Co-dominant leaders	Hanger	Dead branches <=2	Cavity-stem	Wound-stem
619	Maple-Norway	17	Co-dominant leaders	Cavity-stem	Dead branches <=2	...	...
621	Oak-White	42	Co-dominant leaders	Wound-stem	Dead branches >2	...	...
622	Oak-White	42	Co-dominant leaders	Dead branches >2	...	...	...
623	Maple-Norway	34	Co-dominant leaders	Included bark	Wound-stem	Wound-branch	Dead branches >2
625	Dogwood-Flowering	5	Co-dominant leaders	...	...	...	...
626	Dogwood-Flowering	6	Co-dominant leaders	Included bark	...	...	...
628	Maple-Norway	20	Co-dominant leaders	Included bark	Cavity-branch	Girdling roots present (moderate)	Rib
629	Dogwood-Flowering	6	Co-dominant leaders	Included bark	...	...	...
630	Maple-Norway	11	Co-dominant leaders	Included bark	Girdling roots present	...	...
631	Maple-Norway	12	Co-dominant leaders	Included bark	Girdling roots present	Poor branch structure	Hanger
632	Maple-Norway	9	Co-dominant leaders	Included bark	...	...	...
633	Maple-Norway	12	Co-dominant leaders	Included bark	Girdling roots present	...	...
634	Maple-Norway	11	Co-dominant leaders	Included bark	Wound-root flare	Girdling roots suspected	...
635	Maple-Norway	11	Co-dominant leaders	Included bark	Girdling roots suspected	Wound-root	...
636	Maple-Norway	10	Co-dominant leaders	Included bark	Wound-root	Girdling roots suspected	...
637	Purple Leaf Plum	6	Co-dominant leaders	Included bark	Wound-stem	...	...
639	Purple Leaf Plum	7	Co-dominant leaders	Included bark	Wound-stem	Dead branches >2	...
645	Maple-Norway	12	Co-dominant leaders	Included bark	Girdling roots suspected	...	...
650	Maple-Norway	12	Co-dominant leaders	Included bark	Girdling roots present	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
651	Maple-Norway	12	Co-dominant leaders	Included bark	Girdling roots present	Wound-root	...
654	Maple-Norway	10	Co-dominant leaders	Included bark	Girdling roots suspected	...	...
655	Maple-Norway	11	Co-dominant leaders	Included bark	...	...	...
656	Maple-Norway	9	Co-dominant leaders	Included bark	Girdling roots present (severe)	...	...
657	Maple-Norway	10	Co-dominant leaders	...	...	...	...
658	Maple-Norway	10	Co-dominant leaders	Wound-branch	...	...	...
659	Pear-Callery	8	Co-dominant leaders	Included bark	...	...	...
660	Pear-Callery	8	Co-dominant leaders	Included bark	...	...	...
661	Pear-Callery	9	Co-dominant leaders	Included bark	...	...	...
662	Pear-Callery	9	Co-dominant leaders	Included bark	...	...	...
663	Pear-Callery	8	Co-dominant leaders	Included bark	...	...	...
664	Pear-Callery	7	Co-dominant leaders	Included bark	...	...	...
665	Pear-Callery	9	Co-dominant leaders	Included bark	...	...	...
666	Pear-Callery	10	Co-dominant leaders	Included bark	...	...	...
667	Pear-Callery	9	Co-dominant leaders	Included bark	...	...	...
668	Pear-Callery	10	Co-dominant leaders	Included bark	...	...	...
669	Pear-Callery	9	Co-dominant leaders	Included bark	...	...	...
670	Pear-Callery	9	Co-dominant leaders	Included bark	...	...	...
671	Maple-Norway	9	Co-dominant leaders	Girdling roots suspected	Lean	...	...
672	Maple-Norway	9	Co-dominant leaders	...	...	...	...
673	Maple-Norway	11	Co-dominant leaders	Included bark	...	...	...
674	Maple-Norway	21	Co-dominant leaders	Dead branches >2	...	...	...
675	Maple-Norway	17	Co-dominant leaders	Dead branches >2	...	...	...
677	Beech-European	33	Co-dominant leaders	Included bark	Dead branches >2	Hanger	Cavity-branch
678	Linden-Littleleaf	17	Co-dominant leaders	Included bark	Wound-stem	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
681	Dogwood-Corneliancherry	4	Planting material	...	...	...	...
682	Cherry	6	Planting material	...	...	...	...
683	Cherry	5	Poor branch structure	...	...	...	...
685	Oak-Pin	6	Crack-branch	...	...	...	...
690	Maple-Norway	14	Co-dominant leaders	Dead branches >2	Wound-stem	...	...
691	Maple-Norway	21	Co-dominant leaders	Dead branches >2	Cavity-branch	Seam	...
692	Maple-Norway	24	Co-dominant leaders	Dead branches <=2	Wound-root flare	Cavity-stem	...
693	Oak-White	32	Poor branch structure	Butt swell	Dead branches >2	Cavity-stem	Wound-stem
694	Honeylocust-Thornless Common	5	Co-dominant leaders	...	...	...	...
695	Honeylocust-Thornless Common	5	Co-dominant leaders	...	...	...	...
696	Honeylocust-Thornless Common	6	Co-dominant leaders	...	...	...	...
697	Honeylocust-Thornless Common	5	Co-dominant leaders	...	...	...	...
699	Beech-European	45	Co-dominant leaders	Included bark	Dead branches >2	Overextended branch	Cavity-branch
700	Honeylocust-Thornless Common	5	Co-dominant leaders	...	...	...	...
701	Honeylocust-Thornless Common	5	Co-dominant leaders	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
703	Falsecypress-Sawara (11)	12	Co-dominant leaders	Included bark	Dead branches >2	Crack-stem	...
705	Oak- Northern Red	28	Wound-stem	Wound-root flare	Co-dominant leaders	Included bark	...
706	Maple-Norway	18	Cavity-stem	Rib	...	...	...
707	Oak-White	46	Co-dominant leaders	Included bark	Dead branches >2	Cavity-stem	...
710	Maple-Japanese	7	Co-dominant stems	Included bark	Wound-stem	...	...
711	Oak- Northern Red	39	Overextended branch	Cavity-stem	Cavity-branch	Fungi/conks	Dead branches <=2
712	Maple-Norway	24	Co-dominant leaders	Dead branches >2	Rib	Cavity-stem	Cavity-branch
713	Cherry	13	Co-dominant stems	Included bark	Cavity-stem	Wound-stem	...
714	Oak- Black	43	Co-dominant leaders	Overextended branch	Dead branches >2	Cut roots	...
716	Maple-Norway	16	Co-dominant leaders	Wound-root	...	...	...
717	Maple-Norway	24	Co-dominant leaders	Cavity-stem	...	...	...
718	Maple-Norway	20	Co-dominant leaders	Dead branches >2	Cavity-branch	...	...
719	Maple-Norway	26	Co-dominant leaders	Included bark	Dead branches >2	Cavity-stem	Wound-stem
720	Maple-Norway	18	Dead branches >2	Cavity-stem	Co-dominant leaders	Other	...
721	Oak- Northern Red	45	Cavity-stem	Cavity-branch	Wound-stem	Hanger	Dead branches >2
722	Oak- Northern Red	24	Co-dominant leaders	Included bark	Dead branches >2	...	...
723	Oak- Northern Red	19	Cavity-root flare	Cavity-stem	Dead branches >2	...	...
724	Oak- Northern Red	24	Co-dominant leaders	Dead branches >2	Wound-branch	...	...
725	Oak- Black	27	Co-dominant leaders	Included bark	Dead branches <=2	...	...
726	Maple-Red	4	Co-dominant leaders	...	...	...	...
728	Maple-Red	6	Co-dominant leaders	Included bark	...	...	...
730	Maple-Red	5	Co-dominant leaders	Included bark	...	...	...
731	Maple-Red	6	Co-dominant leaders	...	...	...	...
732	Maple-Red	6	Co-dominant leaders	...	...	...	...
733	Maple-Red	6	Co-dominant leaders	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
735	Weeping Cherry	8	...	Rib	...	...	...
736	Oak- Black	32	Co-dominant leaders	Overextended branch	Dead branches >2	...	...
737	Oak- Black	51	Co-dominant leaders	Included bark	Overextended branch	Dead branches <=2	...
738	Oak- Black	37	Co-dominant leaders	Dead branches <=2	...	...	...
739	Hornbeam-European	6	Cavity-stem	Topping/heading cuts	Wound-branch	...	...
740	Oak-White	37	Co-dominant leaders	Dead branches >2	...	...	...
741	Oak- Black	48	Co-dominant leaders	Dead branches <=2	Cavity-stem	Burl	Cavity-root flare
743	Crabapple	7	Wound-stem	Wound-root flare	Cavity-stem	...	...
744	Crabapple	5	Co-dominant stems	Included bark	Wound-branch	...	...
745	Beech-European	28	Co-dominant leaders	Included bark	Cavity-stem	Dead branches <=2	Cavity-branch
746	Spruce-Colorado Blue	16	Dead branches >2	...	...	...	...
747	Honeylocust-Thornless Common	17	Co-dominant leaders	Dead branches <=2	...	...	...
749	Oak- Northern Red	18	Co-dominant leaders	Dead branches <=2	...	...	...
750	Oak- Northern Red	20	Co-dominant leaders	Girdling roots present	...	...	...
751	Tuliptree	16	Wound-stem	Wound-branch	Dead branches <=2	...	...
752	Oak- Northern Red	18	Co-dominant leaders	Included bark	Girdling roots present	...	...
753	Oak- Northern Red	17	Co-dominant leaders	Included bark	...	...	...
754	Birch-Paper	10	Co-dominant stems	Included bark	...	...	...
756	Oak- Black	27	Co-dominant stems	Included bark	Dead branches >2	Hanger	Cavity-branch
757	Oak-White	17	Co-dominant leaders	Included bark	...	...	...
758	Oak-White	19	Co-dominant leaders	Dead branches >2	...	...	...
759	Oak- Northern Red	22	Co-dominant leaders	Dead branches >2	Wound-stem	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
760	Oak- Northern Red	22	Co-dominant leaders	Included bark	Dead branches >2	Cavity-branch	...
761	Oak- Northern Red	24	Dead branches <=2	...	...	...	...
762	Oak- Northern Red	20	Co-dominant leaders	Crack-branch	Cavity-stem	Wound-stem	Cut roots
763	Oak- Black	35	Dead branches >2	Co-dominant leaders	Included bark	Cavity-stem	...
764	Oak- Black	32	Co-dominant leaders	Dead branches >2	...	...	...
765	Oak- Black	32	Co-dominant leaders	Cavity-stem	Dead branches >2	...	...
766	Oak- Northern Red	33	Co-dominant leaders	Overextended branch	Dead branches >2	...	...
767	Pear-Callery	13	Cavity-stem	Co-dominant leaders	Included bark	Lean	...
768	Pear-Callery	11	Co-dominant leaders	Included bark	...	...	...
769	Pear-Callery	11	Co-dominant leaders	Included bark	Wound-stem	...	...
770	Pear-Callery	11	Co-dominant leaders	Included bark	...	...	...
771	Pear-Callery	12	Co-dominant leaders	Included bark	...	...	...
772	Pear-Callery	9	Co-dominant leaders	...	...	...	...
773	Maple-Norway	25	Co-dominant leaders	Cavity-stem	Dead branches >2	Hanger	Crack-branch
774	Maple-Norway	16	Co-dominant leaders	Cavity-stem	Crack-branch	Rib	Dead branches >2
775	Maple-Norway	15	Co-dominant leaders	Dead branches >2	...	...	...
776	Maple-Norway	16	Co-dominant leaders	Wound-stem	Wound-branch	...	...
777	Maple-Norway	18	Co-dominant leaders	Dead branches >2	Wound-stem	Wound-root flare	...
778	Maple-Norway	18	Dead branches >2	Cavity-stem	...	...	...
779	Maple-Norway	19	Co-dominant leaders	Included bark	Cavity-stem	...	...
780	Maple-Norway	16	Co-dominant leaders	Dead branches >2	...	...	...
781	Maple-Norway	10	Co-dominant leaders	Included bark	...	...	...
782	Maple-Norway	10	Co-dominant leaders	Girdling roots present	...	...	...
783	Maple-Norway	17	Co-dominant leaders	Overextended branch	Dead branches >2	Wound-stem	Wound-branch
785	Maple-Norway	22	Co-dominant leaders	Dead branches <=2	Cavity-stem	Wound-stem	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
786	Tree of Heaven	25	Cavity-stem	Rib	Butt swell	...	...
787	Maple-Japanese	32	Co-dominant leaders	Included bark	Girdling roots present	Dead branches <=2	...
790	Maple-Norway	18	Co-dominant leaders	Dead branches <=2	...	...	...
791	Maple-Norway	19	Co-dominant leaders	Dead branches <=2	...	...	...
792	Maple-Sycamore	19	Co-dominant leaders	Cavity-stem	Wound-branch	Included bark	...
793	Maple-Norway	28	Co-dominant leaders	Cavity-stem	Cavity-branch	Dead branches >2	Hanger
794	Maple-Norway	28	Co-dominant leaders	Dead branches >2	Rib	Cavity-stem	Cavity-branch
795	Maple-Norway	18	Co-dominant leaders	Cavity-branch	...	...	...
800	Maple-Norway	28	Co-dominant leaders	Crack-branch	Dead branches >2	Cavity-stem	Fungi/conks
802	Maple-Sugar	30	Co-dominant leaders	Included bark	Dead branches >2	Cavity-stem	Cavity-branch
803	Maple-Sugar	19	Dead branches >2	Hanger	Co-dominant leaders	Girdling roots present	...
806	Weeping Cherry	9	Butt swell	...	...	...	...
807	Crabapple	14	Co-dominant leaders	Cavity-stem	Wound-branch	Hanger	...
808	Cherry	15	Co-dominant leaders	Included bark	Overextended branch	...	...
809	Magnolia-Star	4	Co-dominant stems	Included bark	...	...	...
813	Magnolia-Saucer	13	Co-dominant leaders	Wound-branch	Dead branches <=2	Overextended branch	...
815	Cherry	7	Co-dominant leaders	Poor branch structure	...	...	...
816	Cherry	6	Co-dominant leaders	Dead branches <=2	Cavity-stem	...	...
817	Falsecypress-Sawara	19	Co-dominant leaders	Dead branches >2	Included bark	...	...
818	Falsecypress-Sawara	17	Co-dominant leaders	Included bark	Dead branches >2	...	...
819	Falsecypress-Sawara	23	Dead branches >2	...	...	...	...
820	Cherry	7	Co-dominant leaders	Cavity-stem	...	...	...
821	Cherry	9	Co-dominant leaders	Wound-stem	Wound-branch	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
822	Cherry	7	Co-dominant leaders	Included bark	...	...	...
823	Maple-Japanese	10	Co-dominant stems	Included bark	Dead branches <=2	Girdling roots suspected	Wound-stem
825	Dogwood-Kousa	9	Co-dominant leaders	Wound-stem	...	...	...
826	Cedar-Atlas	12	Co-dominant leaders	Included bark	Dead branches <=2	...	...
837	Oak-English	5	Butt swell	...	...	...	...
842	Lilac-Japanese Tree	8	Co-dominant leaders	Included bark	Dead branches <=2	Wound-stem	...
843	Lilac-Japanese Tree	8	Co-dominant leaders	Included bark	Dead branches <=2	...	...
844	Lilac-Japanese Tree	7	Co-dominant leaders	Included bark	Dead branches <=2	Girdling roots suspected	...
845	Lilac-Japanese Tree	7	Co-dominant leaders	Wound-stem	Dead branches <=2	Girdling roots present	...
846	Lilac-Japanese Tree	8	Co-dominant leaders	Included bark	Wound-stem	Dead branches <=2	...
847	Beech-European	18	Co-dominant leaders	Included bark	Girdling roots present	Wound-stem	...
848	Birch-Paper	14	Co-dominant leaders	Overextended branch	Wound-root flare	...	...
849	Maple-Red	17	Co-dominant leaders	Dead branches <=2	Girdling roots present (moderate)	...	...
852	Cherry	23	Co-dominant leaders	Overextended branch	Cavity-stem	...	...
853	Spruce-Colorado Blue	15	Co-dominant leaders	...	...	...	...
854	Oak- Black	31	Co-dominant leaders	Included bark	Overextended branch	Dead branches >2	...
855	Redbud-Eastern	13	Wound-stem	Dead branches >2	Cavity-stem	Uneven crown	...
856	Redbud-Eastern	9	Cavity-stem	Cavity-root flare	Seam	Crack-branch	...
857	Oak- Black	16	Wound-stem	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
858	Oak- Black	17	Co-dominant leaders	Overextended branch	Wound-stem	...	...
859	Oak- Black	17	Co-dominant leaders	Included bark	Dead branches <=2	...	...
860	Oak- Black	25	Co-dominant leaders	Cavity-branch	Overextended branch	...	...
861	Oak- Black	16	Co-dominant leaders	Poor branch structure	Wound-stem	Dead branches <=2	...
862	Oak- Black	33	Co-dominant leaders	Wound-branch	...	...	...
863	Oak-Pin	26	Co-dominant leaders	Included bark	Overextended branch	Dead branches >2	Wound-root flare
864	Maple-Norway	24	Co-dominant leaders	Cavity-stem	Dead branches >2	Hanger	Cavity-branch
865	Maple-Norway	15	Co-dominant leaders	Dead branches >2	Rib	Other	...
866	Oak- Black	29	Co-dominant leaders	Included bark	Wound-root flare	...	...
867	Pine-Eastern White	19	Cavity-stem	Uneven crown	Wound-stem	Dead branches <=2	...
868	Pine-Eastern White	26	Dead branches >2	Girdling roots present	...	...	...
869	Pine-Eastern White	23	Dead branches >2	Uneven crown	Wound-stem	Burl	...
870	Maple-Norway	23	Wound-stem	Seam	Dead branches >2	Hanger	Overextended branch
871	Maple-Norway	9	Wound-stem	...	...	...	...
872	Pine-Austrian	23	Wound-stem	Uneven crown	Lean	Dead branches >2	...
873	Pine-Austrian	24	Dead branches >2	Uneven crown	...	...	...
874	Pine-Austrian	12	Supressed	...	...	...	...
875	Pine-Austrian	26	Supressed	...	...	...	...
876	Pine-Austrian	21	Dead branches >2	...	...	...	...
877	Pine-Austrian	26	Dead branches >2	...	...	...	...
878	Pine-Eastern White	24	Co-dominant leaders	Dead branches >2	...	...	...
879	Pine-Eastern White	30	Seam	Poor branch structure	Overextended branch	Dead branches >2	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
880	Pine-Eastern White	22	Dead branches >2	...	...	...	...
881	Pine-Eastern White	20	Wound-stem	Cavity-stem	Sweep	...	...
882	Pine-Eastern White	27	Co-dominant leaders	Dead branches >2	Wound-root flare	...	...
883	Pine-Eastern White	24	Co-dominant leaders	Dead branches >2	Seam	...	...
884	Pine-Eastern White	21	Dead branches >2	Wound-stem	Uneven crown	...	...
885	Pine-Eastern White	31	Co-dominant leaders	Poor branch structure	Dead branches >2	Cavity-stem	Cut roots
886	Pine-Eastern White	28	Dead branches >2	...	...	...	...
887	Oak-Pin	17	Wound-stem	...	...	...	...
888	Pine-Eastern White	29	Dead branches >2	...	...	...	...
889	Pine-Eastern White	29	Co-dominant leaders	Dead branches >2	...	Burl	...
890	Pine-Eastern White	27	Dead branches >2	Poor branch structure	Wound-root flare	Cavity-stem	...
891	Oak- Black	34	Co-dominant leaders	Overextended branch	Dead branches >2	...	...
892	Ash-White	7	Wound-root	Co-dominant stems	...	...	...
893	Ash-White	5	Wound-stem	Wound-branch	Co-dominant leaders	...	...
894	Horsechestnut-Common	26	Co-dominant leaders	Included bark	Dead branches >2	Cavity-branch	Cavity-stem
895	Spruce-Colorado Blue	18	Dead branches >2	...	...	...	...
896	Falsecypress-Sawara	13	Dead branches >2	Co-dominant leaders	Included bark	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
897	Falsecypress-Sawara	14	Co-dominant leaders	Included bark	Dead branches >2	...	...
899	Falsecypress-Sawara	22	Co-dominant leaders	Included bark	...	...	...
900	Honeylocust-Thornless Common	8	Wound-stem	Co-dominant stems	...	...	...
905	Honeylocust-Thornless Common	6	Poor branch structure	...	...	...	...
906	Maple-Norway	8	Rib	Co-dominant leaders	Included bark	...	...
910	Spruce-Norway	29	Poor branch structure	Dead branches >2	...	...	...
913	Pine-Eastern White	14	Co-dominant leaders	Included bark	...	...	...
914	Pine-Eastern White	11	Co-dominant leaders	...	...	...	...
917	Pine-Eastern White	14	Co-dominant leaders	Included bark	...	...	...
918	Spruce-Colorado Blue	12	Girdling roots present	...	...	...	...
919	Pear-Callery	17	Co-dominant stems	Included bark	...	...	...
920	Pear-Callery	15	Co-dominant stems	Included bark	...	...	...
923	Birch-Gray	12	Cavity-stem	Co-dominant leaders	Dead branches <=2	Hanger	...
924	Maple-Norway	14	Co-dominant leaders	Rib	Girdling roots present	...	...
927	Pear-Callery	8	Co-dominant stems	Included bark	Lean	Wound-root flare	Wound-branch
928	Pear-Callery	7	Co-dominant leaders	Included bark	...	...	...
929	Dogwood-Flowering	7	Dead branches <=2	Wound-stem	...	...	...
930	Purple Leaf Plum	17	...	Co-dominant leaders	Included bark	Wound-stem	...
932	Cherry	13	Burl	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
933	Cherry	14	Burl	...	...	...	...
934	Maple-Norway	22	Co-dominant leaders	Included bark	Dead branches >2	Crack-branch	Wound-stem
935	Maple-Norway	16	Co-dominant stems	Included bark	Girdling roots suspected	Overextended branch	Dead branches >2
937	Cherry	8	Wound-stem	...	...	...	...
939	Cedar-Atlas	9	Environmental conditions	...	...	...	...
943	Purple Leaf Plum	4	Wound-root flare	...	...	...	...
944	Purple Leaf Plum	5	Wound-stem	...	...	...	...
947	Zelkova-Japanese	7	Co-dominant leaders	...	...	...	...
949	Maple-Norway	6	Rib	Girdling roots suspected	...	...	...
954	Falsecypress-Sawara	22	Co-dominant stems	Included bark	Dead branches >2	...	...
956	Crabapple	6	Co-dominant leaders	Included bark	Butt swell	...	...
957	Crabapple	6	Co-dominant leaders	Included bark	...	...	...
958	Crabapple	6	Co-dominant leaders	Wound-branch	...	...	...
959	Crabapple	5	Co-dominant leaders	Included bark	...	...	...
960	Magnolia-Saucer	9	Co-dominant stems	Cavity-stem	...	...	...
961	Falsecypress-Sawara	27	Dead branches >2	Wound-stem	...	...	...
962	Falsecypress-Sawara	16	Co-dominant leaders	Included bark	Dead branches >2	...	...
963	Falsecypress-Sawara	20	Dead branches >2	Co-dominant leaders	...	Included bark	...
964	Falsecypress-Sawara	8	Wound-root flare	Dead branches >2	...	...	...
965	Arborvitae-Eastern	9	Co-dominant stems	Included bark	Poor branch structure	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
966	Pine-Eastern White	15	Girdling roots present (moderate)	...	...	...	...
967	Pine-Eastern White	21	Girdling roots present (moderate)	Dead branches >2	...	...	...
968	Pine-Eastern White	17	Dead branches >2	Girdling roots present (moderate)	...	...	...
969	Honeylocust-Thornless Common	13	Dead branches >2	...	...	...	...
970	Honeylocust-Thornless Common	13	Cut roots	...	...	...	...
971	Magnolia-Saucer	12	Co-dominant leaders	Dead branches >2	...	Overextended branch	...
973	Pine-Scotch	16	Dead branches >2	Butt swell	...	...	...
975	Oak-White	30	Cavity-stem	Cavity-root flare	Dead branches >2	Hanger	Wound-branch
977	Honeylocust-Thornless Common	14	Dead branches >2	...	...	...	...
978	Honeylocust-Thornless Common	14	Dead branches >2	...	...	...	...
979	Pine-Scotch	14	Dead branches >2	Girdling roots present	Poor branch structure	...	...
980	Pine-Scotch	12	Co-dominant leaders	Included bark	Dead branches >2	Girdling roots present	...
981	Pine-Scotch	16	Dead branches >2	Girdling roots present	...	...	...
982	Pine-Eastern White	16	Dead branches >2	Girdling roots present	Uneven crown	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
983	Pine-Eastern White	22	Co-dominant leaders	Included bark	Overextended branch	Dead branches >2	...
984	Pine-Eastern White	17	Dead branches >2	...	...	...	...
985	Pine-Eastern White	15	Dead branches >2	Butt swell	...	...	...
986	Pine-Eastern White	13	Girdling roots present (severe)	Dead branches >2	Lean	Uneven crown	...
987	Pine-Eastern White	15	Co-dominant leaders	Included bark	Dead branches >2	...	...
988	Pine-Eastern White	17	Dead branches >2	Co-dominant leaders	Included bark	Girdling roots present	...
989	Pine-Eastern White	13	Dead branches >2	Butt swell	Girdling roots present	...	...
991	Pine-Eastern White	15	Dead branches >2	...	...	...	...
992	Pine-Eastern White	12	Co-dominant stems	Included bark	...	...	...
993	Pine-Eastern White	14	Dead branches >2	...	...	...	...
994	Pine-Eastern White	15	Co-dominant leaders	Included bark	Dead branches >2	Girdling roots present	...
995	Catalpa-Northern	23	Dead branches >2	Co-dominant leaders	Wound-stem	Girdling roots present	...
996	Spruce-Colorado Blue	18	Dead branches >2	Sweep	...	...	...
998	Maple-Japanese	5	Dead branches >2	...	...	...	...
999	Oak-White	42	Dead branches >2	Overextended branch	Cavity-root flare	...	...
1000	Oak-White	34	Dead branches >2	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1001	Horsechestnut-Common	28	Dead branches >2	Co-dominant leaders	Cavity-stem	Included bark	...
1002	Catalpa-Northern	19	Dead branches >2	Overextended branch	Wound-stem	...	...
1003	Oak- Black	21	Dead branches >2	Co-dominant leaders	Overextended branch	Wound-stem	...
1004	Oak- Black	23	Dead branches >2	Overextended branch	Hanger	...	...
1005	Pine-Eastern White	27	Dead branches >2	Overextended branch	Co-dominant leaders	Wound-stem	Cavity-stem
1007	Pine-Eastern White	24	Wound-branch	Wound-stem	Poor branch structure	Dead branches >2	...
1008	Pine-Austrian	21	Dead branches >2	Girdling roots present	Lean	...	...
1009	Pine-Eastern White	29	Dead branches >2	Sweep	Hanger	Wound-branch	...
1011	Cedar-Atlas	10	Wound-stem	Environmental conditions	...	...	...
1012	Maple-Red	8	Co-dominant leaders	Wound-stem	Wound-root flare	...	...
1013	Oak- Northern Red	16	Co-dominant leaders	Included bark	...	...	...
1014	Pine-Austrian	20	Dead branches >2	Wound-stem	Uneven crown	...	...
1015	Pine-Eastern White	22	Dead branches >2	Wound-stem	...	...	...
1016	Pine-Eastern White	28	Dead branches >2	Co-dominant leaders	Hanger	...	...
1017	Pine-Eastern White	22	Dead branches >2	Co-dominant leaders	Included bark	Wound-stem	...
1018	Spruce-Norway	23	Dead branches >2	...	...	...	...
1019	Cedar-Atlas	11	Wound-stem	...	...	...	...
1020	Cedar-Atlas	13	Co-dominant leaders	Included bark	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1021	Cedar-Atlas	11	Girdling roots suspected	Wound-stem	Wound-branch	...	...
1022	Pine-Eastern White	24	Dead branches >2	Sweep	Wound-root flare	...	...
1023	Pine-Eastern White	28	Co-dominant leaders	Included bark	Dead branches >2	Girdling roots present	...
1024	Pine-Eastern White	24	Sweep	Girdling roots present	Dead branches >2	...	...
1025	Pine-Eastern White	26	Dead branches >2	Wound-root	...	...	...
1026	Oak- Black	26	Dead branches >2	Co-dominant leaders	...	...	...
1027	Oak- Black	36	Co-dominant leaders	Included bark	Dead branches >2	Overextended branch	Wound-branch
1028	Zelkova-Japanese	6	Co-dominant leaders	Included bark	Wound-stem	...	...
1029	Pine-Eastern White	24	Dead branches >2	Co-dominant leaders	...	...	...
1030	Pine-Eastern White	30	Dead branches >2	Co-dominant leaders	...	...	...
1034	Pine-Eastern White	13	Wound-stem	...	...	...	...
1035	Pine-Eastern White	16	Dead branches >2	...	...	...	...
1036	Oak-Pin	5	Wound-stem	...	...	...	...
1037	Pine-Eastern White	18	Wound-stem	Dead branches >2	...	...	...
1039	Pine-Eastern White	25	Dead branches >2	Overextended branch	...	...	...
1040	Pine-Eastern White	17	Dead branches >2	...	...	...	...
1041	Pine-Eastern White	22	Dead branches >2	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1042	Sweetgum	30	Dead branches >2	Co-dominant leaders	Wound-branch	...	...
1044	Purple Leaf Plum	9	Co-dominant leaders	Included bark	...	...	...
1046	Purple Leaf Plum	7	Co-dominant leaders	Included bark	...	...	...
1047	Zelkova-Japanese	8	Co-dominant leaders	Included bark	...	...	...
1048	Zelkova-Japanese	6	Co-dominant leaders	Included bark	Wound-stem	...	...
1050	Zelkova-Japanese	6	Wound-stem	...	...	...	...
1055	Maple-Norway	7	Co-dominant leaders	Included bark	Wound-stem	...	...
1056	Maple-Norway	7	Co-dominant leaders	Included bark	Wound-stem	Girdling roots suspected	...
1057	Maple-Norway	8	Co-dominant leaders	Girdling roots present	Wound-stem	...	...
1058	Maple-Norway	8	Co-dominant leaders	Included bark	...	...	...
1059	Maple-Norway	7	Wound-stem	...	...	...	...
1060	Maple-Norway	7	...	...	...	Wound-root flare	...
1061	Maple-Red	6	Co-dominant leaders	Included bark	Girdling roots present (moderate)	...	...
1062	Maple-Red	7	Wound-root flare	Girdling roots suspected	...	...	...
1063	Maple-Red	10	Wound-root	...	...	...	...
1065	Maple-Red	7	Co-dominant leaders	Included bark	...	...	...
1066	Maple-Red	7	Co-dominant leaders	Included bark	Girdling roots suspected	...	...
1067	Maple-Red	9	Co-dominant leaders	Included bark	Wound-stem	...	...
1068	Oak- Northern Red	56	Co-dominant leaders	Included bark	Wound-branch	Dead branches >2	...
1069	Linden-Littleleaf	11	Co-dominant leaders	Included bark	...	...	...
1070	Linden-Littleleaf	9	Wound-stem	...	...	...	...
1071	Linden-Littleleaf	9	Co-dominant leaders	Included bark	...	...	...
1072	Linden-Littleleaf	9	Co-dominant leaders	Included bark	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1073	Linden-Littleleaf	9	Co-dominant leaders	Included bark	...	...	...
1074	Linden-Littleleaf	10	Co-dominant leaders	Included bark	...	...	...
1075	Linden-Littleleaf	12	Co-dominant leaders	Included bark	Poor branch structure	Wound-branch	...
1076	Purple Leaf Plum	8	Lean	Cut roots	...	...	...
1077	Purple Leaf Plum	6	Wound-root flare	...	...	...	...
1078	Purple Leaf Plum	7	Lean	...	...	...	...
1079	Purple Leaf Plum	8	Cavity-root flare	...	...	...	...
1080	Purple Leaf Plum	8	Cavity-stem	...	...	...	...
1083	Purple Leaf Plum	8	Wound-branch	...	...	...	...
1084	Maple-Freeman's	16	Co-dominant leaders	Included bark	...	...	...
1087	Cherry	11	Crack-stem	...	...	...	...
1088	Elm	8	Girdling roots present (moderate)	...	...	...	...
1089	Elm	7	Co-dominant leaders	Included bark	Girdling roots present	...	...
1090	Elm	10	Co-dominant leaders	Included bark	...	...	...
1091	Crabapple	5	Wound-stem	...	...	...	...
1092	Elm	10	Co-dominant leaders	Included bark	...	...	...
1094	Crabapple	5	Wound-stem	...	...	...	...
1095	Elm	10	Wound-root	Girdling roots present (moderate)	Co-dominant leaders	Included bark	...
1097	Elm	7	Co-dominant leaders	Included bark	Girdling roots present (moderate)	...	...
1098	Oak-White	54	Dead branches >2	Co-dominant leaders	Included bark	Fungi/conks	Cavity-stem
1099	Pine-Eastern White	31	Dead branches >2	Overextended branch	Cavity-stem	Co-dominant leaders	...
1102	Maple-Red	7	Co-dominant leaders	Included bark	Wound-stem	Girdling roots present (moderate)	...
1103	Maple-Red	8	Co-dominant leaders	Included bark	Girdling roots present	Wound-stem	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1106	Spruce-White	11	Co-dominant leaders	Included bark	...	...	...
1107	Pine-Eastern White	48	Co-dominant leaders	Included bark	Wound-stem	Overextended branch	Dead branches >2
1108	Spruce-Norway	32	Co-dominant leaders	Included bark	Dead branches >2	Cavity-root flare	Wound-root flare
1109	Oak- Black	21	Co-dominant leaders	Included bark	Lean	Uneven crown	...
1110	Oak- Black	19	Hanger	Dead branches >2	Co-dominant leaders	Included bark	Wound-branch
1111	Linden-Littleleaf	11	Co-dominant leaders	Included bark	Poor branch structure	...	...
1112	Maple-Red	7	Wound-stem	Girdling roots present (moderate)	...	...	...
1113	Maple-Red	6	Co-dominant leaders	Included bark	Wound-stem	...	...
1114	Maple-Red	7	Co-dominant leaders	Included bark	Girdling roots present (severe)	...	...
1115	Pine-Eastern White	32	Hanger	Dead branches >2	Wound-stem	...	...
1116	Pine-Eastern White	22	Hanger	Dead branches >2	Wound-stem	...	...
1117	Pine-Eastern White	21	Co-dominant leaders	Included bark	Dead branches >2	...	...
1118	Oak- Northern Red	12	Co-dominant leaders	Included bark	...	...	...
1125	Linden-Littleleaf	11	Co-dominant leaders	Included bark	...	...	...
1126	Linden-Littleleaf	11	Wound-branch	...	...	...	...
1127	Linden-Littleleaf	10	Co-dominant leaders	Included bark	Wound-root	...	...
1128	Linden-Littleleaf	10	Co-dominant leaders	Included bark	Poor branch structure	...	...
1129	Oak- Northern Red	57	Co-dominant leaders	Included bark	Cavity-branch	Overextended branch	Dead branches >2
1130	Ash-White	8	Co-dominant leaders	...	...	...	...
1131	Ash-White	8	Co-dominant leaders	...	...	...	...
1132	Ash-White	8	Co-dominant leaders	...	...	...	...
1134	Ash-White	8	Co-dominant leaders	Included bark	...	...	...
1135	Hemlock-Canadian	27	Dead branches >2	Wound-stem	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1136	Linden-Littleleaf	15	Co-dominant leaders	Girdling roots present	...	...	...
1137	Zelkova-Japanese	14	Wound-root flare	...	...	...	...
1138	Spruce-Colorado Blue	17	Girdling roots suspected	Wound-stem	...	...	...
1142	Maple-Red	7	Co-dominant leaders	Girdling roots present (moderate)	...	...	...
1143	Maple-Red	6	Wound-root	Co-dominant leaders	...	...	...
1144	Maple-Red	7	Co-dominant leaders	Wound-root flare	...	...	...
1145	Weeping Cherry	7	Crack-stem	...	...	...	...
1149	Weeping Cherry	7	Burl	...	...	...	...
1151	Zelkova-Japanese	12	Co-dominant leaders	Included bark	...	...	...
1152	Zelkova-Japanese	11	Co-dominant leaders	Included bark	...	...	...
1153	Zelkova-Japanese	12	Co-dominant leaders	Included bark	Wound-root	...	...
1154	Birch-Paper	6	Girdling roots present	...	...	...	...
1157	Honeylocust-Thornless Common	11	Co-dominant leaders	...	...	...	...
1159	Honeylocust-Thornless Common	11	Co-dominant leaders	Overextended branch	...	...	...
1160	Honeylocust-Thornless Common	8	Co-dominant leaders	...	...	...	...
1161	Oak-English	13	Cavity-root flare	Cavity-stem	Poor branch structure	...	...
1162	Oak- Black	30	Dead branches >2	Overextended branch	...	...	...
1163	Ash-White	7	Co-dominant leaders	Wound-stem	...	...	...
1165	Maple-Norway	9	Wound-root	Wound-root flare	Poor branch structure	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1166	Maple-Norway	8	Co-dominant leaders	Included bark	...	...	...
1167	Oak- Northern Red	11	Co-dominant leaders	...	...	...	...
1168	Honeylocust- Thornless Common	10	Co-dominant leaders	...	...	...	...
1169	Purple Leaf Plum	7	Co-dominant leaders	...	...	...	...
1170	Honeylocust- Thornless Common	10	Co-dominant leaders	...	...	...	...
1171	Honeylocust- Thornless Common	9	Co-dominant leaders	...	...	...	...
1173	Zelkova-Japanese	14	Wound-root flare	Girdling roots present	...	...	...
1175	Zelkova-Japanese	15	Girdling roots present (moderate)	...	...	...	...
1177	Zelkova-Japanese	16	Girdling roots suspected	...	...	...	...
1178	Zelkova-Japanese	17	Girdling roots suspected	...	...	...	...
1180	Maple-Silver	32	Cavity-stem	Overextended branch	...	...	...
1181	Maple-Norway	19	Co-dominant leaders	Uneven crown	...	...	...
1182	Maple-Norway	23	Co-dominant leaders	Uneven crown	...	...	...
1183	Cherry	14	Overextended branch	...	...	...	...
1184	Maple-Norway	21	Crack-stem	Uneven crown	...	...	...
1185	Cherry	12	Overextended branch	...	...	...	...
1186	Maple-Silver	34	Cavity-stem	Co-dominant leaders	...	...	...
1187	Cherry	12	Overextended branch	...	...	...	...
1188	Cherry	11	Wound-root	Wound-branch	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1190	Oak- Black	27	Uneven crown	Overextended branch	...	...	...
1192	Maple-Norway	8	Girdling roots present (severe)	...	...	...	...
1193	Oak- Black	24	Construction damage	Uneven crown	...	...	...
1194	Maple-Silver	32	Overextended branch	...	...	...	...
1195	Oak- Black	41	Hanger	Dead branches >2	Co-dominant leaders	...	...
1196	Oak- Black	22	Co-dominant leaders	...	...	...	...
1198	Catalpa-Northern	26	Dead branches >2	...	...	...	...
1199	Hemlock-Canadian	20	Dead branches >2	...	...	...	...
1200	Pine-Austrian	20	Dead branches >2	Sweep	...	...	...
1201	Oak-White	26	Dead branches >2	Rib	...	...	...
1202	Oak-White	45	Dead branches >2	...	...	...	...
1203	Oak-White	34	Overextended branch	Dead branches >2	Poor branch structure	Wound-stem	...
1204	Oak- Black	21	Included bark	Co-dominant leaders	Dead branches >2	Overextended branch	...
1205	Oak- Black	21	Dead branches >2	Co-dominant leaders	Included bark	Hanger	...
1206	Maple-Japanese	6	Wound-branch	Co-dominant leaders	...	...	...
1208	Maple-Paperbark	3	Co-dominant stems	Co-dominant leaders	...	...	...
1209	Dogwood-Kousa	1	Poor branch structure	...	...	...	...
1210	Dogwood-Kousa	4	Poor branch structure	...	...	...	...
1211	Dogwood-Kousa	4	Poor branch structure	...	...	...	...
1212	Dogwood-Kousa	4	Poor branch structure	Wound-branch	...	...	...
1213	Cherry	5	Poor branch structure	Wound-branch	...	...	...
1214	Cherry	4	Poor branch structure	...	...	...	...
1215	Cherry	4	Poor branch structure	...	...	...	...
1216	Maple-Paperbark	4	Co-dominant stems	Poor branch structure	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1217	Cherry	5	Poor branch structure	...	...	...	...
1218	Cherry	4	Poor branch structure	...	...	...	...
1219	Cherry	5	Poor branch structure	...	...	...	...
1220	Cherry	4	Poor branch structure	...	...	...	...
1221	Cherry	4	Poor branch structure	Wound-stem	...	...	...
1239	Purple Leaf Plum	3	Poor branch structure	...	...	...	...
1241	Ash-White	5	Co-dominant leaders	Included bark	Poor branch structure	...	...
1242	Ash-White	4	Co-dominant leaders	Included bark	Poor branch structure	...	...
1243	Dogwood-Kousa	7	Dead branches <=2	Co-dominant leaders	...	...	...
1244	Birch-Paper	5	Co-dominant stems	Poor branch structure	...	...	...
1245	Dogwood-Kousa	5	Dead branches <=2	Poor branch structure	...	...	...
1246	Dogwood-Kousa	5	Poor branch structure	Co-dominant leaders	...	...	...
1247	Ash-White	3	Co-dominant leaders	Wound-branch	Wound-stem	...	...
1248	Ash-White	3	Poor branch structure	...	...	...	...
1249	Ash-White	3	Poor branch structure	Wound-stem	...	...	...
1250	Tuliptree	3	Co-dominant leaders	...	...	...	...
1251	Tuliptree	3	Co-dominant leaders	...	...	...	...
1252	Tuliptree	3	Co-dominant leaders	...	...	...	...
1253	Tuliptree	3	Co-dominant leaders	...	...	...	...
1254	Tuliptree	3	Co-dominant leaders	...	...	...	...
1255	Dogwood-Kousa	6	Co-dominant leaders	Included bark	...	...	...
1256	Dogwood-Kousa	6	Co-dominant leaders	Included bark	...	...	...
1257	Dogwood-Kousa	5	Co-dominant leaders	Included bark	...	...	...
1258	Maple-Paperbark	5	Co-dominant leaders	...	...	...	...
1259	Maple-Paperbark	8	Co-dominant leaders	...	...	...	...

