

# Greencastle, PA Tree Inventory and Management Plan | 2019



Submitted by:  
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## Greencastle, PA 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. Are a company's tools, for example, old and defective, in need of repair, in short supply, or useless and taking up space that could be better occupied? 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 Greencastle, PA 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. The Bartlett Inventory Solutions team is overseen by Technical Advisors out of the Bartlett Tree Research Laboratories in Charlotte, North Carolina. The advisors are primarily charged with client support, coordination, quality control, and documentation of inventories and the related data. Extensively trained Regional Inventory Arborists from local Bartlett Tree Experts offices are the primary data collectors and authors of the management plans. 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. In addition to the primary author(s) listed on the cover page, Team Member(s) involved in this project included:

#### **Technical Advisor Kevin R. Weber, Consulting Advisor**

Registered Consulting Arborist #636, ISA Board Certified Master Arborist #PD-2030B, ISA Tree Risk Assessment Qualified, Certified Treecare Safety Professional #732

#### **Data Collection Jacob Winn, Regional Inventory Arborist**

ISA Certified Arborist #MA-5918A, ISA Tree Risk Assessment Qualified

#### **Subject Trees**

In this document, the term "subject trees" refers (depending on context) to some or all of the 739 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. The management plan layout is as follows:

- **Table of Contents** ○ Road map for the management plan
- **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
- **Tree Risk Assessment and Mitigation** ○ Summary of *overall tree risk ratings* assigned during the inventory with corresponding table and map displays with figures if applicable
  - Summary of *Level 3 Advanced assessments* recommended during the inventory (summarized in the *overall tree risk ratings* table) with a map display and figures if applicable
- **Stand Dynamics Results** ○ Summary information for the entire tree population inventoried
- **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
- **Additional Resources** ○ Listing of all appended items for this management plan

## EXECUTIVE SUMMARY

In December 2019, the Bartlett Inventory Solutions (BIS) Team from Bartlett Tree Experts conducted an inventory of right-of-way trees within the Borough of Greencastle. We identified 739 trees, including 11 groupings, which included 84 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 are based on the number of desired management cycles. 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 15 trees (2%) 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. Please see the Tree Risk Assessments, Limitations & Glossary section for more information.

### ***Level 3 Advanced Assessment***

At the time of inventory, no trees were recommended for *Level 3 Advanced assessments* to evaluate the impact of wood decay. However, as trees continue to grow and site changes occur, we recommend continual consultation with your local Bartlett Arborist Representative to determine if *Level 3 Advanced assessments* are warranted in the future.

### **Soil Sampling**

Taking 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**

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

### **Mulching**

Wherever possible, apply 2-4 inches of mulch within the root zone to help moderate soil temperatures, reduce soil moisture loss, reduce soil compaction, provide nutrients, improve soil structure, and keep mowers and string trimmers away from tree trunks. The best mulch materials are wood chips, bark nuggets, composted leaves, or pine needles. To avoid potential disease problems, mulch should not be placed directly against the trunk.

### **Root Collar Excavations**

Perform **root collar** excavations to 224 trees (30%) 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 464 trees (63%) for safety, health, structure, and appearance. Pruning will comply with current ANSI A300 standard practices for pruning.

### **Structural Support**

There are structural support system recommendations for 9 trees (1%) to reduce risk of branch or whole tree failure. All structural support systems will comply with current ANSI A300 standard practices for supplemental support systems.

### **Lightning Protection**

At the time of inventory, no trees were recommended for lightning protection systems. However, as trees continue to grow and site changes occur, we recommend continual consultation with your local Bartlett Arborist Representative to determine if lightning protection systems are warranted in the future.

### **Removals**

Remove 3 trees (< 1%) due to condition or because of their location in relation to other trees to try and prevent competition or damage to infrastructure.

### **Vine Removal**

Remove vines from 10 trees (1%) to try and prevent them from hiding defects.

## **INTRODUCTION**

In December 2019, the Greencastle Shade Tree Commission for the Borough of Greencastle, PA retained Bartlett Tree Experts to perform an inventory of trees located in the Borough of Greencastle's right-of-way. Team member Jacob Winn visited the site on December 9-13 and December 16-19 to conduct the inventory.

The inventory included:

- identifying trees and assigning a Tree ID number (Tree ID numbers ranging from 1 to 655);
- identifying the trees' condition, health, and vigor;

- recommending risk evaluations and removals of appropriate trees;
- recommending tree care, soil care, structural support, and pest management treatments to promote tree safety, health, appearance, and longevity; and
- mapping the trees using GPSr hardware and 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. The table below describes each goal and its corresponding objective(s).

### GOALS & OBJECTIVES

GOAL	OBJECTIVES TO ACCOMPLISH GOAL
<p><b>Establish the tree inventory (per numbers agreed) within the Borough Greencastle right of way.</b></p>	<ul style="list-style-type: none"> <li>• Using Trimble® Geo GPSr hardware and ArborScope™ Inventory Management Tools, collect data such as tree name, location, size, age class, and condition class.</li> <li>• Assign a Tree ID number to each tree or group of trees inventoried.</li> </ul>
<p><b>Provide mechanism for managing inventory, recommendations, and related budget planning.</b></p>	<ul style="list-style-type: none"> <li>• Provide map or maps of the inventoried trees and tree groupings to assist the client in managing property areas.</li> <li>• Submit a comprehensive management plan that documents and organizes findings and provides other resources to assist the client in efficient use of the information.</li> </ul>
<p><b>Maximize client understanding and implementation of management plan.</b></p>	<ul style="list-style-type: none"> <li>• Include in management plan specific explanations and visuals related to plan recommendations.</li> <li>• Provide appended resources that address health, procedures, and standards related to tree care.</li> <li>• Make periodic contact with client to follow up and answer any questions about the management plan's contents.</li> </ul>

<b>Maximize immediate and long-term tree health and aesthetics.</b>	Implement recommended plant-health-care program that uses <ul style="list-style-type: none"> <li>• integrated pest management</li> <li>• soil care</li> <li>• maintenance pruning</li> </ul>
<b>Manage immediate and long-term risk associated with trees in high-use areas.</b>	Implement recommended risk-management measures that include <ul style="list-style-type: none"> <li>• risk-reduction pruning</li> <li>• required removals</li> <li>• tree structure evaluations</li> </ul>

## 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, 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
- tree ID 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
- infrastructure interaction (between trees and grayscale that may cause an undesirable condition)
- documented *Level 2 Basic assessment* for tree risk where defects or concerns were observed that prompted the need to use the ISA risk matrices in the field resulting in an *overall tree risk rating*
- Tree & Shrub Work phase (based on number of desired management cycles)
- pruning category
- need for and inspection of existing structural support systems
- need for and inspection of existing lightning protection systems

- need for *Level 3 Advanced assessment* for tree risk
- tree removals
- soil care 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 & Shrub Work Phase

Tree & Shrub Work phase takes into consideration tree species, condition, location, age, and proximity to infrastructure. We intend for this rating system to assist decision makers in prioritizing risk mitigation, tree pruning, cabling and bracing, and tree lightning protection recommendations. *Trees with an ASAP and an overall tree 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.