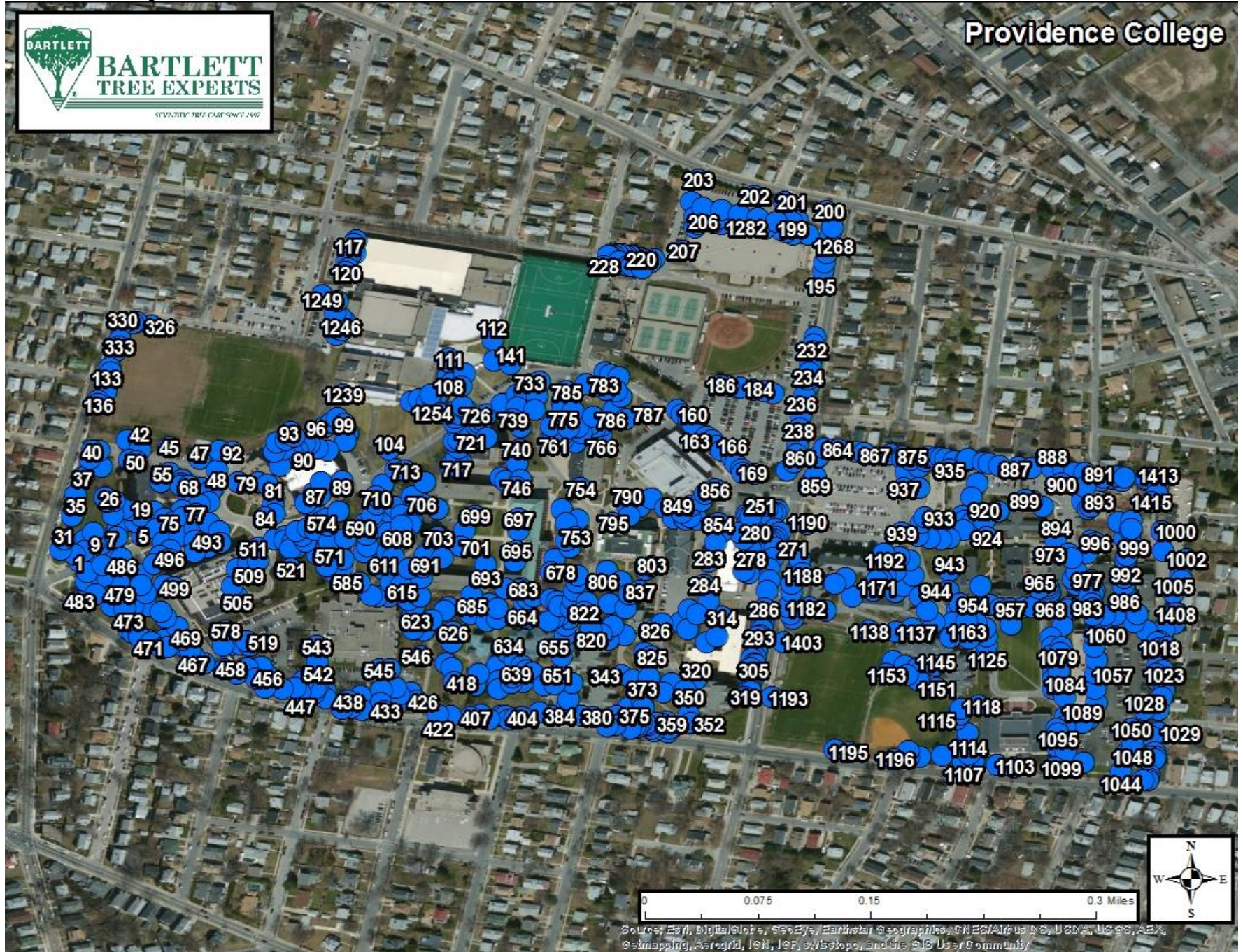
Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1260	Dogwood-Kousa	6	Co-dominant leaders	Included bark	...	...	...
1261	Maple-Paperbark	4	Co-dominant leaders	Included bark	...	...	...
1262	Ash-White	4	Storm damage	Wound-stem	...	...	...
1263	Ash-White	4	Topping/heading cuts	Wound-branch	Wound-stem	...	...
1264	Maple-Red	2	Co-dominant leaders	...	...	...	...
1265	Elm	3	Poor branch structure	...	...	...	...
1266	Elm	3	Co-dominant leaders	Included bark	...	...	...
1267	Elm	3	Co-dominant leaders	Included bark	...	...	...
1268	Elm	3	Co-dominant leaders	Included bark	...	...	...
1269	Elm	3	Co-dominant leaders	Included bark	...	...	...
1270	Elm	3	Co-dominant leaders	Included bark	...	...	...
1271	Maple-Sugar	4	Co-dominant leaders	Included bark	Wound-branch	...	...
1276	Cedar-Atlas	3	Wound-stem	...	...	...	...
1277	Lilac-Japanese Tree	3	Poor branch structure	...	...	...	...
1278	Lilac-Japanese Tree	3	Poor branch structure	...	...	...	...
1279	Lilac-Japanese Tree	3	Poor branch structure	...	...	...	...
1280	Lilac-Japanese Tree	3	Poor branch structure	...	...	...	...
1281	Lilac-Japanese Tree	3	Poor branch structure	...	...	...	...
1282	Lilac-Japanese Tree	3	Poor branch structure	Wound-stem	...	...	...
1283	Lilac-Japanese Tree	4	Poor branch structure	...	...	...	...
1284	Lilac-Japanese Tree	2	Poor branch structure	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1289	Crabapple	2	Poor branch structure	...	...	...	...
1290	Crabapple	2	Poor branch structure	...	...	...	...
1291	Lilac-Japanese Tree	3	Girdling roots present	Poor branch structure	...	...	...
1292	Dogwood-Kousa	4	Poor branch structure	...	...	...	...
1293	Dogwood-Kousa	3	Poor branch structure	Wound-branch	...	...	...
1294	Dogwood-Kousa	4	Dead branches >2	Poor branch structure	...	...	...
1296	Crabapple	1	Poor branch structure	...	...	...	...
1297	Elm-Chinese	3	Poor branch structure	...	...	...	...
1298	Elm-Chinese	3	Poor branch structure	...	...	...	...
1299	Elm-Chinese	3	Poor branch structure	...	...	...	...
1300	Elm-Chinese	3	Dead branches >2	...	...	...	...
1301	Elm-Chinese	4	Poor branch structure	...	...	...	...
1309	Pine-Eastern White	8	Topping/heading cuts	Construction damage	Poor branch structure	...	...
1310	Pine-Eastern White	7	Topping/heading cuts	Construction damage	Poor branch structure	...	...
1311	Pine-Eastern White	9	Construction damage	Planting material	...	...	...
1312	Maple-Sugar	5	Co-dominant leaders	Included bark	...	...	...
1313	Maple-Sugar	4	Poor branch structure	...	...	...	...
1314	Dogwood-Flowering	8	Co-dominant leaders	Included bark	Dead branches >2	Girdling roots present	...
1315	Maple-Norway	28	Hanger	Cavity-stem	Cavity-branch	Dead branches >2	Co-dominant leaders
1316	Maple-Norway	4	Co-dominant leaders	Included bark	Poor branch structure	...	...
1403	Maple-Norway	24	Cavity-stem	Uneven crown	Construction damage	...	...
1406	Magnolia-Star	2	...	Wound-stem	...	...	...
1407	Pine-Scotch	16	Uneven crown	Dead branches <=2	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1408	Maple-Norway	10	Wound-stem	...	...	...	...
1409	Arborvitae-Eastern (23)	2	Co-dominant stems	...	...	...	...
1410	Oak- Black	18	Co-dominant leaders	Hanger	Dead branches >2	Lean	...
1411	Arborvitae-Eastern	18	Uneven crown	Dead branches <=2	...	...	...
1412	Pine-Austrian	19	Co-dominant leaders	Dead branches >2	Uneven crown	...	...
1413	Oak- Black	21	Lean	Dead branches >2	Co-dominant leaders	...	...
1414	Mulberry-White	14	Co-dominant leaders	Included bark	Lean	...	...
1415	Mulberry-White	14	Co-dominant leaders	Wound-stem	...	...	...
1416	Boxelder	15	Lean	Wound-stem	Co-dominant leaders	...	...
1417	Maple-Norway	11	Dead branches >2	Co-dominant leaders	Included bark	Rib	Lean
1418	Catalpa-Northern	17	Co-dominant leaders	Wound-stem	Wound-branch	...	...
1419	Cherry	6	Poor branch structure	...	...	...	...
1420	Magnolia-Star	2	Co-dominant stems	...	...	...	...
1421	Magnolia-Star	2	Co-dominant stems	...	...	...	...
1422	Pondcypress	12	Uneven crown	...	...	...	...
1423	Redbud-Eastern	1	Planting material	...	...	...	...
1426	Ash-Green	3	Poor branch structure	...	...	...	...
1427	Pine-Eastern White	2	Co-dominant leaders	...	...	...	...
1428	Hornbeam-American	3	Poor branch structure	Planting material	...	...	...
1429	Hawthorn	3	Uneven crown	Planting material	...	...	...
1430	Tuliptree	3	Co-dominant leaders	Seam	...	...	...
1432	Pine-Eastern White	2	Planting material	...	...	...	...
1433	Pine-Eastern White	2	Planting material	...	...	...	...

Tree ID	Common Name	DBH	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation	Defect or Observation
1436	Pear-Callery	4	Poor branch structure	...	...	...	...
1437	Pear-Callery	3	Poor branch structure	...	...	...	...
1438	Pear-Callery	3	Poor branch structure	...	...	...	...
1439	Pear-Callery	6	Poor branch structure	...	...	...	...
1440	Pear-Callery	6	Poor branch structure	...	...	...	...
1441	Pear-Callery	6	Poor branch structure	...	...	...	...
1442	Pear-Callery	5	Poor branch structure	...	...	...	...
1443	Pear-Callery	5	Poor branch structure	...	...	...	...
1454	Maple-Japanese	10	Wound-stem	Co-dominant stems	Wound-branch	...	...
1456	Hemlock-Canadian	4	Co-dominant stems	...	...	...	...

Map 17: INVENTORIED TREES WITH DEFECTS, OBSERVATIONS, OR OTHER STRUCTURAL ISSUES



ENTIRE INVENTORY



ENTIRE INVENTORY

Table 22: ENTIRE INVENTORY

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	9	Medium	Semi-mature	15	Good	2	\$1,744.77
2	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	14	Medium	Semi-mature	15	Fair	2	\$3,015.66
3	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	14	Medium	Semi-mature	20	Fair	2	\$3,015.66
5	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	10	Medium	Semi-mature	15	Fair	2	\$1,538.60
7	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	15	Medium	Mature	15	Fair	2	\$3,709.12
8	Cherry	<i>Prunus</i>	sp.	16	Medium	Mature	20	Fair	1	\$3,938.82
9	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	15	Medium	Mature	20	Fair	2	\$3,709.12
10	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	14	Medium	Mature	20	Fair	2	\$3,231.06
11	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	8	Medium	Semi-mature	8	Fair	2	\$984.70
12	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	18	Large	Mature	15	Fair	1	\$5,341.14
13	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	19	Large	Mature	20	Fair	1	\$5,951.08
14	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	22	Large	Mature	15	Fair	1	\$7,978.74
15	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	23	Large	Mature	15	Fair	1	\$8,720.57
17	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Medium	Semi-mature	10	Good	2	\$830.84
18	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	9	Medium	Mature	15	Fair	2	\$1,335.28
19	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	11	Medium	Mature	10	Fair	2	\$1,994.69
20	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	17	Large	Mature	15	Poor	1	\$2,041.78
21	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	31	Large	Mature	20	Poor	1	\$9,316.00
22	Fir-Douglas	<i>Pseudotsuga</i>	<i>menziesii</i>	8	Medium	Semi-mature	8	Fair	2	\$1,195.71
23	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	25	Large	Mature	15	Fair	1	\$10,303.12
24	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	23	Large	Mature	15	Fair	2	\$8,720.56
25	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	17	Large	Mature	15	Fair	2	\$4,764.16
26	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	19	Large	Mature	15	Fair	2	\$5,951.08

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
28	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	30	Large	Mature	25	Fair	1	\$9,184.50
29	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	20	Large	Mature	20	Fair	1	\$5,714.80
30	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	18	Large	Mature	10	Fair	2	\$5,341.14
31	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	26	Large	Mature	15	Fair	1	\$11,143.86
32	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	5	Medium	Young	8	Good	...	\$576.98
33	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	29	Large	Mature	20	Fair	2	\$13,863.88
34	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	5	Medium	Young	4	Good	...	\$576.98
35	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	21	Large	Mature	10	Fair	1	\$7,269.88
36	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	5	Medium	Young	4	Good	...	\$576.98
37	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	14	Large	Mature	10	Fair	2	\$3,231.06
38	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	4	Medium	Young	4	Good	...	\$369.26
39	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	19	Large	Mature	15	Fair	2	\$5,951.08
40	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	21	Large	Mature	25	Fair	1	\$6,300.57
41	Oak- Black	<i>Quercus</i>	<i>velutina</i>	30	Large	Mature	20	Fair	1	\$13,423.50
42	Oak- Black	<i>Quercus</i>	<i>velutina</i>	31	Large	Mature	25	Fair	1	\$14,047.93
43	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	22	Large	Mature	15	Fair	2	\$4,939.22
45	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	44	Large	Mature	40	Good	1	\$31,264.63
47	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	27	Large	Young	25	Fair	1	\$7,439.44
48	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	18	Large	Mature	15	Fair	2	\$3,815.10
49	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Semi-mature	15	Fair	1	\$3,856.71
50	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	16	Large	Mature	20	Fair	1	\$3,416.32
51	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	3	Medium	Young	4	Fair	...	\$105.98
52	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	4	Medium	Semi-mature	10	Good	...	\$221.56
53	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	5	Medium	Semi-mature	8	Fair	3	\$176.62
54	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Medium	Semi-mature	10	Fair	3	\$254.34
55	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	8	Medium	Semi-mature	10	Fair	1	\$653.12
56	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	19	Large	Mature	20	Fair	1	\$4,817.54

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
57	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Semi-mature	15	Fair	3	\$3,856.71
58	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Medium	Semi-mature	8	Good	3	\$830.84
59	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Medium	Semi-mature	10	Fair	3	\$294.38
60	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Medium	Semi-mature	10	Fair	2	\$423.90
61	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	22	Large	Mature	15	Fair	1	\$5,699.10
62	Elm-Slippery	<i>Ulmus</i>	<i>rubra</i>	24	Large	Mature	20	Fair	1	\$4,973.76
63	Crabapple	<i>Malus</i>	sp.	6	Medium	Mature	20	Fair	2	\$2,061.72
64	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	17	Large	Mature	20	Fair	1	\$4,764.16
67	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	13	Large	Semi-mature	10	Fair	2	\$2,785.97
68	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	27	Large	Mature	15	Good	2	\$16,824.59
69	Sourwood	<i>Oxydendrum</i>	<i>arboreum</i>	7	Medium	Semi-mature	8	Fair	2	\$653.90
70	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	16	Medium	Mature	15	Fair	2	\$4,220.16
72	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	21	Large	Mature	15	Good	1	\$7,269.88
73	Crabapple	<i>Malus</i>	sp.	12	Medium	Semi-mature	15	Fair	2	\$2,215.58
74	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	15	Medium	Semi-mature	20	Fair	1	\$2,472.75
75	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	17	Medium	Semi-mature	15	Fair	2	\$3,176.11
76	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	15	Medium	Semi-mature	20	Fair	2	\$2,472.75
77	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	17	Medium	Semi-mature	20	Fair	1	\$3,176.11
78	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	6	Small	Semi-mature	6	Good	2	\$1,052.40
79	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	7	Medium	Semi-mature	10	Fair	2	\$346.18
80	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	12	Medium	Semi-mature	10	Fair	2	\$1,017.36
81	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	11	Medium	Mature	15	Fair	2	\$854.86
82	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	5	Medium	Semi-mature	8	Poor	2	\$105.98
83	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	8	Medium	Semi-mature	10	Fair	2	\$452.16
84	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	5	Small	Semi-mature	6	Fair	3	\$522.02
85	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	9	Medium	Semi-mature	10	Good	2	\$1,335.28
86	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	11	Medium	Mature	15	Good	2	\$1,994.69

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
87	Mimosa	<i>Albizia</i>	<i>julibrissin</i>	21	Large	Mature	30	Fair	1	\$6,785.23
88	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	18	Large	Mature	20	Good	3	\$6,979.09
89	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	5	Medium	Young	8	Good	3	\$653.90
90	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	8	Medium	Mature	10	Good	2	\$7,659.15
91	Oak- Black	<i>Quercus</i>	<i>velutina</i>	30	Large	Mature	35	Fair	1	\$13,423.50
92	Oak- Black	<i>Quercus</i>	<i>velutina</i>	37	Large	Mature	30	Fair	1	\$19,351.21
93	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	53	Large	Mature	30	Fair	1	\$27,963.04
96	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	22	Large	Mature	30	Fair	1	\$4,939.22
97	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	10	Large	Semi-mature	10	Fair	2	\$1,648.50
98	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	10	Large	Semi-mature	15	Fair	1	\$1,428.70
99	Cherry	<i>Prunus</i>	sp.	23	Medium	Semi-mature	20	Fair	1	\$8,139.19
100	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	27	Large	Mature	35	Fair	1	\$10,415.22
101	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	20	Medium	Mature	15	Fair	1	\$4,396.00
104	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	12	Medium	Semi-mature	15	Fair	2	\$2,057.33
105	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	39	Large	Mature	40	Fair	1	\$18,804.80
107	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	10	Medium	Semi-mature	15	Fair	2	\$1,020.50
108	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	29	Large	Mature	30	Fair	1	\$12,015.37
109	Cherry	<i>Prunus</i>	sp.	7	Medium	Semi-mature	10	Fair	3	\$538.51
110	Cherry	<i>Prunus</i>	sp.	6	Medium	Semi-mature	6	Fair	3	\$395.64
111	Cherry	<i>Prunus</i>	sp.	10	Medium	Semi-mature	8	Fair	2	\$1,099.00
112	Cherry	<i>Prunus</i>	sp.	6	Medium	Semi-mature	8	Fair	2	\$395.64
113	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	8	Fair	2	\$254.34
114	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	8	Fair	2	\$254.34
115	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	8	Fair	2	\$254.34
116	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	8	Fair	2	\$254.34
117	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	8	Fair	2	\$254.34
118	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	8	Fair	...	\$254.34

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
119	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	8	Fair	2	\$254.34
120	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	8	Fair	2	\$346.18
124	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	3	Small	Young	4	Good	3	\$235.41
129	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	22	Large	Mature	30	Fair	1	\$6,458.98
131	Elm-American	<i>Ulmus</i>	<i>americana</i>	24	Large	Mature	30	Fair	1	\$4,973.76
132	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	34	Large	Mature	25	Fair	2	\$14,992.98
133	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	26	Large	Mature	25	Fair	2	\$9,021.22
134	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	48	Large	Mature	40	Fair	2	\$24,948.52
135	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	19	Large	Semi-mature	25	Fair	2	\$4,817.54
136	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	14	Large	Semi-mature	25	Fair	2	\$1,384.74
140	Ash-White	<i>Fraxinus</i>	<i>americana</i>	6	Medium	Young	4	Fair	2	\$310.86
141	Ash-White	<i>Fraxinus</i>	<i>americana</i>	4	Medium	Young	4	Poor	3	\$82.90
142	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	11	Large	Semi-mature	15	Fair	2	\$1,614.74
143	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	13	Large	Semi-mature	15	Fair	2	\$2,255.30
144	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	12	Large	Semi-mature	15	Good	1	\$2,690.35
145	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	10	Large	Semi-mature	15	Good	...	\$1,868.30
157	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	20	Large	Semi-mature	20	Fair	1	\$5,338.00
158	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	12	Large	Semi-mature	15	Fair	1	\$1,921.68
159	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	14	Large	Semi-mature	15	Fair	2	\$2,615.62
160	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	15	Large	Semi-mature	20	Fair	2	\$3,002.62
162	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	15	Large	Semi-mature	15	Fair	2	\$3,002.62
163	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	16	Large	Semi-mature	15	Fair	...	\$3,416.32
164	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	9	Large	Semi-mature	15	Fair	2	\$1,080.94
165	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	15	Large	Semi-mature	15	Fair	1	\$3,002.62
166	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	13	Large	Semi-mature	20	Fair	1	\$2,255.30
167	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	15	Large	Semi-mature	15	Fair	2	\$3,002.62
168	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	19	Large	Semi-mature	15	Fair	2	\$4,817.54

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
169	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	15	Large	Semi-mature	20	Good	2	\$4,203.67
180	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	7	Medium	Semi-mature	8	Fair	3	\$484.66
181	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Semi-mature	10	Poor	1	\$307.75
182	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Semi-mature	10	Fair	1	\$423.90
183	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Semi-mature	10	Fair	1	\$512.92
184	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Semi-mature	10	Fair	1	\$512.92
185	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Semi-mature	10	Fair	1	\$423.90
186	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	15	Medium	Mature	8	Fair	1	\$953.78
187	Spruce-White	<i>Picea</i>	<i>glauca</i>	8	Medium	Semi-mature	15	Fair	...	\$1,055.04
188	Spruce-White	<i>Picea</i>	<i>glauca</i>	8	Medium	Semi-mature	10	Fair	...	\$1,055.04
189	Spruce-White	<i>Picea</i>	<i>glauca</i>	11	Medium	Semi-mature	15	Fair	...	\$1,994.69
190	Spruce-White	<i>Picea</i>	<i>glauca</i>	11	Medium	Semi-mature	15	Fair	...	\$1,994.69
195	Holly-American (8)	<i>Ilex</i>	<i>opaca</i>	12	Medium	Semi-mature	15	Good	...	\$42,046.86
198	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	14	Medium	Semi-mature	15	Fair	2	\$2,000.18
199	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	14	Medium	Semi-mature	20	Fair	2	\$2,000.18
200	Arborvitae-Eastern (15)	<i>Thuja</i>	<i>occidentalis</i>	10	Medium	Semi-mature	6	Fair	2	\$20,017.50
201	Arborvitae-Eastern (15)	<i>Thuja</i>	<i>occidentalis</i>	10	Medium	Semi-mature	6	Fair	2	\$20,017.50
202	Arborvitae-Eastern (15)	<i>Thuja</i>	<i>occidentalis</i>	10	Medium	Semi-mature	6	Fair	3	\$20,017.50
203	Arborvitae-Eastern (15)	<i>Thuja</i>	<i>occidentalis</i>	10	Medium	Semi-mature	6	Fair	2	\$20,017.50
204	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	12	Medium	Semi-mature	10	Fair	2	\$2,057.33
205	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	15	Medium	Semi-mature	15	Fair	1	\$3,214.58
206	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	12	Medium	Semi-mature	20	Fair	2	\$2,057.33
207	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	6	Medium	Semi-mature	10	Fair	1	\$1,294.46
208	Cherry-Black	<i>Prunus</i>	<i>serotina</i>	19	Large	Mature	20	Poor	1	\$1,530.28
209	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Semi-mature	20	Fair	2	\$3,002.62
210	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	11	Large	Semi-mature	8	Fair	2	\$1,614.74
211	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	26	Large	Mature	30	Fair	1	\$9,021.22

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
212	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	8	Large	Semi-mature	8	Fair	2	\$854.08
213	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Semi-mature	20	Fair	2	\$3,856.71
214	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	12	Large	Semi-mature	15	Fair	1	\$1,921.68
215	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	14	Large	Semi-mature	20	Fair	2	\$2,615.62
216	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Semi-mature	15	Fair	1	\$3,002.62
217	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	16	Large	Semi-mature	20	Fair	2	\$3,416.32
218	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	8	Large	Semi-mature	6	Fair	2	\$854.08
219	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	12	Large	Semi-mature	15	Fair	2	\$1,921.68
220	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	5	Medium	Semi-mature	8	Poor	2	\$200.18
221	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Semi-mature	25	Fair	1	\$3,002.62
222	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	12	Large	Semi-mature	8	Poor	2	\$1,153.01
223	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Semi-mature	25	Fair	1	\$3,856.71
224	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Semi-mature	20	Fair	1	\$3,856.71
225	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	13	Large	Semi-mature	15	Fair	2	\$2,255.30
226	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Semi-mature	20	Fair	2	\$3,856.71
227	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	27	Large	Mature	20	Poor	1	\$4,463.67
228	Arborvitae-Eastern (50)	<i>Thuja</i>	<i>occidentalis</i>	4	Medium	Semi-mature	6	Fair	3	\$10,676.00
229	Elm	<i>Ulmus</i>	sp.	9	Medium	Semi-mature	10	Fair	2	\$890.19
230	Elm	<i>Ulmus</i>	sp.	8	Medium	Semi-mature	10	Fair	2	\$703.36
231	Elm	<i>Ulmus</i>	sp.	7	Medium	Semi-mature	10	Fair	2	\$538.51
232	Elm	<i>Ulmus</i>	sp.	7	Medium	Semi-mature	10	Fair	2	\$538.51
233	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	5	Medium	Semi-mature	10	Fair	1	\$333.62
234	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	5	Medium	Semi-mature	10	Fair	1	\$333.62
235	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	6	Medium	Semi-mature	10	Fair	1	\$480.42
236	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Semi-mature	10	Fair	2	\$480.42
237	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	5	Medium	Semi-mature	8	Poor	2	\$200.18
238	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Semi-mature	10	Fair	2	\$480.42

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
239	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Semi-mature	10	Fair	2	\$480.42
240	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Semi-mature	10	Fair	1	\$480.42
241	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Semi-mature	10	Fair	2	\$480.42
246	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	7	Medium	Semi-mature	15	Fair	2	\$484.66
247	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	10	Medium	Semi-mature	15	Fair	2	\$706.50
248	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	9	Medium	Semi-mature	15	Fair	2	\$572.26
249	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Medium	Semi-mature	15	Fair	2	\$356.08
250	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	15	Large	Mature	25	Fair	1	\$1,589.62
251	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	15	Large	Mature	25	Fair	1	\$1,589.62
252	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	12	Medium	Semi-mature	15	Fair	2	\$2,373.84
253	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	10	Medium	Semi-mature	20	Fair	2	\$3,297.00
254	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	10	Medium	Mature	20	Fair	2	\$4,632.29
255	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	17	Large	Mature	15	Poor	1	\$2,667.93
256	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	16	Large	Mature	15	Poor	2	\$2,363.29
257	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	13	Large	Mature	15	Poor	2	\$1,560.14
258	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	15	Large	Mature	10	Poor	2	\$2,077.11
259	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	16	Large	Mature	15	Good	...	\$5,514.34
260	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	16	Large	Mature	15	Fair	...	\$3,938.82
261	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	14	Large	Mature	15	Fair	1	\$3,015.66
262	Poplar-Lombardy	<i>Populus</i>	<i>nigra</i>	18	Large	Mature	20	Good	...	\$4,985.06
263	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	5	Medium	Semi-mature	6	Fair	2	\$333.62
264	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	16	Large	Mature	20	Fair	2	\$3,416.32
265	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	13	Large	Mature	20	Fair	3	\$2,255.30
266	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	14	Large	Mature	15	Fair	3	\$2,615.62
267	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	10	Large	Mature	15	Fair	3	\$1,334.50
268	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	14	Large	Mature	15	Fair	3	\$2,615.62
269	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	14	Large	Mature	15	Fair	1	\$2,370.07

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
270	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	13	Large	Semi-mature	15	Fair	2	\$2,255.30
271	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	13	Medium	Semi-mature	20	Fair	1	\$1,857.31
272	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	12	Medium	Semi-mature	20	Fair	1	\$1,582.56
273	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	14	Medium	Semi-mature	20	Fair	2	\$2,154.04
274	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	14	Medium	Semi-mature	20	Fair	2	\$2,154.04
275	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	11	Medium	Semi-mature	20	Fair	2	\$1,329.79
276	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	7	Medium	Semi-mature	10	Poor	1	\$207.71
277	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	7	Medium	Mature	15	Fair	1	\$1,577.85
278	Crabapple	<i>Malus</i>	sp.	12	Medium	Mature	15	Fair	2	\$949.54
279	Crabapple	<i>Malus</i>	sp.	9	Medium	Semi-mature	15	Fair	2	\$534.11
280	Crabapple	<i>Malus</i>	sp.	5	Medium	Semi-mature	8	Fair	2	\$164.85
281	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	29	Large	Mature	35	Fair	1	\$6,733.89
282	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	15	Large	Mature	15	Fair	3	\$2,296.12
283	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	20	Large	Mature	25	Fair	2	\$6,594.00
284	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	35	Large	Mature	30	Fair	1	\$17,634.38
285	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	15	Large	Mature	25	Fair	1	\$4,592.25
286	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	23	Large	Mature	15	Fair	1	\$5,398.44
287	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	15	Large	Mature	10	Fair	2	\$2,472.75
288	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	19	Large	Mature	20	Fair	2	\$3,967.39
289	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	17	Large	Mature	20	Fair	2	\$3,176.11

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
290	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	12	Large	Mature	15	Fair	2	\$1,582.56
291	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	20	Large	Mature	20	Fair	2	\$4,396.00
292	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	20	Large	Mature	15	Fair	1	\$4,396.00
293	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	20	Fair	1	\$4,500.40
294	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	19	Large	Mature	15	Fair	1	\$3,967.39
295	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	20	Large	Mature	20	Fair	2	\$4,396.00
296	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	17	Large	Mature	20	Fair	2	\$3,176.11
297	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	17	Large	Mature	10	Good	...	\$4,446.55
298	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	15	Large	Mature	20	Fair	1	\$2,472.75
299	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	15	Large	Mature	15	Fair	2	\$2,472.75
300	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	18	Large	Mature	20	Fair	1	\$3,560.76
301	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	13	Large	Mature	15	Fair	2	\$1,857.31
302	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	23	Large	Mature	20	Fair	1	\$4,567.92
303	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	21	Large	Mature	20	Fair	1	\$4,846.59
304	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	15	Large	Mature	20	Fair	1	\$2,472.75
305	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	17	Large	Mature	20	Fair	1	\$3,176.11
309	Spruce-Norway	<i>Picea</i>	<i>abies</i>	12	Medium	Semi-mature	15	Fair	2	\$1,921.68

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
310	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	14	Large	Semi-mature	15	Poor	1	\$1,200.11
311	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	50	Large	Over-mature	40	Fair	1	\$36,663.90
312	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	12	Medium	Mature	20	Fair	2	\$1,017.36
313	Maple-Red	<i>Acer</i>	<i>rubrum</i>	18	Large	Mature	20	Poor	1	\$2,289.06
314	Maple-Red	<i>Acer</i>	<i>rubrum</i>	20	Large	Mature	20	Fair	1	\$4,710.00
315	Oak- Black	<i>Quercus</i>	<i>velutina</i>	30	Large	Mature	30	Fair	1	\$13,423.50
316	Oak- Black	<i>Quercus</i>	<i>velutina</i>	21	Large	Mature	20	Fair	1	\$6,577.52
317	Oak- Black	<i>Quercus</i>	<i>velutina</i>	15	Medium	Semi-mature	15	Fair	1	\$3,355.88
318	Oak- Black	<i>Quercus</i>	<i>velutina</i>	24	Medium	Mature	25	Fair	1	\$8,591.04
319	Oak- Black	<i>Quercus</i>	<i>velutina</i>	24	Large	Mature	25	Fair	1	\$8,591.04
320	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	20	Poor	1	\$1,620.15
326	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	17	Large	Mature	20	Fair	1	\$2,949.25
327	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	17	Large	Mature	25	Fair	1	\$2,949.25
328	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	15	Large	Semi-mature	15	Fair	1	\$2,296.12
329	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	13	Large	Semi-mature	15	Fair	1	\$1,724.64
330	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Semi-mature	20	Fair	2	\$3,306.42
332	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	15	Large	Semi-mature	20	Fair	2	\$3,214.58
333	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	20	Fair	2	\$4,628.99
343	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	7	Medium	Mature	15	Fair	2	\$522.81
344	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	29	Large	Over-mature	25	Poor	1	\$4,515.67
345	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	25	Large	Mature	25	Fair	1	\$6,378.12
346	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	20	Large	Mature	30	Fair	1	\$4,082.00
347	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	22	Large	Mature	25	Fair	1	\$4,939.22
349	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	26	Large	Mature	30	Poor	1	\$4,139.15
350	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	30	Large	Mature	35	Fair	1	\$12,010.50
351	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	25	Fair	1	\$4,500.40
352	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	25	Large	Mature	25	Poor	1	\$2,296.12

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
353	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	19	Large	Mature	10	Fair	2	\$4,250.77
354	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	21	Large	Mature	20	Fair	2	\$5,885.14
355	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	15	Large	Mature	8	Fair	2	\$2,649.38
356	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	16	Large	Semi-mature	8	Fair	3	\$3,014.40
357	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	12	Large	Semi-mature	6	Fair	3	\$1,695.60
358	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	19	Large	Mature	20	Fair	1	\$3,684.00
359	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	15	Large	Semi-mature	8	Fair	3	\$2,649.38
360	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	16	Large	Semi-mature	10	Fair	2	\$3,014.40
362	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	15	Large	Semi-mature	8	Fair	3	\$2,649.38
363	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	16	Large	Semi-mature	10	Fair	3	\$3,014.40
364	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	14	Large	Semi-mature	6	Fair	2	\$2,307.90
365	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	16	Large	Semi-mature	10	Fair	1	\$3,014.40
366	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Semi-mature	30	Fair	1	\$4,500.40
367	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	13	Large	Semi-mature	8	Poor	2	\$1,193.98
368	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	14	Large	Semi-mature	8	Poor	2	\$1,384.74
369	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	9	Large	Semi-mature	6	Fair	3	\$953.78
370	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	17	Large	Semi-mature	20	Fair	2	\$2,949.25
372	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	25	Large	Mature	20	Fair	1	\$7,555.62
373	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	30	Large	Mature	25	Fair	1	\$10,880.10
374	Catalpa	<i>Catalpa</i>	sp.	25	Large	Mature	25	Fair	1	\$9,616.25
375	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Large	Mature	25	Fair	1	\$5,878.08
376	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	17	Large	Mature	8	Fair	1	\$3,402.98
377	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	25	Fair	2	\$3,306.42
379	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	22	Large	Mature	25	Good	2	\$12,659.60
380	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	22	Large	Mature	25	Fair	1	\$6,458.98
381	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	24	Large	Mature	30	Fair	1	\$7,686.72
382	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	22	Large	Mature	30	Fair	1	\$6,765.92

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
383	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	24	Large	Mature	25	Good	3	\$6,456.84
384	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	12	Large	Semi-mature	8	Fair	3	\$1,695.60
385	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	36	Large	Mature	40	Fair	1	\$23,172.63
392	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	15	Medium	Semi-mature	15	Fair	2	\$2,296.12
394	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	26	Large	Semi-mature	25	Fair	1	\$5,412.73
395	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	23	Large	Mature	20	Good	...	\$12,208.79
396	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	8	Medium	Mature	15	Fair	2	\$880.30
397	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	20	Large	Mature	20	Fair	1	\$4,710.00
398	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Medium	Young	6	Fair	2	\$412.12
399	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	4	Medium	Young	4	Fair	2	\$298.93
400	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	19	Large	Mature	20	Fair	1	\$4,817.54
401	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	25	Large	Mature	35	Fair	1	\$8,340.62
402	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	29	Large	Mature	25	Fair	2	\$11,223.14
403	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	22	Large	Mature	20	Fair	2	\$9,042.57
404	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	27	Large	Mature	20	Fair	1	\$13,619.91
405	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	7	Medium	Young	8	Fair	2	\$500.04
406	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	35	Large	Mature	45	Fair	1	\$15,778.12
407	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	31	Large	Mature	35	Fair	1	\$12,569.21
412	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	4	Medium	Young	4	Fair	2	\$228.59
413	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	21	Large	Semi-mature	25	Fair	1	\$5,885.14
415	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	31	Large	Over-mature	30	Fair	2	\$9,611.75
416	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	33	Large	Mature	35	Fair	1	\$14,196.45
418	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	38	Large	Over-mature	40	Fair	2	\$28,266.76
421	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	10	Medium	Semi-mature	10	Fair	2	\$1,020.50
422	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	29	Large	Mature	35	Fair	1	\$11,223.14
425	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	20	Large	Mature	10	Fair	1	\$6,594.00
426	Elm	<i>Ulmus</i>	sp.	9	Medium	Semi-mature	15	Fair	2	\$1,246.27

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
427	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	17	Large	Mature	20	Good	...	\$6,669.83
428	Oak-White	<i>Quercus</i>	<i>alba</i>	31	Large	Mature	35	Fair	1	\$19,667.11
429	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	13	Medium	Semi-mature	20	Fair	2	\$2,414.50
430	Oak-White	<i>Quercus</i>	<i>alba</i>	28	Large	Mature	25	Fair	2	\$11,693.36
431	Oak-White	<i>Quercus</i>	<i>alba</i>	33	Large	Mature	30	Fair	1	\$15,866.62
432	Oak-White	<i>Quercus</i>	<i>alba</i>	24	Large	Mature	25	Fair	2	\$12,027.46
433	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	16	Large	Semi-mature	20	Fair	1	\$2,612.48
434	Oak-White	<i>Quercus</i>	<i>alba</i>	30	Large	Mature	35	Fair	1	\$18,792.90
435	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	22	Large	Semi-mature	30	Fair	1	\$4,939.22
436	Oak-White	<i>Quercus</i>	<i>alba</i>	36	Large	Mature	30	Fair	1	\$18,499.16
437	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	30	Large	Mature	35	Fair	1	\$7,206.30
438	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	21	Large	Mature	10	Fair	2	\$7,269.88
441	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	19	Large	Semi-mature	20	Fair	1	\$5,157.61
442	Oak - Scarlet	<i>Quercus</i>	<i>coccinea</i>	33	Large	Mature	25	Fair	1	\$14,196.45
443	Oak-White	<i>Quercus</i>	<i>alba</i>	33	Large	Mature	30	Fair	1	\$22,213.26
444	Oak-White	<i>Quercus</i>	<i>alba</i>	29	Large	Mature	25	Fair	1	\$12,543.51
445	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Semi-mature	20	Fair	2	\$3,306.42
446	Oak-White	<i>Quercus</i>	<i>alba</i>	38	Large	Mature	30	Fair	1	\$20,190.54
447	Oak-White	<i>Quercus</i>	<i>alba</i>	32	Large	Mature	40	Fair	1	\$20,949.10
448	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	19	Large	Semi-mature	25	Fair	1	\$5,157.61
451	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	28	Large	Mature	20	Fair	1	\$11,201.01
452	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	16	Large	Semi-mature	20	Fair	2	\$2,612.48
453	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	29	Large	Mature	35	Fair	1	\$8,582.41
454	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	13	Large	Semi-mature	6	Poor	1	\$1,671.58
455	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	28	Large	Mature	30	Fair	1	\$11,201.01
456	Maple-Red	<i>Acer</i>	<i>rubrum</i>	24	Large	Mature	25	Fair	1	\$9,495.36
457	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	26	Large	Mature	20	Poor	1	\$5,794.81

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
458	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	22	Large	Mature	20	Good	1	\$9,680.87
459	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Small	Young	4	Fair	2	\$158.26
460	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	3	Small	Young	4	Fair	2	\$89.02
461	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	3	Small	Young	4	Fair	2	\$89.02
462	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	3	Small	Young	4	Fair	2	\$89.02
466	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	14	Large	Semi-mature	15	Fair	1	\$6,017.02
467	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	20	Large	Semi-mature	15	Fair	1	\$4,082.00
468	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	33	Large	Mature	20	Fair	1	\$10,856.11
469	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	14	Large	Semi-mature	10	Fair	1	\$2,307.90
470	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	32	Large	Mature	35	Poor	1	\$8,600.16
471	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	13	Large	Semi-mature	8	Good	3	\$3,900.35
472	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	37	Large	Over-mature	30	Poor	1	\$7,944.18
473	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	7	Medium	Young	8	Fair	3	\$915.47
474	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	35	Large	Over-mature	40	Poor	1	\$10,135.12
475	Spruce-Norway	<i>Picea</i>	<i>abies</i>	22	Large	Mature	25	Fair	...	\$9,042.57
476	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	23	Large	Mature	15	Good	...	\$8,720.57
477	Maple-Red	<i>Acer</i>	<i>rubrum</i>	33	Large	Mature	35	Poor	1	\$7,515.77
479	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	9	Medium	Semi-mature	8	Fair	3	\$801.17
480	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	17	Medium	Mature	15	Fair	3	\$4,764.16
481	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	25	Large	Mature	15	Fair	2	\$10,303.12
482	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	37	Large	Mature	35	Poor	1	\$11,121.86
483	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	39	Large	Mature	40	Poor	1	\$8,628.09
484	Crimson King Maple	<i>Acer</i>	<i>platanoides</i>	9	Medium	Semi-mature	8	Fair	1	\$890.19
485	Crimson King Maple	<i>Acer</i>	<i>platanoides</i>	13	Medium	Semi-mature	15	Poor	1	\$1,114.39
486	Crimson King Maple	<i>Acer</i>	<i>platanoides</i>	14	Medium	Semi-mature	15	Fair	2	\$2,154.04
488	Crimson King Maple	<i>Acer</i>	<i>platanoides</i>	22	Large	Mature	25	Fair	2	\$5,319.16
489	Crimson King Maple	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	25	Fair	1	\$4,846.59