Phase 1, 2, 3, 4, and 5 are all based on observations by the inventory arborist according to the manager's goals. The following additional information clarifies each priority:

- ASAP** Trees with recommendations that should be addressed As Soon As Possible.
- Phase 1** Typically addressed in the first management cycle. Trees located in high-use sites, have a high aesthetic value, have an elevated *overall tree risk rating*, and/or parts that are currently in conflict with infrastructure.
- Phase 2** Typically addressed in the second management cycle. Trees with moderate aesthetic value, don't have an elevated *overall tree risk rating*, and/or parts that are anticipated to be in conflict with infrastructure.
- Phase 3** Typically addressed in the third management cycle. Tree parts that are anticipated to be in conflict with infrastructure and/or recommendations based on anticipated growth.
- Phase 4** Typically addressed in the fourth management cycle. Recommendations are for future consideration and anticipated growth.
- Phase 5** Typically addressed in the fifth management cycle. Recommendations are for future consideration and anticipated growth.

## Pruning Category

All trees identified in this management plan that have tree care recommendations are listed within a specific pruning category. Trees within each pruning category can be prioritized by the specific goals of the manager. It is recommended that specific goals be discussed prior to any pruning.

- Risk Mitigation** This goal requires pruning of any tree where risk mitigation should take precedence over other pruning goals. Typically aims to reduce the *overall tree risk rating* by branch removal and/or branch reduction.
- Maintenance** This goal typically requires routine pruning of large/mature trees. Includes branch removal and/or branch reduction to help reduce *likelihood of failure* and/or conflict with infrastructure. Trees with this goal are typically climbed or require the use of aerial lifts and/or other specialized equipment.
- Developmental** This goal typically requires routine pruning of small/young trees. Includes structural pruning to develop a strong central stem, establish proper branch spacing, and/or develop branch structure.
- Ornamental** This goal typically requires pruning of small trees. Includes reduction and/or shearing to its desired shape, size, and/or structure.
- Specialized** Trees with this goal require a unique treatment that may include, but not limited to, targeted pruning cuts, removal of nuisance fruit/parasitic plants, and/or rejuvenation/internodal pruning.

\* The listed descriptions of goals, tools, and/or techniques are not limited to these definitions. Specific individual goals and species profiles should guide the pruning recommendations.

## 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 tree 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 the failed tree or tree part could impact the target, but is not expected to do so; 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 the Likelihood Matrix below.

**LIKELIHOOD OF FAILURE AND IMPACT**

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very Likely  Likely Somewhat likely Unlikely
Probable	Unlikely	Unlikely	Somewhat likely	
Possible	Unlikely	Unlikely	Unlikely	
Improbable	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 defined in the Risk Matrix below as a combination of Likelihood and Consequences:

**ISA RISK MATRIX**

Likelihood of Failure & Impact	Consequences of the Tree Failure			
	Negligible	Minor	Significant	Severe
Very Likely	Low	Moderate	High	Extreme High Moderate Low
Likely	Low	Moderate	High	
Somewhat likely	Low	Low	Moderate	
Unlikely	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 Experts can inventory trees that have ropes courses, zip lines, swings, tree houses, or any other life support system attached for several different attributes; however, Bartlett Tree Experts is unable to provide tree risk assessment information on such trees, nor is Bartlett Tree Experts able to determine whether the correct hardware has been used, the systems are attached to the trees correctly, or whether the trees can withstand the additional forces that are placed on the tree or trees from such systems or structures. Bartlett Tree Experts does not recommend that any hardware or structures, other than those recommended by and installed by qualified arborists to aid the tree in structural support or protections from lightning, be installed in or attached to any tree(s). Bartlett Tree Experts recommends removing, or discontinuing the use of, any such system or recreational structure until the Client hires or consults with an engineer/specialist that deals specifically with ropes courses, zip lines, swings, tree houses, or any other life support systems and how they attach to and impact trees to determine if the trees can handle the forces being placed on them.

In the event that Bartlett Tree Experts observes an immediate safety issue with a tree with any such device attached, such as the presence of a dead, dying, or broken limb that could fall and injure a person or damage property, Bartlett Tree Experts may make a recommendation to remove or prune such a limb or otherwise mitigate the obvious safety issue. However, the Client should not infer that following such a recommendation and mitigating the immediate safety issue makes the tree in question safe for the use of the attached device or feature.

# TREE RISK ASSESSMENTS AND MITIGATION



## TREE RISK ASSESSMENTS AND MITIGATION

In reviewing the results and recommendations, the reader will find useful the specifications and definitions detailed in the preceding methodology. We used the following categories to organize the results and recommendations, which are displayed in tables:

- **Subject Trees Summarized According to:**
  - Tree Risk Assessment Results and Mitigation Recommendations
  - *Level 3 Advanced Assessment Recommendations*

## Tree Risk Assessments and Mitigation

As part of the inventory process, the Inventory Team conducts a *Level 2 Basic assessment* from the ground. While every tree poses a risk, typically low, any trees that were found to have conditions 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. *Overall Tree Risk Ratings* are then assigned to these trees.

During the *Level 2 Basic assessment* the Regional Inventory Arborist can determine whether some aspect of tree structure or health indicates that a more comprehensive tree structure evaluation, called a *Level 3 Advanced assessment*, is needed to more thoroughly evaluate tree condition and *likelihood 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), resistancerecording drilling, 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 those *Level 3 Advanced assessments* are completed, more specific recommendations can be made, such as remediation, maintenance, or removal.

The Tree Risk Table below summarizes the inventoried trees that were observed posing a hazardous situation during the course of the inventory, including those trees recommended for *Level 3 Advanced assessments*. The table is organized first by *Overall Tree Risk Rating* (highest to lowest), then by Tree & Shrub Work Phase (ascending order), and finally by Tree ID (ascending order).