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
490	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	24	Large	Mature	25	Fair	1	\$6,330.24
491	Crimson King Maple	<i>Acer</i>	<i>platanooides</i>	24	Large	Mature	25	Fair	1	\$6,330.24
492	Cherry	<i>Prunus</i>	sp.	30	Medium	Mature	25	Poor	1	\$8,308.44
493	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	28	Medium	Mature	25	Fair	1	\$16,370.70
494	Cherry	<i>Prunus</i>	sp.	29	Medium	Mature	25	Fair	1	\$12,939.63
495	Cherry	<i>Prunus</i>	sp.	15	Medium	Semi-mature	15	Poor	1	\$2,077.11
496	Crabapple	<i>Malus</i>	sp.	14	Medium	Mature	15	Fair	2	\$3,015.66
497	Crabapple	<i>Malus</i>	sp.	30	Medium	Mature	25	Poor	1	\$5,934.60
498	Maple-Red	<i>Acer</i>	<i>rubrum</i>	22	Large	Mature	15	Fair	2	\$5,699.10
499	Maple-Red	<i>Acer</i>	<i>rubrum</i>	32	Large	Mature	15	Fair	1	\$11,813.40
505	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	10	Medium	Semi-mature	15	Good	2	\$2,154.04
506	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	11	Medium	Semi-mature	15	Good	1	\$2,606.39
508	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	10	Medium	Mature	15	Good	2	\$5,746.67
509	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	19	Medium	Over-mature	20	Fair	1	\$3,570.65
510	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	19	Medium	Over-mature	20	Poor	2	\$2,142.39
511	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	11	Medium	Mature	15	Good	1	\$2,792.56
512	Crabapple	<i>Malus</i>	sp.	14	Medium	Mature	15	Good	2	\$9,930.12
513	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Small	Mature	6	Good	3	\$830.84
514	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	18	Large	Mature	20	Good	2	\$5,483.57
515	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	10	Good	2	\$1,218.57
516	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	10	Good	3	\$720.06
517	Fir-White	<i>Abies</i>	<i>concolor</i>	19	Large	Mature	15	Good	3	\$9,442.39
519	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	4	Small	Semi-mature	6	Good	3	\$221.56
521	Oak-White	<i>Quercus</i>	<i>alba</i>	40	Large	Mature	35	Good	1	\$42,788.76
524	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	4	Small	Semi-mature	6	Good	3	\$221.56

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
526	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	4	Small	Semi-mature	6	Good	3	\$221.56
542	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	34	Large	Mature	30	Good	1	\$32,843.45
543	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	14	Medium	Mature	10	Poor	3	\$2,096.89
544	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	25	Fair	1	\$6,300.57
545	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	19	Large	Mature	20	Fair	1	\$5,157.61
546	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	27	Large	Mature	25	Good	1	\$21,311.15
548	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	40	Large	Mature	25	Fair	1	\$30,563.40
549	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	10	Fair	3	\$514.33
550	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	10	Fair	...	\$603.35
551	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	8	Small	Mature	10	Fair	...	\$633.02
552	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	30	Large	Mature	30	Good	1	\$23,540.58
553	Cherry	<i>Prunus</i>	sp.	14	Medium	Mature	10	Poor	1	\$1,809.39
554	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	16	Medium	Mature	10	Poor	1	\$2,532.10
555	Cherry	<i>Prunus</i>	sp.	7	Medium	Semi-mature	10	Good	2	\$1,055.48
556	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	11	Large	Mature	20	Fair	1	\$3,643.19
557	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	10	Large	Mature	15	Fair	1	\$3,791.55
558	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Medium	Mature	15	Fair	2	\$850.63
559	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	20	Large	Mature	15	Poor	1	\$3,428.88
560	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	20	Fair	1	\$6,300.57
561	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	27	Large	Mature	25	Fair	1	\$10,415.22
562	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	26	Large	Mature	25	Fair	1	\$9,658.01
563	Oak- Black	<i>Quercus</i>	<i>velutina</i>	45	Large	Mature	35	Fair	1	\$35,993.12
564	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	7	Small	Mature	10	Good	2	\$678.52
565	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	8	Good	...	\$498.51
566	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	5	Small	Mature	10	Good	3	\$941.62
567	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	10	Good	3	\$1,343.20
568	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	8	Small	Mature	10	Good	3	\$3,741.88

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
569	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	10	Good	2	\$1,093.94
570	Fir-White	<i>Abies</i>	<i>concolor</i>	21	Large	Mature	15	Fair	1	\$8,239.20
571	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	25	Fair	1	\$6,300.57
573	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	17	Large	Mature	15	Fair	2	\$4,764.16
574	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	12	Medium	Mature	15	Fair	2	\$1,780.38
575	Crabapple	<i>Malus</i>	sp.	6	Medium	Mature	15	Fair	2	\$2,215.58
576	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	25	Fair	1	\$6,300.57
578	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	5	Medium	Mature	10	Good	2	\$2,455.61
579	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	6	Small	Mature	10	Fair	...	\$1,607.84
583	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	23	Large	Mature	20	Fair	1	\$7,557.82
585	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	21	Large	Mature	25	Fair	1	\$6,300.57
587	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	26	Large	Mature	30	Fair	1	\$9,658.01
588	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	28	Large	Mature	35	Fair	1	\$11,201.01
589	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	23	Large	Mature	30	Poor	1	\$4,534.69
590	Yew	<i>Taxus</i>	sp.	11	Small	Mature	15	Good	...	\$8,573.08
591	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	7	Medium	Semi-mature	10	Good	2	\$980.09
592	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	25	Large	Mature	30	Poor	1	\$5,357.62
593	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	23	Large	Mature	25	Fair	1	\$7,557.82
594	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	4	Small	Semi-mature	10	Good	...	\$1,198.57
597	Oak-White	<i>Quercus</i>	<i>alba</i>	40	Large	Mature	35	Fair	1	\$30,563.40
598	Oak-White	<i>Quercus</i>	<i>alba</i>	34	Large	Mature	30	Good	2	\$32,843.45
602	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	15	Large	Mature	15	Fair	2	\$3,709.12
603	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	16	Large	Mature	15	Fair	2	\$4,220.16
604	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	23	Large	Mature	15	Fair	2	\$8,720.57
606	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	15	Large	Mature	15	Fair	3	\$3,709.12
607	Oak-White	<i>Quercus</i>	<i>alba</i>	38	Large	Mature	35	Good	1	\$39,573.46
608	Oak-White	<i>Quercus</i>	<i>alba</i>	38	Large	Mature	35	Good	2	\$39,573.46

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
609	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Large	Mature	25	Fair	1	\$8,229.31
610	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	20	Large	Mature	15	Fair	3	\$6,594.00
611	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	18	Large	Mature	15	Fair	3	\$5,341.14
612	Oak- Black	<i>Quercus</i>	<i>velutina</i>	30	Large	Mature	30	Fair	1	\$18,792.90
613	Oak- Black	<i>Quercus</i>	<i>velutina</i>	39	Large	Mature	30	Good	1	\$41,193.59
614	Oak-White	<i>Quercus</i>	<i>alba</i>	34	Large	Mature	35	Good	1	\$63,942.01
615	Oak- Black	<i>Quercus</i>	<i>velutina</i>	36	Large	Mature	35	Fair	1	\$25,898.82
616	Cherry	<i>Prunus</i>	<i>sp.</i>	7	Small	Semi-mature	10	Good	2	\$1,055.48
617	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	17	Large	Mature	20	Fair	1	\$4,128.94
618	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	14	Large	Mature	15	Fair	2	\$2,800.25
619	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	17	Large	Mature	20	Fair	2	\$4,128.94
620	Cherry	<i>Prunus</i>	<i>sp.</i>	7	Small	Semi-mature	10	Good	2	\$1,055.48
621	Oak-White	<i>Quercus</i>	<i>alba</i>	42	Large	Mature	35	Good	1	\$45,904.26
622	Oak-White	<i>Quercus</i>	<i>alba</i>	42	Large	Mature	35	Good	1	\$45,904.26
623	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	34	Large	Mature	35	Fair	1	\$16,051.31
625	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	5	Small	Mature	8	Good	3	\$470.81
626	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Mature	8	Good	3	\$720.06
628	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	20	Large	Mature	25	Fair	1	\$5,714.80
629	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Small	Semi-mature	8	Good	2	\$498.51
630	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	11	Large	Semi-mature	15	Fair	1	\$1,728.73
631	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	12	Large	Semi-mature	15	Fair	1	\$2,057.33
632	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	9	Medium	Semi-mature	10	Fair	1	\$1,157.25
633	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	12	Medium	Semi-mature	15	Fair	1	\$2,057.33
634	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	11	Medium	Semi-mature	15	Fair	1	\$1,728.73
635	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	11	Medium	Semi-mature	15	Fair	1	\$1,728.73
636	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	10	Medium	Semi-mature	10	Fair	1	\$1,428.70
637	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	6	Medium	Mature	10	Good	2	\$775.45

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
638	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	7	Medium	Mature	10	Good	2	\$1,055.48
639	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	7	Small	Mature	10	Fair	2	\$753.91
640	Crabapple	<i>Malus</i>	sp.	6	Small	Semi-mature	8	Good	2	\$775.45
641	Crabapple	<i>Malus</i>	sp.	8	Small	Mature	10	Good	2	\$1,378.59
642	Crabapple	<i>Malus</i>	sp.	7	Small	Mature	10	Good	2	\$1,055.48
643	Crabapple	<i>Malus</i>	sp.	6	Small	Semi-mature	8	Good	2	\$775.45
644	Crabapple	<i>Malus</i>	sp.	9	Small	Mature	10	Good	2	\$1,744.77
645	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	12	Medium	Semi-mature	15	Fair	1	\$2,057.33
646	Crabapple	<i>Malus</i>	sp.	6	Small	Semi-mature	8	Good	2	\$775.45
647	Crabapple	<i>Malus</i>	sp.	6	Small	Semi-mature	8	Good	2	\$775.45
648	Crabapple	<i>Malus</i>	sp.	6	Small	Semi-mature	8	Good	2	\$775.45
649	Crabapple	<i>Malus</i>	sp.	7	Small	Mature	10	Good	2	\$1,055.48
650	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	12	Medium	Semi-mature	15	Fair	1	\$2,057.33
651	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	12	Medium	Semi-mature	15	Fair	1	\$2,057.33
652	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	3	Small	Young	4	Good	3	\$193.86
653	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	3	Small	Young	4	Good	3	\$193.86
654	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	10	Medium	Semi-mature	10	Fair	1	\$1,428.70
655	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	11	Medium	Semi-mature	10	Fair	1	\$1,728.73
656	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	9	Medium	Semi-mature	10	Poor	2	\$694.35
657	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	10	Medium	Semi-mature	10	Fair	2	\$1,428.70
658	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	10	Medium	Semi-mature	10	Fair	1	\$1,428.70
659	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	8	Fair	2	\$633.02
660	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	8	Fair	2	\$633.02
661	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	8	Fair	2	\$801.17
662	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	10	Fair	2	\$801.17
663	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	10	Fair	2	\$633.02
664	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	8	Fair	2	\$484.66

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
665	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	10	Fair	2	\$801.17
666	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Semi-mature	8	Fair	2	\$989.10
667	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	8	Fair	2	\$801.17
668	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Semi-mature	10	Fair	2	\$989.10
669	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	8	Fair	2	\$801.17
670	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	8	Fair	2	\$801.17
671	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	9	Medium	Semi-mature	10	Fair	1	\$1,157.25
672	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	9	Large	Semi-mature	15	Fair	1	\$1,157.25
673	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	11	Large	Semi-mature	15	Fair	1	\$1,728.73
674	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	21	Large	Mature	20	Fair	1	\$6,300.57
675	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	17	Large	Mature	20	Fair	1	\$4,128.94
677	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	33	Large	Mature	30	Fair	1	\$22,213.26
678	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	17	Large	Mature	20	Fair	1	\$4,764.16
680	Dogwood-Corneliancherry	<i>Cornus</i>	<i>mas</i>	4	Small	Semi-mature	6	Good	2	\$369.26
681	Dogwood-Corneliancherry	<i>Cornus</i>	<i>mas</i>	4	Small	Semi-mature	6	Good	3	\$369.26
682	Cherry	<i>Prunus</i>	sp.	6	Small	Semi-mature	6	Good	2	\$775.45
683	Cherry	<i>Prunus</i>	sp.	5	Small	Semi-mature	6	Good	2	\$538.51
685	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Young	10	Good	3	\$941.62
686	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Young	10	Good	3	\$941.62
687	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	6	Medium	Young	10	Good	2	\$941.62
688	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	5	Medium	Young	10	Good	3	\$653.90
689	Cherry	<i>Prunus</i>	sp.	6	Small	Semi-mature	10	Good	2	\$775.45
690	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	14	Large	Mature	15	Fair	1	\$2,800.25
691	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	21	Large	Mature	15	Fair	1	\$6,300.57
692	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	24	Large	Mature	25	Fair	2	\$8,229.31
693	Oak-White	<i>Quercus</i>	<i>alba</i>	32	Large	Mature	35	Good	1	\$29,328.73

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
694	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	5	Medium	Young	8	Good	2	\$538.51
695	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	5	Medium	Young	10	Good	3	\$538.51
696	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	6	Medium	Young	10	Good	2	\$775.45
697	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	5	Medium	Young	10	Good	2	\$538.51
698	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	8	Good	3	\$369.26
699	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	45	Large	Mature	30	Good	1	\$50,390.38
700	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	5	Medium	Young	8	Good	2	\$538.51
701	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	5	Medium	Young	10	Good	2	\$538.51
702	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Small	Young	6	Good	3	\$369.26
703	Falsecypress-Sawara (11)	<i>Chamaecyparis</i>	<i>pisifera</i>	12	Large	Mature	15	Fair	1	\$22,630.61
704	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	8	Good	3	\$369.26
705	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	28	Large	Mature	25	Good	2	\$22,918.99
706	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	20	Fair	1	\$4,628.99
707	Oak-White	<i>Quercus</i>	<i>alba</i>	46	Large	Mature	30	Fair	1	\$37,025.61
710	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	7	Medium	Mature	15	Good	2	\$2,864.87
711	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	39	Large	Mature	40	Fair	1	\$29,423.99
712	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Large	Mature	20	Fair	2	\$8,229.31
713	Cherry	<i>Prunus</i>	sp.	13	Medium	Mature	15	Fair	2	\$6,446.73
714	Oak- Black	<i>Quercus</i>	<i>velutina</i>	43	Large	Mature	30	Good	1	\$47,424.58
716	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	16	Large	Mature	20	Fair	1	\$3,657.47
717	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Large	Mature	25	Fair	1	\$8,229.31
718	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	20	Large	Mature	25	Fair	1	\$5,714.80
719	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	26	Large	Mature	25	Fair	1	\$9,658.01

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
720	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	25	Poor	1	\$2,777.39
721	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	45	Large	Mature	35	Poor	1	\$21,595.88
722	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	24	Large	Mature	30	Fair	1	\$12,027.46
723	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	19	Large	Mature	20	Poor	1	\$4,522.82
724	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	24	Large	Mature	25	Good	1	\$16,838.44
725	Oak- Black	<i>Quercus</i>	<i>velutina</i>	27	Large	Mature	30	Good	1	\$21,311.15
726	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	10	Good	2	\$369.26
727	Maple-Red	<i>Acer</i>	<i>rubrum</i>	5	Medium	Young	10	Good	3	\$576.98
728	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	10	Good	2	\$830.84
729	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	10	Good	2	\$830.84
730	Maple-Red	<i>Acer</i>	<i>rubrum</i>	5	Medium	Young	10	Poor	1	\$247.28
731	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	10	Good	2	\$830.84
732	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	10	Good	2	\$830.84
733	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	10	Good	2	\$830.84
734	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	7	Medium	Mature	10	Good	3	\$1,130.87
735	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	8	Small	Mature	8	Fair	2	\$1,055.04
736	Oak- Black	<i>Quercus</i>	<i>velutina</i>	32	Large	Mature	30	Good	1	\$29,328.73
737	Oak- Black	<i>Quercus</i>	<i>velutina</i>	51	Large	Mature	35	Good	1	\$58,688.94
738	Oak- Black	<i>Quercus</i>	<i>velutina</i>	37	Large	Mature	30	Good	1	\$37,928.38
739	Hornbeam-European	<i>Carpinus</i>	<i>betulus</i>	6	Small	Semi-mature	6	Poor	2	\$403.55
740	Oak-White	<i>Quercus</i>	<i>alba</i>	37	Large	Mature	40	Good	1	\$37,928.38
741	Oak- Black	<i>Quercus</i>	<i>velutina</i>	48	Large	Mature	40	Fair	1	\$39,037.10
742	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	9	Medium	Semi-mature	10	Good	3	\$1,869.40
743	Crabapple	<i>Malus</i>	sp.	7	Small	Mature	8	Fair	3	\$753.91
744	Crabapple	<i>Malus</i>	sp.	5	Small	Mature	10	Good	3	\$1,658.61
745	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	28	Large	Mature	25	Good	1	\$22,918.99
746	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	16	Large	Mature	10	Fair	1	\$4,220.16

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
747	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	17	Large	Mature	20	Good	2	\$6,225.18
748	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	18	Large	Mature	20	Good	3	\$7,477.60
749	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	18	Large	Mature	20	Good	2	\$9,471.62
750	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	20	Large	Mature	20	Good	2	\$11,693.36
751	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	16	Large	Mature	15	Fair	2	\$4,220.16
752	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	18	Large	Mature	20	Fair	1	\$6,765.44
753	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	17	Large	Mature	20	Fair	1	\$6,034.61
754	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	10	Medium	Mature	15	Good	2	\$5,654.36
755	Crabapple	<i>Malus</i>	sp.	12	Small	Mature	15	Good	3	\$3,101.82
756	Oak- Black	<i>Quercus</i>	<i>velutina</i>	27	Large	Mature	30	Fair	1	\$28,272.87
757	Oak-White	<i>Quercus</i>	<i>alba</i>	17	Large	Mature	20	Good	2	\$8,448.45
758	Oak-White	<i>Quercus</i>	<i>alba</i>	19	Large	Mature	30	Good	1	\$10,553.26
759	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	22	Large	Mature	25	Good	1	\$14,148.97
760	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	22	Large	Mature	30	Fair	1	\$10,106.40
761	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	24	Large	Mature	30	Good	2	\$16,838.44
762	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	20	Large	Mature	30	Fair	1	\$8,352.40
763	Oak- Black	<i>Quercus</i>	<i>velutina</i>	35	Large	Mature	35	Fair	1	\$24,688.12
764	Oak- Black	<i>Quercus</i>	<i>velutina</i>	32	Large	Mature	35	Fair	1	\$20,949.10
765	Oak- Black	<i>Quercus</i>	<i>velutina</i>	32	Large	Mature	30	Fair	3	\$20,949.10
766	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	33	Large	Mature	35	Fair	1	\$22,213.26
767	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	20	Poor	3	\$1,002.95
768	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	15	Fair	3	\$1,196.81
769	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	15	Fair	3	\$1,196.81
770	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	15	Fair	1	\$1,196.81
771	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	12	Medium	Mature	15	Fair	2	\$1,424.30
772	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	15	Fair	2	\$801.17

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
773	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	25	Large	Mature	25	Fair	1	\$8,929.38
774	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	16	Large	Mature	20	Fair	1	\$3,657.47
775	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	15	Large	Mature	20	Fair	2	\$3,214.58
776	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	16	Large	Mature	20	Fair	2	\$3,657.47
777	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	20	Fair	2	\$4,628.99
778	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	20	Fair	2	\$4,628.99
779	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	19	Large	Mature	25	Fair	1	\$5,157.61
780	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	16	Large	Mature	20	Fair	2	\$3,657.47
781	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	10	Medium	Semi-mature	15	Fair	2	\$1,428.70
782	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	10	Medium	Semi-mature	15	Fair	2	\$1,428.70
783	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	17	Large	Mature	20	Fair	1	\$4,128.94
785	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	22	Large	Mature	25	Fair	2	\$6,914.91
786	Tree of Heaven	<i>Ailanthus</i>	<i>altissima</i>	25	Large	Mature	25	Poor	1	\$1,236.38
787	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	32	Medium	Mature	20	Good	2	\$29,328.73
790	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	25	Fair	1	\$4,628.99
791	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	19	Large	Mature	25	Fair	2	\$5,157.61
792	Maple-Sycamore	<i>Acer</i>	<i>pseudoplatanus</i>	19	Large	Mature	25	Fair	2	\$5,157.61
793	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	28	Large	Mature	30	Fair	2	\$11,201.01
794	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	28	Large	Mature	25	Fair	1	\$11,201.01
795	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Large	Mature	20	Fair	2	\$4,628.99
796	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	15	Large	Mature	15	Good	3	\$4,500.40
799	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	4	Small	Semi-mature	4	Good	...	\$320.03
800	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	28	Large	Mature	25	Fair	1	\$11,201.01
801	Cherry	<i>Prunus</i>	sp.	9	Medium	Mature	10	Good	2	\$1,744.77
802	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	30	Large	Mature	25	Fair	1	\$16,814.70
803	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	19	Large	Mature	25	Good	1	\$9,442.39
804	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	5	Medium	Young	8	Good	3	\$576.98

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
805	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	4	Medium	Young	8	Good	3	\$369.26
806	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	9	Small	Mature	8	Good	2	\$1,869.40
807	Crabapple	<i>Malus</i>	sp.	14	Medium	Mature	15	Fair	2	\$3,015.66
808	Cherry	<i>Prunus</i>	sp.	15	Medium	Mature	15	Good	1	\$4,846.59
809	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	4	Small	Mature	6	Good	2	\$1,038.56
810	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	4	Small	Semi-mature	6	Good	2	\$344.65
811	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	6	Small	Mature	4	Good	3	\$1,052.40
812	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	4	Small	Mature	4	Good	3	\$467.73
813	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	13	Medium	Mature	20	Good	2	\$9,000.81
814	Spruce-Norway (3)	<i>Picea</i>	<i>abies</i>	5	Small	Mature	6	Good	2	\$1,961.72
815	Cherry	<i>Prunus</i>	sp.	7	Medium	Mature	15	Good	2	\$2,606.39
816	Cherry	<i>Prunus</i>	sp.	6	Medium	Mature	15	Good	3	\$1,852.47
817	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	19	Large	Mature	20	Good	2	\$17,501.58
818	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	17	Large	Mature	20	Good	2	\$10,900.98
819	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	23	Large	Mature	20	Good	1	\$10,580.95
820	Cherry	<i>Prunus</i>	sp.	7	Medium	Mature	15	Good	3	\$2,369.44
821	Cherry	<i>Prunus</i>	sp.	9	Medium	Mature	15	Good	2	\$2,864.87
822	Cherry	<i>Prunus</i>	sp.	7	Medium	Mature	15	Good	2	\$2,563.31
823	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	10	Medium	Mature	15	Good	2	\$8,419.22
824	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	9	Small	Mature	10	Good	3	\$2,367.91
825	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	9	Medium	Mature	10	Good	3	\$1,869.40
826	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	12	Large	Semi-mature	10	Fair	1	\$2,215.58
828	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	4	Medium	Young	8	Good	3	\$369.26
829	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	5	Medium	Young	8	Good	3	\$576.98
830	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
831	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
832	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
833	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
834	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
835	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
836	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
837	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
838	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
839	Oak-English	<i>Quercus</i>	<i>robur</i>	5	Medium	Semi-mature	4	Good	3	\$653.90
840	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	5	Small	Young	4	Good	3	\$730.84
842	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	8	Medium	Mature	10	Good	2	\$1,674.00
843	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	8	Medium	Mature	10	Fair	2	\$1,195.71
844	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	7	Medium	Mature	10	Good	2	\$1,281.65
845	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	7	Medium	Mature	10	Good	2	\$1,281.65
846	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	8	Medium	Mature	10	Fair	2	\$1,195.71
847	Beech-European	<i>Fagus</i>	<i>sylvatica</i>	18	Large	Mature	15	Fair	1	\$6,765.44
848	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	14	Large	Mature	25	Fair	1	\$3,231.06
849	Maple-Red	<i>Acer</i>	<i>rubrum</i>	17	Large	Mature	25	Fair	1	\$4,764.16
850	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	5	Small	Semi-mature	8	Good	2	\$576.98
851	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	6	Small	Mature	6	Good	3	\$1,052.40
852	Cherry	<i>Prunus</i>	sp.	23	Medium	Mature	15	Fair	1	\$8,139.19
853	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	15	Large	Mature	10	Good	2	\$5,192.77
854	Oak- Black	<i>Quercus</i>	<i>velutina</i>	31	Large	Mature	40	Good	1	\$27,533.95
855	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	13	Medium	Mature	10	Poor	2	\$1,002.95
856	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	9	Medium	Mature	15	Fair	2	\$801.17
857	Oak- Black	<i>Quercus</i>	<i>velutina</i>	16	Large	Mature	20	Fair	2	\$5,345.54
858	Oak- Black	<i>Quercus</i>	<i>velutina</i>	17	Large	Mature	25	Fair	2	\$6,034.61
859	Oak- Black	<i>Quercus</i>	<i>velutina</i>	17	Large	Mature	25	Fair	1	\$12,069.22
860	Oak- Black	<i>Quercus</i>	<i>velutina</i>	25	Large	Mature	25	Good	2	\$18,270.88

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
861	Oak- Black	<i>Quercus</i>	<i>velutina</i>	16	Large	Mature	20	Fair	2	\$5,345.54
862	Oak- Black	<i>Quercus</i>	<i>velutina</i>	33	Large	Mature	30	Fair	2	\$22,213.26
863	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	26	Large	Mature	30	Good	1	\$17,681.59
864	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Large	Mature	25	Fair	1	\$8,229.31
865	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	15	Medium	Semi-mature	15	Fair	3	\$3,214.58
866	Oak- Black	<i>Quercus</i>	<i>velutina</i>	29	Large	Mature	30	Fair	1	\$17,560.92
867	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	19	Large	Mature	25	Fair	3	\$6,744.56
868	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	26	Large	Mature	20	Good	2	\$17,681.59
869	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	23	Large	Mature	20	Fair	1	\$9,883.31
870	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	23	Large	Mature	25	Fair	1	\$7,557.82
871	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	9	Medium	Semi-mature	15	Good	2	\$1,620.15
872	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	23	Large	Mature	20	Fair	3	\$7,557.82
873	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	24	Large	Mature	25	Fair	3	\$8,229.31
874	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	12	Medium	Semi-mature	10	Poor	3	\$1,234.40
875	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	26	Large	Mature	25	Poor	2	\$5,794.81
876	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	21	Large	Mature	20	Poor	2	\$3,780.34
877	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	26	Large	Mature	30	Fair	2	\$9,658.01
878	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	24	Large	Mature	25	Fair	1	\$10,761.41
879	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	30	Large	Mature	30	Fair	1	\$16,814.70
880	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	22	Large	Mature	25	Fair	2	\$9,042.57
881	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	20	Large	Mature	25	Fair	2	\$7,473.20
882	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	27	Large	Mature	25	Fair	1	\$13,619.91
883	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	24	Large	Mature	25	Fair	1	\$10,761.41
884	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	21	Large	Mature	25	Good	2	\$11,534.88
885	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	31	Large	Mature	30	Fair	1	\$17,596.89
886	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	28	Large	Mature	25	Good	2	\$20,506.46
887	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	17	Large	Mature	15	Poor	3	\$3,239.63

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
888	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	29	Large	Mature	25	Good	2	\$21,997.36
889	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	29	Large	Mature	25	Fair	1	\$15,712.40
890	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	27	Large	Mature	25	Fair	2	\$13,619.91
891	Oak- Black	<i>Quercus</i>	<i>velutina</i>	34	Large	Mature	35	Good	2	\$32,843.45
892	Ash-White	<i>Fraxinus</i>	<i>americana</i>	7	Medium	Young	10	Good	3	\$829.31
893	Ash-White	<i>Fraxinus</i>	<i>americana</i>	5	Medium	Young	10	Fair	2	\$302.22
894	Horsechestnut-Common	<i>Aesculus</i>	<i>hippocastanum</i>	26	Large	Mature	30	Fair	2	\$9,658.01
895	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	18	Large	Mature	15	Poor	2	\$3,204.68
896	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	13	Medium	Mature	10	Fair	1	\$3,114.57
897	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	14	Medium	Mature	10	Fair	2	\$2,800.25
898	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	8	Medium	Semi-mature	10	Good	3	\$1,280.12
899	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	22	Large	Mature	15	Fair	1	\$6,914.91
900	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	8	Medium	Semi-mature	15	Good	2	\$1,378.59
901	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	8	Medium	Semi-mature	15	Good	2	\$1,378.59
902	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	4	Medium	Young	15	Good	2	\$344.65
903	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	5	Medium	Young	15	Good	2	\$538.51
904	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	8	Medium	Semi-mature	15	Good	2	\$1,378.59
905	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	6	Medium	Semi-mature	15	Good	2	\$775.45
906	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	8	Medium	Semi-mature	15	Fair	2	\$914.37
907	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	11	Medium	Semi-mature	15	Good	2	\$3,537.24
908	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	8	Medium	Semi-mature	8	Good	...	\$1,280.12
909	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	9	Medium	Semi-mature	8	Good	...	\$1,620.15
910	Spruce-Norway	<i>Picea</i>	<i>abies</i>	29	Large	Mature	20	Good	2	\$21,997.36

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
911	Western Redcedar (3)	<i>Thuja</i>	<i>plicata</i>	6	Small	Semi-mature	4	Good	...	\$4,786.58
912	Pine-Eastern White (7)	<i>Pinus</i>	<i>strobus</i>	6	Medium	Semi-mature	6	Fair	2	\$4,708.12
913	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	14	Medium	Semi-mature	8	Fair	2	\$2,615.62
914	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	11	Medium	Semi-mature	8	Good	2	\$3,164.90
915	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	9	Medium	Semi-mature	8	Good	2	\$2,118.65
916	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	10	Medium	Semi-mature	8	Good	2	\$2,615.62
917	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	14	Medium	Semi-mature	8	Fair	2	\$3,661.87
918	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	12	Large	Semi-mature	10	Good	2	\$3,323.38
919	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	17	Medium	Mature	15	Good	1	\$4,001.90
920	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	15	Medium	Mature	15	Fair	1	\$2,225.48
921	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	4	Small	Mature	6	Good	2	\$467.73
922	Hemlock-Canadian (3)	<i>Tsuga</i>	<i>canadensis</i>	5	Medium	Semi-mature	6	Poor	2	\$1,748.73
923	Birch-Gray	<i>Betula</i>	<i>populifolia</i>	12	Medium	Semi-mature	10	Fair	2	\$1,107.79
924	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	14	Medium	Semi-mature	15	Good	2	\$3,920.35
925	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Small	Mature	6	Good	...	\$1,453.98
926	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Small	Mature	6	Good	2	\$830.84
927	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	15	Fair	1	\$633.02
928	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	10	Fair	1	\$484.66
929	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	7	Small	Mature	6	Fair	3	\$484.66
930	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	17	Small	Mature	15	Good	2	\$6,225.18
931	Cherry	<i>Prunus</i>	sp.	5	Small	Semi-mature	6	Good	3	\$538.51
932	Cherry	<i>Prunus</i>	sp.	13	Small	Mature	15	Good	2	\$3,640.33
933	Cherry	<i>Prunus</i>	sp.	14	Small	Mature	15	Good	2	\$4,221.92
934	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	22	Large	Mature	20	Fair	1	\$6,914.91
935	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	16	Large	Mature	20	Fair	1	\$3,657.47
937	Cherry	<i>Prunus</i>	sp.	8	Small	Semi-mature	8	Good	3	\$1,378.59
938	Cherry	<i>Prunus</i>	sp.	9	Small	Semi-mature	8	Good	3	\$1,744.77

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
939	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	9	Medium	Semi-mature	10	Fair	2	\$1,246.27
940	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	8	Good	3	\$1,130.87
941	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	8	Medium	Semi-mature	10	Good	3	\$1,477.06
942	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	8	Medium	Semi-mature	10	Good	3	\$1,477.06
943	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	4	Small	Semi-mature	6	Poor	1	\$147.71
944	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	5	Small	Semi-mature	6	Fair	3	\$384.65
945	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	8	Medium	Semi-mature	10	Good	3	\$1,477.06
946	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	10	Good	3	\$1,130.87
947	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	10	Good	3	\$1,130.87
948	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	10	Good	3	\$1,130.87
949	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	6	Medium	Semi-mature	8	Good	2	\$720.06
950	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	8	Medium	Semi-mature	10	Good	3	\$1,477.06
952	Cherry	<i>Prunus</i>	sp.	9	Medium	Semi-mature	10	Good	3	\$1,744.77
953	Cherry	<i>Prunus</i>	sp.	7	Medium	Semi-mature	10	Good	3	\$1,055.48
954	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	22	Large	Mature	20	Good	1	\$17,681.59
955	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	8	Medium	Semi-mature	10	Good	3	\$1,477.06
956	Crabapple	<i>Malus</i>	sp.	6	Medium	Semi-mature	10	Good	2	\$775.45
957	Crabapple	<i>Malus</i>	sp.	6	Medium	Semi-mature	10	Good	1	\$775.45
958	Crabapple	<i>Malus</i>	sp.	6	Medium	Semi-mature	10	Good	1	\$775.45
959	Crabapple	<i>Malus</i>	sp.	5	Medium	Semi-mature	10	Good	2	\$538.51
960	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	9	Medium	Mature	15	Good	3	\$5,215.85
961	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	27	Large	Mature	20	Good	1	\$14,581.31
962	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	16	Large	Mature	15	Good	1	\$5,120.46
963	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	20	Large	Mature	15	Fair	1	\$5,714.80
964	Falsecypress-Sawara	<i>Chamaecyparis</i>	<i>pisifera</i>	8	Medium	Mature	10	Poor	2	\$548.62
965	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	9	Medium	Mature	10	Fair	2	\$2,185.91
966	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Semi-mature	20	Good	...	\$5,885.14

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
967	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	21	Large	Mature	20	Good	2	\$11,534.88
968	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Mature	20	Good	1	\$7,559.14
969	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	13	Large	Mature	25	Good	2	\$3,640.33
970	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	13	Large	Mature	25	Good	3	\$3,640.33
971	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	12	Medium	Mature	20	Good	2	\$7,108.33
972	Mulberry-White	<i>Morus</i>	<i>alba</i>	6	Small	Semi-mature	6	Good	3	\$387.73
973	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	16	Large	Mature	20	Good	3	\$5,908.22
975	Oak-White	<i>Quercus</i>	<i>alba</i>	30	Large	Mature	45	Fair	1	\$18,792.90
976	Spruce-White	<i>Picea</i>	<i>glauca</i>	8	Medium	Mature	10	Good	...	\$1,477.06
977	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	14	Medium	Mature	20	Good	2	\$4,221.92
978	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	14	Medium	Mature	20	Good	1	\$4,221.92
979	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	14	Medium	Mature	15	Good	3	\$4,523.48
980	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	12	Medium	Mature	20	Fair	2	\$4,368.52
981	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	16	Medium	Mature	15	Fair	3	\$4,220.16
982	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	16	Medium	Mature	15	Fair	3	\$4,782.85
983	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	22	Large	Mature	20	Fair	1	\$9,042.57
984	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Mature	20	Good	2	\$7,559.14
985	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Mature	15	Good	2	\$5,885.14
986	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	13	Large	Mature	15	Good	3	\$4,420.40
987	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Mature	15	Fair	1	\$4,203.67
988	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Mature	20	Good	2	\$7,559.14
989	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	13	Large	Mature	15	Good	3	\$4,420.40
990	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	12	Large	Mature	15	Poor	2	\$1,614.21
991	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Mature	20	Fair	3	\$4,203.67

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
992	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	12	Large	Mature	20	Fair	1	\$3,886.06
993	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	14	Large	Mature	15	Good	3	\$5,126.62
994	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	15	Large	Mature	15	Fair	1	\$4,203.67
995	Catalpa-Northern	<i>Catalpa</i>	<i>speciosa</i>	23	Large	Mature	20	Fair	1	\$7,557.82
996	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	18	Large	Mature	15	Fair	2	\$5,341.14
997	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	6	Medium	Mature	15	Good	...	\$1,637.07
998	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	5	Medium	Mature	15	Poor	3	\$1,190.22
999	Oak-White	<i>Quercus</i>	<i>alba</i>	42	Large	Mature	50	Good	1	\$45,904.26
1000	Oak-White	<i>Quercus</i>	<i>alba</i>	34	Large	Mature	40	Fair	1	\$16,756.86
1001	Horsechestnut-Common	<i>Aesculus</i>	<i>hippocastanum</i>	28	Large	Mature	25	Fair	1	\$11,201.01
1002	Catalpa-Northern	<i>Catalpa</i>	<i>speciosa</i>	19	Large	Mature	20	Fair	1	\$5,157.61
1003	Oak- Black	<i>Quercus</i>	<i>velutina</i>	21	Large	Mature	30	Fair	1	\$9,208.52
1004	Oak- Black	<i>Quercus</i>	<i>velutina</i>	23	Large	Mature	35	Good	1	\$15,464.47
1005	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	27	Large	Mature	35	Fair	1	\$13,619.91
1007	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	24	Large	Mature	25	Poor	1	\$6,456.84
1008	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	21	Large	Mature	20	Fair	2	\$6,300.57
1009	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	29	Large	Mature	25	Good	2	\$21,997.36
1010	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	7	Medium	Young	15	Good	3	\$1,281.65
1011	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	10	Medium	Semi-mature	15	Fair	3	\$1,538.60
1012	Maple-Red	<i>Acer</i>	<i>rubrum</i>	8	Medium	Semi-mature	15	Good	2	\$1,477.06
1013	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	16	Large	Mature	25	Poor	2	\$3,207.32
1014	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	20	Large	Mature	20	Poor	3	\$3,428.88
1015	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	22	Large	Mature	25	Good	3	\$12,659.60
1016	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	28	Large	Mature	25	Good	2	\$20,506.46
1017	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	22	Large	Mature	25	Fair	1	\$9,042.57
1018	Spruce-Norway	<i>Picea</i>	<i>abies</i>	23	Large	Mature	20	Fair	3	\$9,883.31
1019	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	11	Medium	Semi-mature	10	Good	3	\$2,606.39

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1020	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	13	Medium	Semi-mature	10	Good	2	\$3,640.33
1021	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	11	Medium	Semi-mature	10	Good	3	\$2,606.39
1022	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	24	Large	Mature	25	Good	3	\$15,065.97
1023	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	28	Large	Mature	25	Fair	1	\$14,647.47
1024	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	24	Large	Mature	25	Good	3	\$15,065.97
1025	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	26	Large	Mature	30	Good	3	\$17,681.59
1026	Oak- Black	<i>Quercus</i>	<i>velutina</i>	26	Large	Mature	30	Good	1	\$19,761.78
1027	Oak- Black	<i>Quercus</i>	<i>velutina</i>	36	Large	Mature	35	Fair	1	\$25,898.82
1028	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	6	Medium	Semi-mature	10	Good	3	\$830.84
1029	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	24	Large	Mature	25	Fair	1	\$10,761.41
1030	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	30	Large	Mature	25	Fair	1	\$16,814.70
1031	Maple-Red	<i>Acer</i>	<i>rubrum</i>	5	Medium	Young	10	Good	3	\$576.98
1032	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	16	Large	Mature	20	Good	...	\$6,695.99
1033	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	16	Large	Mature	15	Good	3	\$6,695.99
1034	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	13	Large	Mature	15	Good	3	\$4,420.40
1035	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	16	Large	Mature	15	Good	3	\$6,695.99
1036	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	5	Small	Young	6	Poor	3	\$280.24
1037	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	18	Large	Mature	25	Good	3	\$8,474.61
1038	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	18	Large	Mature	20	Good	3	\$8,474.61
1039	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	25	Large	Mature	25	Good	2	\$16,347.62
1040	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	17	Large	Mature	20	Good	3	\$7,559.14
1041	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	22	Large	Mature	25	Good	3	\$12,659.60
1042	Sweetgum	<i>Liquidambar</i>	<i>styraciflua</i>	30	Large	Mature	35	Good	1	\$20,771.10
1043	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	8	Small	Mature	10	Good	2	\$1,378.59
1044	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	9	Small	Mature	10	Good	2	\$1,744.77
1045	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	10	Good	3	\$1,130.87
1046	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	7	Small	Mature	10	Good	3	\$1,055.48

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1047	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	8	Medium	Semi-mature	15	Good	3	\$1,477.06
1048	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	6	Medium	Semi-mature	10	Good	3	\$830.84
1049	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	10	Good	3	\$1,130.87
1050	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	6	Medium	Semi-mature	10	Fair	3	\$593.46
1051	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	10	Fair	2	\$807.76
1052	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	12	Medium	Semi-mature	15	Good	1	\$3,766.49
1053	Cherry	<i>Prunus</i>	sp.	8	Medium	Semi-mature	10	Good	1	\$1,378.59
1054	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	7	Medium	Semi-mature	10	Good	3	\$1,130.87
1055	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	7	Medium	Young	10	Good	1	\$980.09
1056	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	7	Medium	Young	10	Good	1	\$980.09
1057	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	8	Medium	Young	10	Good	1	\$1,280.12
1058	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	8	Medium	Young	10	Good	1	\$1,280.12
1059	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	7	Medium	Young	10	Good	1	\$980.09
1060	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	7	Medium	Young	10	Good	1	\$980.09
1061	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	10	Good	1	\$830.84
1062	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	10	Good	1	\$1,130.87
1063	Maple-Red	<i>Acer</i>	<i>rubrum</i>	10	Medium	Semi-mature	10	Good	1	\$2,307.90
1064	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	10	Good	1	\$1,130.87
1065	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	10	Good	1	\$1,130.87
1066	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	10	Good	1	\$1,130.87
1067	Maple-Red	<i>Acer</i>	<i>rubrum</i>	9	Medium	Semi-mature	10	Good	1	\$1,869.40
1068	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	56	Large	Mature	50	Fair	1	\$46,370.18
1069	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	11	Large	Semi-mature	15	Fair	1	\$1,994.69
1070	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	9	Medium	Young	10	Good	2	\$1,869.40
1071	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	9	Medium	Young	10	Good	1	\$1,869.40
1072	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	9	Medium	Young	10	Fair	1	\$1,335.28
1073	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	9	Medium	Young	10	Fair	1	\$1,335.28

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1074	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	10	Medium	Young	10	Fair	1	\$1,648.50
1075	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	12	Medium	Semi-mature	15	Fair	1	\$2,373.84
1076	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	8	Medium	Mature	10	Fair	2	\$984.70
1077	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	6	Small	Semi-mature	10	Poor	2	\$332.34
1078	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	7	Small	Semi-mature	10	Fair	2	\$753.91
1079	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	8	Small	Semi-mature	10	Poor	2	\$590.82
1080	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	8	Small	Mature	10	Good	3	\$1,378.59
1081	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	8	Small	Mature	10	Good	3	\$1,378.59
1082	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	8	Small	Mature	10	Good	3	\$1,378.59
1083	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	8	Medium	Mature	15	Good	3	\$1,378.59
1084	Maple-Freeman's	<i>Acer</i>	<i>x freemanii</i>	16	Large	Semi-mature	15	Fair	1	\$3,938.82
1085	Cherry	<i>Prunus</i>	sp.	8	Small	Semi-mature	10	Good	3	\$1,378.59
1086	Cherry	<i>Prunus</i>	sp.	10	Small	Semi-mature	10	Good	2	\$2,154.04
1087	Cherry	<i>Prunus</i>	sp.	11	Small	Semi-mature	10	Fair	1	\$1,861.71
1088	Elm	<i>Ulmus</i>	sp.	8	Medium	Young	10	Good	2	\$1,378.59
1089	Elm	<i>Ulmus</i>	sp.	7	Medium	Young	10	Good	2	\$1,055.48
1090	Elm	<i>Ulmus</i>	sp.	10	Medium	Semi-mature	10	Good	1	\$2,154.04
1091	Crabapple	<i>Malus</i>	sp.	5	Small	Semi-mature	10	Good	1	\$538.51
1092	Elm	<i>Ulmus</i>	sp.	10	Large	Semi-mature	15	Good	1	\$2,154.04
1093	Crabapple	<i>Malus</i>	sp.	5	Small	Semi-mature	10	Good	2	\$538.51
1094	Crabapple	<i>Malus</i>	sp.	5	Small	Semi-mature	10	Good	2	\$538.51
1095	Elm	<i>Ulmus</i>	sp.	10	Large	Semi-mature	15	Fair	1	\$1,538.60
1096	Crabapple	<i>Malus</i>	sp.	5	Small	Semi-mature	10	Good	2	\$883.16
1097	Elm	<i>Ulmus</i>	sp.	7	Medium	Semi-mature	10	Fair	1	\$753.91
1098	Oak-White	<i>Quercus</i>	<i>alba</i>	54	Large	Mature	50	Poor	1	\$26,786.31
1099	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	31	Large	Mature	25	Good	2	\$24,635.64
1100	Spruce-White	<i>Picea</i>	<i>glauca</i>	8	Medium	Semi-mature	10	Good	...	\$1,477.06

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1101	Spruce-White	<i>Picea</i>	<i>glauca</i>	7	Medium	Semi-mature	10	Good	3	\$1,130.87
1102	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Semi-mature	10	Fair	1	\$807.76
1103	Maple-Red	<i>Acer</i>	<i>rubrum</i>	8	Medium	Semi-mature	10	Fair	1	\$1,055.04
1104	Spruce-White	<i>Picea</i>	<i>glauca</i>	10	Medium	Semi-mature	10	Good	...	\$2,307.90
1105	Spruce-White	<i>Picea</i>	<i>glauca</i>	9	Medium	Semi-mature	10	Good	3	\$1,869.40
1106	Spruce-White	<i>Picea</i>	<i>glauca</i>	11	Medium	Semi-mature	10	Fair	1	\$1,994.69
1107	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	48	Large	Mature	30	Fair	1	\$34,927.93
1108	Spruce-Norway	<i>Picea</i>	<i>abies</i>	32	Large	Mature	25	Poor	1	\$11,246.36
1109	Oak- Black	<i>Quercus</i>	<i>velutina</i>	21	Large	Mature	25	Fair	1	\$9,208.52
1110	Oak- Black	<i>Quercus</i>	<i>velutina</i>	19	Large	Mature	25	Fair	1	\$7,538.04
1111	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	11	Medium	Semi-mature	15	Good	2	\$2,792.56
1112	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Semi-mature	15	Good	2	\$1,130.87
1113	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Semi-mature	15	Fair	2	\$593.46
1114	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Semi-mature	15	Poor	2	\$484.66
1115	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	32	Large	Mature	20	Good	1	\$26,241.50
1116	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	22	Large	Mature	20	Fair	1	\$9,042.57
1117	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	21	Large	Mature	20	Fair	1	\$8,239.20
1118	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	12	Large	Semi-mature	15	Fair	1	\$3,006.86
1119	Crabapple	<i>Malus</i>	sp.	4	Small	Semi-mature	8	Good	2	\$344.65
1120	Crabapple	<i>Malus</i>	sp.	4	Small	Semi-mature	8	Good	2	\$344.65
1121	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	13	Medium	Semi-mature	10	Good	2	\$3,900.35
1122	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	8	Medium	Semi-mature	10	Good	2	\$1,477.06
1123	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	12	Medium	Semi-mature	15	Good	2	\$3,323.38
1124	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	11	Medium	Semi-mature	15	Good	2	\$2,792.56
1125	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	11	Medium	Semi-mature	15	Fair	1	\$1,994.69
1126	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	11	Medium	Semi-mature	15	Fair	2	\$1,994.69
1127	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	10	Medium	Semi-mature	10	Fair	2	\$1,648.50

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1128	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	10	Medium	Semi-mature	10	Fair	2	\$1,648.50
1129	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	57	Large	Mature	50	Poor	1	\$28,323.97
1130	Ash-White	<i>Fraxinus</i>	<i>americana</i>	8	Medium	Young	15	Fair	1	\$773.70
1131	Ash-White	<i>Fraxinus</i>	<i>americana</i>	8	Medium	Young	15	Fair	1	\$773.70
1132	Ash-White	<i>Fraxinus</i>	<i>americana</i>	8	Medium	Young	15	Fair	1	\$773.70
1133	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	4	Small	Semi-mature	10	Good	3	\$669.29
1134	Ash-White	<i>Fraxinus</i>	<i>americana</i>	8	Medium	Young	15	Fair	1	\$773.70
1135	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	27	Large	Mature	25	Poor	1	\$6,249.13
1136	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	15	Large	Semi-mature	15	Fair	1	\$3,709.12
1137	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	14	Large	Semi-mature	15	Good	...	\$4,523.48
1138	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	17	Large	Mature	10	Fair	3	\$4,764.16
1139	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Small	Mature	10	Good	1	\$576.98
1140	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Small	Mature	8	Good	3	\$576.98
1141	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	8	Small	Mature	10	Good	2	\$1,477.06
1142	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	10	Fair	2	\$807.76
1143	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	10	Fair	2	\$593.46
1144	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	10	Fair	2	\$807.76
1145	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	7	Small	Semi-mature	10	Fair	1	\$807.76
1146	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	7	Small	Semi-mature	10	Fair	3	\$807.76
1147	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	9	Small	Semi-mature	10	Fair	1	\$1,335.28
1148	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	8	Small	Semi-mature	10	Fair	3	\$1,055.04
1149	Weeping Cherry	<i>Prunus</i>	<i>subhirtella</i>	7	Small	Semi-mature	10	Fair	3	\$807.76
1150	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	13	Medium	Semi-mature	10	Good	...	\$3,900.35
1151	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	12	Large	Semi-mature	15	Good	3	\$3,323.38
1152	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	11	Large	Semi-mature	15	Good	3	\$2,792.56
1153	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	12	Large	Semi-mature	15	Good	3	\$3,323.38
1154	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	6	Large	Semi-mature	15	Good	...	\$1,984.79

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1155	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	6	Large	Semi-mature	15	Good	...	\$2,492.53
1156	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	5	Large	Semi-mature	15	Good	3	\$1,730.92
1157	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	11	Medium	Semi-mature	15	Good	3	\$2,606.39
1158	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	9	Medium	Semi-mature	15	Good	2	\$1,744.77
1159	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	11	Medium	Semi-mature	15	Good	2	\$2,606.39
1160	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	8	Medium	Semi-mature	15	Good	3	\$1,378.59
1161	Oak-English	<i>Quercus</i>	<i>robur</i>	13	Large	Mature	10	Poor	3	\$1,894.46
1162	Oak- Black	<i>Quercus</i>	<i>velutina</i>	30	Large	Mature	30	Good	1	\$26,310.06
1163	Ash-White	<i>Fraxinus</i>	<i>americana</i>	7	Medium	Young	15	Fair	1	\$592.36
1164	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	11	Medium	Semi-mature	15	Fair	1	\$1,728.73
1165	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	9	Medium	Semi-mature	10	Fair	2	\$1,157.25
1166	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	8	Medium	Semi-mature	10	Fair	3	\$914.37
1167	Oak- Northern Red	<i>Quercus</i>	<i>rubra</i>	11	Medium	Semi-mature	15	Fair	1	\$2,526.60
1168	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	10	Medium	Semi-mature	15	Good	3	\$2,154.04
1169	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	7	Medium	Semi-mature	15	Good	2	\$1,055.48
1170	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	10	Large	Semi-mature	20	Good	2	\$2,154.04
1171	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	9	Large	Semi-mature	20	Good	3	\$1,744.77
1172	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	17	Large	Mature	20	Good	3	\$6,669.83
1173	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	14	Large	Mature	20	Good	...	\$4,523.48
1174	Crabapple	<i>Malus</i>	sp.	5	Medium	Semi-mature	8	Good	3	\$538.51
1175	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	15	Large	Mature	20	Good	...	\$5,192.77
1176	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	17	Large	Mature	20	Good	...	\$6,669.83

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1177	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	16	Large	Mature	20	Good	...	\$5,908.22
1178	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	17	Large	Mature	20	Good	...	\$6,669.83
1179	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	17	Large	Mature	20	Good	3	\$6,669.83
1180	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	32	Large	Mature	60	Fair	3	\$12,128.42
1181	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	19	Large	Semi-mature	50	Fair	3	\$5,157.61
1182	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	23	Large	Semi-mature	50	Fair	3	\$7,557.82
1183	Cherry	<i>Prunus</i>	sp.	14	Small	Semi-mature	30	Fair	3	\$3,015.66
1184	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	21	Large	Semi-mature	40	Fair	3	\$6,300.57
1185	Cherry	<i>Prunus</i>	sp.	12	Medium	Semi-mature	30	Fair	3	\$2,215.58
1186	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	34	Large	Over-mature	55	Poor	3	\$8,149.13
1187	Cherry	<i>Prunus</i>	sp.	12	Medium	Semi-mature	30	Fair	3	\$2,215.58
1188	Cherry	<i>Prunus</i>	sp.	11	Medium	Mature	15	Fair	1	\$1,861.71
1189	Crabapple	<i>Malus</i>	sp.	5	Small	Young	20	Good	3	\$538.51
1190	Oak- Black	<i>Quercus</i>	<i>velutina</i>	27	Medium	Mature	50	Fair	3	\$15,222.25
1191	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	12	Medium	Semi-mature	35	Good	3	\$2,880.26
1192	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	8	Medium	Young	20	Good	3	\$1,280.12
1193	Oak- Black	<i>Quercus</i>	<i>velutina</i>	24	Large	Mature	60	Good	3	\$16,838.44
1194	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	32	Large	Mature	60	Good	3	\$16,979.79
1195	Oak- Black	<i>Quercus</i>	<i>velutina</i>	41	Large	Over-mature	80	Good	3	\$44,358.98
1196	Oak- Black	<i>Quercus</i>	<i>velutina</i>	22	Large	Mature	60	Good	3	\$14,148.97
1197	Oak- Black	<i>Quercus</i>	<i>velutina</i>	21	Large	Mature	60	Good	3	\$12,891.93
1198	Catalpa-Northern	<i>Catalpa</i>	<i>speciosa</i>	26	Large	Mature	25	Fair	3	\$9,658.01
1199	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	20	Large	Mature	20	Fair	3	\$5,714.80
1200	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	20	Large	Mature	20	Fair	3	\$5,714.80
1201	Oak-White	<i>Quercus</i>	<i>alba</i>	26	Large	Mature	25	Fair	3	\$14,115.56
1202	Oak-White	<i>Quercus</i>	<i>alba</i>	45	Large	Mature	45	Good	1	\$50,390.38
1203	Oak-White	<i>Quercus</i>	<i>alba</i>	34	Large	Mature	40	Fair	3	\$23,459.60

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1204	Oak- Black	<i>Quercus</i>	<i>velutina</i>	21	Large	Mature	35	Fair	1	\$9,208.52
1205	Oak- Black	<i>Quercus</i>	<i>velutina</i>	21	Large	Mature	35	Fair	1	\$15,973.96
1206	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	6	Small	Semi-mature	4	Good	2	\$1,052.40
1207	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	4	Medium	Young	4	Good	...	\$369.26
1208	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	3	Small	Young	4	Fair	3	\$242.88
1209	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	1	Small	Young	4	Good	3	\$23.08
1210	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Small	Young	4	Good	3	\$369.26
1211	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Small	Young	4	Good	3	\$369.26
1212	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Small	Young	4	Fair	3	\$263.76
1213	Cherry	<i>Prunus</i>	sp.	5	Small	Young	4	Fair	2	\$274.75
1214	Cherry	<i>Prunus</i>	sp.	4	Medium	Young	4	Good	3	\$246.18
1215	Cherry	<i>Prunus</i>	sp.	4	Medium	Young	4	Good	3	\$246.18
1216	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	4	Small	Young	4	Fair	3	\$427.04
1217	Cherry	<i>Prunus</i>	sp.	5	Medium	Young	4	Fair	3	\$274.75
1218	Cherry	<i>Prunus</i>	sp.	4	Medium	Young	4	Fair	3	\$175.84
1219	Cherry	<i>Prunus</i>	sp.	5	Medium	Young	4	Fair	3	\$384.65
1220	Cherry	<i>Prunus</i>	sp.	4	Medium	Young	4	Fair	3	\$246.18
1221	Cherry	<i>Prunus</i>	sp.	4	Medium	Young	4	Fair	3	\$246.18
1222	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	4	Good	...	\$369.26
1223	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	4	Good	...	\$369.26
1224	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	4	Good	...	\$369.26
1225	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1226	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1227	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1228	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1229	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1230	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1231	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1232	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1233	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1234	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1235	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1236	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1237	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	2	Good	...	\$83.52
1238	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Medium	Young	2	Good	3	\$207.71
1239	Purple Leaf Plum	<i>Prunus</i>	<i>cerasifera</i>	3	Small	Young	2	Fair	3	\$138.47
1240	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Medium	Young	2	Good	3	\$207.71
1241	Ash-White	<i>Fraxinus</i>	<i>americana</i>	5	Medium	Young	6	Fair	2	\$215.88
1242	Ash-White	<i>Fraxinus</i>	<i>americana</i>	4	Medium	Young	6	Fair	2	\$138.16
1243	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	7	Medium	Semi-mature	4	Fair	3	\$807.76
1244	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	5	Medium	Semi-mature	20	Fair	2	\$588.75
1245	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Medium	Semi-mature	4	Fair	3	\$294.38
1246	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Medium	Semi-mature	4	Fair	3	\$294.38
1247	Ash-White	<i>Fraxinus</i>	<i>americana</i>	3	Medium	Young	4	Fair	3	\$77.72
1248	Ash-White	<i>Fraxinus</i>	<i>americana</i>	3	Medium	Young	4	Fair	3	\$77.72
1249	Ash-White	<i>Fraxinus</i>	<i>americana</i>	3	Medium	Young	4	Fair	3	\$77.72
1250	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	3	Medium	Young	4	Good	3	\$207.71
1251	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	3	Medium	Young	4	Good	3	\$207.71
1252	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	3	Medium	Young	4	Good	3	\$207.71
1253	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	3	Medium	Young	4	Good	3	\$207.71
1254	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	3	Medium	Young	4	Good	3	\$207.71
1255	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Medium	Young	4	Fair	3	\$423.90
1256	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Medium	Young	4	Fair	3	\$423.90
1257	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Medium	Young	4	Fair	3	\$294.38

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1258	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	5	Medium	Young	4	Fair	3	\$333.62
1259	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	8	Medium	Young	4	Fair	3	\$854.08
1260	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6	Medium	Semi-mature	6	Fair	3	\$423.90
1261	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	4	Small	Semi-mature	4	Fair	3	\$298.93
1262	Ash-White	<i>Fraxinus</i>	<i>americana</i>	4	Medium	Young	2	Poor	2	\$82.90
1263	Ash-White	<i>Fraxinus</i>	<i>americana</i>	4	Medium	Young	4	Poor	2	\$82.90
1264	Maple-Red	<i>Acer</i>	<i>rubrum</i>	2	Medium	Young	2	Good	3	\$92.32
1265	Elm	<i>Ulmus</i>	sp.	3	Medium	Young	2	Good	3	\$193.86
1266	Elm	<i>Ulmus</i>	sp.	3	Medium	Young	4	Good	3	\$193.86
1267	Elm	<i>Ulmus</i>	sp.	3	Medium	Young	4	Fair	3	\$138.47
1268	Elm	<i>Ulmus</i>	sp.	3	Medium	Young	4	Good	3	\$193.86
1269	Elm	<i>Ulmus</i>	sp.	3	Medium	Young	4	Good	3	\$193.86
1270	Elm	<i>Ulmus</i>	sp.	3	Medium	Young	4	Fair	3	\$138.47
1271	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	4	Medium	Young	6	Fair	2	\$298.93
1272	Crabapple	<i>Malus</i>	sp.	2	Small	Young	4	Good	...	\$86.16
1273	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	3	Small	Young	2	Good	...	\$193.86
1274	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	3	Small	Young	2	Good	...	\$193.86
1275	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	3	Small	Young	2	Good	...	\$193.86
1276	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	3	Small	Young	2	Fair	...	\$138.47
1277	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3	Small	Young	4	Fair	3	\$317.61
1278	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3	Small	Young	2	Fair	3	\$336.29
1279	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3	Small	Young	2	Fair	3	\$336.29
1280	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3	Small	Young	2	Fair	3	\$261.56
1281	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3	Small	Young	2	Fair	3	\$261.56
1282	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3	Small	Young	2	Fair	3	\$242.88
1283	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	4	Small	Young	2	Fair	3	\$317.61
1284	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	2	Small	Young	2	Fair	3	\$149.46

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1285	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	3	Medium	Young	4	Good	...	\$148.36
1286	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	3	Medium	Young	4	Good	...	\$207.71
1287	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	2	Medium	Young	4	Good	...	\$92.32
1288	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	2	Medium	Young	4	Good	...	\$92.32
1289	Crabapple	<i>Malus</i>	sp.	2	Small	Young	4	Good	3	\$61.54
1290	Crabapple	<i>Malus</i>	sp.	2	Small	Young	4	Good	3	\$61.54
1291	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3	Small	Young	4	Fair	3	\$261.56
1292	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Small	Young	4	Good	3	\$369.26
1293	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	3	Small	Young	4	Fair	3	\$148.36
1294	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Medium	Young	6	Poor	2	\$158.26
1295	Crabapple	<i>Malus</i>	sp.	2	Small	Young	6	Fair	...	\$61.54
1296	Crabapple	<i>Malus</i>	sp.	1	Small	Young	4	Good	3	\$86.16
1297	Elm-Chinese	<i>Ulmus</i>	<i>parvifolia</i>	3	Medium	Young	4	Fair	3	\$128.58
1298	Elm-Chinese	<i>Ulmus</i>	<i>parvifolia</i>	3	Medium	Young	4	Good	3	\$180.02
1299	Elm-Chinese	<i>Ulmus</i>	<i>parvifolia</i>	3	Medium	Young	4	Fair	3	\$128.58
1300	Elm-Chinese	<i>Ulmus</i>	<i>parvifolia</i>	3	Medium	Young	4	Poor	2	\$77.15
1301	Elm-Chinese	<i>Ulmus</i>	<i>parvifolia</i>	4	Medium	Young	4	Fair	3	\$228.59
1302	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	3	Medium	Young	4	Good	3	\$148.36
1303	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	3	Medium	Young	4	Good	3	\$148.36
1304	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	4	Good	3	\$164.85
1305	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	4	Good	3	\$115.40
1306	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	4	Good	3	\$148.36
1307	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	4	Good	3	\$164.85
1308	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	5	Medium	Young	6	Fair	3	\$333.62
1309	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	8	Medium	Young	6	Poor	2	\$512.45
1310	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	7	Medium	Young	6	Poor	2	\$392.34
1311	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	9	Medium	Young	8	Fair	3	\$1,080.94

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1312	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	5	Medium	Semi-mature	10	Fair	1	\$333.62
1313	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	4	Medium	Semi-mature	10	Fair	2	\$213.52
1314	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	8	Medium	Semi-mature	15	Poor	2	\$271.30
1315	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	28	Large	Mature	25	Poor	1	\$4,800.43
1316	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	4	Medium	Young	4	Fair	2	\$163.28
1317	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Small	Young	4	Good	3	\$207.71
1318	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Small	Young	6	Good	3	\$221.56
1319	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Small	Young	6	Good	3	\$346.18
1320	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	4	Small	Young	4	Good	3	\$418.50
1321	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	4	Small	Young	4	Good	3	\$418.50
1322	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	5	Small	Young	4	Good	3	\$346.18
1323	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	4	Small	Young	6	Good	3	\$221.56
1324	Birch-River	<i>Betula</i>	<i>nigra</i>	4	Small	Young	10	Good	3	\$946.24
1325	Birch-River	<i>Betula</i>	<i>nigra</i>	3	Small	Young	10	Good	3	\$323.11
1326	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	4	Small	Young	6	Good	3	\$418.50
1327	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	6	Small	Young	8	Good	3	\$830.84
1328	Serviceberry (8)	<i>Amelanchier</i>	<i>canadensis</i>	1	Small	Young	4	Good	3	\$138.47
1329	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	3	Small	Young	4	Good	3	\$124.63
1330	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	3	Small	Young	4	Good	3	\$124.63
1331	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	3	Small	Young	4	Good	3	\$124.63
1332	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	3	Small	Young	4	Good	3	\$124.63
1333	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	3	Small	Young	4	Good	3	\$124.63
1334	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	3	Small	Young	4	Good	3	\$124.63
1335	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	5	Small	Young	10	Good	3	\$576.98
1336	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	5	Small	Young	10	Good	3	\$576.98
1337	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	5	Small	Young	10	Good	3	\$576.98
1338	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	5	Small	Young	10	Good	3	\$576.98

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1339	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	4	Small	Young	10	Good	3	\$369.26
1340	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Small	Young	4	Good	3	\$207.71
1341	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Small	Young	4	Good	3	\$207.71
1342	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Small	Young	4	Good	3	\$207.71
1343	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Small	Young	4	Good	3	\$207.71
1344	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Small	Young	4	Good	3	\$207.71
1345	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	4	Good	3	\$193.86
1346	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	4	Good	3	\$193.86
1347	Horsechestnut-Common	<i>Aesculus</i>	<i>hippocastanum</i>	3	Small	Young	6	Good	3	\$180.02
1348	Horsechestnut-Common	<i>Aesculus</i>	<i>hippocastanum</i>	2	Small	Young	6	Good	3	\$80.01
1349	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	4	Small	Young	6	Good	3	\$344.65
1350	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	4	Small	Young	6	Good	3	\$344.65
1351	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	4	Good	3	\$193.86
1352	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	6	Good	3	\$193.86
1353	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	6	Good	3	\$193.86
1354	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	6	Good	3	\$193.86
1355	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	20	Good	3	\$1,121.64
1356	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	20	Good	3	\$1,121.64
1357	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	20	Good	3	\$1,121.64
1358	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	20	Good	3	\$1,121.64
1359	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Semi-mature	20	Good	3	\$1,384.74
1360	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Semi-mature	20	Good	3	\$1,121.64
1361	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Small	Young	10	Good	3	\$221.56
1362	Arborvitae-Eastern (2)	<i>Thuja</i>	<i>occidentalis</i>	3	Small	Young	6	Good	3	\$470.81
1363	Arborvitae-Eastern (4)	<i>Thuja</i>	<i>occidentalis</i>	2	Small	Young	6	Good	3	\$418.50
1364	Arborvitae-Eastern (9)	<i>Thuja</i>	<i>occidentalis</i>	2	Small	Young	6	Good	3	\$941.62
1365	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	12	Medium	Mature	20	Poor	2	\$1,329.35

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1366	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	12	Small	Mature	10	Dead	1	\$0.00
1367	Falsecypress-Sawara (3)	<i>Chamaecyparis</i>	<i>pisifera</i>	4	Small	Young	10	Good	3	\$960.09
1368	Arborvitae-Eastern (21)	<i>Thuja</i>	<i>occidentalis</i>	3	Small	Semi-mature	6	Good	3	\$4,943.52
1369	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	10	Medium	Semi-mature	20	Good	3	\$2,000.18
1370	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	9	Small	Semi-mature	20	Good	3	\$1,620.15
1371	Cherry	<i>Prunus</i>	sp.	10	Small	Semi-mature	25	Good	3	\$2,154.04
1372	Cherry	<i>Prunus</i>	sp.	9	Small	Semi-mature	20	Good	3	\$1,744.77
1373	Cherry	<i>Prunus</i>	sp.	8	Small	Semi-mature	20	Good	3	\$1,378.59
1374	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	8	Small	Semi-mature	6	Good	3	\$1,674.00
1375	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	10	Small	Semi-mature	6	Good	3	\$2,615.62
1376	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	4	Small	Semi-mature	6	Good	3	\$758.53
1377	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	4	Small	Semi-mature	6	Good	3	\$941.62
1378	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	5	Small	Semi-mature	6	Good	3	\$993.94
1379	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	5	Small	Semi-mature	6	Good	3	\$1,412.43
1380	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	6	Small	Semi-mature	6	Good	3	\$1,412.43
1381	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	3	Small	Young	4	Good	3	\$235.41
1382	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Small	Young	8	Good	3	\$207.71
1383	Hawthorn	<i>Crataegus</i>	sp.	4	Small	Young	8	Good	3	\$344.65
1384	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	3	Small	Young	4	Good	3	\$263.10
1385	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	6	Good	3	\$92.32
1386	Birch-European White	<i>Betula</i>	<i>pendula</i>	3	Small	Young	6	Good	3	\$124.63
1387	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	3	Small	Young	8	Good	3	\$207.71
1388	Fir-Balsam	<i>Abies</i>	<i>balsamea</i>	4	Small	Young	8	Good	...	\$320.03
1389	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	3	Small	Young	6	Good	3	\$207.71
1390	Oak-Bur	<i>Quercus</i>	<i>macrocarpa</i>	3	Small	Young	4	Good	3	\$263.10
1391	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	4	Good	3	\$193.86
1392	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	4	Good	3	\$193.86

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1393	Lilac-Common	<i>Syringa</i>	<i>vulgaris</i>	3	Small	Young	4	Good	3	\$193.86
1394	Maple-Paperbark	<i>Acer</i>	<i>griseum</i>	2	Small	Young	4	Good	3	\$104.62
1395	Crabapple	<i>Malus</i>	sp.	2	Small	Young	4	Good	3	\$86.16
1396	Crabapple	<i>Malus</i>	sp.	2	Small	Young	4	Good	3	\$86.16
1397	Crabapple	<i>Malus</i>	sp.	2	Small	Young	4	Good	3	\$86.16
1398	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	2	Small	Young	4	Good	3	\$92.32
1399	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	2	Small	Young	4	Good	3	\$276.95
1400	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	8	Small	Young	8	Good	3	\$1,477.06
1401	Crabapple	<i>Malus</i>	sp.	4	Small	Young	10	Good	3	\$344.65
1402	Crabapple	<i>Malus</i>	sp.	3	Small	Young	10	Good	3	\$193.86
1403	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Large	Mature	45	Fair	3	\$8,229.31
1404	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i>	9	Medium	Semi-mature	15	Good	3	\$1,744.77
1405	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	3	Small	Young	4	Good	3	\$576.98
1406	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	2	Small	Young	4	Good	3	\$230.79
1407	Pine-Scotch	<i>Pinus</i>	<i>sylvestris</i>	16	Large	Mature	25	Fair	2	\$3,014.40
1408	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	10	Medium	Semi-mature	10	Poor	2	\$857.22
1409	Arborvitae-Eastern (23)	<i>Thuja</i>	<i>occidentalis</i>	2	Medium	Semi-mature	4	Fair	3	\$5,217.90
1410	Oak- Black	<i>Quercus</i>	<i>velutina</i>	18	Large	Mature	25	Fair	1	\$6,765.44
1411	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	18	Large	Mature	20	Fair	3	\$4,323.78
1412	Pine-Austrian	<i>Pinus</i>	<i>nigra</i>	19	Large	Mature	15	Fair	3	\$5,157.61
1413	Oak- Black	<i>Quercus</i>	<i>velutina</i>	21	Large	Mature	20	Fair	1	\$9,208.52
1414	Mulberry-White	<i>Morus</i>	<i>alba</i>	14	Large	Mature	25	Poor	1	\$904.70
1415	Mulberry-White	<i>Morus</i>	<i>alba</i>	14	Large	Mature	25	Fair	1	\$1,507.83
1416	Boxelder	<i>Acer</i>	<i>negundo</i>	15	Large	Mature	15	Poor	2	\$1,038.56
1417	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	11	Large	Mature	15	Fair	2	\$1,728.73
1418	Catalpa-Northern	<i>Catalpa</i>	<i>speciosa</i>	17	Large	Mature	20	Good	2	\$5,780.52

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1419	Cherry	<i>Prunus</i>	sp.	6	Small	Young	10	Good	3	\$775.45
1420	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	2	Small	Young	8	Good	3	\$346.18
1421	Magnolia-Star	<i>Magnolia</i>	<i>stellata</i>	2	Small	Young	8	Good	3	\$346.18
1422	Pondcypress	<i>Taxodium</i>	<i>ascendens</i>	12	Large	Semi-mature	15	Poor	1	\$1,329.35
1423	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	1	Small	Young	4	Fair	3	\$9.89
1424	Fir-Balsam	<i>Abies</i>	<i>balsamea</i>	2	Small	Young	6	Fair	3	\$57.15
1425	Spruce-White	<i>Picea</i>	<i>glauca</i>	2	Small	Young	6	Fair	3	\$65.94
1426	Ash-Green	<i>Fraxinus</i>	<i>pennsylvanica</i>	3	Medium	Young	8	Fair	3	\$148.36
1427	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	2	Small	Young	4	Fair	3	\$74.73
1428	Hornbeam-American	<i>Carpinus</i>	<i>caroliniana</i>	3	Small	Young	4	Fair	3	\$168.15
1429	Hawthorn	<i>Crataegus</i>	sp.	3	Small	Young	6	Fair	3	\$138.47
1430	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	3	Small	Young	4	Good	2	\$207.71
1431	Oak-Swamp White	<i>Quercus</i>	<i>bicolor</i>	3	Small	Young	4	Good	1	\$235.41
1432	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	2	Small	Young	4	Fair	3	\$74.73
1433	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	2	Small	Young	4	Fair	3	\$74.73
1434	Birch-River	<i>Betula</i>	<i>nigra</i>	2	Small	Young	4	Good	1	\$276.95
1435	Spruce-White	<i>Picea</i>	<i>glauca</i>	3	Small	Young	4	Good	3	\$207.71
1436	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Small	Young	6	Fair	3	\$158.26
1437	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	3	Small	Young	4	Fair	3	\$89.02
1438	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	3	Small	Young	4	Fair	3	\$89.02
1439	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Young	8	Fair	3	\$356.08
1440	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Young	10	Fair	3	\$356.08
1441	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Young	8	Fair	3	\$356.08
1442	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Young	8	Fair	3	\$247.28
1443	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Young	8	Fair	3	\$247.28
1444	Fir-Balsam	<i>Abies</i>	<i>balsamea</i>	2	Small	Young	4	Fair	3	\$57.15
1445	Magnolia-Sweetbay	<i>Magnolia</i>	<i>virginiana</i>	2	Small	Young	4	Good	3	\$207.71

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Canopy Radius	Condition Class	Tree Care Priority	Estimated Value
1446	Magnolia-Sweetbay	<i>Magnolia</i>	<i>virginiana</i>	2	Small	Young	2	Good	...	\$92.32
1447	Birch-River	<i>Betula</i>	<i>nigra</i>	2	Small	Young	2	Good	3	\$161.55
1448	Tupelo-Black	<i>Nyssa</i>	<i>sylvatica</i>	2	Small	Young	4	Good	3	\$116.93
1449	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	2	Small	Young	4	Good	...	\$55.39
1450	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	4	Good	3	\$276.95
1451	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	4	Good	3	\$484.66
1452	Serviceberry	<i>Amelanchier</i>	<i>canadensis</i>	2	Small	Young	4	Good	3	\$484.66
1453	Burning Bush	<i>Euonymus</i>	<i>alatus</i>	4	Small	Mature	8	Good	3	\$926.24
1454	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	10	Medium	Mature	10	Fair	2	\$2,088.10
1455	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	4	Small	Semi-mature	8	Good	...	\$369.26
1456	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	4	Small	Semi-mature	8	Good	3	\$820.07

APPENDIX



BIBLIOGRAPHY

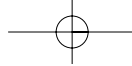
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LIST OF APPENDED ITEMS

Technical Reports

- ANSI A300 (Part 1) – 2008 Pruning**
- ANSI A300 (Part 3) – 2013 Supplemental Support Systems**
- ANSI A300 (Part 4) – 2008 Lightning Protection Systems**
- Diplodia Tip Light**
- Hemlock Woolly Adelgid**
- Needlecast**
- Winter Moth**
- Girdling Roots**
- Lightning Protection Systems**
- Maintenance Pruning Program**
- Monitor IPM Program**
- Mulch Application Guidelines**
- Tree Risk Assessments**
- Tree Structure Evaluation**
- Tree Structure Evaluation**

Glossary

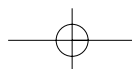


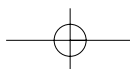
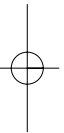
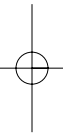
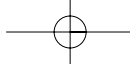
*ANSI A300 (Part 1)-2008 Pruning
Revision of ANSI A300 (Part 1)-2001*

American National Standard

*for Tree Care Operations —
Tree, Shrub, and Other Woody Plant
Management —
Standard Practices (Pruning)*

*ANSI A300 (Part 1)-2008 Pruning
Revision of ANSI A300 (Part 1)-2001*





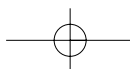
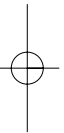
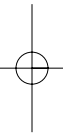
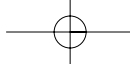
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A300 (Part 1)-2008

for Tree Care Operations —
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Standard Practices (*Pruning*)

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* The term pruning type is replaced with the term pruning method. The purpose of this is to label the processes detailed in section 6 with greater accuracy.

Foreword This foreword is not part of American National Standard A300 (Part 1)-2008 *Pruning*

ANSI A300 Standards are divided into multiple parts, each focusing on a specific aspect of woody plant management (e.g. Pruning, Fertilization, etc).

These standards are used to develop written specifications for work assignments. They are not intended to be used as specifications in and of themselves. Management objectives may differ considerably and therefore must be specifically defined by the user. Specifications are then written to meet the established objectives and must include measurable criteria.

ANSI A300 standards apply to professionals who provide for or supervise the management of trees, shrubs, and other woody landscape plants. Intended users include businesses, government agencies, property owners, property managers, and utilities. The standard does not apply to agriculture, horticultural production, or silviculture, except where explicitly noted otherwise.

This standard has been developed by the Tree Care Industry Association (TCIA), an ANSI-accredited Standards Developing Organization (SDO). TCIA is secretariat of the ANSI A300 standards, and develops standards using procedures accredited by the American National Standards Institute (ANSI).

Consensus for standards writing was developed by the Accredited Standards Committee on Tree, Shrub, and Other Woody Plant Management Operations – Standard Practices, A300 (ASC A300).

Prior to 1991, various industry associations and practitioners developed their own standards and recommendations for tree care practices. Recognizing the need for a standardized, scientific approach, green industry associations, government agencies and tree care companies agreed to develop consensus for an official American National Standard.

The result – ANSI A300 standards – unify and take authoritative precedence over all previously existing tree care industry standards. ANSI requires that approved standards be developed according to accepted principles, and that they be reviewed and, if necessary, revised every five years.

TCIA was accredited as a standards developing organization with ASC A300 as the consensus body on June 28, 1991. ASC A300 meets regularly to write new, and review and revise existing ANSI A300 standards. The committee includes industry representatives with broad knowledge and technical expertise from residential and commercial tree care, utility, municipal and federal sectors, landscape and nursery industries, and other interested organizations.

Suggestions for improvement of this standard should be forwarded to: A300 Secretary, c/o Tree Care Industry Association, Inc., 136 Harvey Road - Suite B101-B110, Londonderry, NH, 03053.

ANSI A300 (Part 1)-2008 Pruning was approved as an American National Standard by ANSI on May 1, 2008. ANSI approval does not require unanimous approval by ASC A300. The ASC A300 committee contained the following members at the time of ANSI approval:

Tim Johnson, Chair
(Artistic Arborist, Inc.)

Bob Rouse, Secretary
(Tree Care Industry Association, Inc.)

(Continued)

Organizations Represented	Name of Representative
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American Society of Consulting Arborists	Donald Zimar
American Society of Landscape Architects	Ron Leighton
Asplundh Tree Expert Company	Geoff Kempter Peter Fengler (Alt.)
Bartlett Tree Expert Company	Peter Becker Dr. Thomas Smiley (Alt.)
Davey Tree Expert Company.....	Joseph Tommasi R.J. Laverne (Alt.)
International Society of Arboriculture	Bruce Hagen Sharon Lilly (Alt.)
National Park Service	Robert DeFeo Dr. James Sherald (Alt.)
Professional Grounds Management Society	Thomas Shaner
Professional Land Care Network	Preston Leyshon
Society of Municipal Arborists	Gordon Mann Andy Hillman (Alt.)
Tree Care Industry Association	Dane Buell James McGuire (Alt.)
USDA Forest Service	Ed Macie Keith Cline (Alt.)
Utility Arborist Association.....	Matthew Simons Jeffrey Smith (Alt.)

Additional organizations and individuals:

American Forests (Observer)
Mike Galvin (Observer)
Peter Gerstenberger (Observer)
Dick Jones (Observer)
Myron Laible (Observer)
Beth Palys (Observer)
Richard Rathjens (Observer)
Richard Roux (NFPA-780 Liaison)

ASC A300 mission statement:

Mission: To develop consensus performance standards based on current research and sound practice for writing specifications to manage trees, shrubs, and other woody plants.

American National Standard for Tree Care Operations –

Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning)

1 ANSI A300 standards

1.1 Scope

ANSI A300 standards present performance standards for the care and management of trees, shrubs, and other woody plants.

1.2 Purpose

ANSI A300 performance standards are intended for use by federal, state, municipal and private entities including arborists, property owners, property managers, and utilities for developing written specifications.

1.3 Application

ANSI A300 performance standards shall apply to any person or entity engaged in the management of trees, shrubs, or other woody plants.

2 Part 1 – Pruning standards

2.1 Purpose

The purpose of Part 1 – *Pruning* is to provide performance standards for developing written specifications for pruning.

2.2 Reasons for pruning

The reasons for tree pruning may include, but are not limited to, reducing risk, managing tree health and structure, improving aesthetics, or achieving other specific objectives. Pruning practices for agricultural, horticultural production, or silvicultural purposes are exempt from this standard unless this standard, or a portion thereof, is expressly referenced in standards for these other related areas.

2.3 Implementation

2.3.1 Specifications for pruning should be written and administered by an arborist.

2.3.1.1 Specifications should include location of tree(s), objectives, methods (types), and extent of pruning (location, percentage, part size, etc).

2.3.2 Pruning specifications shall be adhered to.

2.4 Safety

2.4.1 Pruning shall be implemented by an arborist, familiar with the practices and hazards of pruning and the equipment used in such operations.

2.4.2 This performance standard shall not take precedence over applicable industry safe work practices.

2.4.3 Performance shall comply with applicable Federal and State Occupational Safety and Health standards, ANSI Z133.1, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and other Federal Environmental Protection Agency (EPA) regulations, as well as state and local regulations.

3 Normative references

The following standards contain provisions, which, through reference in the text, constitute provisions of this American National Standard. All standards are subject to revision, and parties to agreements based on this American National Standard shall apply the most recent edition of the standards indicated below.

ANSI Z60.1, Nursery stock
ANSI Z133.1, Arboriculture – Safety requirements
29 CFR 1910, General industry ¹⁾
29 CFR 1910.268, Telecommunications ¹⁾
29 CFR 1910.269, Electric power generation, transmission, and distribution ¹⁾
29 CFR 1910.331 - 335, Electrical safety-related work practices ¹⁾

4 Definitions

4.1 arboriculture: The art, science, technology, and business of commercial, public, and utility tree care.

¹⁾ Available from U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210

4.2 arborist: An individual engaged in the profession of arboriculture who, through experience, education, and related training, possesses the competence to provide for or supervise the management of trees and other woody plants.

4.3 arborist trainee: An individual undergoing on-the-job training to obtain the experience and the competence required to provide for or supervise the management of trees and other woody plants. Such trainees shall be under the direct supervision of an arborist.

4.4 branch: A shoot or stem growing from a parent branch or stem (See Fig. 4.4).

4.4.1 codominant branches/codominant leaders: Branches or stems arising from a common junction, having nearly the same size diameter (See Fig. 4.4).

4.4.2 lateral branch: A shoot or stem growing from another branch (See Fig. 4.4).

4.4.3 parent branch or stem: A tree trunk or branch from which other branches or shoots grow (See Fig. 4.4).