### TREE RISK ASSESSMENTS AND MITIGATION (15 Trees)

Tree ID	Common Name	DBH	Condition	Overall Tree Risk Rating	Primary Target	Tree & Shrub Work Phase	Recommendation	Defect(s) or Observation(s)
39	Honeylocust-Thornless Common	23	Good	Low	Street	ASAP	☐ Prune: Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Hanger</li> </ul>

132	Maple	14	Good	Low	Sidewalk	ASAP	<input type="checkbox"/> Prune: Reduce risk of branch stem and/or root failure <input type="checkbox"/> RCX	<ul style="list-style-type: none"> <li>Buried root collar</li> <li>Dead branches &gt;2</li> </ul>
211	Mulberry	40	Fair	Low	Parking	ASAP	<input type="checkbox"/> Prune: Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>Dead branches &gt;2</li> <li>Broken branch(s)</li> <li>Overextended branch</li> </ul>
306	Maple-Silver	13,12,14	Fair	Low	Street	ASAP	<input type="checkbox"/> Prune: Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2 <input type="checkbox"/> Topping/heading cuts
408	Elm	42	Good	Low	Sidewalk	ASAP	<ul style="list-style-type: none"> <li>Prune: Reduce risk of branch stem and/or root failure</li> <li>Prune: Reduce weight of branch ends</li> <li>Cable: New 1</li> </ul>	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Dead branches &gt;2</li> <li>Hanger</li> </ul>
418	Walnut-Black	33	Good	Low	Sidewalk	ASAP	<input type="checkbox"/> Prune: Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
419	Walnut-Black	23	Good	Low	Sidewalk	ASAP	<input type="checkbox"/> Prune: Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
420	Maple-Norway	19	Good	Low	Sidewalk	ASAP	<ul style="list-style-type: none"> <li>Prune: Reduce risk of branch stem and/or root failure</li> <li>Prune: Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>Dead branches &gt;2</li> <li>Co-dominant stems</li> <li>Topping/heading cuts</li> </ul>
429	Walnut-Black	31	Good	Low	Path	ASAP	<input type="checkbox"/> Prune: Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>Hanger</li> <li>Dead branches &gt;2</li> </ul>
430	Walnut-Black	30	Good	Low	Path	ASAP	<input type="checkbox"/> Prune: Reduce risk of branch	<ul style="list-style-type: none"> <li>Dead branches &gt;2</li> <li>Wound-stem</li> </ul>

Tree ID	Common Name	DBH	Condition	Overall Tree Risk Rating	Primary Target	Tree & Shrub Work Phase	Recommendation	Defect(s) or Observation(s)
							stem and/or root failure	
440	Maple-Norway	30	Good	Low	Sidewalk	ASAP	☐ Prune: Reduce risk of branch stem and/or root failure	☐ Dead branches >2
450	Maple-Norway	33	Good	Low	Parking	ASAP	☐ Prune: Reduce risk of branch stem and/or root failure	☐ Dead branches >2 ☐ Topping/heading cuts
490	Maple-Sugar	45	Good	Low	Path	ASAP	☐ Prune: Reduce risk of branch stem and/or root failure	• Wound-stem • Dead branches >2
499	Locust-Black	14,9	Fair	Low	Path	ASAP	☐ Prune: Reduce risk of branch stem and/or root failure	• Dead branches >2 • Poor branch structure
653	Maple-Norway	28	Good	Low	Sidewalk	ASAP	☐ Prune: Reduce risk of branch stem and/or root failure	• Dead branches >2 • Hanger

**INVENTORIED TREES ASSIGNED *OVERALL TREE RISK RATINGS* AT THE TIME OF DATA COLLECTION**



**Overall Tree Risk Rating:** ● Low



## STAND DYNAMICS RESULTS



### STAND DYNAMICS RESULTS

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

- **Subject Trees Summarized According to:**
  - Tree Species Identified
  - Tree Groupings
  - Condition Class
  - Age Class
  - Tree Size per DBH
  - Estimated Tree Asset Value
  - Tree Location Value

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

## Stand Dynamics

### Tree Species Identified

Our inventory revealed 84 species of trees, as detailed in the following table:

#### TREE SPECIES IDENTIFIED

Genus	Species	Common Name	Count	% Distribution Total
<i>Abies</i>	<i>balsamea</i>	Fir-Balsam	2	< 1%
	<i>concolor</i>	Fir-White	1	< 1%
<b>Abies Total</b>			<b>3</b>	<b>&lt; 1%</b>
<i>Acer</i>	<i>buergeranum</i>	Maple-Trident	2	< 1%
	<i>negundo</i>	Boxelder	1	< 1%
	<i>palmatum</i>	Maple-Japanese	9	1%
	<i>platanooides</i> var. 'Crimson King'	Maple-Crimson King	1	< 1%
	<i>platanooides</i>	Maple-Norway	39	5%
	<i>rubrum</i>	Maple-Red	30	4%
	<i>saccharinum</i>	Maple-Silver	9	1%
	<i>saccharum</i>	Maple-Sugar	6	1%
	sp.	Maple	10	1%
<b>Acer Total</b>			<b>107</b>	<b>14%</b>
<i>Amelanchier</i>	sp.	Serviceberry	5	1%
<i>Betula</i>	<i>nigra</i>	Birch-River	1	< 1%
	<i>papyrifera</i>	Birch-Paper	2	< 1%
	sp.	Birch	2	< 1%
<b>Betula Total</b>			<b>5</b>	<b>1%</b>
<i>Buxus</i>	<i>sempervirens</i>	Boxwood-Common	1	< 1%
<i>Carpinus</i>	<i>betulus</i>	Hornbeam-European	2	< 1%
<i>Cedrus</i>	<i>atlantica</i>	Cedar-Atlas	3	< 1%
	<i>deodara</i>	Cedar-Deodar	1	< 1%
<b>Cedrus Total</b>			<b>4</b>	<b>1%</b>
<i>Celtis</i>	<i>occidentalis</i>	Hackberry	4	1%
<i>Cercis</i>	<i>canadensis</i>	Redbud-Eastern	5	1%

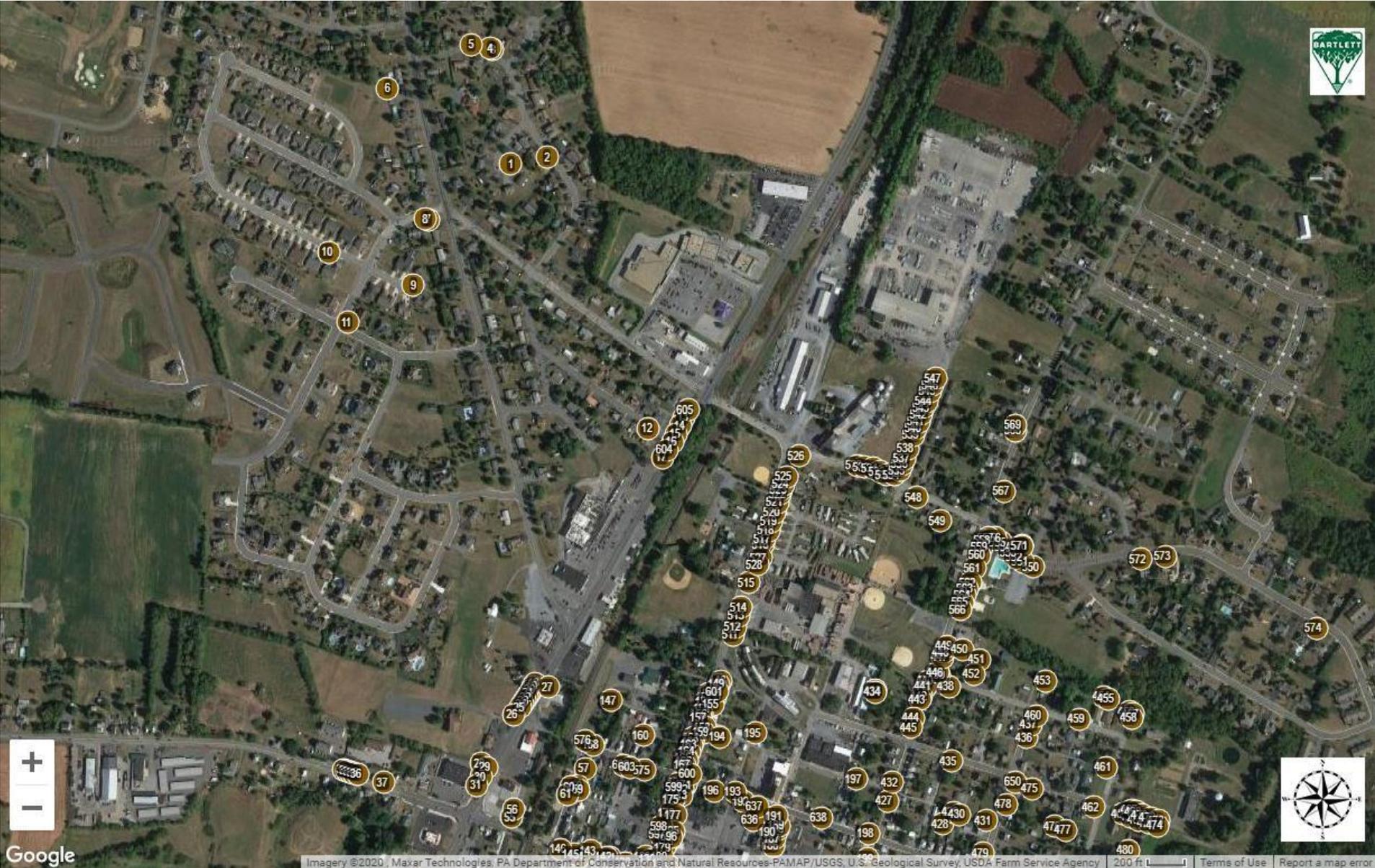
<i>Chamaecyparis</i>	<i>obtusa</i>	Falsecypress-Hinoki	4	1%
<i>Cladrastis</i>	<i>kentukea</i>	Yellowwood	2	< 1%
<i>Cornus</i>	<i>florida</i>	Dogwood-Flowering	14	2%
	<i>kousa</i>	Dogwood-Kousa	9	1%
	sp.	Dogwood	1	< 1%
<b>Cornus Total</b>			<b>24</b>	<b>3%</b>
<i>Crataegus</i>	sp.	Hawthorn	1	< 1%
<i>Cryptomeria</i>	<i>japonica</i>	Japanese Cryptomeria	1	< 1%
<i>Fraxinus</i>	<i>americana</i>	Ash-White	3	< 1%
<i>Ginkgo</i>	<i>biloba</i>	Ginkgo	14	2%

Genus	Species	Common Name	Count	% Distribution Total
<i>Gleditsia</i>	<i>triacanthos</i>	Honeylocust-Common	1	< 1%
	<i>triacanthos</i> var. <i>inermis</i>	Honeylocust-Thornless Common	2	< 1%
<b>Gleditsia Total</b>			<b>3</b>	<b>&lt; 1%</b>
<i>Gymnocladus</i>	<i>dioicus</i>	Coffeetree-Kentucky	4	1%
<i>Hibiscus</i>	<i>syriacus</i>	Rose-of-Sharon	2	< 1%
<i>Ilex</i>	<i>opaca</i>	Holly-American	5	1%
	x <i>attenuata</i>	Holly-Foster's	1	< 1%
<b>Ilex Total</b>			<b>6</b>	<b>1%</b>
<i>Juglans</i>	<i>nigra</i>	Walnut-Black	12	2%
	<i>regia</i>	Walnut-Persian	2	< 1%
<b>Juglans Total</b>			<b>14</b>	<b>2%</b>
<i>Juniperus</i>	sp.	Juniper	2	< 1%
	<i>virginiana</i>	Redcedar-Eastern	4	1%
<b>Juniperus Total</b>			<b>6</b>	<b>1%</b>
<i>Koelreuteria</i>	<i>paniculata</i>	Goldenraintree-Panicked	5	1%
<i>Lagerstroemia</i>	sp.	Crapemyrtle	3	< 1%
<i>Ligustrum</i>	sp.	Privet	4	1%
<i>Liquidambar</i>	<i>styraciflua</i>	Sweetgum	4	1%
<i>Liriodendron</i>	<i>tulipifera</i>	Tuliptree	2	< 1%
<i>Magnolia</i>	<i>grandiflora</i>	Magnolia-Southern	2	< 1%
	x <i>soulangiana</i>	Magnolia-Saucer	6	1%
<b>Magnolia Total</b>			<b>8</b>	<b>1%</b>