4.4.4 scaffold branch: A primary branch that forms part of the main structure of the crown (See Fig. 4.4).

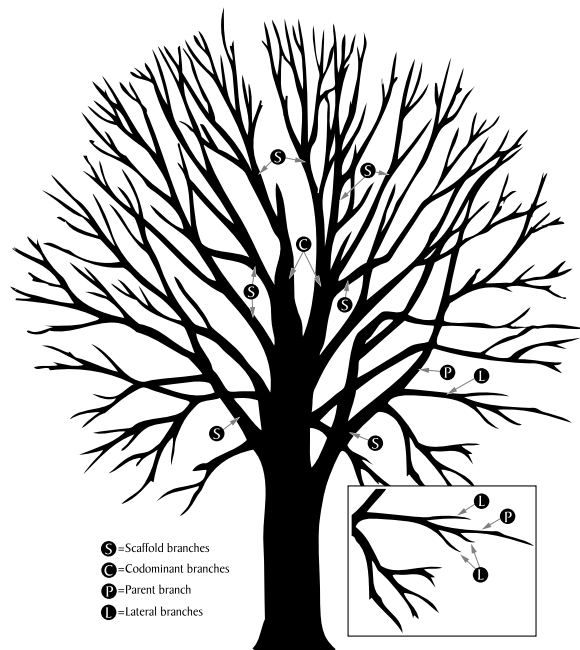


Figure 4.4 Standard branch definitions.

4.5 branch bark ridge: The raised area of bark in the branch crotch that marks where the branch and parent stem meet. (See Figs. 5.3.2 and 5.3.3).

4.6 branch collar: The swollen area at the base of a branch.

4.7 callus: Undifferentiated tissue formed by the cambium around a wound.

4.8 cambium: The dividing layer of cells that forms sapwood (xylem) to the inside and inner bark (phloem) to the outside.

4.9 clean: Selective pruning to remove one or more of the following non-beneficial parts: dead, diseased, and/or broken branches (7.2).

4.10 climbing spurs: Sharp, pointed devices strapped to a climber's lower legs used to assist in climbing trees. (syn.: gaffs, hooks, spurs, spikes, climbers)

4.11 closure: The process in a woody plant by which woundwood grows over a pruning cut or injury.

4.12 crown: Upper part of a tree, measured from the lowest branch, including all the branches and foliage.

4.13 decay: The degradation of woody tissue caused by microorganisms.

4.14 espalier: The combination of pruning, supporting, and training branches to orient a plant in one plane (6.5).

4.15 establishment: The point after planting when a tree's root system has grown sufficiently into the surrounding soil to support growth and anchor the tree.

4.16 facility: A structure or equipment used to deliver or provide protection for the delivery of an essential service, such as electricity or communications.

4.17 frond: A leaf structure of a palm.

4.18 heading: The reduction of a shoot, stem, or branch back to a bud or to a lateral branch not large enough to assume the terminal role.

- 4.19 interfering branches:** Crossing, rubbing, or upright branches that have the potential to damage tree structure and/or health.
- 4.20 internode:** The area between lateral branches or buds.
- 4.21 job briefing:** The communication of at least the following subjects for arboricultural operations: work specifications, hazards associated with the job, work procedures involved, special precautions, electrical hazards, job assignments, and personal protective equipment.
- 4.22 leader:** A dominant, typically upright, stem – usually the main trunk. There can be several leaders in one tree.
- 4.23 lion's tailing:** The removal of an excessive number of inner and/or lower lateral branches from parent branches. Lion's tailing is not an acceptable pruning practice (6.1.7).
- 4.24 live crown ratio:** Crown height relative to overall plant height.
- 4.25 mechanical pruning:** A pruning technique where large-scale power equipment is used to cut back branches (9.3.2).
- 4.26 method:** A procedure or process for achieving an objective.
- 4.27 peeling:** The removal of dead frond bases without damaging living trunk tissue at the point they make contact with the trunk. (syn.: shaving)
- 4.28 petiole:** A stalk of a leaf or frond.
- 4.29 pollarding:** Pruning method in which tree branches are initially headed and then reduced on a regular basis without disturbing the callus knob (6.6).
- 4.30 pruning:** The selective removal of plant parts to meet specific goals and objectives.
- 4.31 qualified line-clearance arborist:** An individual who, through related training and on-the-job experience, is familiar with the equipment and hazards in line clearance and has demonstrated the ability to perform the special techniques involved. This individual may or may not be currently employed by a line-clearance contractor.
- 4.32 qualified line-clearance arborist trainee:** An individual undergoing line-clearance training under the direct supervision of a qualified line-clearance arborist. In the course of such training, the trainee becomes familiar with the equipment and hazards in line clearance and demonstrates ability in the performance of the special techniques involved.
- 4.33 raise:** Pruning to provide vertical clearance (7.3).
- 4.34 reduce:** Pruning to decrease height and/or spread (7.4).
- 4.35 remote area:** As used in the utility pruning section of this standard, an unpopulated area.
- 4.36 restoration:** Pruning to redevelop structure, form, and appearance of topped or damaged trees (6.3).
- 4.37 rural area:** As used in the utility pruning section of this standard, a sparsely populated place away from large cities, suburbs, or towns but distinct from remote areas.
- 4.38 shall:** As used in this standard, denotes a mandatory requirement.
- 4.39 shoot:** Stem or branch and its leaves, especially when young.
- 4.40 should:** As used in this standard, denotes an advisory recommendation.
- 4.41 specifications:** A document stating a detailed, measurable plan or proposal for provision of a product or service.
- 4.42 sprouts:** New shoots originating from epicormic or adventitious buds, not to be confused with suckers. (syn.: watersprouts, epicormic shoots)
- 4.43 standard, ANSI A300:** The performance parameters established by industry consensus as a rule for the measure of extent, quality, quantity, value or weight used to write specifications.
- 4.44 stem:** A woody structure bearing buds, foliage, and giving rise to other stems.
- 4.45 structural pruning:** Pruning to improve branch architecture (6.2).

4.46 stub: Portion of a branch or stem remaining after an internodal cut or branch breakage.

4.47 subordination: Pruning to reduce the size and ensuing growth rate of a branch or leader in relation to other branches or leaders.

4.48 sucker: Shoot arising from the roots.

4.49 thin: pruning to reduce density of live branches (7.5).

4.50 throw line: A small, lightweight line with a weighted end used to position a climber's rope in a tree.

4.51 topping: Reduction of tree size using internodal cuts without regard to tree health or structural integrity. Topping is not an acceptable pruning practice (6.1.7).

4.52 tracing: The removal of loose, damaged tissue from in and around the wound.

4.53 trunk: The main woody part of a tree beginning at and including the trunk flare and extending up into the crown from which scaffold branches grow.

4.54 trunk flare: 1. The area at the base of the plant's trunk where it broadens to form roots. 2. The area of transition between the root system and trunk (syn.: root flare).

4.55 urban/residential areas: Populated areas including public and private property that are normally associated with human activity.

4.56 utility: A public or private entity that delivers a public service, such as electricity or communications.

4.57 utility space: The physical area occupied by a utility's facilities and the additional space required to ensure its operation.

4.58 vista/view prune: Pruning to enhance a specific view without jeopardizing the health of the tree (6.4).

4.59 wound: An opening that is created when the bark of a live branch or stem is cut, penetrated, damaged, or removed.

4.60 woundwood: Partially differentiated tissue responsible for closing wounds. Woundwood develops from callus associated with wounds.

5 Pruning practices

5.1 Tree inspection

5.1.1 An arborist or arborist trainee shall visually inspect each tree before beginning work.

5.1.2 If a condition is observed requiring attention beyond the original scope of the work, the condition should be reported to an immediate supervisor, the owner, or the person responsible for authorizing the work.

5.1.3 Job briefings shall be performed as outlined in ANSI Z133.1, subclause 3.1.4.

5.2 Tools and equipment

5.2.1 Equipment, tools, and work practices that damage living tissue and bark beyond the scope of normal work practices shall be avoided.

5.2.2 Climbing spurs shall not be used when entering and climbing trees for the purpose of pruning.

Exceptions:

- when branches are more than throw-line distance apart and there is no other means of climbing the tree;
- when the outer bark is thick enough to prevent damage to the inner bark and cambium;
- in remote or rural utility rights-of-way.

5.3 Pruning cuts

5.3.1 Pruning tools used in making pruning cuts shall be sharp.

5.3.2 A pruning cut that removes a branch at its point of origin shall be made close to the trunk or parent branch without cutting into the branch bark ridge or branch collar or leaving a stub (see Figure 5.3.2).

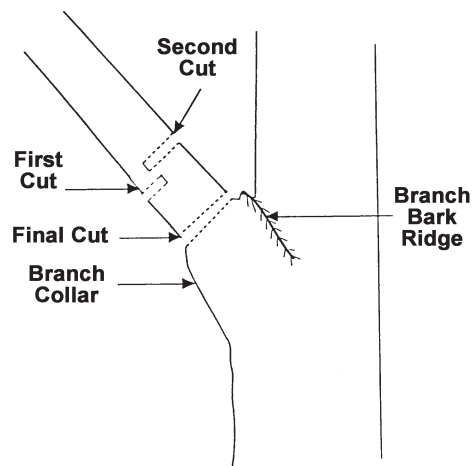


Figure 5.3.2. A cut that removes a branch at its point of origin. (See Annex A – Pruning cut guideline).

5.3.3 A pruning cut that reduces the length of a branch or parent stem shall be made at a slight downward angle relative to the remaining stem and not damage the remaining stem. Smaller cuts shall be preferred (see Fig. 5.3.3).

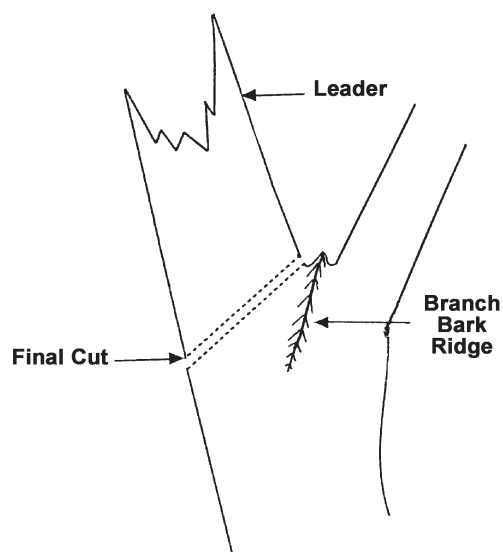


Figure 5.3.3. A cut that reduces the length of a branch or parent stem.

5.3.4 When pruning to a lateral, the remaining lateral branch should be large enough to assume the terminal role.

5.3.5 The final cut should result in a flat surface with adjacent bark firmly attached.

5.3.6 When removing a dead branch, the final cut shall be made just outside the collar of living tissue.

5.3.7 Tree branches shall be removed in such a manner so as to avoid damage to other parts of the tree or to other plants or property. Branches too large to support with one hand shall be precut to avoid splitting of the wood or tearing of the bark (see Figure 5.3.2). Where necessary, ropes or other equipment shall be used to lower large branches or portions of branches to the ground.

5.3.8 A cut that removes a branch with a narrow angle of attachment should be made from the outside of the branch to prevent damage to the parent branch (see Figure 5.3.8).

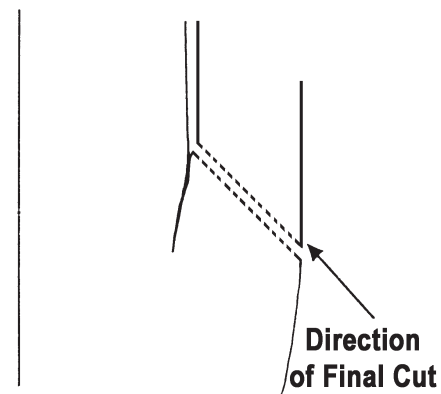


Figure 5.3.8. A cut that removes a branch with a narrow angle of attachment.

5.3.9 Severed branches shall be removed from the crown upon completion of the pruning, at times when the tree would be left unattended, or at the end of the workday.

5.4 Wound treatment

5.4.1 Wound treatments shall not be used to cover wounds or pruning cuts, except when necessary for disease, insect, mistletoe, or sprout control, or for cosmetic reasons.

5.4.2 Wound treatments that are damaging to tree tissues shall not be used.

5.4.3 When tracing wounds, only loose, damaged tissue shall be removed.

6 Pruning objectives

6.1 Pruning objectives shall be established prior to beginning any pruning operation.

6.1.1 Objectives should include, but are not limited to, one or more of the following:

- Risk reduction
- Manage health
- Clearance
- Structural improvement/correction
- View improvement/creation
- Aesthetic improvement
- Restoration

6.1.2 Established objectives should be specified in writing (See Annex B – *Specification writing guideline*).

6.1.3 To obtain the defined objective, the growth cycles, structure, species, and the extent of pruning to be performed shall be considered.

6.1.4 Not more than 25 percent of the foliage should be removed within an annual growing season. The percentage and distribution of foliage to be removed shall be adjusted according to the plant's species, age, health, and site.

6.1.5 When frequent excessive pruning is necessary for a tree to avoid conflicts with elements such as infrastructure, view, traffic, or utilities, removal or relocation of the tree shall be considered.

6.1.6 Pruning cuts should be made in accordance with section 5.3 *Pruning cuts*.

6.1.7 Topping and lion's tailing shall be considered unacceptable pruning practices for trees.

6.2 Structural: Structural pruning shall consist of selective pruning to improve tree and branch architecture primarily on young- and medium-aged trees.

6.2.1 Size and location of leaders or branches to be subordinated or removed should be specified.

6.2.2 Dominant leader(s) should be selected for development as appropriate.

6.2.3 Strong, properly spaced scaffold branch structure should be selected and maintained by reducing or removing others.

6.2.4 Temporary branches should be retained or reduced as appropriate.

6.2.5 Interfering, overextended, defective, weak, and poorly attached branches should be removed or reduced.

6.2.6 At planting, pruning should be limited to cleaning (7.2).

6.3 Restoration: Restoration shall consist of selective pruning to redevelop structure, form, and appearance of severely pruned, vandalized, or damaged trees.

6.3.1 Location in tree, size range of parts, and percentage of sprouts to be removed should be specified.

6.4 Vista/view: Vista/view pruning shall consist of the use of one or more pruning methods (types) to enhance a specific line of sight.

6.4.1 Pruning methods (types) shall be specified.

6.4.2 Size range of parts, location in tree, and percentage of foliage to be removed should be specified.

6.5 Espalier

6.5.1 Branches that extend outside the desired plane of growth shall be pruned or tied back.

6.5.2 Ties should be replaced as needed to prevent girdling the branches at the attachment site.

6.6 Pollarding

6.6.1 Consideration shall be given to the ability of the individual tree to respond to pollarding.

6.6.2 Management plans shall be made prior to the start of the pollarding process for routine removal of sprouts.

6.6.3 Heading cuts shall be made at specific locations to start the pollarding process. After the initial cuts are made, no additional heading cuts shall be made.

6.6.4 Sprouts growing from the cut ends of branches (knuckles) should be removed annually during the dormant season.

7 Pruning methods (types)

7.1 One or more of the following methods (types) shall be specified to achieve the objective.

7.2 Clean: Cleaning shall consist of pruning to remove one or more of the following non-beneficial parts: dead, diseased, and/or broken branches.

7.2.1 Location of parts to be removed shall be specified.

7.2.2 Size range of parts to be removed shall be specified.

7.3 Raise: Raising shall consist of pruning to provide vertical clearance.

7.3.1 Clearance distance shall be specified.

7.3.2 Location and size range of parts to be removed should be specified.

7.3.3 Live crown ratio should not be reduced to less than 50 percent.

7.4 Reduce: Reducing shall consist of pruning to decrease height and/or spread.

7.4.1 Consideration shall be given to the ability of a species to tolerate this type of pruning.

7.4.2 Location of parts to be removed or clearance requirements shall be specified.

7.4.3 Size of parts should be specified.

7.5 Thin: Thinning shall consist of selective pruning to reduce density of live branches.

7.5.1 Thinning should result in an even distribution of branches on individual branches and throughout the crown.

7.5.2 Not more than 25 percent of the crown should be removed within an annual growing season.

7.5.3 Location of parts to be removed shall be specified.

7.5.4 Percentage of foliage and size range of parts to be removed shall be specified.

8 Palm pruning

8.1 Palm pruning should be performed when fronds, fruit, or loose petioles may create a dangerous condition.

8.2 Live healthy fronds should not be removed.

8.3 Live, healthy fronds above horizontal shall not be removed. Exception: Palms encroaching on electric supply lines (see Fig. 8.3a and 8.3b).

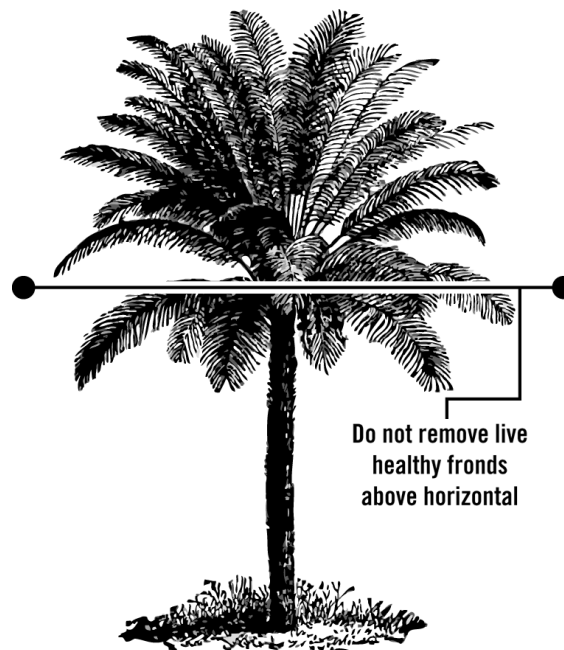


Figure 8.3a Frond removal location.

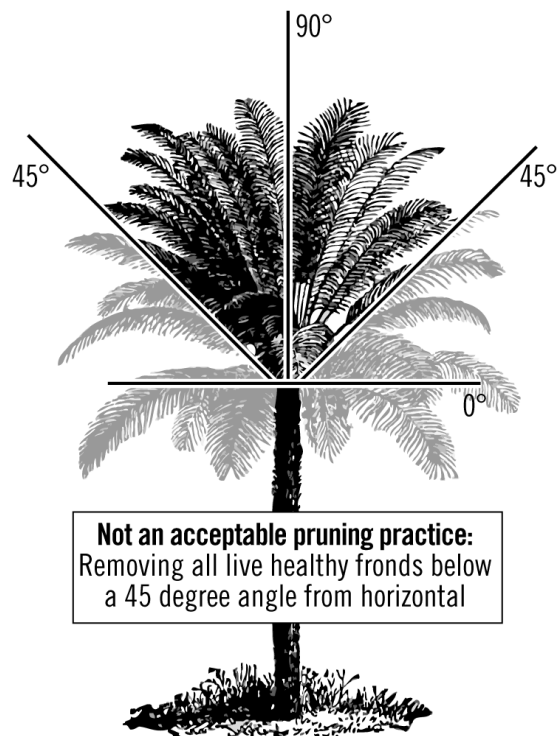


Figure 8.3b An overpruned palm (not an acceptable pruning practice).

8.4 Fronds removed should be severed close to the petiole base without damaging living trunk tissue.

8.5 Palm peeling (shaving) should consist of the removal of only the dead frond bases at the point they make contact with the trunk without damaging living trunk tissue.

9 Utility pruning

9.1 Purpose

The purpose of utility pruning is to prevent the loss of service, comply with mandated clearance laws, prevent damage to equipment, maintain access, and uphold the intended usage of the facility/utility space while adhering to accepted tree care performance standards.

9.2 General

9.2.1 Only a qualified line-clearance arborist or line-clearance arborist trainee shall be assigned to

line clearance work in accordance with ANSI Z133.1, 29 CFR 1910.331 – 335, 29 CFR 1910.268 or 29 CFR 1910.269.

9.2.2 Utility pruning operations are exempt from requirements in subclause 5.1, *Tree Inspection*, for conditions outside the utility pruning scope of work.

9.2.3 Job briefings shall be performed as outlined in ANSI Z133.1, subclause 3.1.4.

9.3 Utility crown reduction pruning

9.3.1 Urban/residential areas

9.3.1.1 Pruning cuts should be made in accordance with subclause 5.3, *Pruning cuts*. The following requirements and recommendations of 9.3.1.1 are repeated from subclause 5.3 *Pruning cuts*.

9.3.1.1.1 A pruning cut that removes a branch at its point of origin shall be made close to the trunk or parent branch, without cutting into the branch bark ridge or collar, or leaving a stub (see Figure 5.3.2).

9.3.1.1.2 A pruning cut that reduces the length of a branch or parent stem shall be made at a slight downward angle relative to the remaining stem and not damage the remaining stem. Smaller cuts shall be preferred (see Fig. 5.3.3).

9.3.1.1.3 The final cut shall result in a flat surface with adjacent bark firmly attached.

9.3.1.1.4 When removing a dead branch, the final cut shall be made just outside the collar of living tissue.

9.3.1.1.5 Tree branches shall be removed in such a manner so as not to cause damage to other parts of the tree or to other plants or property. Branches too large to support with one hand shall be precut to avoid splitting of the wood or tearing of the bark (see Figure 5.3.2). Where necessary, ropes or other equipment shall be used to lower large branches or portions of branches to the ground.

9.3.1.1.6 A cut that removes a branch with a narrow angle of attachment should be made from the outside of the branch to prevent damage to the parent branch (see Figure 5.3.8).

9.3.1.2 A minimum number of pruning cuts should be made to accomplish the purpose of facility/utility pruning. The structure and growth habit of the tree should be considered.

9.3.1.3 Trees directly under and growing into facility/utility spaces should be removed or pruned. Such pruning should be done by removing entire branches or leaders or by removing branches that have laterals growing into (or once pruned, will grow into) the facility/utility space.

9.3.1.4 Trees growing next to, and into or toward, facility/utility spaces should be pruned by reducing branches to laterals (5.3.3) to direct growth away from the utility space or by removing entire branches. Branches that, when cut, will produce sprouts that would grow into facilities and/or utility space should be removed.

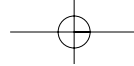
9.3.1.5 Branches should be cut to laterals or the parent branch and not at a pre-established clearing limit. If clearance limits are established, pruning cuts should be made at laterals or parent branches outside the specified clearance zone.

9.3.2 Rural/remote locations – mechanical pruning

Cuts should be made close to the main stem, outside of the branch bark ridge and branch collar. Precautions should be taken to avoid stripping or tearing of bark or excessive wounding.

9.4 Emergency service restoration

During a utility-declared emergency, service must be restored as quickly as possible in accordance with ANSI Z133.1, 29 CFR 1910.331 – 335, 29 CFR 1910.268, or 29 CFR 1910.269. At such times, it may be necessary, because of safety and the urgency of service restoration, to deviate from the use of proper pruning techniques as defined in this standard. Following the emergency, corrective pruning should be done as necessary.



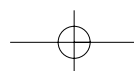
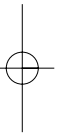
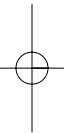
Annex A

Pruning cut guideline

A-1 Three-cut method

Multiple cutting techniques exist for application of a three-cut method. A number of them may be used to implement an acceptable three-cut method.

A-1.1 The technique depicted in *Figure 5.3.2* demonstrates one example of a three-cut method that is common to hand-saw usage. It is not intended to depict all acceptable three-cut method techniques.



Annex B

Specification writing guideline

A300 (Part 1)-2008 *Pruning* standards are performance standards, and shall not be used as job specifications. Job specifications should be clearly detailed and contain measurable criteria.

The words “should” and “shall” are both used when writing standards. The word “shall” is used when writing specifications.

Writing specifications can be simple or complex and can be written in a format that suits your company/the job. The specifications consist of two sections.

I. General:

This section contains all aspects of the work to be performed that needs to be documented, yet does not need to be detailed.

Saying under the General section that “all work shall be completed in compliance with A300 Standards” means the clauses covering safety, inspections, cuts, etc. will be adhered to. There is no need to write each and every clause into every job specification.

Other items that may be covered in the General section could be: work hours and dates, traffic issues, disposal criteria, etc.

The second section under Job Specifications would be:

II. Details:

This section provides the clear and measurable criteria; the deliverables to the client.

This section, to be written in compliance with A300 standards, shall contain the following information:

1. Objective – Clause 6

These objectives originate from/with the tree owner or manager. The arborist shall clearly state what is going to be done to achieve the objective(s).

Objectives can be written for the entire job or individual trees. Rarely can one or two words clearly convey an objective so that all parties involved (client, sales, crew, etc.) can visualize the outcome.

2. Method – Clause 7

Here the method(s) to be used to achieve the objective are stated. Again, depending on the type of job, this can be stated for the individual tree or a group of trees.

3. Location – Clause 7.2.1, 7.3.2, 7.4.2, 7.5.3

This is the location in the tree(s) that the work methods are to take place.

4. Density – Clause 7.3.1, 7.3.3, 7.5.1, 7.5.2, 7.5.4

This is the amount or volume of parts that are to be removed and can be stated exactly or in ranges.

5. Size – Clause 7.2.2, 7.3.2, 7.4.3, 7.5.4

This is the size or range of sizes of cut(s) utilized to remove the volume specified.

NOTE: Items # 4 & 5 are directly related to resource allocation, staffing and dollars.

SAMPLE PRUNING SPECIFICATIONS

#1. **Scope:** Large live oak on west side of pool

Objectives: Increase light penetration through east side of tree. Reduce risk potential of 1-inch-diameter branches falling.

Specifications: All broken branches and 1-inch-plus diameter dead branches shall be removed from the crown.

The three lowest 8-inch-plus diameter branches on the east side shall be thinned 25 percent with 1-inch- to 3-inch-diameter cuts.

NOTE: All work shall be completed in compliance with ANSI A300 and Z133.1 Standards.

Annex B Specification writing guideline

#2. Scope: 1 Arizona ash

Objective: Enhance structure/structural development.

Specifications: General:

All pruning shall be completed in compliance with A300 Standards.

Detail:

Thin crown 20-25 percent with 1-inch- to 4-inch-diameter cuts. Reduce west codominant leader by approximately 12 feet.

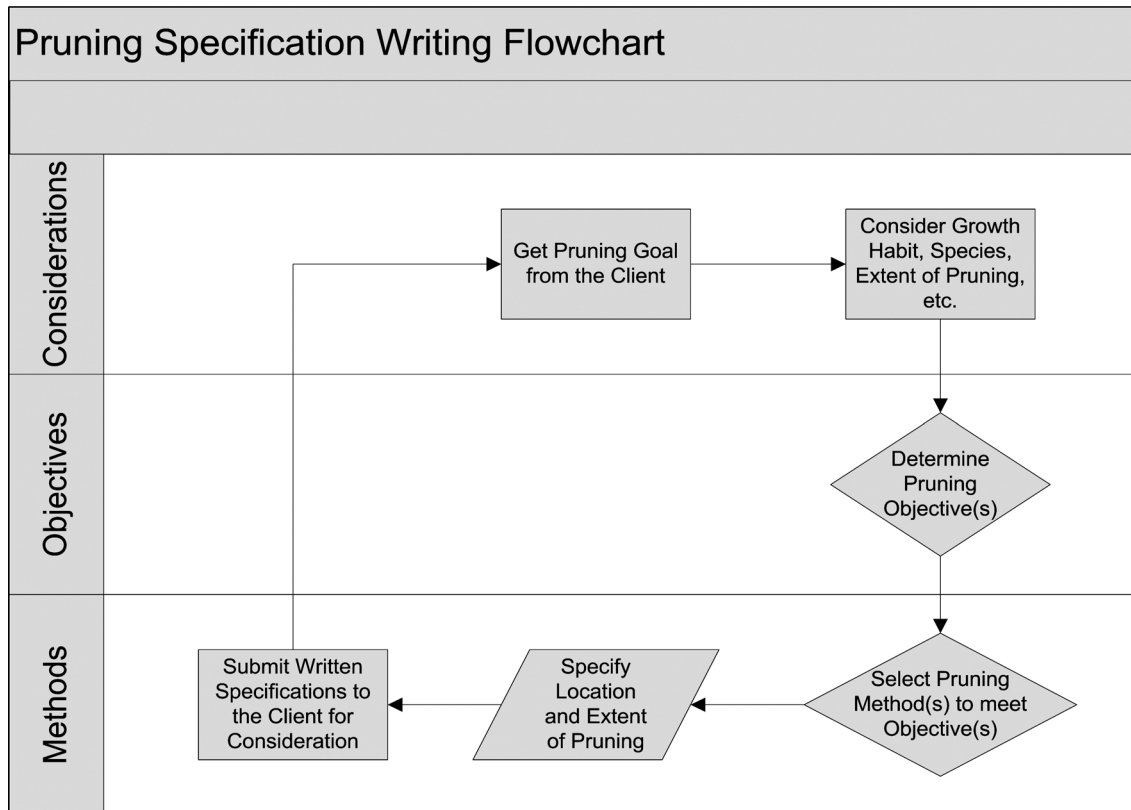
#3. Scope: Twenty-three newly installed evergreen elms

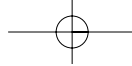
Objective: Maximize establishment – reduce nuisance while enhancing natural growth habit.

All work shall be completed in compliance with A300 Standards and the following specifications.

Specifications:

- Retain as much size as possible and 80-90 percent density of foliage.
- Lowest permanent branch will be 6 feet above grade in four to five years.
- Retain all sprout growth originating 18 inches above grade on trunk and 4 inches out from branch attachments throughout crown.
- Remove weakest rubbing branches.
- Remove dead branches.
- Reduce broken branches or branches with dead ends back to live laterals or buds. Heading cuts can be used.
- Maintain 6 inches behind adjacent edge of walks all growth that originates between 1.5 feet (18 inches) and 6 feet (72 inches) above grade. Heading cuts are acceptable.





Annex C

Applicable ANSI A300 interpretations

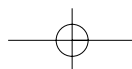
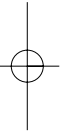
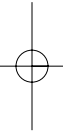
The following interpretations apply to Part 1 – *Pruning*:

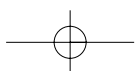
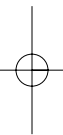
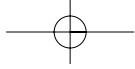
C-1 Interpretation of “should” in ANSI A300 standards

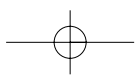
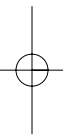
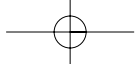
“An advisory recommendation” is the common definition of “should” used in the standards development community and the common definition of “should” used in ANSI standards. An advisory notice is not a mandatory requirement. Advisory recommendations may not be followed when defensible reasons for non-compliance exist.

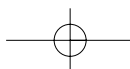
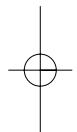
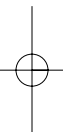
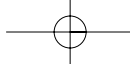
C-2 Interpretation of “shall” in ANSI A300 standards

“A mandatory requirement” is the common definition of “shall” used in the standards development community and the common definition of “shall” used in ANSI standards. A mandatory requirement is not optional and must be followed for ANSI A300 compliance.









ANSI A300 (Part 3)-2013
Revision of ANSI A300 (Part 3)-2006

American National Standard

*for Tree Care Operations –
Tree, Shrub, and Other Woody Plant
Management –Standard Practices
(Supplemental Support Systems)*

ANSI A300 (Part 3)-2013 Supplemental Support Systems
Revision of ANSI A300 (Part 3)-2006





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for Tree Care Operations –

*Tree, Shrub, and Other Woody Plant Management –
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A300 (Part 3)-2013

Foreword This foreword is not part of American National Standard A300 (Part 3)-2013 Supplemental Support Systems.

ANSI A300 Standards are divided into multiple parts, each focusing on a specific aspect of woody plant management (e.g. Pruning, Soil Management, Supplemental Support Systems, etc.)

These standards are used to develop written specifications for work assignments. They are not intended to be used as specifications in and of themselves. Management objectives may differ considerably and therefore must be specifically defined by the user. Specifications are then written to meet the established objectives and must include measurable criteria.

ANSI A300 standards apply to professionals who provide for, or supervise the management of, trees, shrubs, and other woody landscape plants. Intended users include businesses, government agencies, property owners, property managers, and utilities. The standard does not apply to agriculture, horticultural production, or silviculture, except where explicitly noted otherwise.

This standard has been developed by the Tree Care Industry Association (TCIA), an ANSI-accredited Standards Developing Organization (SDO). TCIA is secretariat of the ANSI A300 standards, and develops standards using procedures accredited by the American National Standards Institute (ANSI).

Consensus for standards writing was developed by the Accredited Standards Committee on Tree, Shrub, and Other Woody Plant Management Operations – Standard Practices, A300 (ASC A300).

Prior to 1991, various industry associations and practitioners developed their own standards and recommendations for tree care practices. Recognizing the need for a standardized, scientific approach, green industry associations, government agencies and tree care companies agreed to develop consensus for an official American National Standard.

The result – ANSI A300 standards – unify and take authoritative precedence over all previously existing tree care industry standards. ANSI requires that approved standards be developed according to accepted principles, and that they be reviewed and, if necessary, revised every five years.

TCIA was accredited as a standards developing organization with ASC A300 as the consensus body on June 28, 1991. ASC A300 meets regularly to write new, and review and revise existing, ANSI A300 standards. The committee includes industry representatives with broad knowledge and technical expertise from residential and commercial tree care, utility, municipal and federal sectors, landscape and nursery industries, and other interested organizations.

Suggestions for improvement of this standard should be forwarded to: ANSI A300 Secretary, c/o Tree Care Industry Association, Inc., 136 Harvey Road - Suite 101, Londonderry, NH 03053.

ANSI A300 (Part 3)-2013 Supplemental Support Systems was approved as an American National Standard by ANSI on May 6, 2013. ANSI approval does not require unanimous approval by ASC A300.

The ASC A300 had the following members as of May 6, 2013:

*Dane Buell, Chair
(SavATree, Inc.)*

*Bob Rouse, Secretary
(Tree Care Industry Association, Inc.)*

Organizations Represented

*Alliance for Community Trees
American Nursery and Landscape Association*

American Society of Consulting Arborists

*American Society of Landscape Architects
Asplundh Tree Expert Company
Bartlett Tree Expert Company*

Davey Tree Expert Company

International Society of Arboriculture

Professional Grounds Management Society

Professional Land Care Network

Society of Municipal Arborists

Tree Care Industry Association

USDA Forest Service

Utility Arborist Association

Name of Representative

*Carrie Gallagher
Warren Quinn
Craig J. Regelbrugge (Alt.)
Donald Godi
Stephen Miller (Alt.)
Ron Leighton
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ASC A300 Mission: To develop consensus performance standards based on current research and sound practice for writing specifications to manage trees, shrubs, and other woody plants.

ASC A300 Vision: ANSI A300 standards will be the foundation for work specifications, training materials, quality protocols, and regulations for the management of trees, shrubs, palms, and other woody plants.

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American National Standard
for Tree Care Operations –

Part 3 Supplemental support systems

Subclause 1.1 to 1.3 excerpted from ANSI A300 (Part 1) – Pruning

1 ANSI A300 standards

1.1 Scope

ANSI A300 standards present performance standards for the care and management of trees, shrubs, and other woody plants.

1.2 Purpose

ANSI A300 performance standards are intended for use by federal, state, municipal and private entities including arborists, property owners, property managers, and utilities for developing written specifications.

1.3 Application

ANSI A300 performance standards shall apply to any person or entity engaged in the management of trees, shrubs, or other woody plants.

30 Part 3 – Supplement support system standards

30.1 Purpose

The purpose of this standard is to provide industry consensus guidelines for supplemental support systems and standards for writing specifications.

30.2 Reason

Supplemental support systems are used to provide additional support or limit movement of a tree or tree part.

30.3 Implementation

Specifications for tree management should be written and administered by an arborist or arborist trainee who is under the supervision of an arborist.

30.3.1 Specifications shall be adhered to.

30.4 Safety

30.4.1 This performance standard shall not take precedence over applicable industry safe work practices.

30.4.2 Tree management shall be performed only by arborists or arborist trainees who, through related training or on-the-job experience, or both, are familiar with the standards, practices and hazards of arboriculture related to supplemental support systems and equipment used to install and maintain them.

30.4.2.1 Arborists shall follow appropriate safe work practices.

30.4.3 Performance shall comply with applicable Federal and State Occupational Safety and Health Administration (OSHA) standards, ANSI Z133, and other federal, state, and local regulations.

30.4.4 The sites shall be inspected for visible above ground hazards prior to beginning any tree management procedure.

30.4.5 The location and type of utilities and other obstructions both below and above ground shall be considered prior to tree management operations.

30.4.6 Job briefings shall be performed as outlined in ANSI Z133.

31 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. All standards are subject to revision, and parties to agreements based on this American National Standard shall apply the most recent edition of the standards indicated below.

ANSI A300 for Tree Care Operations – Tree, Shrub, and Other Woody Plant Management – Standard Practices, all Parts

ANSI B18.12, Glossary of Terms for Mechanical Fasteners

ANSI Z60, Nursery stock

ANSI Z133 for Arboricultural Operations – Safety Requirements

ASTM A-475, Standard Specification for Zinc-Coated Steel Wire Strand

Federal Standard: FF-T-276b, Thimbles, Rope

29 CFR 1910, Occupational Safety and Health Standards (General Industry)¹⁾

29 CFR 1910.268, Telecommunications¹⁾

29 CFR 1910.269, Electric power generation, transmission and distribution¹⁾

29 CFR 1910.331 - 335, Electrical safety-related work practices¹⁾

29 CFR 1910, Subpart S – Electrical, §§ 1910.331 - 335, Safety-related work practices¹⁾

¹⁾ Available from U.S. Department of Labor, 200 Constitution Ave. NW, Washington, D.C. 20210, or www.osha.gov.

32 Definitions (Definitions are considered part of the ANSI A300 Part 3 standard.)

32.1 amon-eye nut: Drop-forged eye nut, used to fashion through-hardware anchor(s).



Figure 32.1:
amon-eye nut

32.2 anchor: Hardware installed to affix and/or terminate a cable or guy to the tree, ground, or other device.

32.3 anchor-tree: A tree used to provide supplemental support in a guying installation.

32.4 arborist: An individual engaged in the profession of arboriculture who, through experience, education and related training, possesses the competence to provide for, or supervise the management of, trees and other woody plants.

32.5 arborist trainee: An individual undergoing on-the-job training to obtain the experience and the competence required to provide for, or supervise the management of, trees and woody plants. Such trainees shall be under the direct supervision of an arborist.

32.6 bond: An electrical connection between an electrically conductive object and a component of a

lightning protection system that is intended to significantly reduce potential differences created by lightning currents.

32.7 bracing: The installation of lag-thread screw or machine-thread steel rods in branches, leaders, or trunks to provide supplemental support.

32.8 cable: 1) Zinc coated strand per ASTM A-475 for dead-end grip applications. 2) Wire rope or strand for general applications. 3) Synthetic-fiber rope or synthetic-fiber webbing for general applications.

32.9 cable-end termination: Hardware designed to anchor cables installed through a branch or stem.

32.10 cable grip: A mechanical device that temporarily grasps and holds a wire rope or strand cable during installation.

32.11 cabling: The installation of a steel wire rope, steel strand, or synthetic-fiber system within a tree between branches or leaders to provide supplemental support.

32.12 compartmentalization: Physiological process that creates the chemical and physical boundaries that act to limit the spread of disease and decay organisms.

32.13 connector clamp: A multi-purpose bolt clamp that is used to bond conductors, or bond a conductor to a ground terminal or tree supplemental support system, and meets the specifications of ANSI/UL-96.

32.14 dead-end brace: A brace formed by threading a lag-thread screw rod directly into the limb, leader, or trunk, but not through the side opposite the installation.

32.15 dead-end grip: A manufactured wire wrap designed to form a termination in the end of 1 X 7, left-hand lay cable that meets the specifications of ASTM A-475 for zinc coated strand.

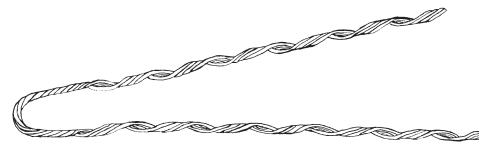


Figure 32.15: dead-end grip

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32.16 dead-end hardware: Anchors or braces that are threaded directly into the tree but not through the side opposite the installation. Dead-end hardware includes but is not limited to: lag hooks; lag eyes; and, lag-thread screw rod.

32.17 eye bolt: A drop-forged, closed-eye bolt.



Figure 32.17: eye bolt

32.18 eye splice: A closed-eye termination formed into common grade cable by bending it back on itself and winding each wire around the cable a minimum of two complete turns.

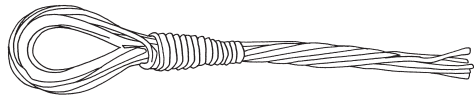


Figure 32.18: eye splice

32.19 guying: The installation of a steel cable or synthetic-fiber cable system between a tree and an external anchor to provide supplemental support.

32.20 lag eye: Lag-thread, drop-forged, closed-eye anchor.



Figure 32.20: lag eye

32.21 lag hook (J-hook): Lag-thread, J-shaped anchor.



Figure 32.21: lag hook

32.22 lag thread: A coarse screw thread designed for securing into wood.

32.23 lag-thread hardware: Anchors or braces with lag-threads. Lag-thread hardware includes, but is not limited to: lag eyes, lag hooks, and lag-thread screw rod.

32.24 lag-thread screw rod: Lag-thread, steel rod, used for dead-end and through-brace installations.



Figure 32.24: lag-thread screw rod

32.25 loop anchor: A synthetic fiber termination that serves as an anchor.

32.26 machine thread: A fine screw thread designed for fittings (such as hardware nuts).

32.27 machine-thread rod: A machine-thread steel rod used for through bracing installation.

32.28 peen: The act of bending, rounding or flattening the fastening end(s) of through-hardware for the purpose of preventing a nut from “backing-off.”

32.29 prop: The installation of a rigid support placed between a trunk and/or branch and another supporting structure.

32.30 shall: As used in this standard, denotes a mandatory requirement.

32.31 should: As used in this standard, denotes an advisory recommendation.

32.32 specifications: A detailed, measurable plan or proposal for performing a work activity or providing a product, usually a written document.

32.33 stabilize: To support a tree in a new location or after root or soil failure.

32.34 standard, ANSI A300: The performance parameters established by industry consensus as a rule for the measure of extent, quality, quantity, value, or weight used to write specifications.

32.35 supplemental support system: A system designed to provide additional support or limit movement of a tree or tree part.

32.36 swage stop: A sleeve-type fitting used to terminate a wire rope or cable.

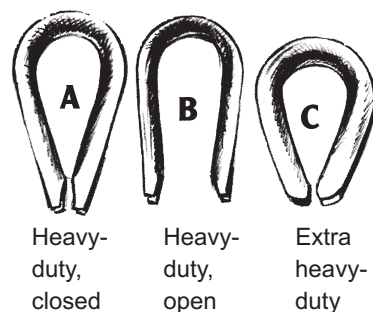
32.37 taut: Tightened to the point of eliminating visible slack.

32.38 termination: A device or configuration that secures the end of a cable to the anchor in a cabling or guying installation.

32.39 termination hardware: Hardware used to form a termination. Termination hardware includes but is not limited to: dead-end grips; thimbles used in eye-splice configurations; cable-end terminations; and, swage-stop terminations.

32.40 thimble: An oblong galvanized or stainless steel fitting with flared margins and an open-ended base.

Figure 32.40:
Thimble



32.41 threaded-steel rod: A machine-thread, steel rod used for through-brace installations.

32.42 through-brace: A brace formed by installing hardware completely through a branch, leader, or trunk.

32.43 through-hardware: Anchors, cables, or braces that pass completely through the branch, leader, or trunk, secured with nuts and heavy-duty washers or cable-end termination. Through-hardware includes but is not limited to: cables; eyebolts; lag-thread screw rods; and, threaded-steel rods.

32.44 turnbuckle: A drop-forged, closed-eye device for adjusting tension.



Figure 32.44: turnbuckle

32.45 wire rope clamp: A clamp consisting of a “U” bolt, bracing plate, and fastening nuts.

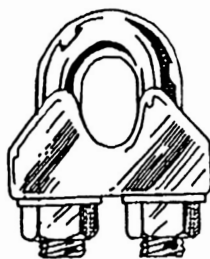


Figure 32.45:
wire rope clamp

33 Supplemental support systems practices

33.1 Objectives

Objectives for supplemental support systems shall be defined prior to design, installation, or maintenance of the system.

33.1.1 Objectives should be based on the reasons for installing or maintaining the supplemental support system.

33.1.2 Supplemental support system design shall be specified. Specifications should include support method (cabling, bracing, guying, etc), system type (direct, triangular, hub and spoke, etc.), system location, and materials, including number, sizes, and types of components.

33.2 Tree inspection

33.2.1 An arborist or arborist trainee shall visually inspect each tree before beginning work.

33.2.2 Structural integrity and potential changes in tree movement and loading (dynamics) shall be considered prior to installing a tree supplemental support system.

33.2.3 If a condition is observed requiring attention beyond the original scope of work, the condition shall be reported to an immediate supervisor, the owner, or the person responsible for authorizing the work.

33.3 Tools and equipment

33.3.1 Climbing spurs shall not be used when climbing trees to install supplemental support systems, except in the case of emergencies.

33.3.2 Equipment and work practices that damage bark, cambium, live palm tissue, or any combination of these, beyond the scope of the work, should be avoided.

33.3.3 Cable grips used to tension the cable shall be designed for use with the type of cable being installed.

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33.4 General

33.4.1 All necessary pruning should be performed prior to installing a tree supplemental support system. Pruning shall be in accordance with ANSI A300 Part 1 – *Pruning*.

33.4.2 Prior to installation, the owner or owner's agent shall be notified of the need for periodic inspection by an arborist of the supplemental support system's condition; position; cable tension; and the tree's structural integrity, see **Annex C**. Scheduling inspections shall be the responsibility of the tree owner.

33.4.3 Anchors and braces shall not be installed into decayed areas where sound wood is less than 30% of the trunk or branch diameter, see **Figure 33.4.3**.

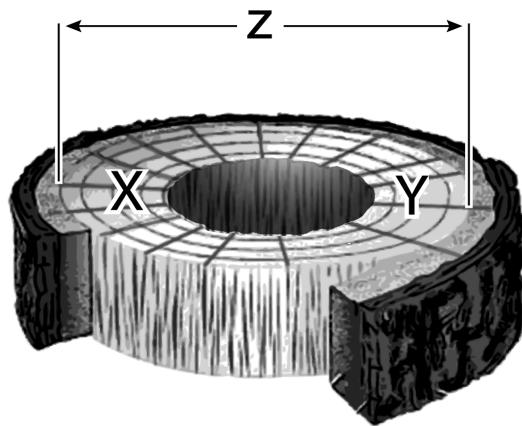


Figure 33.4.3: Equations for finding the percentage of sound wood. Symbol Key for Equations:

- X = sound wood depth, working side.*
- Y = sound wood depth, opposite side.*
- Z = total trunk/branch diameter, bark diameter not included.*

Equation for percentage of sound wood for through-bolt applications:

$$[(X + Y) \div Z] \times 100 = \% \text{ of sound wood for through-bolt applications.}$$

Equation for percentage of sound wood for dead-end applications:

$$(X \div Z) \times 100 = \% \text{ of sound wood for dead-end applications.}$$

33.4.4 Steel cables or guys in trees with existing lightning protection conductors, shall be bonded to the lightning protection system. A connector clamp, designed for use in lightning protection systems, shall be used to bond steel cables or guys to the lightning protection system [see *ANSI A300 (Part 4) — Lightning Protection Systems standard*].

33.4.5 Supplemental support systems shall be installed in compliance with minimum distance Table 1 in ANSI Z133 for overhead, energized conductors.

33.4.6 Steel hardware shall be corrosion resistant (e.g. galvanized or stainless steel). Synthetic fiber cable systems shall be ultra-violet (UV) light resistant.

33.4.7 Wire rope clamps shall not be used to form terminations in cables larger than 1/8 inch (3 mm).

33.4.8 Treatment of cavities by filling, shall not be considered to provide support.

33.5 Installation practices

33.5.1 Holes should not be drilled closer together than the diameter of the branch or trunk being drilled. The diameter of the hole shall not be greater than 1/6 the diameter of the limb, trunk, or branch at the point of installation.

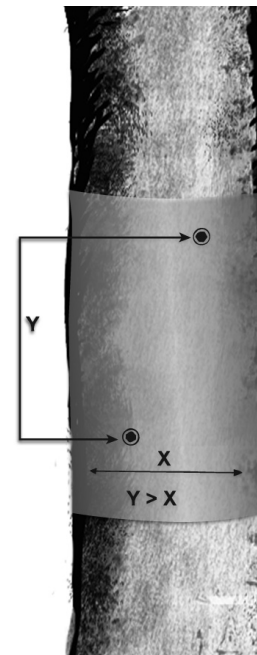


Figure 33.5.1: Brace positioning

33.5.2 Longitudinal alignment of anchors and/or braces should be avoided.

33.5.3 Anchor(s) shall be installed in alignment with the cable and termination hardware, and not be subjected to side loading.

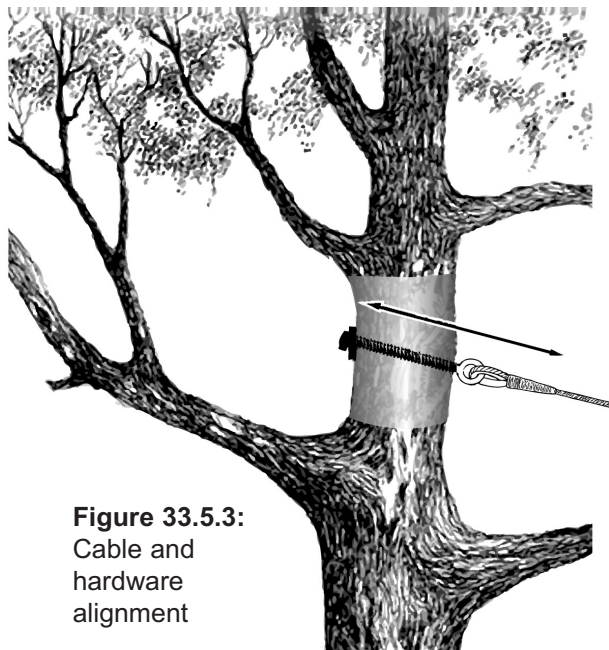


Figure 33.5.3:
Cable and
hardware
alignment

33.5.4 Only one termination shall be attached to an anchor.

33.5.5 Lag-thread hardware shall only be installed in sound wood. The hole for the lag-thread hardware shall be $\frac{1}{16}$ " to $\frac{1}{8}$ " (1.5-3 mm) smaller than the diameter of the lag.

33.5.6 Holes for through-hardware should be no greater than $\frac{1}{8}$ " (3 mm) of the diameter of the hardware being installed.

33.5.7 Lag hooks shall only be used when they can be seated to the full length of the threads. If it is not possible to seat the full length of lag hook threads other hardware shall be selected.

33.5.8 Lag hooks shall be installed to prevent the cable termination from coming loose. Bark should not be damaged beyond the scope of the work during installation of the lag hook.

33.5.9 When installing through-hardware, heavy-duty or heat-treated, heavy-duty round steel washers shall be installed between the nut(s) and the wood or according to manufacturer's recommendations.

33.5.10 Washers shall not be countersunk into the wood.

33.5.11 Fasteners for threaded hardware, such as nuts, amon eyes, and turnbuckles, shall be secured to prevent loosening.

33.5.12 Excess portion of the through-hardware shall be removed.

33.5.13 Terminations shall be specified in the system design specifications.

33.5.14 Termination hardware shall be the appropriate size and type for the cable to be installed.

33.5.15 Terminations formed by eye-splice configurations shall incorporate thimbles.

33.5.16 Dead-end grip terminations shall only be used on cable that meets the specifications of ASTM A-475.

33.5.17 Dead-end grip terminations shall incorporate extra heavy-duty wire rope thimbles – Type III, that meet the performance specifications of federal standard FF-T276b.

33.5.18 All hardware within a system shall meet or exceed the minimum strength required to achieve the objective, see **Annex A**.

33.5.19 Installations shall follow manufacturers' recommendations.

34 Cabling

34.1 Cabling objectives

Objectives for cabling shall be defined prior to design, installation, or maintenance of the system.

34.1.1 Objectives should include, but are not limited to, one or more of the following:

- Limit the movement of codominant stems or branches;
- Limit the movement of weakly attached branches;
- Provide supplemental support for overextended branches; and,
- Provide supplemental support for branches that may be exposed to extra loading.

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34.2 Cabling types

Cabling system specifications should include one or more of the following types.

34.2.1 Direct: Direct cabling consists of a single cable between two tree parts, e.g., two branches, two stems, or a trunk and a limb (three direct cables shown).

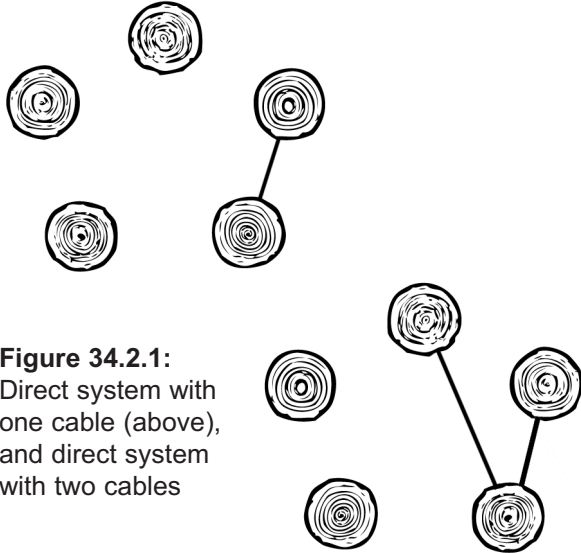


Figure 34.2.1:
Direct system with one cable (above), and direct system with two cables

34.2.1.1 Location of hardware shall be specified.

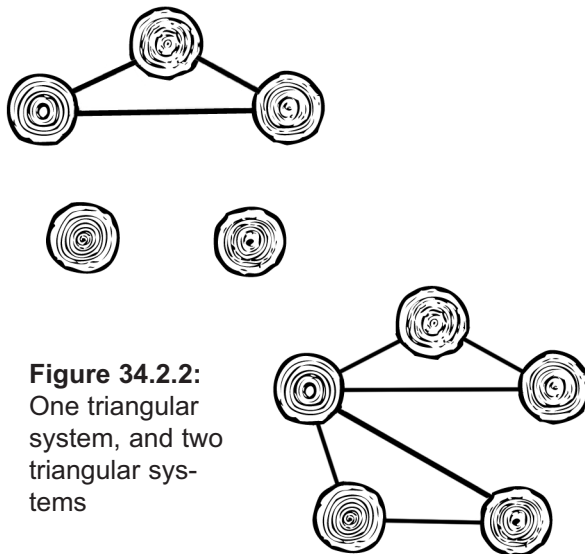


Figure 34.2.2:
One triangular system, and two triangular systems

34.2.2 Triangular: Triangular cabling consists of connecting tree parts in combination of threes. This method should be preferred, when maximum support is required (two triangular systems shown).

34.2.2.1 Location of hardware shall be specified.

34.2.3 Box: Box cabling consists of connecting four or more tree parts in a closed series. This system should be used only when minimal direct support is needed.

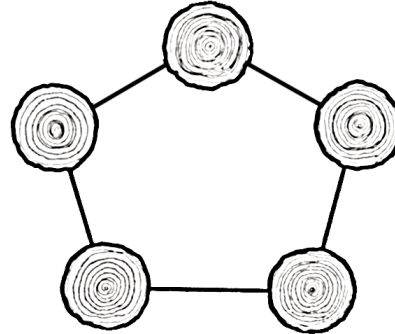


Figure 34.2.3: Box system

34.2.3.1 Location of hardware shall be specified.

34.2.4 Hub and Spoke: Hub and Spoke cabling consists of a center attachment (hub) with spans (spokes) of cable radiating to three or more leaders.

34.2.4.1 Location of hardware shall be specified.

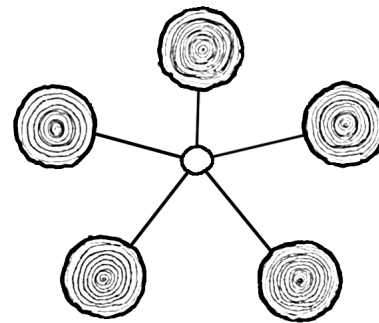


Figure 34.2.4: Hub and spoke system

34.3 Cabling installation

34.3.1 Support cables should be taut following installation.

34.3.2 Anchor(s) should be installed at or near a point two-thirds ($2/3$) of the length/height of the branch or leader to be supported, measured from the junction to be supported, see Figure 34.3.2.

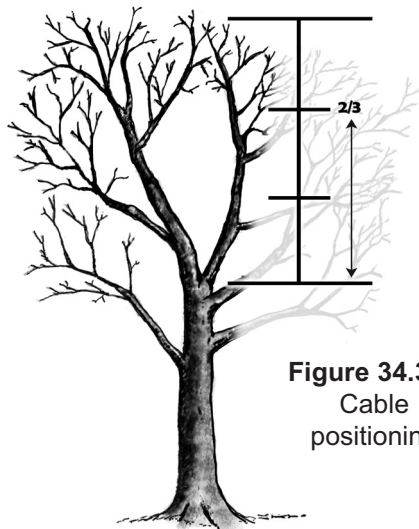


Figure 34.3.2:
Cable
positioning

34.3.3 The angle of cable installation should be perpendicular to an imaginary line bisecting the angle between the tree parts being cabled, see Figure 34.3.3.

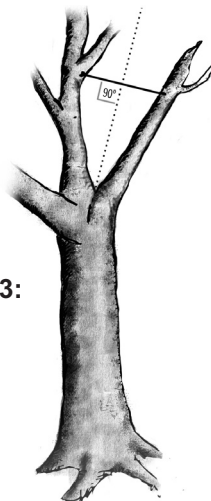


Figure 34.3.3:
Cable
angle

34.3.4 If existing cables are to be replaced, they shall not be removed until the new system is installed.

35 Bracing

35.1 Bracing objectives

Objectives for bracing shall be defined prior to design, installation, or maintenance of the system.

35.1.1 Objectives should include, but are not limited to, one or more of the following:

- Limit the movement of codominant stems or branches;
- Reinforce and/or close cracks in stems or branches; and,
- Restrict movement of rubbing branches.

35.2 Bracing types

Bracing system specifications should include one or more of the following types.

35.2.1 Single: Single bracing consists of one installed rod, see Figure 35.2.1.

35.2.2 Parallel: Parallel bracing consists of two or more rods installed in vertical and directional alignment, see Figure 35.2.2.

35.2.3 Alternating: Alternating bracing consists of two or more rods installed in directional alignment but not vertical alignment, see Figure 35.2.3.

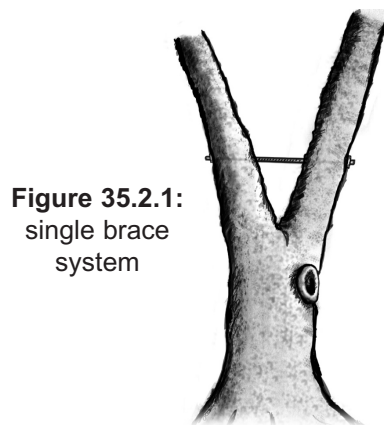


Figure 35.2.1:
single brace
system

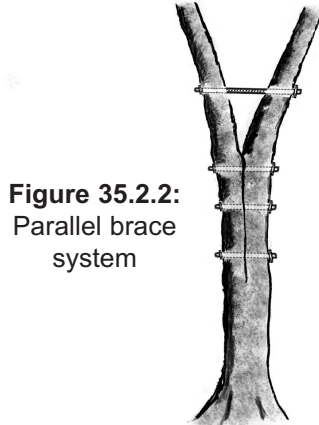


Figure 35.2.2:
Parallel brace
system

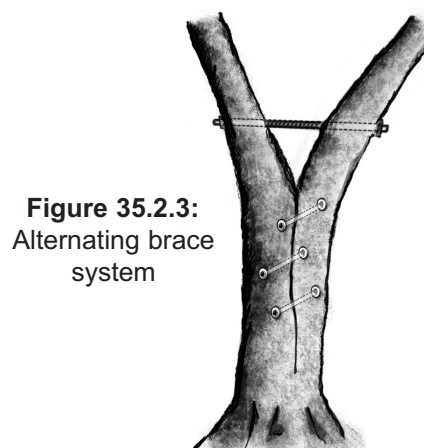


Figure 35.2.3:
Alternating brace
system

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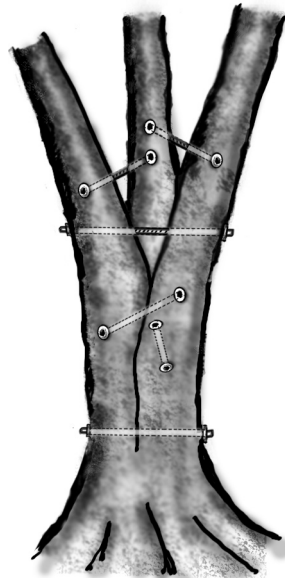


Figure 35.2.4:
Crossing brace
system

35.2.4 Crossing: Crossing bracing consists of two or more rods installed in a non-aligned pattern.

35.3 Bracing installation

35.3.1 When bracing installation is specified, supplement support should be installed in the crotch, before bracing installation occurs.

35.3.2 The preferred location for a single rod for a non-split crotch, should be approximately the branch diameter of the largest branch above the crotch.

35.3.2.1 Variables such as wood quality, species, form, and branch structure, should be considered when determining the distance above the crotch.

35.3.3 Bracing systems using multiple rods should have at least one rod installed above the crotch.

35.3.4 Braces shall be installed in either a through-brace or dead-end brace configuration.

35.3.5 The minimum hardware requirements for braces should be in accordance with **Table 1** Minimum hardware requirements for bracing trees.

35.3.6 Through-bracing

35.3.6.1 Through-braces shall be used when bracing through decayed area/wood or in trees that are poor compartmentalizers or have weak wood characteristics.

35.3.6.2 Through-braces shall be terminated with heavy duty washers and nuts.

35.3.7 Dead-end bracing

35.3.7.1 Dead-end bracing shall be performed with lag-thread screw rod.

35.3.7.2 The brace shall be installed completely through the smaller or equal portion and at least halfway into the other portion.

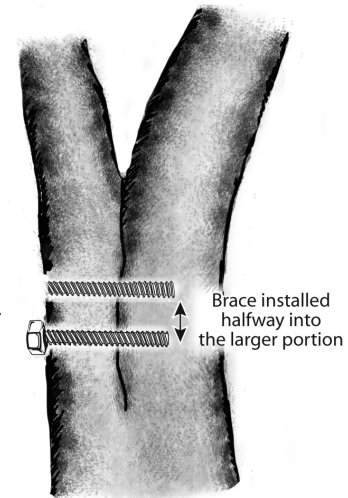


Figure 35.3.7.2: Dead-
end brace installation

Brace installed
halfway into
the larger portion

35.3.7.3 The end of the lag-thread screw rod shall be inside the bark or shall be fastened with a heavy duty or heat-treated washer and a nut.

36 Propping

36.1 Propping objectives

Objectives for propping shall be defined prior to design, installation, or maintenance of the system.

36.1.1 Objectives should include, but are not limited to, one or more of the following:

- Support long, lateral branches;
- Keep branches or leaning stems off the ground; and,
- Support branches or leaning stems to provide clearance.

36.2 Propping installation

36.2.1 Props shall be of sufficient strength to hold the intended load.

Table 1: Minimum hardware requirements for bracing trees, English and metric equivalent

Diameter at Brace (in inches)	Brace Rod Diameter (in inches)	Minimum number of rods with split or included bark	Minimum number of rods with no apparent split or included bark
<5	1/4	1	1
5-8	3/8	1	1
8-14	1/2	2	1
14-20	5/8	2	1
20-40	3/4	3 min. with one additional for each 8" in excess of 30"	2 min. with one additional for each 8" in excess of 30"
>40	7/8	4 min. with one additional for each 8" in excess of 40"	3 min. with one additional for each 12" in excess of 40"

Diameter at Brace (in cm)	Brace Rod Diameter (in mm)	Minimum number of rods with split or included bark	Minimum number of rods with no apparent split or included bark
<13	6	1	1
13-20	10	1	1
20-36	14	2	1
36-51	17	2	1
51-102	19	3 min. with one additional for each 20 cm in excess of 76 cm	2 min. with one additional for each 20 cm in excess of 76 cm
>102	21	4 min. with one additional for each 20 cm in excess of 102 cm	3 min. with one additional for each 30 cm in excess of 102 cm

36.2.2 Props shall be fastened to the branch in a manner that minimizes damage and prevents the branch from falling off the prop.

36.2.3 Props shall be designed and installed in a manner that minimizes restriction of plant growth.

36.2.4 Props shall be anchored so that movement does not damage the tree branch, limb, or trunk.

37 Guying established trees

37.1 Objectives for guying established trees

Objectives for guying shall be defined prior to design, installation, or maintenance of the system.

37.1.1 Objectives should include, but are not limited to, one or more of the following:

- Stabilize an existing tree or shrub;
- Reduce risk of windthrow; and,
- Reduce other specified risks.

37.2 Guying established trees – types

Specifications for guying established trees should include one or more of the following types.

37.2.1 Tree-to-ground: Tree-to-ground guying consists of installing at least one cable between a ground anchor and the tree to be guyed.



Figure 37.2.1:
Tree-to-ground
system

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37.2.2 Tree-to-tree: Tree-to-tree guying consists of installing at least one cable between an anchor-tree and the tree to be guyed.

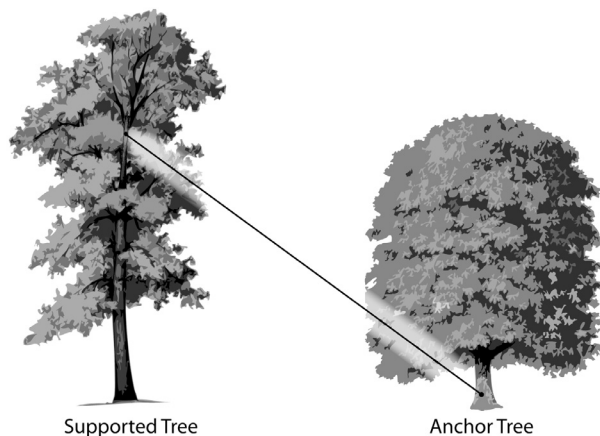


Figure 37.2.2: Tree-to-tree system

37.3 Safety

Public safety shall be considered when guying trees including, but not limited to:

- Pedestrian and vehicular traffic; and,
- Site and recreational use.

37.4 Guying installation

37.4.1 Hardware should be installed so that it is in alignment with the angle of pull from the guy.

37.4.2 Permanent guys shall be attached to the tree with dead-end hardware or through-hardware.

37.4.3 A temporary guy should be considered when there is an immediate need for supplemental support.

37.4.4 Tree-to-ground guying

37.4.4.1 Guys shall be secured to a ground-anchor(s) sufficient to achieve the objective.

37.4.4.2 Guys should be attached to the tree at or above a point not less than one-half the height of the tree.

37.4.4.3 Ground-anchor(s) should be placed no closer to the trunk than two-thirds the distance from the ground to the height of the lowest point of attachment in the tree, adjusted for slope and site conditions.

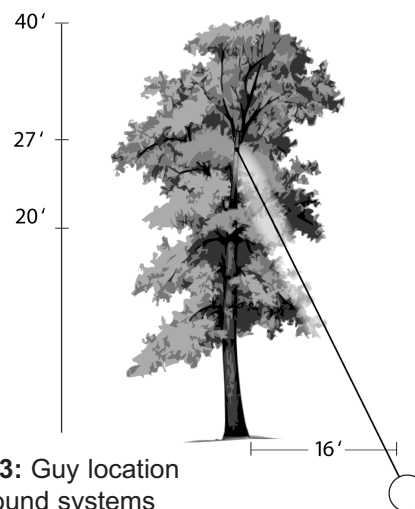


Figure 37.4.4.3: Guy location in tree-to-ground systems

37.4.5 Tree-to-tree guying

37.4.5.1 Anchor-tree(s) shall be inspected for structural integrity.

37.4.5.2 Anchor-tree(s) shall have the ability to meet the objective.

37.4.5.3 Anchors should be attached in the upper half of the tree to be supported and in the lower half of the anchor-tree(s).

38 Guying newly installed landscape plants

38.1 Objectives

Objectives for guying shall be defined prior to design, installation, or maintenance of the system.

38.1.1 Objectives should include, but are not limited to, one or more of the following:

- Stabilize a larger transplanted tree or shrub;
- Reduce risk of windthrow; and,
- Protect a new transplant from damage, including from maintenance or vandalism.

38.1.2 Guys or other supplemental support systems should not be installed unless necessary.

38.2 Guys shall be attached using a method that minimizes damage to the tree.

38.3 A minimum of two guys should be installed at an angle sufficient to support the landscape plant.

38.4 For trees over 10-inch diameter, guys should be installed in accordance with subclause **37.2 Guying established tree-types.**

38.5 Guys shall be secured to (a) ground anchor(s) sufficient to achieve the objective.

38.6 Guys or other supplemental support systems shall be maintained and be removed when they are no longer needed.

39 Supplemental support system inspection and maintenance

39.1 Systems should be inspected periodically for wear, corrosion, degradation of hardware, and damage to the tree. The inspection should include the system's condition, position, cable tension, and the tree's structural integrity, see **Annex C.**

39.2 If problems are detected they should be corrected or the system should be repaired, replaced, or modified.

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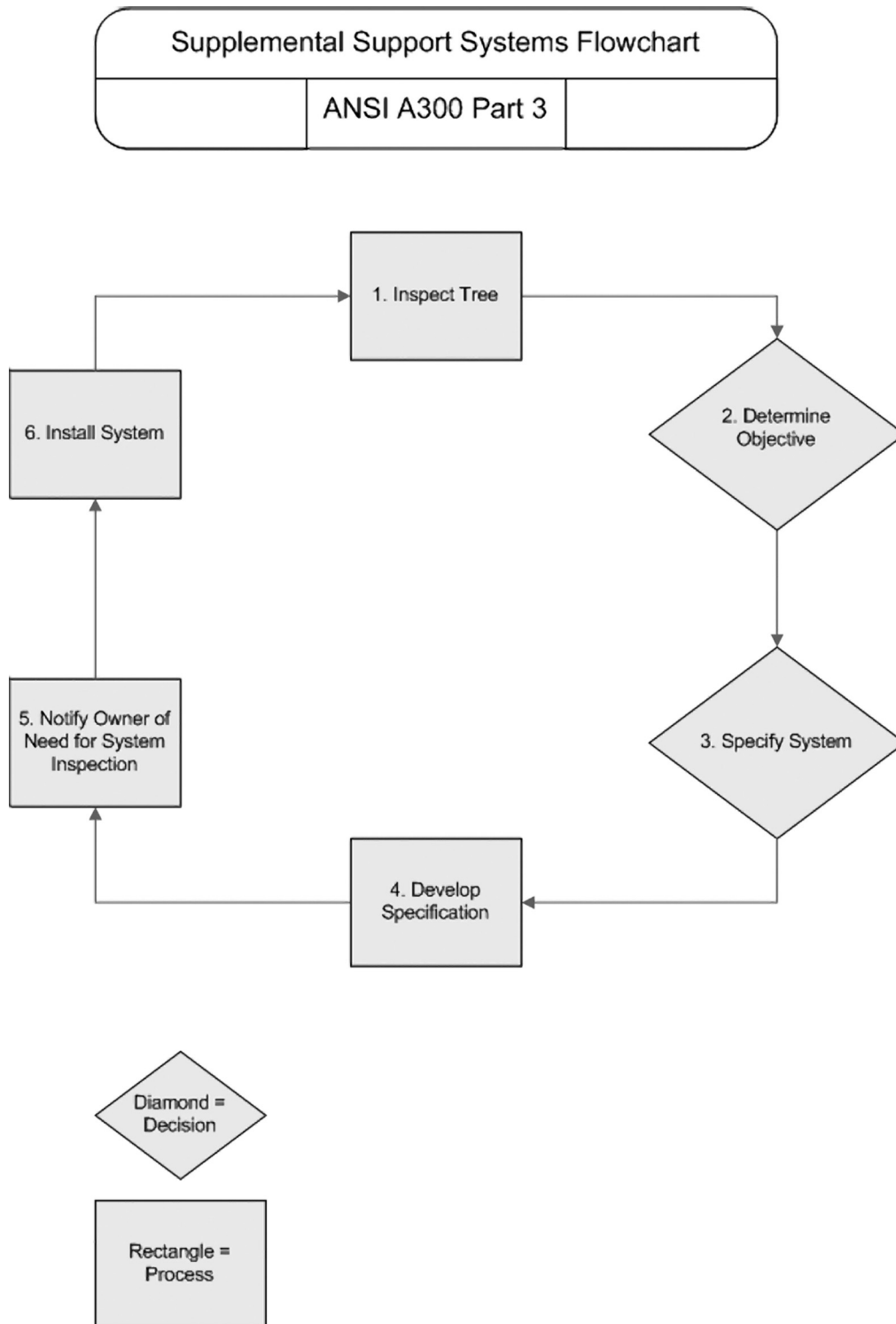
Annex A – Additional hardware information (This annex is not part of the ANSI A300 Part 3 standard.)

Table A-1 Minimum hardware size for cabling trees

Maximum Limb Diameter at anchor attachment point in inches	Estimated Load in pounds	Lag Hook diameter in inches	Eye Bolt diameter in inches	Amon nut / Loop nut Threaded-rod diameter in inches	Common Grade Cable (galvanized, 1 x 7) diameter in inches	Extra High Strength Cable (1 x 7) diameter in inches	Aircraft Cable (galvanized, 7 x 19) diameter in inches
2	100	1/4	1/4	1/4	1/8	3/16	1/8
3.5	200	5/16	1/4	1/4	3/16	3/16	1/8
5	300	3/8	1/4	1/4	1/4	3/16	1/8
8	600	1/2	5/16	5/16	5/16	3/16	3/16
10	900	5/8	3/8	3/8	3/8	1/4	1/4
15	1000	N/A	3/8	3/8	7/16	1/4	1/4
18	1200	N/A	3/8	3/8	1/2	1/4	1/4
20	1400	N/A	1/2	7/16	1/2	5/16	1/4
24	2200	N/A	1/2	1/2	N/A	5/16	3/8
28	3300	N/A	5/8	5/8	N/A	7/16	1/2
30	3700	N/A	N/A	7/8	N/A	7/16	1/2

* N/A indicates not an acceptable application.

Annex B – Supplemental support systems specification flow chart (This annex is not part of the ANSI A300 Part 3 standard.)



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Annex C – Supplemental support system inspection process (This annex is not part of the ANSI A300 Part 3 standard.)

C-1 Supplemental support systems may be inspected by an arborist or arborist trainee by ground and/or aerial inspection methods on a periodic basis.

C-2 Appropriate timeframes for periodic inspections are based on the species and condition of the tree, weather events, the supplemental support system method and type, and the type and materials of components used.

C-3 Inspection checklist criteria may include, but is not limited to the:
System's current condition and position in the tree;
Integrity of system components;
Bonding to lightning protection systems, as appropriate;
Growth of the tree;
Tension in the system;
Effect of the system on the tree; and,
Structural condition of the tree.

C-4 Inspection of supplemental support systems may be considered when other maintenance tasks are being performed in the tree.

C-5 Suggested tools and equipment may include, but is not limited to:
Inspection checklist;
System tag;
Sounding hammer;
Binoculars;
Clinometer; and,
Aerial lift.

C-6 Suggested written record data may include, but is not limited to:
Inspection date;
Methods; and,
Findings.

Annex D – Applicable ANSI A300 interpretations (This annex is not part of the ANSI A300 Part 3 standard.)

The following interpretations apply to the ANSI A300 Part 3 Supplemental Support Systems standard.

D-1 Interpretation of “should” and “shall” in ANSI A300 standards

“An advisory recommendation” is the common definition of “should” used in the standards development community and the common definition of “should” used in ANSI standards. An advisory notice is not a mandatory requirement. Advisory recommendations might not be followed when defensible reasons for non-compliance exist.

D-2 Revised interpretation for compliant lag hooks, original version from ANSI A300 (Part 3)-2000)

The intent of this interpretation remains the same as the 2000 and 2006 versions.

Excerpts:

33.5.5 Lag-thread hardware shall only be installed in sound wood. The hole for the lag-thread hardware shall be $\frac{1}{16}$ " to $\frac{1}{8}$ " (1.5-3 mm) smaller than the diameter of the lag.

33.5.7 Lag hooks shall only be used when they can be seated to the full length of the threads. If it is not possible to seat the full length of lag hook threads other hardware shall be selected.

33.5.8 Lag hooks shall be installed to prevent the cable termination from coming loose. Bark should not be damaged beyond the scope of the work during installation of the lag hook.

Interpretation: In normal circumstances, lag hooks that have a thread depth variance greater than $\frac{1}{16}$ inch make determination of correct hole size impossible and cannot be installed in a manner compliant with the ANSI A300 Part 3 standard. Lag hooks with threads cut beyond the bent portion of the hook cannot be installed in a manner that allows the full length of the threads to be seated without damaging the bark beyond the scope of the work and cannot be installed in a manner compliant with the ANSI A300 Part 3 standard.

D-3 Interpretation for cable selection when using dead-end grip terminations, update for ANSI A300 (Part 3)-2013 standard

The intent of this interpretation remains the same as the 2006 version.

The user of ANSI A300 standards is instructed to cross-reference definition subclauses **32.8 cable** and **32.15 dead-end grip** and subclause **33.5.16**.

Interpretation: In normal circumstances, dead-end cable grips that meets the ANSI ASTM A475 standard specification for zinc coated steel wire strand can be used with common grade and extra high strength grade cable that also meets the ANSI ASTM A475 standard as long as they are installed correctly and according to manufacturer’s instructions.

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Annex E – Sample specifications (This annex is not part of the ANSI A300 Part 3 standard.)



E-1 Sample specification for tree over historic cemetery.

Cite: “All work to be done according to ANSI A300 Part 3 Supplemental Support Systems standard” or, “All tree care management to be done according to ANSI A300 standards.”

Objective: Maximum, direct support of limb

Type of cabling to meet objective: Triangular system

Specification:

(6) $\frac{3}{8}$ inch heat-treated, galvanized eyebolts shall be installed and secured with heat-treated, galvanized nuts and washers in a through-anchor configuration.

The anchor on the subject limb should be installed at a location approximately two-thirds ($\frac{2}{3}$) the height of that limb.

$\frac{1}{4}$ inch EHS cable shall be secured to eyebolts with dead-end grips and thimbles, sized and matched according to manufacturers’ instructions and ASTM A475. The EHS cables shall be installed between anchors to form a triangular system.

Notes:



Notes:



Notes:

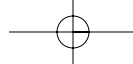


ANSI A300 (Part 3)-2013: Supplemental Support Systems



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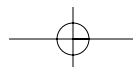


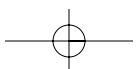
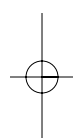
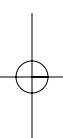
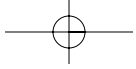
ANSI A300 (Part 4)-2008 Lightning Protection Systems
Revision of ANSI A300 (Part 4)-2002

ANSI A300 (Part 4)-2008 Lightning Protection Systems
Revision of ANSI A300 (Part 4)-2002

American National Standard

*for Tree Care Operations —
Tree, Shrub, and Other Woody Plant
Management — Standard Practices
(Lightning Protection Systems)*





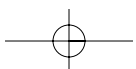
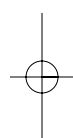
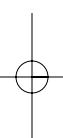
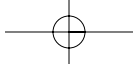
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for Tree Care Operations —
Tree, Shrub, and Other Woody Plant Management —
Standard Practices (*Lightning Protection Systems*)

Secretariat
Tree Care Industry Association, Inc.

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Foreword (This foreword is not part of American National Standard A300 (Part 4)-2008 Lightning Protection Systems)

ANSI A300 Standards are divided into multiple parts, each focusing on a specific aspect of woody plant management (e.g. Pruning, Fertilization, etc).

These standards are used to develop written specifications for work assignments. They are not intended to be used as specifications in and of themselves. Management objectives may differ considerably and therefore must be specifically defined by the user. Specifications are then written to meet the established objectives and must include measurable criteria.

ANSI A300 standards apply to professionals who provide for or supervise the management of trees, shrubs, and other woody landscape plants. Intended users include businesses, government agencies, property owners, property managers, and utilities. The standard does not apply to agriculture, horticultural production, or silviculture, except where explicitly noted otherwise.

This standard has been developed by the Tree Care Industry Association (TCIA), an ANSI-accredited Standards Developing Organization (SDO). TCIA is secretariat of the ANSI A300 standards, and develops standards using procedures accredited by the American National Standards Institute (ANSI).

Consensus for standards writing was developed by the Accredited Standards Committee on Tree, Shrub, and Other Woody Plant Management Operations – Standard Practices, A300 (ASC A300).

Prior to 1991, various industry associations and practitioners developed their own standards and recommendations for tree care practices. Recognizing the need for a standardized, scientific approach, green industry associations, government agencies and tree care companies agreed to develop consensus for an official American National Standard.

The result – ANSI A300 standards – unify and take authoritative precedence over all previously existing tree care industry standards. ANSI requires that approved standards be developed according to accepted principles, and that they be reviewed and, if necessary, revised every five years.

TCIA was accredited as a standards developing organization with ASC A300 as the consensus body on June 28, 1991. ASC A300 meets regularly to write new, and review and revise existing ANSI A300 standards. The committee includes industry representatives with broad knowledge and technical expertise from residential and commercial tree care, utility, municipal and federal sectors, landscape and nursery industries, and other interested organizations.

Suggestions for improvement of this standard should be forwarded to: A300 Secretary,
c/o Tree Care Industry Association, Inc., 136 Harvey Road - Suite B101-B110, Londonderry, NH, 03053.

ANSI A300 (Part 4)-2008 Lightning Protection Systems was approved as an American National Standard by ANSI on March 20, 2008. ANSI approval does not require unanimous approval by ASC A300. The ASC A300 committee contained the following members at the time of ANSI approval:

Tim Johnson, Chair
(Artistic Arborist, Inc.)

Bob Rouse, Secretary
(Tree Care Industry Association, Inc.)

(Continued)

Organizations Represented	Name of Representative
<i>American Nursery and Landscape Association</i>	Warren Quinn Craig J. Regelbrugge (Alt.)
<i>American Society of Consulting Arborists</i>	Donald Zimar
<i>American Society of Landscape Architects</i>	Ron Leighton
<i>Asplundh Tree Expert Company</i>	Geoff Kempter Peter Fengler (Alt.)
<i>Bartlett Tree Expert Company</i>	Peter Becker Dr. Thomas Smiley (Alt.)
<i>Davey Tree Expert Company</i>	Joseph Tommasi R.J. Laverne (Alt.)
<i>International Society of Arboriculture</i>	Bruce Hagen Sharon Lilly (Alt.)
<i>National Park Service</i>	Robert DeFeo Dr. James Sherald (Alt.)
<i>Professional Grounds Management Society</i>	Thomas Shaner
<i>Professional Land Care Network</i>	Preston Leyshon
<i>Society of Municipal Arborists</i>	Gordon Mann Andy Hillman (Alt.)
<i>Tree Care Industry Association</i>	James McGuire (Alt.)
<i>USDA Forest Service</i>	Ed Macie Keith Cline (Alt.)
<i>Utility Arborist Association</i>	Matthew Simons Jeffrey Smith (Alt.)

Additional organizations and individuals:

American Forests (*Observer*)
 Mike Galvin (*Observer*)
 Peter Gerstenberger (*Observer*)
 Dick Jones (*Observer*)
 Myron Laible (*Observer*)
 Beth Palys (*Observer*)
 Richard Rathjens (*Observer*)
 Richard Roux (*NFPA-780 Liaison*)

ASC A300 mission statement:

Mission: To develop consensus performance standards based on current research and sound practice for writing specifications to manage trees, shrubs, and other woody plants.