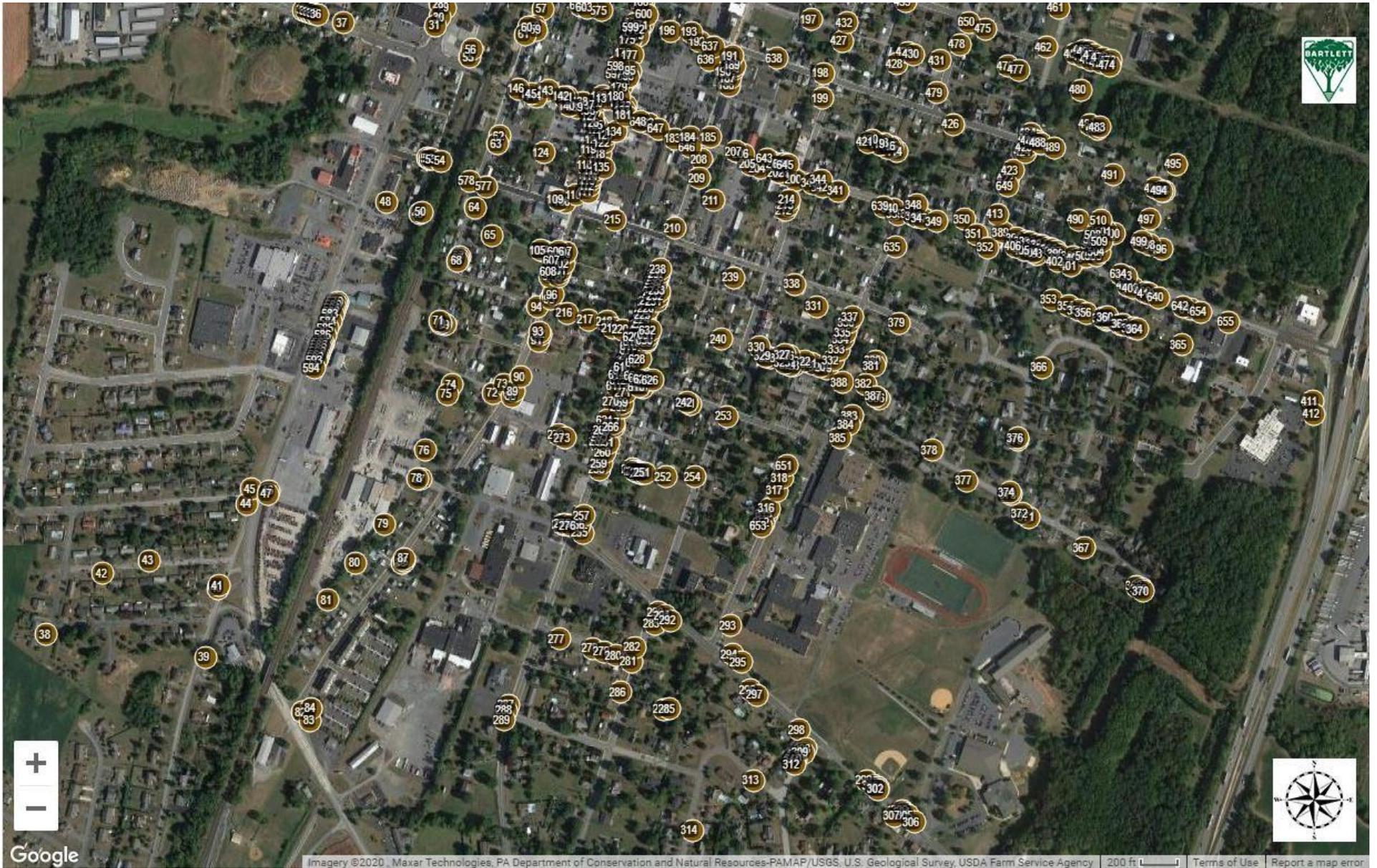
<i>Malus</i>	sp.	Crabapple	47	6%
<i>Morus</i>	sp.	Mulberry	5	1%
<i>Picea</i>	<i>abies</i>	Spruce-Norway	10	1%
	<i>glauca</i>	Spruce-White	3	< 1%
	<i>pungens</i>	Spruce-Colorado Blue	7	1%
	sp.	Spruce	1	< 1%
<b>Picea Total</b>			<b>21</b>	<b>3%</b>
<i>Pinus</i>	<i>strobus</i>	Pine-Eastern White	4	1%
	<i>thunbergii</i>	Pine-Japanese Black	2	< 1%
<b>Pinus Total</b>			<b>6</b>	<b>1%</b>
<i>Platanus</i>	<i>occidentalis</i>	Sycamore-American	19	3%
	<i>x acerifolia</i>	Planetree-London	3	< 1%
<b>Platanus Total</b>			<b>22</b>	<b>3%</b>
<i>Prunus</i>	<i>cerasifera</i>	Plum-Purple Leaf	4	1%
	<i>serotina</i>	Cherry-Black	1	< 1%
	<i>serrulata</i>	Cherry-Flowering	61	8%
<b>Prunus Total</b>			<b>66</b>	<b>9%</b>
<i>Pyracantha</i>	sp.	Firethorn	1	< 1%
<i>Pyrus</i>	<i>calleryana</i>	Pear-Callery	125	17%
<i>Quercus</i>	<i>alba</i>	Oak-White	1	< 1%
	<i>palustris</i>	Oak-Pin	3	< 1%
	<i>rubra</i>	Oak-Northern Red	1	< 1%
<b>Quercus Total</b>			<b>5</b>	<b>1%</b>
<b>Genus</b>	<b>Species</b>	<b>Common Name</b>	<b>Count</b>	<b>% Distribution Total</b>
<i>Robinia</i>	<i>pseudoacacia</i>	Locust-Black	3	< 1%
<i>Salix</i>	<i>babylonica</i>	Willow-Babylon Weeping	1	< 1%
<i>Styrax</i>	sp.	Snowbell	3	< 1%
<i>Syringa</i>	<i>pekinensis</i>	Lilac-Pekin	3	< 1%
	<i>reticulata</i>	Lilac-Japanese Tree	3	< 1%
	sp.	Lilac	46	6%
<b>Syringa Total</b>			<b>52</b>	<b>7%</b>
<i>Taxus</i>	sp.	Yew	4	1%
<i>Thuja</i>	<i>occidentalis</i>	Arborvitae-Eastern	1	< 1%

	<i>plicata</i>	Redcedar-Western	80	11%
	sp.	Arborvitae	6	1%
<b>Thuja Total</b>			<b>87</b>	<b>12%</b>
<b>Tilia</b>	<i>americana</i>	Linden-American	2	< 1%
	<i>cordata</i>	Linden-Littleleaf	1	< 1%
<b>Tilia Total</b>			<b>3</b>	<b>&lt; 1%</b>
<b>Tsuga</b>	<i>canadensis</i>	Hemlock-Canadian	3	< 1%
<b>Ulmus</b>	<i>americana</i>	Elm-American	2	< 1%
	<i>pumila</i>	Elm-Siberian	3	< 1%
	sp.	Elm	11	1%
<b>Ulmus Total</b>			<b>16</b>	<b>2%</b>
<b>Viburnum</b>	sp.	Viburnum	1	< 1%
<b>Zelkova</b>	<i>serrata</i>	Zelkova-Japanese	11	1%
<sup>x</sup> <b>Cupressocyparis</b>	<i>leylandii</i>	Cypress-Leyland	11	1%
<b>Grand Total</b>			<b>739</b>	<b>100%</b>

2019 TREE INVENTORY (NORTH)







Google

## 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.

### TREE GROUPINGS

<b>Tree ID</b>	<b>Common Name</b>	<b>Total Plants</b>
79	Redcedar-Western	25
81	Redcedar-Western	8
331	Redcedar-Western	9
355	Cypress-Leyland	3
356	Redcedar-Western	8
365	Redcedar-Western	8
431	Maple-Norway	8
476	Redcedar-Western	13
481	Spruce-Colorado Blue	4
509	Cypress-Leyland	5
573	Pear-Callery	4