American National Standard for Tree Care Operations –

Tree, Shrub, and Other Woody Plant Management –Standard Practices (*Lightning Protection Systems*)

Clause 1 excerpted from ANSI A300 (Part 1)–2008
Pruning

1 ANSI A300 standards

1.1 Scope

ANSI A300 standards present performance standards for the care and management of trees, shrubs, and other woody plants.

1.2 Purpose

ANSI A300 performance standards are intended for use by federal, state, municipal and private entities including arborists, property owners, property managers, and utilities for developing written specifications.

1.3 Application

ANSI A300 performance standards shall apply to any person or entity engaged in the management of trees, shrubs, or other woody plants.

43 Part 4 – Lightning protection systems standards

43.1 Purpose

The purpose of this document is to provide standards for developing specifications for tree lightning protection system installation.*

43.2 Reasons for tree lightning protection systems

Lightning protection systems are used to reduce the

risk of damage to trees from lightning strikes. Protected trees shall not be considered a safe haven from lightning strikes.*

43.3 Implementation

Specifications for tree maintenance should be written and administered by an arborist.

43.4 Safety

43.4.1 Lightning protection systems for trees shall be implemented by an arborist familiar with the practices and hazards of lightning protection systems for trees and the equipment used in such operations.

43.4.2 This standard shall not take precedence over applicable industry safe work practices.

43.4.3 Operations shall comply with applicable Federal and State Occupational Safety and Health standards, ANSI Z133.1, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and other Federal Environmental Protection Agency (EPA) regulations, as well as state and local regulations.

44 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. All standards are subject to revision, and parties to agreements based on this American National Standard shall apply the most recent edition of the standards indicated below.

ANSI/UL 96 *Lightning Protection Components*

ANSI/UL 96A *Installation Requirements for Lightning Protection Systems*

ANSI/UL 467 *Grounding and Bonding Equipment*

ANSI Z60.1 *Nursery stock*

ANSI Z133.1 *Arboriculture – Safety Requirements*

NFPA 780 *Standard for the Installation of Lightning Protection Systems*

29 CFR 1910, *General industry*¹

29 CFR 1910.268, *Telecommunications*¹

29 CFR 1910.269, *Electric power generation, transmission and distribution*¹

29 CFR 1910.331 - 335, *Electrical safety-related work practices*¹

*See Annex C Interpretations.

1) Available from U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210

45 Definitions

45.1 air terminal: The end of a lightning protection system that is intended to intercept lightning strikes.

45.2 arborist: An individual engaged in the profession of arboriculture who, through experience, education, and related training, possesses the competence to provide for, or supervise the management of, trees and other woody plants.

45.3 arborist trainee: An individual undergoing on-the-job training to obtain the experience and the competence required to provide for or supervise the management of trees and other woody plants. Such trainees shall be under the direct supervision of an arborist.

45.4 bond: Electrical connection between a conductive object and a component of a lightning protection system intended to reduce electrical potential differences.

45.5 cable splicer: A cast or stamped crimp-type connector used to connect conductors in either an end-to-end, side-by-side or Y configuration.



Fig. 45.5a End-to-end cable splicer.

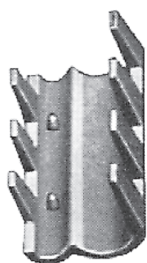


Fig. 45.5b Side-by-side cable splicer.



Fig. 45.5c Y cable splicer.

45.6 clamp-type (multi-use) connector: A cast connector fitting that uses one or more bolts to secure the connection.

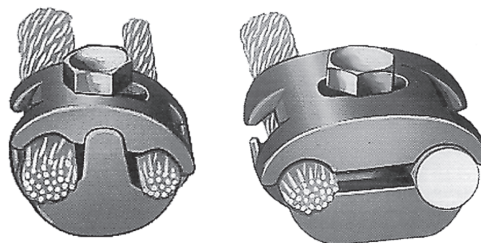


Fig. 45.6 Clamp-type connectors.

45.7 conductor: A copper cable used in a lightning protection system intended to carry the lightning discharge to ground.

45.7.1 bonding conductor: A conductor that connects a tree support cable or metal conduit to the lightning protection system.

45.7.2 branch conductor: A conductor that connects an air terminal to a main conductor.

45.7.3 main conductor: A conductor that connects the main air terminal and the ground terminal.

45.8 electrolytic couple: Contact between metals that are not galvanically compatible, causing an accelerated degradation (corrosion or oxidation) in the presence of moisture. Examples of these combinations are copper and zinc galvanization.

45.9 fastener: An attachment to secure a conductor to a tree.



Fig. 45.9 Pinch-type fastener.

45.10 grounded: Connected to earth or to a conductive material that is connected to earth.

45.11 ground plate: A copper plate used to form a ground terminal in shallow soils.

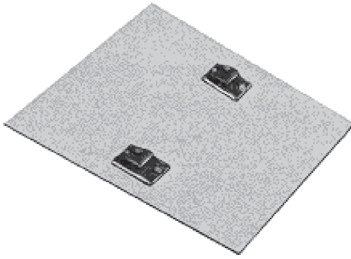


Fig. 45.11 Ground plate.

45.12 ground rod: A copper-clad steel, solid copper, stainless steel, or stainless steel clad rod used to form a ground terminal.



Fig. 45.12 Ground rod.

45.13 ground-rod clamp: A fitting that is specifically designed to connect a conductor to a ground terminal.

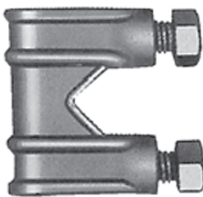


Fig. 45.13a Ground-rod clamp.

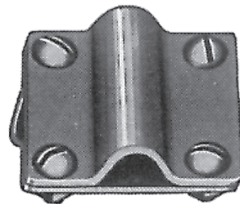


Fig. 45.13b Right-angle ground-rod clamp.

45.14 ground terminal: The portion of a lightning protection system – such as a conductor, ground rod or ground plate – that is installed for the purpose of providing electrical ground.

45.15 multiple ground system: A ground terminal composed of two or more ground rods or copper ground plates.

45.16 shall: As used in this standard, denotes a mandatory requirement.

45.17 should: As used in this standard, denotes an advisory recommendation.

*See Annex C Interpretations.

45.18 specifications: A document stating a detailed, measurable plan or proposal for provision of a product or service.

45.19 standards, ANSI A300: Performance parameters established by industry consensus as a rule for the measure of quantity, weight, extent, value, or quality.

45.20 taut: Tightened to the point of eliminating visible slack.

45.21 tree support system: A support system used to provide supplemental support to leaders, individual limbs, and/or the whole plant.

46 Lightning protection practices for trees

46.1 Lightning protection objectives for trees

The objective of a tree lightning protection system is to provide a preferred path to ground for the electrical charge; protected trees shall not be considered a safe haven from lightning strikes.*

46.2 Tree and site inspection

46.2.1 An arborist or arborist trainee shall visually inspect each tree before beginning work.

46.2.2 If a condition is observed requiring attention beyond the original scope of work, the condition shall be reported to an immediate supervisor, the owner, or the person responsible for authorizing the work.

46.2.3 Prior to installation, underground utilities shall be located. Other underground infrastructure should be located.

46.3 Tools and equipment

46.3.1 Equipment and work practices that damage bark, cambium, live palm tissue or any combination of these, beyond the scope of the work, shall be avoided.

46.3.2 Climbing spurs shall not be used when climbing trees to install lightning protection systems.

Exception: When limbs are more than throwline distance apart and there is no other means of climbing the tree.

46.4 General

46.4.1 Prior to installation, the owner or owner's agent shall be notified of the need for periodic inspection of the system's condition, position and grounding integrity. Scheduling inspections shall be the responsibility of the tree owner.

46.4.2 Tree lightning protection system conductors shall be installed in compliance with minimum distance Table 1 in ANSI Z133.1 for overhead, energized conductors.

46.4.3 Existing metal support cables, guys, and conduits in trees shall be bonded to the lightning protection system.

46.4.4 Soil type and the physical character of the surrounding area shall be considered before grounding the system.

46.5 Materials**46.5.1 General**

46.5.1.1 Lightning protection system design shall be specified to achieve the established objective.

46.5.1.2 Components of tree lightning protection systems shall be made of copper of commercial electrical grade, or a copper alloy with similar resistance to corrosion as copper, stainless steel, bronze, or clad using one of these metals.

46.5.1.3 Incompatible metals shall not be used in combinations that form an electrolytic couple, except when bonded to the tree lightning protection system as required or recommended by this standard.

46.5.2 Conductors

46.5.2.1 Acceptable construction for conductors shall be rope-lay, smooth-twist or loose-weave cable.

46.5.2.2 Conductors shall be stranded tightly enough to form a symmetrical cable and remain in a fixed position when installed.

46.5.2.3 Conductors shall be at least 14 strand of 17 AWG copper wire.

46.5.3 Connectors and fasteners

46.5.3.1 All hardware shall be of proper size for the conductors.

46.5.3.2 Cable splicers and clamp-type (multi-use) connector shall be constructed so that a minimum of 1½ inches (38 mm) of each conductor can be secured within the fitting.

46.5.3.3 Cable splicers and clamp-type (multi-use) connectors shall be installed so as to withstand a pull of 200 pounds (890 N).

46.5.3.4 Cable splicers shall have at least two 1/8-inch (3.2 mm) high projections on the interior surface.

46.5.3.5 Pinch-type fasteners shall be of substantial construction that can be closed by bending.

46.5.4 Ground terminals

46.5.4.1 Ground rods shall be a minimum ½-inch (12.7 mm) diameter and not less than 8 feet (2.4 m) long and shall be made of copper-clad steel, solid copper, stainless steel, or stainless steel clad.

46.5.4.2 Ground-rod clamps shall have a minimum of two bolts, machine screws, or cap screws for applying compression to the conductor and ground rod.

46.5.4.3 Ground-rod clamps shall have a length that makes contact with the ground rod for a minimum distance of 1½ inches (38 mm) measured parallel to the axis of the ground rod.

46.5.4.4 Copper ground plates shall have a minimum thickness of 0.032 inch (0.8 mm) and a minimum surface area of 2 square feet (0.19 m²).

46.6 Installation practices**46.6.1 Above-ground system**

46.6.1.1 Air terminals shall be located on leaders, limbs and/or branches as far out as practical in the crown.

46.6.1.2 Branch conductors shall be connected to a main conductor.

46.6.1.3 Branch conductors should be installed so that no aerial portion of the tree is farther than 35 feet from a conductor.

46.6.1.4 No bend of a conductor shall form an included angle of less than 90 degrees or have a radius of bend less than 8 inches (20 cm) other than at the ground rod. (see Figure 46.6.1.4).

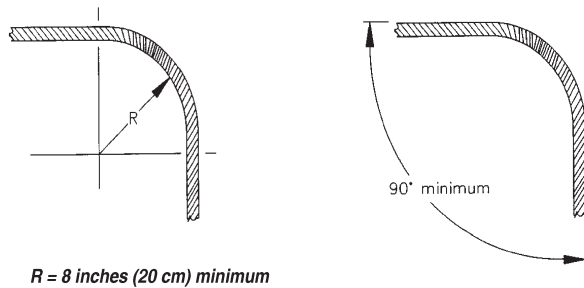


Fig.46.6.1.4 Bends in conductors.

46.6.1.5 Conductors should be installed taut.

46.6.1.6 Conductor fasteners shall be installed to the tree at intervals no greater than 6 feet (1.8 m).

46.6.1.7 A bimetallic or bronze clamp-type connector shall be used to connect metals that form an electrolytic couple, such as when bonding galvanized steel cables or guys to the tree lightning protection system.

46.6.1.8 Cable splicers or clamp-type (multi-use) connectors shall be used to form end-to-end, side-by-side, or Y splices in conductors (see Figure 46.6.1.8).



Fig. 46.6.1.8 An installed, side-by-side cable splicer.

46.6.1.9 Conductors subject to mechanical damage should be protected.

46.6.2 Below-ground system

46.6.2.1 Ground terminal installation should not damage roots greater than 2 inches (5 cm) in diameter.

46.6.2.2 Conductors shall extend away from the tree at a minimum depth of 8 inches (20 cm), except when impenetrable conditions do not allow. Maximum contact with the soil shall be achieved.

46.6.2.3 Ground rod connections shall be made with ground-rod clamp connectors.

46.6.2.4 Ground terminals shall not be located within 2 feet (61 cm) of a structure's foundation or other known underground installation.

46.6.2.5 Ground terminals shall extend into the earth to a minimum depth of 9 feet (2.74 m) except as specified in 46.6.2.9 and 46.6.2.10.

46.6.2.6 The soil shall be in contact with the ground system.

46.6.2.7 The method of grounding shall be specified as one of the following types (see Figures 46.6.2.7a and 46.6.2.7b):

A. Single Ground Rod System

B. Multiple Ground System

C. Horizontal Ground System

46.6.2.8 Single ground rod system

46.6.2.8.1 A single ground rod should be installed a minimum of 10 feet (3 m) from the trunk.

46.6.2.9 Multiple ground system

46.6.2.9.1 Multiple ground systems shall be used when the full length of the ground rod cannot be driven into the soil (see Figures 46.6.2.9a and 46.6.2.9b).

46.6.2.9.2 A minimum 8 feet (2.4 m) of total ground rod length shall be installed.

46.6.2.9.3 A minimum 16 feet (4.9 m) of total ground rod length shall be installed in sandy or gravelly soils.

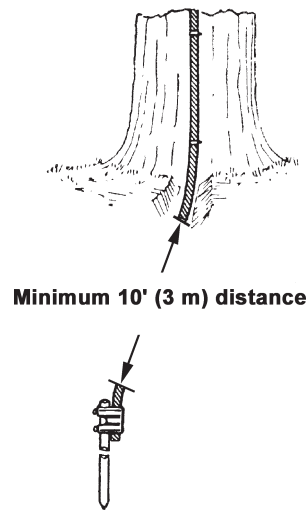


Fig. 46.6.2.7a Single ground rod system.

X = 10' (3 m) minimum

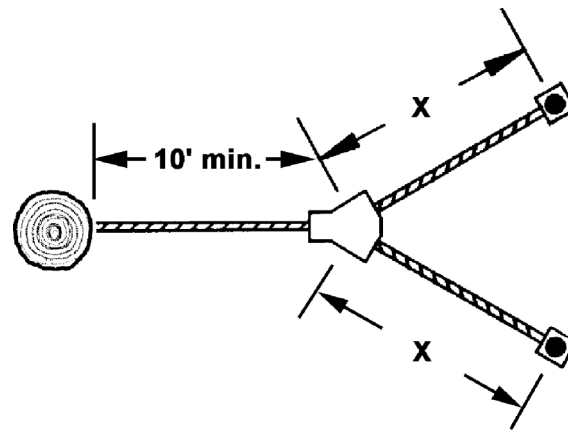


Fig. 46.6.2.9b Y configuration.

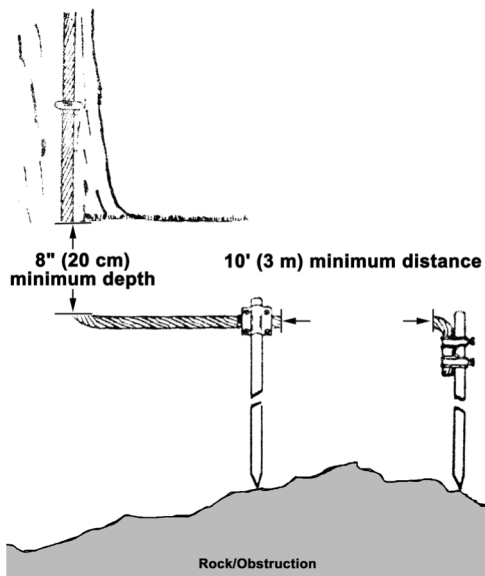


Fig. 46.6.2.7b Multiple ground system (in-line configuration shown).

X = 10' (3 m) minimum

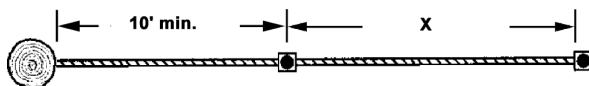


Fig. 46.6.2.9a In-line configuration.

46.6.2.9.4 When using in-line or Y configurations in sandy or gravelly soils, ground rods or copper ground plates shall be located a minimum distance of 10 feet (3 m) from each other and from tree trunk (see Figures 46.6.2.9a and 46.6.2.9b).

46.6.2.10 Horizontal ground system

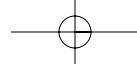
46.6.2.10.1 Horizontal ground systems shall be used when ground rods cannot be driven at least 2 feet (61 cm).

46.6.2.10.2 Horizontal systems should be terminated with a ground plate

46.6.2.10.3 Conductors shall be installed in trenches extending away from the tree. These trenches shall be at least:

- A) For sandy or gravelly soil: a total of 24 feet (7.3 m) long.
- B) For all other soils: a total of 12 feet (3.7 m) long.

46.6.2.10.4 The ground plate shall be installed 8 inches or deeper below the soil surface, except when impenetrable conditions do not allow. Maximum contact with the soil shall be achieved.



Annex A

Tree lightning protection systems information

A-1	When to install lightning protection systems in trees.	<i>Pinus</i> (pine) <i>Platanus</i> (sycamore) <i>Populus</i> (poplar)	high moderate moderate
A-1.1	According to the National Fire Protection Association:	<i>Quercus</i> (oak) <i>Robinia</i> (black locust) <i>Tsuga</i> (hemlock) <i>Ulmus</i> (elm)	high very high high moderate

Trees with trunks within 10 feet (3 m) of a structure, or with branches that extend to a height above the structure, should be equipped with a lightning protection system because of the danger of side flash, fire, or superheating of the moisture in the tree, which could result in the splintering of the tree. (NFPA – 780 F-1)

A-1.2 According to the Tree Care Industry Association:

A-1.2.1 Trees of historical interest; trees of unusual value; shade trees within 10 feet (3 m) of a building; trees with branches overhanging buildings; tall trees in recreational or park areas; trees that are more likely to be struck by lightning due to their location, such as isolated trees on a hill, in a golf course, or in a pasture, etc.; and similar trees; should be equipped with tree lightning protection systems.

A-1.2.2 Tree lightning protection systems are usually not necessary for small trees located under the drip line or very close to a larger tree with a lightning protection system.

A-2 Lightning strike susceptibility of non-protected, temperate zone trees table.

Table A-2 Strike frequency assessed from visual indications of a strike and therefore may not reflect actual likelihood of being struck. This table is presented as a guide to the prioritization of trees for lightning protection, if all other factors (e.g. height, location, distance from house) are equal, trees rated as high or very high should be protected before trees of low or moderate susceptibility.

Tree species	Susceptibility to Lightning Damage
<i>Acer</i> (maple)	moderate
<i>Aesculus</i> (horsechestnut)	low
<i>Betula</i> (birch)	moderate to low
<i>Catalpa</i> (catalpa)	moderate
<i>Fagus</i> (beech)	low
<i>Fraxinus</i> (ash)	high
<i>Ilex</i> (holly)	low
<i>Liriodendron</i> (tulip poplar)	very high
<i>Picea</i> (spruce)	moderate

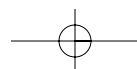
A-3 Ground system selection based on site considerations.

A-3.1 Single ground rod systems are preferred for tree lightning protection system grounding. Root damage can be minimized when single ground rod systems are installed correctly.

A-3.2 Multiple ground systems can be specified to address a variety of reasons, such as:

- 1) Inability to drive the full length of a ground rod into the soil.
- 2) Poor soil conductivity, such as what can occur in sandy, gravelly and/or dry soils.
- 3) When obstructions prevent a single ground rod system from being installed in an effective manner.

A-3.3 Horizontal ground systems can be specified when ground rods cannot be driven at least 2 feet (61 cm) deep.



Annex B

Ground measurement techniques

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Appendix I Ground Measurement Techniques

This appendix is not a part of the requirements of the NFPA document but is included for informational purposes only.

I-1 General

I-1.1 In order to determine the ground resistance of a lightning protection system, it is necessary to remove it from any other ground connection. This may prove a virtually impossible task necessitating certain assumptions. In reality, ground resistance measuring equipment works at low frequencies relative to the lightning discharge. The resistance it computes is therefore often affected by the resistance of power-system ground electrodes or a similar ground medium that may be several thousand feet from the structure being protected. The ground resistance to be used to calculate lightning conductor potentials when a high-frequency lightning discharge strikes a building must be the grounds in the immediate area of the building, not the remote ones that ground measuring equipment probably monitor.

I-1.2 If the building is small, and the lightning protection system can be disconnected totally from any other grounding network, its resistance can be measured by the three-point technique described in I-1.3. If the building is large or cannot be disconnected totally from any other grounding network, then the ground resistance of individual isolated lightning protection ground rods should be measured by the three-point techniques described in I-1.3 and this resistance multiplied by a factor depending on the number of ground rods.

I-1.3 The principle of ground resistance measurement is shown in Figure I-1.3. L is the lightning ground rod or ground rod system, P is a test probe, and A is an auxiliary current probe. M is the standard ac measuring equipment for three-point technique ground resistance measurements. Convenient distances for LP and LA are 75 ft (22 m)

and 120 ft (36 m), respectively. In general, P should be at 62 percent of the distance from L to A. If 120 ft (36 m) is not convenient, it could be increased significantly [or reduced to no less than 50 ft (15.2 m)], provided LP is increased proportionately.

A current, I, is passed through the electrode or electrodes to be tested, L, and through an auxiliary probe, A. The distance, LA, is long compared to the electrode length. The voltage, V, between L and P is measured by the test equipment, which also monitors I and calculates the ground resistance, R, as V/I . Alternating current is used to avoid errors due to electrolytic factors in the soil and to remove effects due to stray currents.

Three-point ground resistance measuring equipment using these principles is relatively inexpensive and allows direct reading of R.

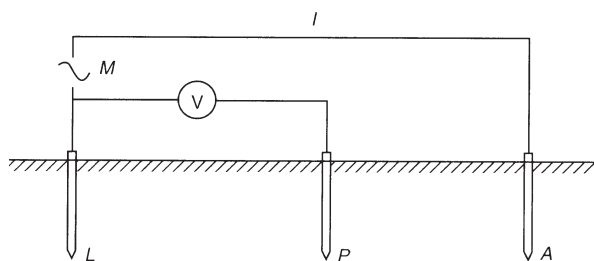


Figure I-1.3 Measurement of ground resistance.

I-1.4 Variations in soil resistivity due to temperature and moisture fluctuations can affect the measured ground resistance. A good designer will measure ground resistance under average or high resistivity conditions in order to design a lightning protection system to function adequately.

If the building ground is complex in nature, the resistance of single ground rods may be measured and certain assumptions made. The average single ground rod resistance, R_m , must be multiplied by a factor depending on the number of lightning-protection ground rods, n , spaced at least 35 ft (10.7 m) apart. The total system ground resistance, R , can be calculated from the following formula:

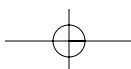
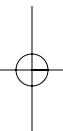
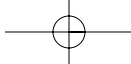
$$R = 1.1 \left(\frac{R_m}{n} \right)$$

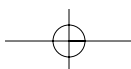
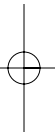
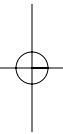
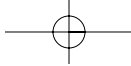
Annex C Interpretations

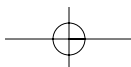
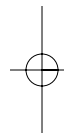
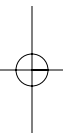
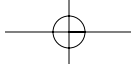
Tree lightning protection systems, purpose, reason, and objective:

When considering tree lightning protection systems, the user has to keep in mind that the purpose of the ANSI A300 (Part 4)-2008 standard is to provide standards for developing specifications for tree lightning protection system installation (43.1). The only reason for installing a tree lightning protection system is to reduce the risk of damage to trees from lightning strikes (43.2). Tree lightning protection systems do not protect buildings or property from damage or provide safe havens from lightning. The user needs to understand that the only objective for a tree lightning protection system is to provide a preferred path to ground for the electrical charge (46.1).

If there is danger from side flash or other lightning-induced damage to non-tree components, property, buildings, etc., or, the tree's owner or owner's agent have a different objective than outlined in this standard (46.1), then the appropriate standard practices must be followed as detailed by this standard's normative references (44).







Diplodia Tip Blight

Bruce R. Fraedrich, Ph. D., Plant Pathologist

Diplodia tip blight is a devastating disease of **two- and three-needle pines**. It is caused by the fungus *Sphaeropsis sapinea* (syn. *Diplodia pinea*), thus is also called Sphaeropsis tip blight.

The disease starts with needle infections, which spread into branch tips. The fungus weakens the tree so that secondary insects and diseases attack and cause mortality.

Diplodia tip blight occurs in all areas of the United States north of Georgia. Most pines and spruces are susceptible, especially when planted outside their natural ranges. **Austrian, ponderosa, mugo, red and Scots pine** are most seriously affected.

SYMPTOMS

The first obvious symptom is a yellowing then browning of young needles in the spring, usually on the lower portions of the crown. Branch tip and buds are quickly killed and become soaked with resin. This resin may drip from needles and also makes the dead tip somewhat flexible.

Another pest, which causes dead tips on pine, is the pine tip moth. To distinguish tip blight from tip moths, bend the dead tip; if it breaks and is hollow it is probably pine tip moth, if flexible it is probably tip blight. In the late summer fungal fruiting structures (pycnidia) form on dead needles. They appear as small black dots, first under the fascicle sheath, then up the needle (Figure 1).



Figure 1: Needles infected with *Sphaeropsis sapinea*. Arrow points to the fungal fruiting structures (pycnidia).

MANAGEMENT

Diplodia tip blight more readily infects, and causes more damage on, stressed trees. Therefore, to reduce potential problems it is best to maintain a vigorous tree. To keep the tree vigorous, it should be mulched, watered, fertilized and pruned. Mulch should be applied from the trunk to the drip line at a depth of 2-4 inches. Avoid mulching directly against the trunk. Wood chips are one of the best mulch materials. Other materials, which can be used, include bark, pine needles and leaf compost.

Trees should be irrigated during dry periods in the spring and summer. Avoid sprinklers, which wet the needles. Instead use a soaker hose, drip or microsprinkler system. If the tree is nutrient deficient, fertilization will improve tree vitality and reduce susceptibility to disease. Once the tree is

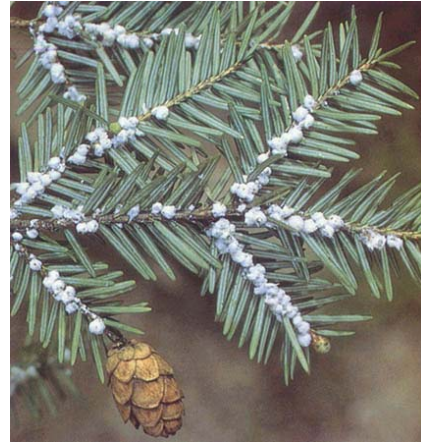
infected, all of the above recommendations should be followed as well as pruning and applying fungicides. Pruning will not provide effective control of the disease. However, dead tips may be pruned to improve the appearance of the tree. If

pruning is the only management method used, cones should also be removed since they are a major source of inoculum. Fungicide treatments should begin at budbreak and be repeated two or three times at 14-day intervals.



Hemlock Woolly Adelgid

The hemlock woolly adelgid (*Adelges tsugae*) is an exotic insect pest of hemlock that was first introduced from Asia into North America in the Pacific Northwest in the 1920's. It was first discovered in the eastern U.S. in Virginia around 1950. This insect is a serious pest of both eastern hemlock (*Tsuga canadensis*) and Carolina hemlock (*T. caroliniana*) and heavy infestations can lead to mortality of either of these species in just a few years. The predominant hemlock species in the western U.S. and Canada are western hemlock (*T. heterophylla*) and mountain hemlock (*T. mertensiana*), and while both of these species are hosts of the adelgid, damage caused by this pest is considered negligible. This is due to both the inherent resistance of these species to the adelgid, and also the presence of over 50 endemic predators of the adelgid in the western part of North America.



Populations of this adelgid are completely female and reproduce asexually. Crawlers emerge in the spring and can move to other parts of the tree, or can be moved to new trees by wind, birds, and mammals. Once these crawlers settle on a feeding site, they become immobile feeding nymphs, and eventually develop into winged or wingless female adults. The winged adults search in vain for a spruce species that is not found in North America before dying, while the wingless adults can lay up to 300 eggs on hemlock and start a new generation.

Symptoms-

Infestations of the hemlock woolly adelgid are quite noticeable due to the white, woolly covering produced by the insect from which it gets its common name. The damage to infested trees is characterized by off color needles, needle drop, and eventual twig and branch dieback. In the east, the pest is predicted to spread throughout the range of the eastern and Carolina hemlock, and cause major mortality, especially in forest areas that are impossible reach with control measures. In the west, as in the adelgid's native Asian range, populations are kept in check by natural enemies and resistant hemlock species. These hemlock species may support a noticeable population of the pest, but without the accompanying decline in plant health commonly found in the east. For the most part this insect is considered a cosmetic or aesthetic problem throughout its Pacific coast range.

Control-

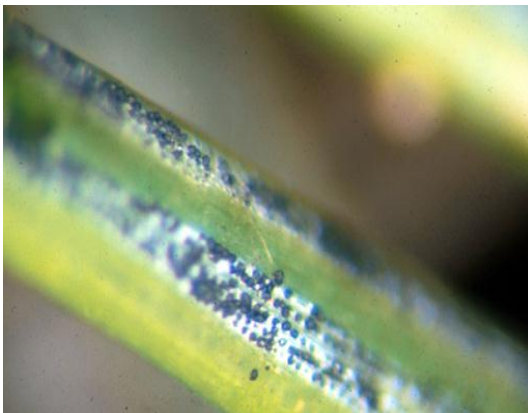
There are several treatment options available for control of the hemlock woolly adelgid including horticultural oil, soap, and registered pesticides. While these options are not always viable in a forest setting, good control can be achieved in a landscape situation. Care must be taken to carefully monitor populations because a small surviving population can reproduce quickly and build up to damaging levels. There are also predatory insects that are being tested for potential biological control of this pest in the eastern U.S.

Needlecast of Conifers

Bruce R. Fraedrich, Ph. D., Plant Pathologist

Needlecast is a term applied to a variety of foliage disorders of many coniferous species. Needlecast diseases are usually more severe on young trees or on trees growing outside of their natural range. Disease severity and corresponding defoliation vary from year to year depending on climatic conditions. Although few trees die as a result of defoliation, needlecast is a serious disease of shade trees because of the unsightly condition and loss of vigor of affected trees.

Needlecast fruiting bodies on spruce needles.



CAUSE

At least forty different species of fungi are known to cause this disease, but only six genera are of major importance. These are *Rhabdocline* in **Douglas-fir** and *Bifusella*, *Elytroderma*, *Hypoderma*, *Hypodermella*, and *Lophodermium* on other conifers including **pine, spruce, fir, larch and juniper**.

SYMPTOMS

One- and two-year old needles of infected conifers (except larch) develop spots and become yellowish-brown to red by early spring. Discoloration symptoms rarely involve an entire needle. By early to mid-summer most of the infected needles are dropped or cast, leaving



only the current season needles. On spruce and larch, however, the diseased needles remain attached beyond the normal time.

*Ploioderma
Needlecast on
pine*

SIGNS

After the needle is cast from the tree (sometimes before), small, black elongate fruiting bodies of the causal fungus erupt through the surface of the infected needle area. During moist weather, the mature fruiting bodies discharge spores, which may be carried to nearby unaffected needles.

CONTROL

Needlecast can be controlled by making protective applications of a properly registered fungicide when the needles are half-grown and again when fully developed.



Winter Moth

The Winter Moth (*Operophtera brumata*) was introduced to North America from Europe. Winter Moth has been noted as a pest for years in Eastern and Western Canada and the Pacific Northwest region of the United States. Since Winter Moth is an introduced pest, it has few natural parasites capable of suppressing populations. As a result Winter Moth continues to spread and has recently become a serious pest in parts of New England, especially along coastal areas of Massachusetts.



Winter Moth caterpillar (larvae)

DAMAGE: Winter Moth is primarily a pest of deciduous plants. Common hosts include, but are not limited to Oak, Maple, Basswood, Ash, Apple, and Crabapple. Winter Moth causes injury to trees when larvae (caterpillars) tunnel into buds to feed. Larvae continue feeding as they move from bud to bud. Defoliation occurs as older larvae feed in the expanding leaf clusters. Delayed leaf expansion due to cool springs can increase injury.

DESCRIPTION: Moths (adult stage) emerge from the soil in November. Moth activity generally extends into January and can be seen flying around outside lights. After mating, females deposit eggs in bark crevices, under bark scales, under lichen, etc. Egg hatch occurs in spring when temperatures average approximately 55° F or when 20-50 Growing Degree Days have accumulated.

Winter Moth larvae are pale green caterpillars often referred to as loopers or inchworms with white longitudinal stripes that extend down each side of the body. After egg hatch larvae crawl up tree trunks and begin to penetrate leaf buds where they begin to feed. Larvae feed through mid-June when they migrate to the soil for pupation and overwintering.

CONTROL: Winter Moth will continue to be a serious pest in New England. An effective pest management program that consists of cultural and chemical treatments is necessary to promote tree vigor and suppress populations of the insect. Trees exposed to good cultural practices are better able to withstand Winter Moth outbreaks. Mulch and fertilizer according to soil analysis and irrigation during drought are excellent cultural treatments that improve tree health. Tree banding has also shown to provide good control efficacy.

Properly timed chemical spray treatments are highly effective for controlling large outbreaks of Winter Moth. Consult your Bartlett Arborist Representative to discuss various control options.

Girdling Roots

Bruce R. Fraedrich, Ph. D., Plant Pathologist

Girdling roots are usually lateral roots at or slightly below the soil line that cut into at least one side of the main trunk. These roots restrict water and nutrients, which may be translocated to the leaves. Branches will eventually become weakened and the tree may die in five to fifteen years from the girdling roots alone, or in conjunction with environmental stresses or attacks by insects or diseases. Cultural practices like fertilization, irrigation and pruning will not offset the slow growth caused by girdled roots. Once diagnosed, they should be treated promptly.

CAUSES AND PREVENTION

Girdling roots are caused by nursery and transplanting practices, soil obstructions and unknown factors.

When plants are held in containers for too long a period of time, many roots begin to circle around the pot (Figure 1). These eventually can girdle the tree. When planting trees and shrubs with this condition, be sure to loosen these roots from the container root ball and spread them out in the planting hole before back filling. Circling roots two or more years old will be woody and may have to be cut and removed from the root system, because they will have taken the permanent shape of the container and cannot bend enough

without breaking. Although this reduces the size of the root system, it will prevent the development of girdling roots in the future.



Figure 1. Roots growing in containers frequently begin circling if held in the container for too long.

When a planting hole is not dug wide enough or deep enough, bare-rooted stock can be twisted into the hole in order to make it fit. This undesirable practice can cause root growth encircle the trunk and produce girdling.

Be certain to make planting holes wider than the root area in order to prevent encircling roots from forming.

The third major cause of girdling roots is planting in very compacted soil, where the new roots have difficulty growing out of the planting hole and into the surrounding hard soil. Roots can circle the bottom of the planting hole, not unlike those growing in an undersized container. Eventually, several of these roots can begin girdling the trunk. Other soil obstructions like foundations, curbs or large rocks can deflect roots and may contribute in some cases to the development of girdling roots.

SYMPTOMS AND DETECTION

Trees which leaf out late, have small chlorotic leaves or needles, drop their leaves early, and are dying back should be checked for a girdling root, particularly if the normal flare or buttress swell is absent. This condition is associated with placing too much fill over the roots, a procedure not uncommon in new housing developments.

Probably the most reliable aboveground characteristic of a girdling root is a trunk indentation or flattening at the base of the bole. Non-girdled trees rarely show this abnormal development. Note that not all girdled trees show crown symptoms commonly attributed to girdling roots.

Most girdled trees are not severely girdled, with few roots ever circling more than 50% around the bole. Since most girdled trees are girdled by more than one root, careful examination around the entire circumference may be necessary. Species like sugar, Norway maple, and white pine particularly are prone to forming girdling roots. Soil excavation is often needed to find girdling roots.

A large majority of girdling roots is found in the top several inches of soil, although they can develop at a somewhat greater depth. Frequently they can be seen on the surface

where erosion has removed one or two inches of soil from around the base of the trunk. Some girdling roots are present at the soil line.

TREATMENT AND REMOVAL

A girdling root must be removed in a manner that will minimize injury to the trunk cambium beneath the root. First excavate soil from around the root uncovering the entire length to be removed. Using a chisel or saw, cut the root at a point 6 – 12" out from the trunk. The final cut is made where the root attaches to the trunk (figure 2). This prevents the root from being pulled violently away from the embedded area causing extensive cambium injury if the root happens to be under tension. This is important since occasionally it is best to leave the girdled root in the tree after cutting because the trunk and cambium would be damaged severely by gouging out the deeply embedded root so that it does not grow back together. Detach the root if it is not embedded very deeply.

Prune deadwood, and if large roots were removed, thin the crown to compensate for the loss of roots. Very large girdling roots should not be cut or removed.



BARTLETT TREE

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CHARLOTTE, NC



Technical Report



Lightning Protection for Trees

E. Thomas Smiley, Ph.D.

Thousands of trees are struck by lightning every year. These trees will have varying degrees of damage ranging from complete shattering and destruction of the tree to a slow lingering death to virtually no apparent damage at all (Fig. 1). When severe damage does occur, parts of the tree can fall or be thrown hundreds of yards causing extensive damage to people or property. In dry conditions the electrical current may also flow through the root system, potentially damaging and, destroying it. Trees with lightning damaged roots rarely survive.

Lightning is a transient, high current electric discharge whose path length is measured in miles. The main type of lightning we are concerned with is between clouds and ground. The first portion of lightning typically seen is the “stepped leader” that descends from a storm cloud. As it nears earth, “streamers” are drawn from tall and /or conductive structures. The streamers and the leader attach 30 to 100 yards above the structure. At this connection the first stroke of lightning occurs. After this initial stroke there are usually two or three more exchanges of current that comprise a strike. Each stroke lasts about 1/100 to 3/100 of a second and each strike 2/10 or 5/10 of a second. The total current in a strike is usually between 20,000 and 50,000 amps at about 100,000 volts or 10 to 30 Coulombs. Some strikes have a longer lasting, continuous flow of current (100 amps for 0.1 second). These strikes are more likely to start fires.

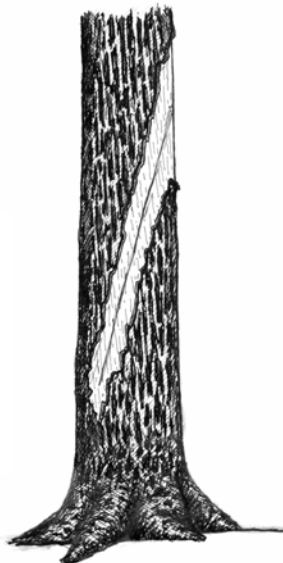


Figure 1. Moderate lightning damage showing spiral bark damage and groove in the sapwood.

Sideflash. When lightning strikes a tall tree it may travel down the stem for a distance, then leave the tree “jumping” to a more conductive tree, structure or animal. This is called sideflash. In urban areas this sideflash can cause serious damage to structures, often starting fires. It is also responsible for the death of groups of trees or people/animals taking refuge under the tree during a storm.

Step voltage. As lightning leaves an unprotected tree it goes into the soil. At the soil surface there will be a great difference in the electrical potential. This is called “step voltage”. If people or animals are standing in the area, potentially deadly electricity may flow through them rather than staying in the soil.

The National Fire Protection Association (780 F-1) recommends that trees within 10 feet (3m) of a structure, that are taller than the structure or have limbs over the structure should be protected. This is to reduce the risk of sideflash and to reduce the risk of damage from the tree being splintered by lightning. The National Arborist Association goes beyond this to recommend protecting trees of historical interest; high value; in recreational areas, parks, golf courses; and those more prone to strikes because of their location, isolated on hills, pastures or near water.

Table 1. Susceptibility of non-protected temperate zone trees to lightning strikes.

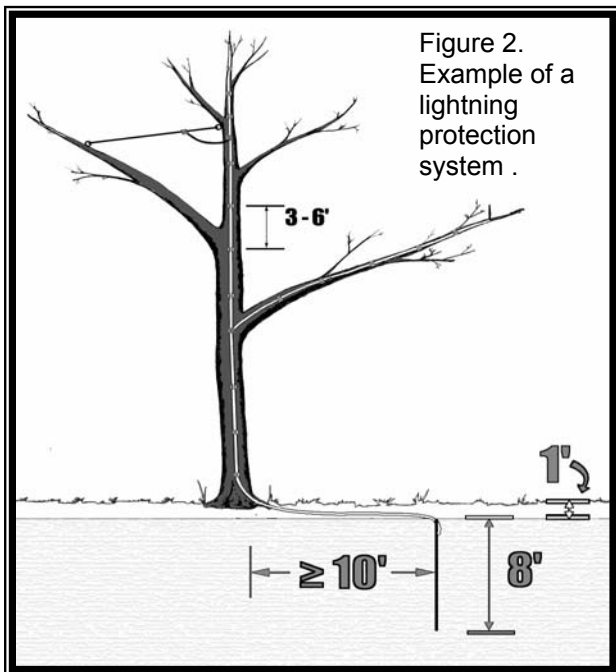
<u>Tree genera</u>	<u>Susceptibility to Lightning Strikes</u>
<i>Acer</i> (maple)	high
<i>Aesculus</i> (horsechestnut)	low
<i>Betula</i> (birch)	mod to low
<i>Catalpa</i> (catalpa)	moderate
<i>Fagus</i> (beech)	low
<i>Fraxinus</i> (ash)	high
<i>Ilex</i> (holly)	low
<i>Liriodendron</i> (tulip poplar)	very high
Palm	high/moderate
<i>Picea</i> (spruce)	moderate
<i>Pinus</i> (pine)	moderate
<i>Platanus</i> (sycamore)	moderate
<i>Populus</i> (poplar)	high
<i>Quercus</i> (oak)	high
<i>Robinia</i> (black locust)	high
<i>Tsuga</i> (hemlock)	high
<i>Ulmus</i> (elm)	high

Lightning protection systems are installed in trees to provide a preferred (not through the tree), non-damaging path to ground for a lightning strike. Since trees are often much taller than adjacent houses or other structures the streamer produced at the top of a trees lightning protection system will be much higher than those from most adjacent structures. This results in the tree's lightning protection systems being more likely to be struck. Lightning protection systems in trees are not intended to dissipate the electrical charge, but rather they are intended to be receptive to a strike and safely conduct it to ground. This local receptiveness may act to protect adjacent structures. Protected trees should not be considered safe havens for people during storms.

Lightning protection systems are extremely effective at preventing damage to trees. Systems that are new or properly maintained are thought to be over 98% effective at preventing serious damage to trees.

The working life of lightning protection systems can be very long. The conductor and major components may last for 50 to 100 years. If parts do deteriorate, they can be replaced or upgraded.

The objective of a lightning protection system is to provide a preferred path to ground for lightning strikes. To accomplish this objective, a conductor is installed in the tree from near the top, down the trunk and major limbs, to a grounding system (Figure 2). Systems must be inspected regularly and maintained to ensure reliability.



Tree protection system installation and inspection, as with all tree maintenance, needs to be preformed by a qualified arborist.

Materials and installation techniques used in lightning protection systems are specified by the American National Standards Institute (ANSI) A300 standard for Tree Lightning Protection.

Conductors are copper cables composed of 14 strands of 17 gauge copper wire. Solid conductor is not used because it has less surface area to conduct the lightning. Aluminum conductor is not used because of problems with corrosion and its higher electrical resistance that may lead to melting when struck. Copper or bronze fasteners driven into the tree to attach the conductor are **not** toxic to the tree because they are compartmentalized by the xylem.

Susceptibility to Lightning Strikes. Some tree species are thought to be more receptive to lightning than others. The reason for this is not known, it most likely has to do with tree height and electrical conductivity. Lists of susceptibility vary among authors. Table 1 provides a summary of species susceptibility.

When considering susceptibility, often more important than species is the location of the tree. Considered more susceptible to strikes are:

- * The tallest tree in a group
- * Trees growing in the open or small groups.
- * Trees that border woods or line a street
- * Trees close to water
- * Trees on hill tops
- * Trees in local areas or geographic regions with a history of numerous lightning strikes.

Inspection / Maintenance. The working life of lightning protection systems can be very long. However, over time the tree will grow making the system potentially less effective. To avoid this, the system needs to be inspected on a regular basis (e.g. annually on fast growing trees, every two or three years on slow growing trees). Scheduling inspections is the responsibility of the tree's owner.

If the conductor has been grown over by the tree, this does not necessarily mean that the system will not function. However, to find out if the conductor is intact, an electrical continuity test will need to be preformed.

The ground system can also be electrically checked on both new and existing systems to make sure that the electrical ground is adequate.

When problems are found during the inspection, they should be corrected as soon as possible.



BARTLETT TREE

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Technical Report



Maintenance Pruning Standard: A Simplified View

*E. Thomas Smiley, Ph. D., Plant Pathologist
Bruce R. Fraedrich, Ph. D., Plant Pathologist*

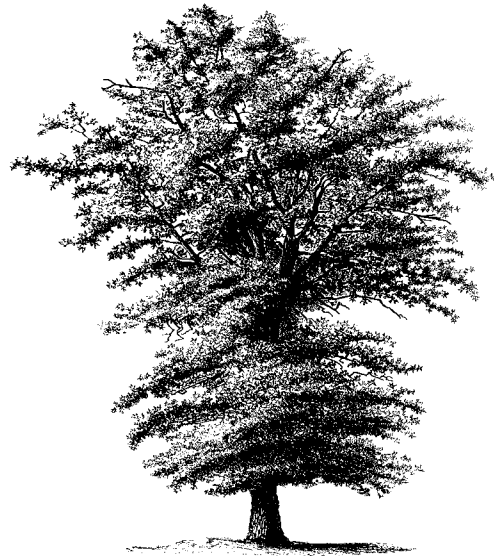
“Correct pruning cuts should be made close to the branch collar. Do not leave stubs and do not injure the collar”. For many years, correct removal of branches has been synonymous with proper tree pruning. The new American National Standards Institute (ANSI) A-300 Pruning Standard brings the *tree* back into focus. It places emphasis on developing pruning goals based on specific needs of the plant. The Standard also provides clear, concise and descriptive terminology that arborists, tree workers and consumers can readily understand.

When pruning, arborists must decide which branches to remove. Will only defective limbs be removed or is there a benefit to thinning out live branches? Should the tree remain the same height and spread or are reductions necessary? Are low limbs interfering with traffic and require raising? What is the size limit on branches to be removed?

Before removing any branches, several factors must be considered. What is the condition of the tree? What are the landscape functions provided by the tree? Will pruning maintain or enhance those functions? Are structural defects or storm damage present that should be removed? Are branches interfering with powerlines,

houses, and walkways? Is the tree too dense or does it need shaping? Will the tree tolerate removal of live branches? What are the customer's expectations and budget? The answers to these questions will govern how and to what extent the tree is pruned.

Four basic pruning techniques are used to maintain trees. Depending on tree requirements, client expectations and budget, one or more of the techniques will be used to maintain the plant.



Before pruning

Crown thinning is the removal of live, healthy branches on trees with dense crowns. This improves light penetration and air movement, and decreases wind resistance, thus reducing pest infestations and decreasing the risk of storm damage.



Crown thinning

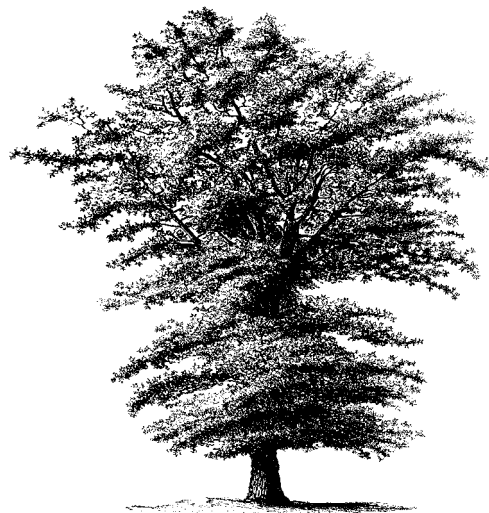
Thinning can also be used to reduce weight of individual limbs and to slow the growth rate on overly vigorous limbs. This pruning technique is most commonly needed on young, rapidly growing trees.

On slower growing mature trees, thinning is mainly used when weight reduction is needed on individual limbs to compensate for structural defects. Usually, thinning is performed in conjunction with crown cleaning.

Virtually all-urban trees benefit from periodic **crown cleaning**. This is the removal of defective limbs including those that are dead, dying, diseased, rubbing, and structurally unsound. Cleaning reduces the risk of branch failures, improves plant health and enhances tree appearance by removing limbs that are unsightly, unhealthy and unsound.

Although removal of healthy branches is technically “thinning”, selective removal of watersprouts is included in the cleaning specification. Before selecting this option, arborists must judge whether sprout

removal will benefit the tree. Stripping sprouts is rarely beneficial and may eventually create many more problems for the tree. The Standard also states that **one-half of the foliage should be evenly distributed in the lower two-thirds of the**



crown and individual limbs.

Crown cleaning

Unnecessary sprout removal and removal of all lower branches would certainly violate this rule. The concept of not removing sprouts must be clearly conveyed to consumers since many homeowners equate proper pruning with removal of interior limbs. There are a few exceptions where removal of watersprouts is beneficial. Removing sprouts on dogwoods in areas where *Discula* anthracnose is present is recommended to reduce risk of cankers in larger branches, for example.

Leaving interior and lower branches on a tree is equally important when thinning the crown. In order not to violate the *one-half the foliage on the lower two-thirds* rule, the majority of thinning cuts are on the outer portion of the crown, not the inside. This means working with pole tools or from an aerial lift. After large deadwood and structural problems have been corrected using a chainsaw, hand or pneumatic tools are used for thinning.

Crown reduction is needed on trees or individual limbs that are growing close to

buildings, other trees, or utility wires. Reduction may also be necessary to prevent or correct storm damage and to shorten errant branches to provide a more desirable shape. This type of pruning involves reducing the height or spread of the crown or individual limbs. Certain species such as beech and sugar maple respond poorly to reductions so consideration must be given to the ability of the species to tolerate this procedure.

When reducing a leader or branch cut back to a lateral branch that is large enough to assume dominance. The size of the remaining lateral is not specified in the Standard since it varies with tree species and tree condition. Typically, a lateral one-third the diameter of the parent limb is selected. If the lateral is smaller, the limb will either dieback or sprout profusely. If the lateral is considerably larger than the one-third guideline, then thinning the remaining lateral should be considered due to the risk of storm damage. The remaining lateral should be growing in a direction that will maintain a desirable shape and not interfere with objects within the pruning cycle.

When lower limbs interfere with mowing, traffic, people or utilities, pruning is needed to provide clearance. While removal of lower limbs goes under many names, the one that has been selected is **crown raising**. Limbs can either be removed at

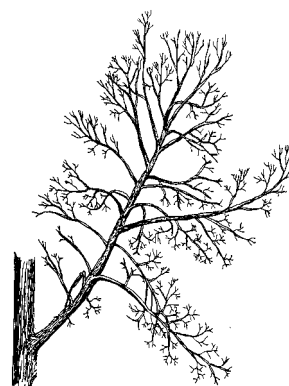


Crowing raising

the trunk or downward growing branches can be removed at the parent limb. Thinning the ends of a heavy limb may accomplish the same goal if the limb raises when weight is removed. When raising is performed, limb levels generally are left at a uniform height around the tree to provide symmetry.

These are the four primary types of maintenance pruning - **thinning, cleaning, reduction and raising**. Other pruning techniques and systems are discussed in the Standard, including **crown restoration, vista pruning, young tree pruning, espalier, pollarding** and **palm pruning**. These techniques are generally performed to achieve specific goals that are separate from maintenance considerations or are oriented to a specific type of tree. Consult the Standard for descriptions of these pruning types.

The majority of established trees can benefit from **one or more** maintenance pruning types. How can you prune a tree in more than one way? Easy! If a tree is



Before pruning

growing next to a house and has deadwood and limbs rubbing against the roof, it needs crown cleaning throughout and reduction or raising of the limbs over the residence. You may use any of the techniques, or combination of techniques, to provide exactly what the tree needs and the customer wants. Choosing the correct

pruning technique(s) is relatively easy, even for an inexperienced arborist, because the tree guides the decision making process. If the tree has deadwood - clean it; if overly thick - thin it; if too tall - reduce it; if too low - raise it. Once the technique(s) have been decided, and then the **size of the smallest limb** to prune is the next consideration. Typically, the sizes that have been used are 1/2", 1", 2" or 4". However, no numbers are specified in the Standard so you can select any size that meets the needs of the specific tree and customer objectives. If 1" minimum is selected, then limbs 1" in diameter at the point of attachment and larger would be removed when the branches meet the requirements of the technique.

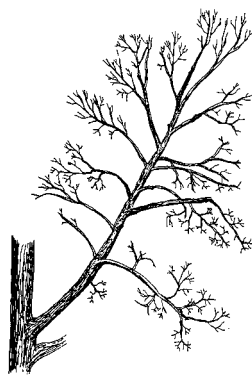
The size of the smallest limb to be pruned should be adjusted for the tree and the client's budget. When crown cleaning a small tree such as a Japanese maple, the smallest branch to remove might be specified at 1/2 inch in diameter. This means that dead, dying, diseased or weak branches greater than 1/2 inch are removed. If 1/4" diameter is chosen instead, the time required to complete the task is easily doubled or tripled.

Arborists and consumers must realize that more is **not** always better when it comes to pruning. The amount of foliage that should be pruned from mature trees is now less than before. The Standard specifies that

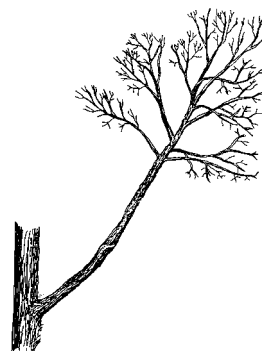
not more than one quarter of the leaf surface be removed during a single pruning operation. This will benefit the tree by maintaining a greater leaf surface area for producing photosynthates (energy).

When work is sold, whether to a municipality, commercial account or residential client, the pruning technique and minimum branch size must be specified, explained and discussed. This will foster fair competition and help ensure that both client and arborist understand what is to be accomplished by pruning. There should be no surprises for the client when purchasing tree work. To ensure this, tree workers as well as the arborist must understand the Standard. If a client selects crown cleaning but budget constraints require pruning 2" and larger limbs, then the crew cannot take the time to remove 1/2-inch limbs.

In summary, the new Standard encourages arborists to prune trees based on the tree's need. This is a significant improvement from the days when we tried to "fit" the tree to a predetermined, artificial classification. Basing pruning on the tree's needs make the principles described hold true for hardwoods and conifers, small ornamentals and large shade trees, young trees and mature trees. The terminology in the Standard is a change for most arborists, but it is user friendly and descriptive. Industry professionals as well as consumers should readily adopt the terminology and techniques.



Correct pruning



Improper pruning



BARTLETT TREE

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CHARLOTTE, NC



Technical Report



Mulch Application Guidelines

E. Thomas Smiley, Ph. D., Plant Pathologist

Mulches provide many benefits for trees and shrubs. They moderate soil temperatures, reduce soil moisture loss, reduce soil compaction, provide nutrients, improve soil structure, keep mowers and string trimmers away from the trunk. These benefits result in more root growth and healthier plants. When applying mulch the following guidelines should be observed:

1. The best mulch materials are wood chips, bark nuggets, composted leaves or pine needles. Plastic, stone, sawdust, finely shredded bark, and grass clippings should be avoided. Do not use redwood or walnut mulch due to allelopathic effects.

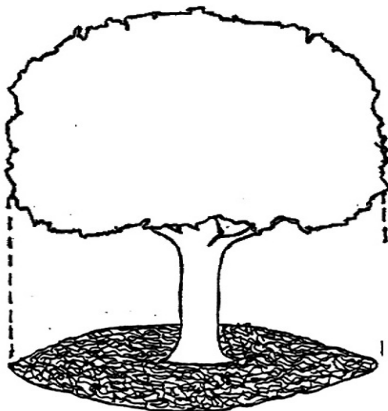


Figure 1. Mulch should be applied from the trunk to the dripline.

2. Mulch should be applied from the dripline to the trunk (Figure 1). If this

is not practical, minimum mulch circle radii should be 3 feet for small trees, 8 feet for medium trees and 12 feet for large trees.

3. When applying mulch it is not necessary to kill or remove existing ground cover. However, turf should be mowed very short and clippings removed prior to application. Mulch should be applied directly to the soil surface, do not use landscape fabric to separate the mulch from the soil.



Figure 2. Mulch layer should be 2-4 inches thick and not be against the trunk.

4. Mulch layer should be 2-4 inches thick depending on tree species and mulch (Figure 2).
5. Additional mulch should be added to maintain a 2-4 inch depth.
6. Mulch should not be placed against the trunk (Figure 2). Mulch will retain too much moisture against the trunk, potentially resulting in disease problems.

Tree Risk Assessments

Limitations of Tree Risk Assessments

It is important for the tree owner or manager to know and understand that all trees pose some degree of risk from failure or other conditions. The information and recommendations within this report have been derived from the level of tree risk assessment identified in this report, using the information and practices outlined in the *International Society of Arboriculture's Best Management Practices for Tree Risk Assessment*, as well as the information available at the time of the inspection. However, the overall risk rating, the mitigation recommendations, or any other conclusions do not preclude the possibility of failure from undetected conditions, weather events, or other acts of man or nature. Trees can unpredictably fail even if no defects or other conditions are present. It is the responsibility of the tree owner or manager to schedule repeat or advanced assessments, determine actions, and implement follow up recommendations, monitoring and/or mitigation.

Bartlett Tree Experts can make no warranty or guarantee whatsoever regarding the safety of any tree, trees, or parts of trees, regardless of the level of tree risk assessment provided, the risk rating, or the residual risk rating after mitigation. The information in this report should not be considered as making safety, legal, architectural, engineering, landscape architectural, land surveying advice or other professional advice. This information is solely for the use of the tree owner and manager to assist in the decision making process regarding the management of their tree or trees. Tree risk assessments are simply tools which should be used in conjunction with the owner or tree manager's knowledge, other information and observations related to the specific tree or trees discussed, and sound decision making.

Glossary

Tree risk assessment has a unique set of terms with specific meanings. Definitions of all specific terms may be found in the International Society of Arboriculture's *Best Management Practice for Tree Risk Assessment*. Definitions of some of these terms used in this report are as follows:

The *likelihood of failure* may be categorized as imminent meaning that failure has started or could occur at any time; probable meaning that failure may be expected under normal weather conditions within the next 3 years; possible meaning that failure could occur, but is unlikely under normal weather conditions during that time frame; and improbable meaning that failure is not likely under normal weather conditions, and may not occur in severe weather conditions during that time frame.

The *likelihood of the failed tree part impacting a target* may be categorized as high meaning that a failed tree or tree part will most likely impact a target; medium meaning that a failed tree or tree part may or may not impact a target with equal likelihood; low meaning that the failed tree or tree part is not likely to impact a target; and very low meaning that the chance of a failed tree or tree part impacting the target is remote.

The *Likelihood of Failure and Impact* is defined by Table 1, the Likelihood Matrix:

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

The *consequences* of a known target being struck may be categorized as severe meaning that impact could involve serious personal injury or death, damage to high value property, or disruption to important activities; significant meaning that the impact may involve personal injury, property damage of moderate to high value, or considerable disruption; minor meaning that impact could cause low to moderate property damage, small disruptions to traffic or a communication utility, or minor injury; and negligible meaning that impact may involve low value property damage, disruption that can be replaced or repaired, and do not involve personal injury.

Targets are people, property, or activities that could be injured, damaged or disrupted by a tree failure.

Levels of assessment 1) *Limited visual assessments* are conducted to identify obvious defects. 2) *Basic assessments* are visual inspections done by walking around the tree looking at the site, buttress roots, trunk and branches. It may include the use of simple tools to gain information about the tree or defects. 3) *Advanced assessments* are performed to provide detailed information about specific tree parts, defects, targets of site conditions. Drilling to detect decay is an advanced assessment technique.

Tree Risk Ratings are terms used to communicate the level of risk rating. They are defined in Table 2, the Risk Matrix, as a combination of Likelihood and Consequences:

Likelihood of Failure & Impact	Consequences of the Tree Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Overall tree risk rating is the highest individual risk identified for the tree.

The *residual risk* is the level of risk the tree should pose after the recommended mitigation.



BARTLETT TREE

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CHARLOTTE, NC



Technical Report



Tree Structure Evaluation

Bruce R. Fraedrich, Ph. D., Plant Pathologist

The urban forest is aging and declining at an increasing rate. At the same time, society is becoming more litigious. As a result, detection, evaluation and management of defective trees now are a major concern for arborists, urban foresters and park managers.

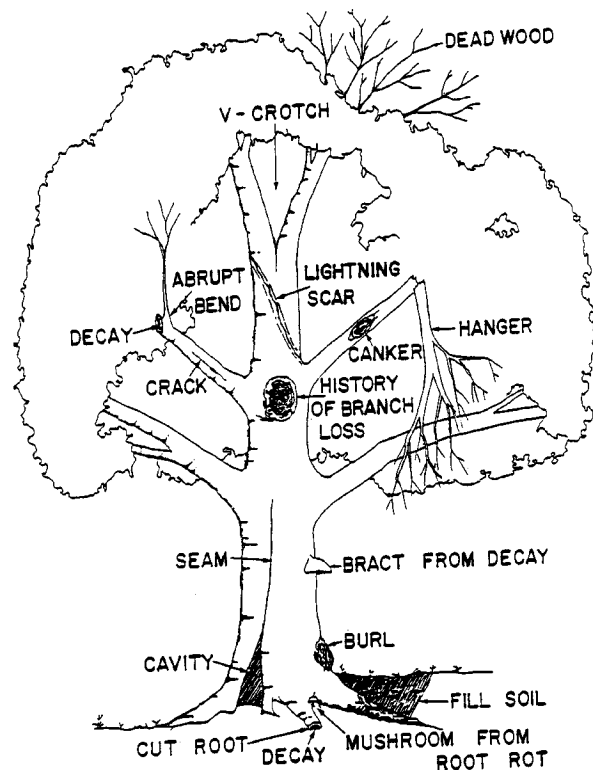
HAZARDOUS TREES DEFINED

A tree is considered hazardous when it has a structural defect that predisposes it to failure and the tree is located near a target (an area where property damage or personal injury could occur if the tree failed). Targets include areas around structures, walkways, roadways, campsites and other areas where there are property and people.

Structurally sound trees also may be hazardous if plant parts interfere with routine activities of people such as obstructing motorists' vision, raising sidewalk, interfering with utilities, roadways or walkways.

LIABILITIES

Property owners/managers have a legal obligation to (1) periodically inspect trees for defects and unsafe conditions and (2) correct defects and unsafe conditions immediately upon detection. If a property owner/manager employs an arborist to perform work on site, the arborist may assume at least some of the responsibility for detecting defective tree conditions and recommending remedial treatments. Arborists are considered "experts" and may



be held accountable for uncorrected or unreported tree defects, which are not obvious to the average property owner.

HAZARD TREES DUE TO STRUCTURAL DEFECTS

A thorough inspection of the branches, stem, root crown and area around the root system is essential in detecting hazardous conditions. Binoculars are helpful in detecting defects in the upper crown. In some instances an aerial lift or climber may be needed to provide a detailed evaluation.

Common structural defects include dead trees, dead branches, stubs from topping cuts, broken branches (hangers), abrupt bends in branches, "V" crotches and multiple stems from the root collar (coppice growth). Failure also is more common in trees with an unbalanced crown or leaning stem if there is a defect.

WOOD DECAY DETECTION AND EVALUATION

Many failures in branches and stems result from loss in structural integrity due to wood decay. When evaluating decayed stems and branches, arborists have generally relied on qualitative parameters for formulating recommendations. These parameters include the location and relative size of the defect, tree species characteristics, site exposure, crown size, leaning stems, owner's "attitude" toward the tree and target considerations.

A method is now available that allows the arborist to quantitatively estimate a strength loss value from wood decay which then can be used with the qualitative parameters listed above to determine more precisely if a tree is prone to failure due to wood decay.

Evaluating decay is a four-step process involving:

1. Decay Detection - Symptoms and signs
2. Measuring the size of the decay column
3. Calculating strength loss value due to decay.
4. Selecting a strength loss value "threshold" for wood decay (taking into consideration the strength loss from decay and qualitative factors previously listed).

DETECTION

Symptoms of wood decay can be quite obvious such as open cavities, loose bark/exposed punky wood and fungal fruiting structures growing from the bark or exposed wood. Other symptoms of wood

decay can be subtler such as seams, cracks, abnormal flare, burls, stubs and cankers. Decay is often associated with multiple stems from the root collar (coppice growth) and in limbs with abrupt bends. When inspecting trees for decay, make sure the crown and stem is thoroughly examined. Binoculars are helpful for inspecting the crown. In some instances, a climber or aerial lift may be necessary for a satisfactory inspection of the upper crown.

MEASURING THE DECAY COLUMN

The diameter of the decay column is determined by measuring the thickness of sound wood at the weakest point on the stem or branch. The average sound wood thickness is multiplied by 2 and subtracted from the total wood diameter to arrive at the diameter of the decay column. Note wood diameter equals the stem/branch diameter minus twice the bark thickness.

The thickness of the "shell" of sound wood can be rapidly determined with minimum damage using a drill with a 1/8" drill bit. The drill bit is inserted until resistance decreases when decayed tissues are encountered. The inserted portion of the drill is then extracted and measured to determine the thickness of sound wood.

An increment borer also can be used to extract a core of sound wood, which can be measured. This is useful on trees with soft wood where it may be difficult to detect the resistance change between healthy and decayed wood. The increment core is more damaging and slower than the drilling technique.

A Shigometer also can be used to assess healthy, decayed and discolored wood.

A minimum of three sampling sites is used and the values are averaged to calculate the decay column diameter. More sampling is necessary in trees over 30 inches in diameter or when measurements vary greatly.

DETERMINING STRENGTH LOSS VALUES FROM WOOD DECAY IN STANDING TREES

Principally the outer rings of wood provide strength in woody stems and branches. Trees can withstand considerable loss of the inner cylinder without a significant loss in structural integrity. Strength loss resulting from decay in wood tissues can be estimated by comparing the diameter of the decay column to the total diameter of the stem.

This technique is based on engineering formulas used in estimating strength loss in pipes due to corrosion. In pipes, strength loss estimates are as follows:

$$\% \text{ Strength Loss} = \frac{\text{Inside Diameter (hollow)}^4}{\text{Total Diameter}^4} \times 100$$

Wagener (1) modified this formula for trees as follows:

$$\text{Strength Loss (SL)} = \frac{(\text{Diameter of Decay Column})^3}{(\text{Diameter of Stem})^3} \times 100$$

$$\text{or } \text{SL} + \frac{d^3}{D^3} \times 100$$

Due to the modification, values derived from use of this formula should be viewed as a relative measure of strength loss rather than an actual measure. Values measured against a scale where 0 (zero) equals no strength loss and 100 equals total loss in strength.

When trees have open cavities, the reduction in strength from loss of the outer rings of wood must be entered into the strength loss formula. Loss in strength from open cavities is significant because the outer rings of wood provide most of the structural strength.

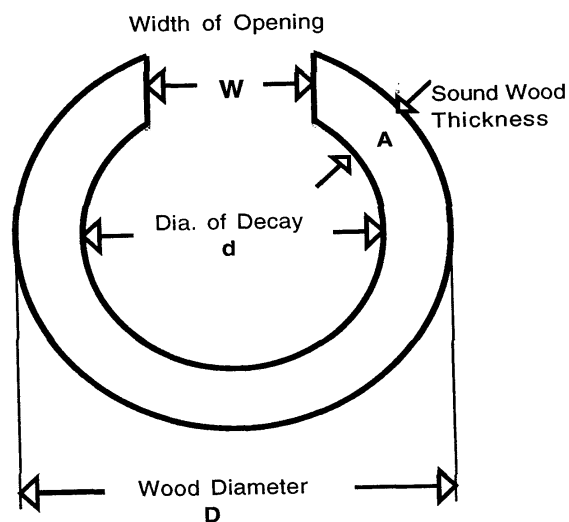
The F.A. Bartlett Tree Expert Co. uses a variation of the formula proposed by Wagener to determine strength loss in stems from open cavities. This formula is as follows:

$$\text{Strength Loss (SL)} = \frac{(\text{Diameter of Decay Column})^3 + \text{Area of Cavity}}{(\text{Diameter of Stem})^3}$$

$$\text{or } \text{SL} = \frac{d^3 + R(D^3 - d^3)}{D^3} \times 100$$

SL = Strength Loss
 d = Diameter of Decay Column
 D = Stem Diameter (inside bark)
 R = Ratio of Cavity Opening to Stem Circumference
 (R = width of cavity opening)

Values derived from this formula should also be viewed as a relative measure of strength loss as described above.



STRENGTH LOSS VALUE THRESHOLDS

Wagener (1) stated that West Coast conifers could tolerate up to a one-third loss in strength without predisposing the stem to unreasonable risk of failure if the weakening effect is heart rot uncomplicated by other defects. Wagener emphasizes that the one-third-strength loss value is not absolute and is only a general guideline.

Smiley and Fraedrich (2) surveyed hardwood trees that were broken during 1989's Hurricane Hugo in Charlotte, NC. Sustained winds were 69 miles per hour (mph) with gusts to 90 mph during the storm. They found that 52 of the 54 broken trees had internal decay. Using formulas proposed by Wagener and modified by the Bartlett Tree Lab, strength loss values of broken trees with decay varied from one to

90 with an average of 33. This evidence supports the establishment of a threshold value between 30 and 40 depending on local conditions.

The F. A. Bartlett Tree Expert Co. uses a value of 33 as the maximum strength loss to be tolerated. The threshold is reduced in:

- Leaning Trees
- Trees with inherently weak or brittle wood
- Trees in exposed locations
- Trees with large/full crowns
- Declining trees
- Trees with multiple defects
- Trees in high use areas (sensitive target areas)

STRENGTH LOSS VALUE SIMPLIFIED

The minimum thickness of sound wood surrounding heart rot must be at least 15% of the total wood diameter or the tree is considered an unreasonable risk.

The thickness of sound wood must be greater in trees with cavity openings, species with weak wood, trees with multiple defects, relatively large crowns, leaning stems and trees on exposed sites.

**Minimum thickness sound wood =
Wood diameter x .015**

Wood Diameter (inches)	Minimum Thickness of Sound Wood (inches)
10"	1.5"
15"	2.3"
20"	3.0"
25"	3.8"
30"	4.5"
35"	5.3"
40"	6.0"
50"	7.5"

ROOT DEFECT EVALUATION

Up to seventy-five percent of all tree failures are due to root problems. The majority of tree failures occur when winds exceed 50 mph (e.g. hurricane, tornado), however,

failures may occur under any wind conditions if the roots are sufficiently weakened. Two types of failure have been classified for this occurrence: Root failure and Ground failure.

Ground failure is extremely difficult to predict. Failure occurs when the soil does not have enough strength to keep the roots intact. Soil and roots are exposed when the tree falls over. This type of failure can occur in any soil texture if the soil is wet. Failure is more common on sandy textured and very shallow (<2' deep) soils. Soil failure also occurs when trees are surrounded by pavement, which does not allow the root system to develop sufficiently to support the tree.

Root failure occurs when roots break, thus do not provide the necessary support. Root failure occurs more readily on trees, which have root decay or other root problems.

Trees growing in stands, recently thinned stands and recently created edge trees are more susceptible to windthrow due to lack of root spread and increased susceptibility to root disease. Root disease can be detected, however, this is a relatively difficult procedure.

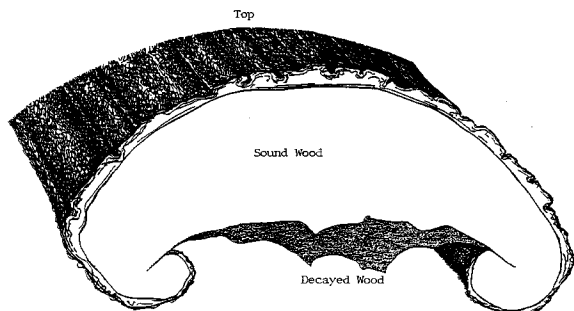
SYMPTOMS OF ROOT FAILURE

Trees with extensive root decay often show little or no symptoms of decline. External indicators of root decay include:

- Dead (loose bark) on the roots, root flare or lower trunk.
- Fungus fruiting structures around the root flare. These include mushrooms, conks and bracts on or immediately adjacent to the tree.
- Oozing from the root flare, lower trunk or wounds on the lower trunk.
- Cuts or fill soil moved beneath the tree.
- Cracks in the soil above or beside major roots.

ASSESSING ROOT DECAY

Root decay is difficult to assess since it starts on the lower section of the root and works its way upward. The most visible section of the root shows the least amount of symptoms. When root decay is present in the buttress or flare roots it is usually



Typical pattern of root decay, starting from the lower side working upward

much more extensive than anticipated. Where root decay is suspected, the first step is to excavate soil from the root collar. Using a penknife, nick the bark on major root flares and valleys between flares to determine whether the bark is healthy.

High-risk trees may tolerate a lower percentage of root decay.

High-risk trees include the following:

1. Leaning trees
2. Trees with limited root space
3. Trees at the edge of recently cleared areas where severe windstorms frequently occur
4. Trees with large and/or dense crowns
5. Trees, which have, soil fractures associated with one or more major roots where trees are high risk and any root decay is encountered, always notify the property owner of the increased risk window. Removal may be appropriate.

The next step is to determine if decay is present in the roots or base of the trunk.

Using a drill with 1/8" x 8" bit or increment borer, drill downward into each major root issuing from the root collar. Consider the entire root decayed if any defect is encountered. Repeat the same procedures drilling toward the center of the tree in the valleys of the root collar to determine if basal decay is present. Often lower trunk heart rot is associated with root decay. Record the number of healthy and decayed roots.

ROOT DECAY THRESHOLD

Assessing root decay is complicated by the fact that root and basal decay is frequently more severe than detection procedures will indicate. Subsequently, whenever any root/basal decay is encountered the property owner should be advised that root disease might be more severe than anticipated. There is always a risk of failure (windthrow) when root decay is encountered.

The F. A. Bartlett Tree Expert Co. considers that whenever 33% or more of the major roots contain decay, the bark/cambium is dead on more than 33% of the root flare, or when 33% or more of the support root system has been severed, there is high risk of failure. Removal is recommended in the following instances.

INSPECTION AND DOCUMENTATION

Landscape trees should be periodically inspected for defects and other potentially hazardous conditions. Inspections should be performed at least annually and after major storms. Trees growing in high use sites and those with known defects should be inspected more often.

Inspections should be documented in writing whether the trees are considered defective or not. Documentation of inspections (including date), the presence of defects and recommended treatments should be sent to the property owner in writing.

When assessing wood decay and root defects, arborists should not base treatments or removal recommendations

solely on strength loss value or percentage of roots with decay. Document all qualitative parameters that may contribute to the hazard as well as the quantitative measurements. Qualitative parameters include species characteristics, crown size, defect location, multiple defects, tree vitality, site exposure, and intensity of site use (target considerations).

Literature Cited

1. Wagener, W.W. 1963. *Judging Hazards From Native Trees in California Recreation Areas: A Guide for Professional Foresters*. US Forest Service Research Paper PSW-P1. 29 pages.
2. Smiley, E.T. and B.R. Fraedrich. 1992. Determining Strength Loss From Wood Decay. Journal of Arboriculture 18:201-204.

Glossary of Terms

arborist: 1. An individual engaged in the profession of arboriculture who, through experience, education and related training, possesses the competence to provide for, or supervise the management of, trees and other woody ornamentals. [ANSI A300 (Part 1, 2, 4, 5, 6)] 2. An individual engaged in the profession of arboriculture. [ANSI Z133.1-2000 Safety Requirements for Arboricultural Operations]

bracing: The installation of lag-thread screw or threaded-steel rods in limbs, leaders, or trunks to provide supplemental support. [ANSI A300 (Part 3)-2000 Support Systems]

branch: An outgrowing shoot, stem or twig that grows from the main stem or trunk. [ANSI Z60.1-2004 Nursery Stock]

buttress roots: Lateral surface roots that aid in stabilizing the tree.

cable: 1) Zinc coated strand per ASTM A-475 for dead-end grip applications. 2) Wire rope or strand for general applications. 3) Synthetic-fiber rope or synthetic-fiber webbing for general applications. [ANSI A300 (Part 3)-2000 Support Systems]

cabling: The installation of a steel wire rope, steel strand, or synthetic-fiber system within a tree between limbs or leaders to limit movement and provide supplemental support. [ANSI A300 (Part 3)-2000 Support Systems]

canopy: collective branches and foliage of a tree or group of trees' crowns

cation exchange capacity(CEC): The ability of soil to absorb nutrients.

cavity: An open wound characterized by the presence of decay and resulting in a hollow.

cleaning: Selective pruning to remove one or more of the following parts: dead, diseased, and/or broken branches (5.6.1). [ANSI A300 (Part 1)-2001 Pruning]

co-dominant branches: Equal in size and importance, usually associated with either the trunks, stems, or scaffold limbs.

conk: fruiting body or nonfruiting body of a fungus. Often associated with decay.

critical root zone(CRZ): area of soil around a tree trunk where roots are located that provide stability and uptake of water and minerals required for tree survival.

crow: 1. The leaves and branches of a tree measured from the lowest branch on the trunk to the top of the tree. [ANSI A300 (Part 1)-2001 Pruning] [ANSI A300 (Part 6)-2005 Transplanting] 2. The portion of a tree comprising the branches. [ANSI Z60.1-2004 Nursery Stock]

D.B.H. [diameter at breast height]: Measurement of trunk diameter taken at 4.5 feet (1.4 m) off the ground. [ANSI A300 (Part 6)-2005 Transplanting]

decay: The degradation of woody tissue caused by microorganisms. [ANSI A300 (Part 1)-2001 Pruning]

Geographic Information System (GIS): is any system for capturing, storing, analyzing and managing data and associated attributes which are spatially referenced to earth.

girdling root: A root that may impede proper development of other roots, trunk flare, and/or trunk. [ANSI A300 (Part 6)-2005 Transplanting]

Global Positioning System (GPS): A constellation of at least 24 Medium Earth Orbit satellites that transmit precise microwave signals, the system enables a GPS receiver to determine its location, speed, direction, and time.

Global Positioning System receiver (GPSr): A receiver that receives its input from GPS satellites to determine location, speed, direction, and time.

heading: cutting a shoot back to a bud or cutting branches back to buds, stubs, or lateral branches not large enough to assume apical dominance. Cutting an older branch or stem back to meet a structural objective

integrated pest management (IPM): A pest control strategy that uses an array of complementary methods: mechanical devices, physical devices, genetic, biological, legal, cultural management, and chemical management. These methods are done in three

Glossary of Terms

stages of prevention, Observation, and finally Intervention. It is an ecological approach that has its main goal is to significantly reduce or eliminate the use of pesticides.

lateral branch: A shoot or stem growing from a parent branch or stem. [ANSI A300 (Part 1)-2001 Pruning]

leader: A dominant or co-dominant, upright stem. [ANSI A300 (Part 1)-2001 Pruning]

lean: Departure from vertical of the stem, beginning at or near the base of the trunk.

limb: A large, prominent branch. [ANSI A300 (Part 1)-2001 Pruning]

lion's tailing: The removal of an excessive number of inner, lateral branches from parent branches. Lion's tailing is not an acceptable pruning practice (5.5.7). [ANSI A300 (Part 1)-2001 Pruning]

macronutrient: Nutrient required in relatively large amounts by plants, such as nitrogen (N), phosphorus (P), potassium (K), and sulfur (S). [ANSI A300 (Part 2)-2004 Fertilization]

micronutrient: Nutrient required in relatively small amounts by plants, such as iron (Fe), manganese (Mn), zinc (Zn), copper (Cu), and boron (B). [ANSI A300 (Part 2)-2004 Fertilization]

nutrient: Element or compound required for growth, reproduction or development of a plant. [ANSI A300 (Part 2)-2004 Fertilization]

organic matter: material derived from the growth (and death) of living organisms. The organic components of soil.

parent branch or stem: A tree trunk, limb, or prominent branch from which shoots or stems grow. [ANSI A300 (Part 1)-2001 Pruning]

pH: unit of measurement that describes the alkalinity or acidity of a solution. Measured on a scale of 0 to 14. Greater than 7 is alkaline, less than 7 is acid, and 7 is neutral (pure water).

pruning: The selective removal of plant parts to meet specific goals and objectives. [ANSI

A300 (Part 1)-2001 Pruning]

qualified arborist: An individual who, by possession of a recognized degree, certification, or professional standing, or through related training and on-the-job experience, is familiar with the equipment and hazards involved in arboricultural operations and who has demonstrated ability in the performance of the special techniques involved. [ANSI Z133.1-2000 Safety Requirements for Arboricultural Operations]

raising: Selective pruning to provide vertical clearance (5.6.3). [ANSI A300 (Part 1)-2001 Pruning]

reduction: Selective pruning to decrease height and/or spread (5.6.4). [ANSI A300 (Part 1)-2001 Pruning]

risk assessment: process of evaluating what unexpected things could happen, how likely it is, and what the likely outcomes are. In tree management, the systematic process to determine the level of risk posed by a tree, tree part, or group of trees.

root collar: 1. The transition zone between the trunk and the root system. [ANSI A300 (Part 6)-2005 Transplanting] 2. See COLLAR. [ANSI Z60.1-2004 Nursery Stock]

root flare or trunk flare: The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk. [ANSI Z60.1-2004 Nursery Stock] [ANSI A300 (Part 6)-2005 Transplanting]

root zone: The volume of soil containing the roots of a plant. [ANSI A300 (Part 5)-2005

secondary nutrient: Nutrient required in moderate amounts by plants, such as calcium (Ca) and magnesium (Mg). [ANSI A300 (Part 2)-2004 Fertilization]

seam: Vertical line that appears where two edges of wound wood or callus ridge meet.

soil amendment: Any material added to soil to alter its composition and structure, such as sand, fertilizer, or organic matter. [ANSI A300 (Part 6)-2005 Transplanting]

Glossary of Terms

soil pH: A measure of the acidity or alkalinity of the soil.

structural support system: hardware installed in tree, may be; cables, braces, or guys, to provide supplemental support.

sweep: Departure from vertical of the stem, beginning above the base of the trunk.

thinning: Selective pruning to reduce density of live branches (5.6.2). [ANSI A300 (Part 1)-2001 Pruning]

tree risk assessment: Closer inspection of visibly damaged, dead, defected diseased, leaning or dying tree to determine management needs.

topping: The reduction of a tree's size using heading cuts that shorten limbs or branches back to a predetermined crown limit. Topping is not an acceptable pruning practice (5.5.7). [ANSI A300 (Part 1)-2001 Pruning]

tree inventory: A comprehensive list of individual trees providing descriptive information on all or a portion of the project area. [ANSI A300 (Part 5)-2005 Management during site planning, site development, and construction]

tree protection zone: A space above and belowground within which trees are to be retained and protected. [ANSI A300 (Part 5)-2005 Management during site planning, site development, and construction]

structural support system: A support system used to provide supplemental support to leaders, individual limbs, and/or the whole plant. [ANSI A300 (Part 4)-2002 Lightning Protection Systems]

trunk: That portion of a stem or stems of a tree before branching occurs. [ANSI Z60.1-2004 Nursery Stock]

wound: An opening that is created when the bark of a live branch or stem is penetrated, cut, or removed. [ANSI A300 (Part 1)-2001 Pruning]