**INVENTORIED TREES RECORDED AS GROUPINGS**

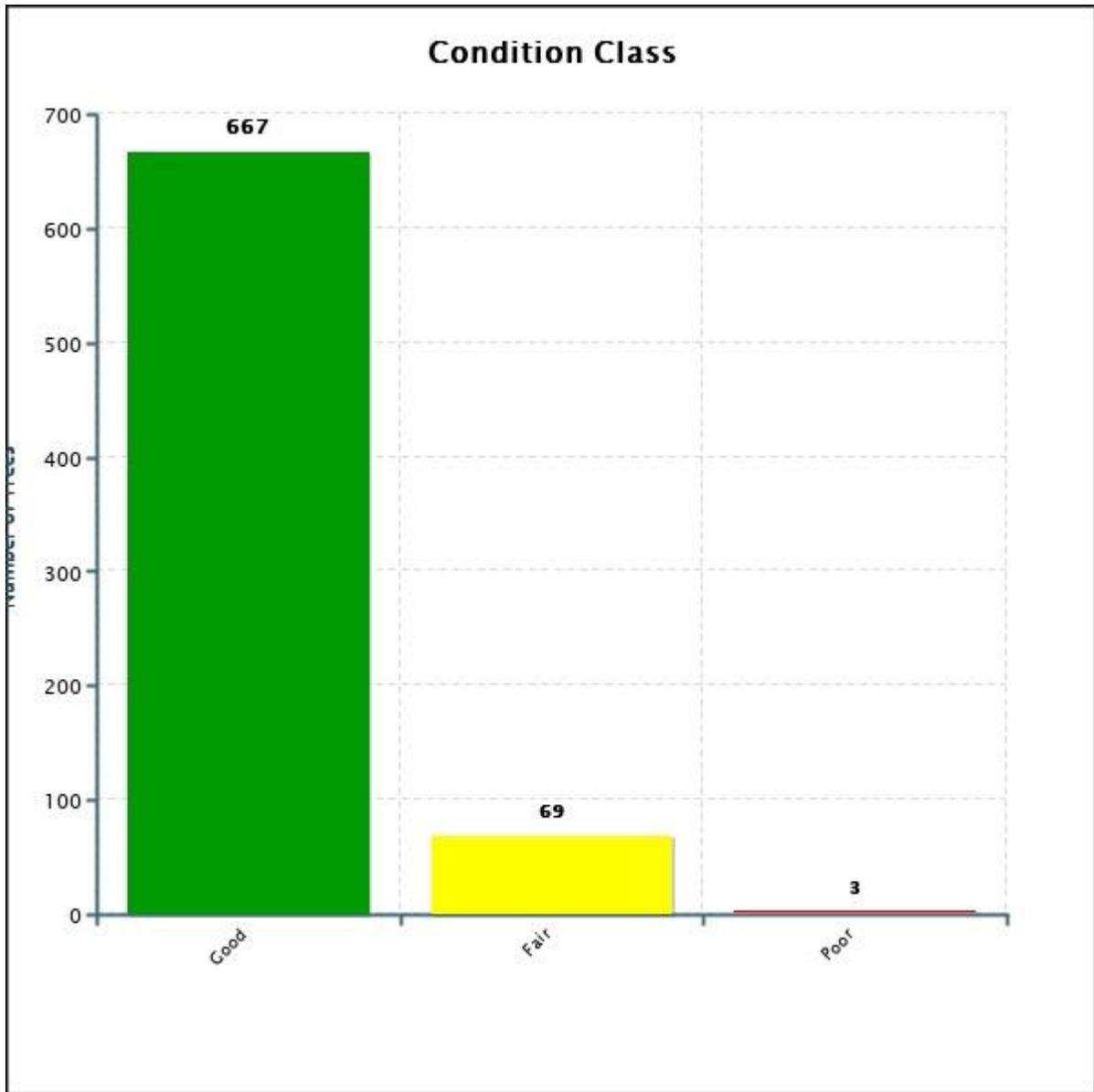


## Condition Class

The breakdown of tree condition follows:

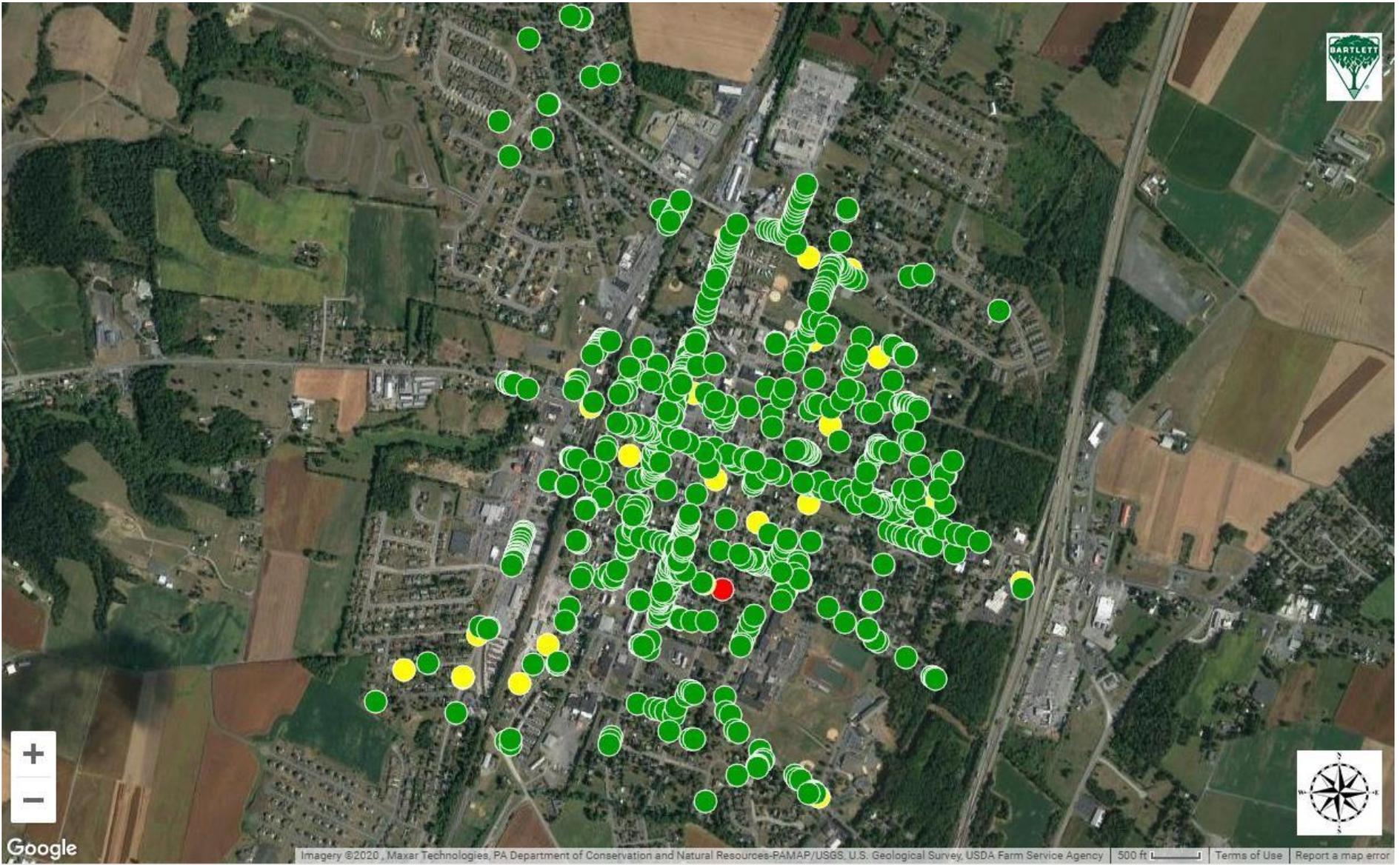
### CONDITION CLASS BREAKDOWN

Condition Class	Quantity	% of Total
Good	667	90%
Fair	69	9%
Poor	3	< 1%





**INVENTORIED TREES BY CONDITION CLASS**



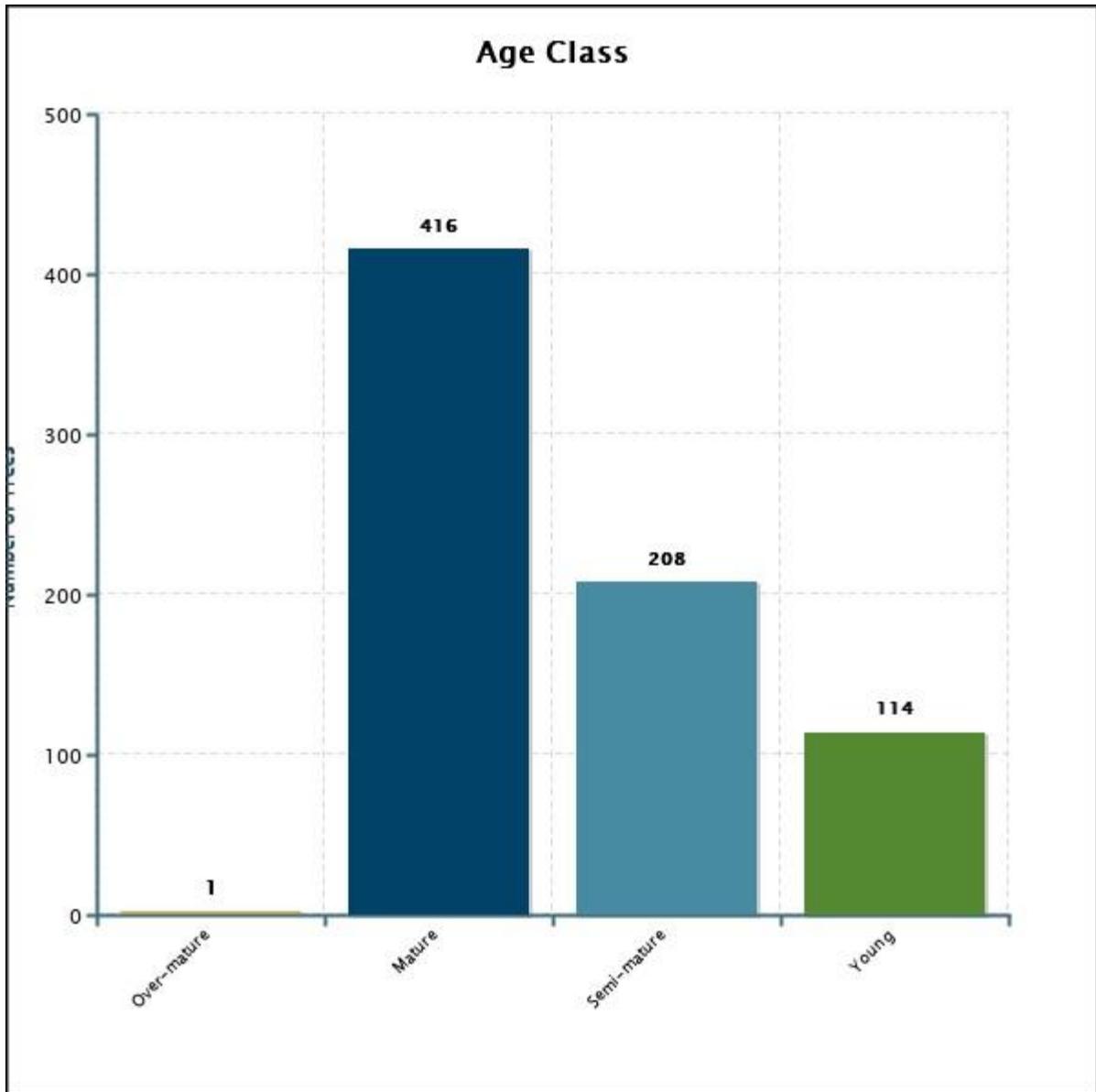
**Condition:** ● Good ● Fair ● Poor

## Age Class

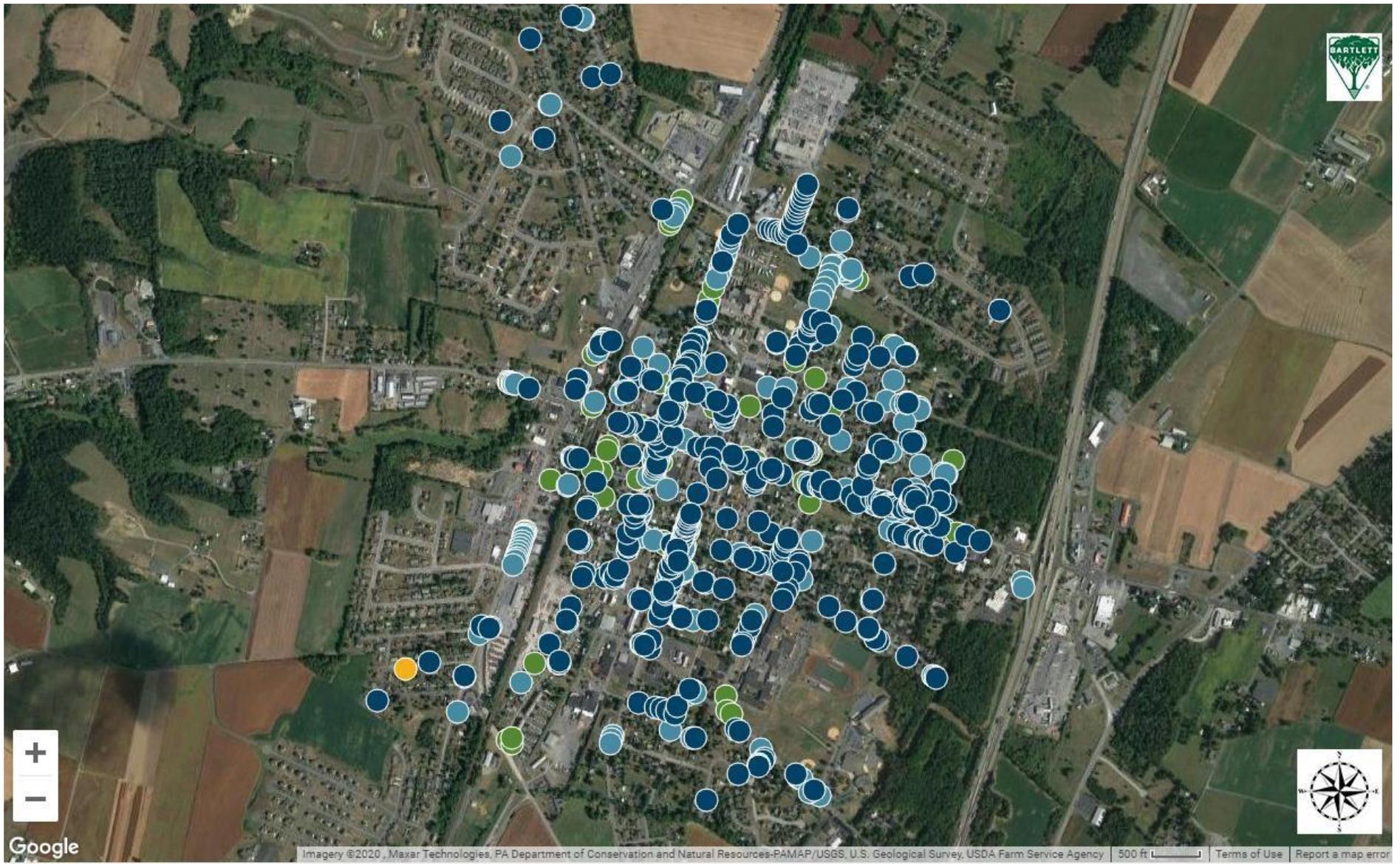
The breakdown of tree age class follows:

### AGE CLASS BREAKDOWN

Age Class	Quantity	% of Total
Over-mature	1	< 1%
Mature	416	56%
Semi-mature	208	28%
Young	114	15%

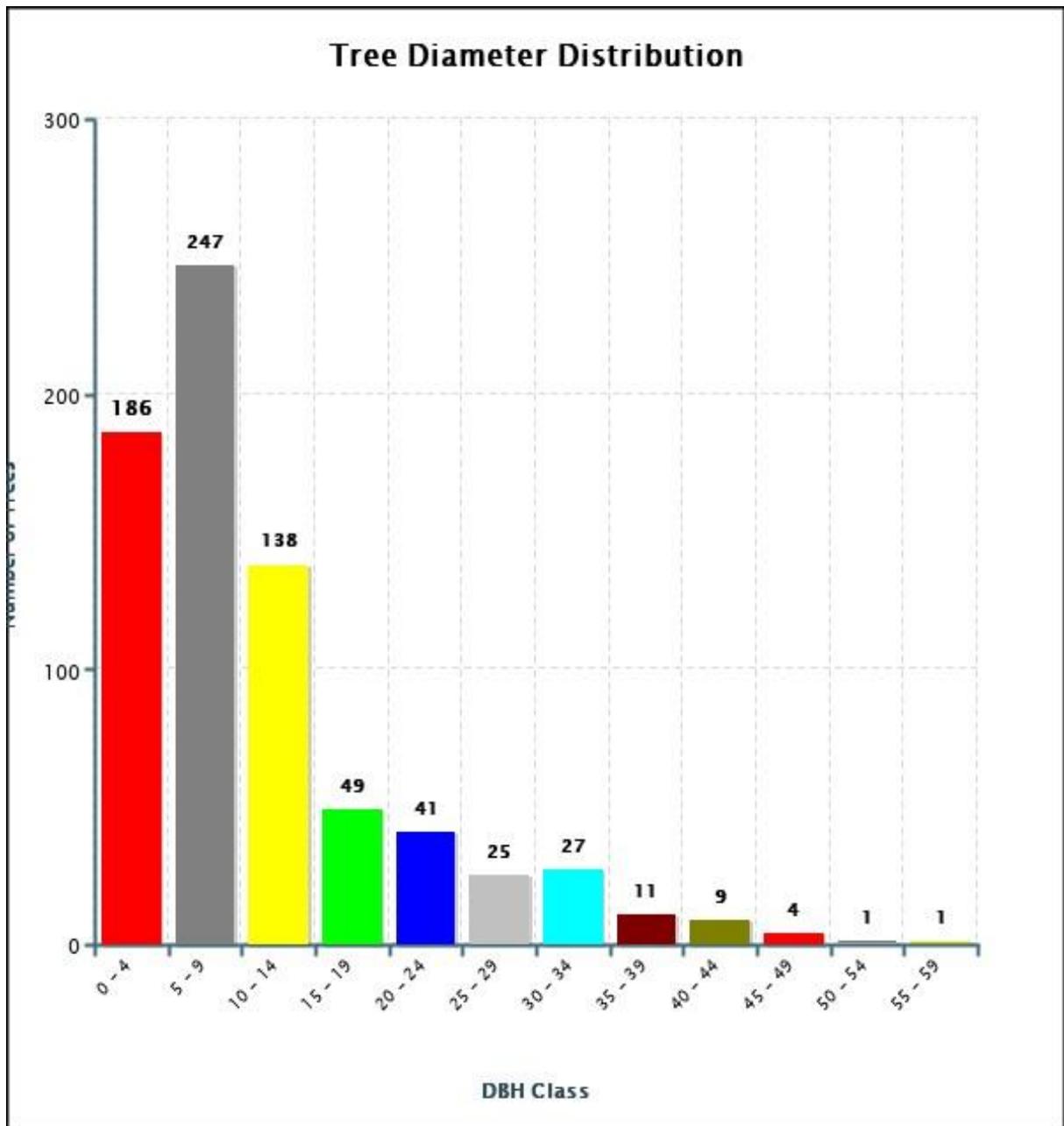


## **INVENTORIED TREES BY AGE CLASS**



## Tree Size (DBH)

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



## Estimated Tree Asset Value

As part of the Bartlett inventory process, we have included an Estimated Tree Asset Value for each tree and a cumulative total for all trees inventoried. We use an average per square

inch nursery price, size (DBH), species factor, condition factor, and location factor to estimate the tree asset value. This is not intended to replace a tree appraisal.

The following data fields are used in this formula:

<b>Data Field</b>	<b>Description</b>
<b>Average Per Square Inch Nursery Price</b>	Based on the average nursery prices for two common tree species and one exotic tree species within a region, then taking the average of those three as the average per square inch price for the region
<b>Size</b>	Based on tree DBH (4.5 feet above grade)
<b>Species Factor</b>	Relative species desirability based on 100% for the tree in that geographical location. In most cases, species desirability ratings, published by the International Society of Arboriculture, are used for adjustment.
<b>Condition Factor</b>	Rating of the tree's structure and health based on 100%
<b>Location Factor</b>	Average rating for the site and the tree's contribution and placement, based on 100%

$$\text{Estimated Tree Asset Value} = (\text{Average Per Square Inch Nursery Price} * \text{Size}) * \text{Species Factor} * \text{Condition Factor} * \text{Location Factor}$$

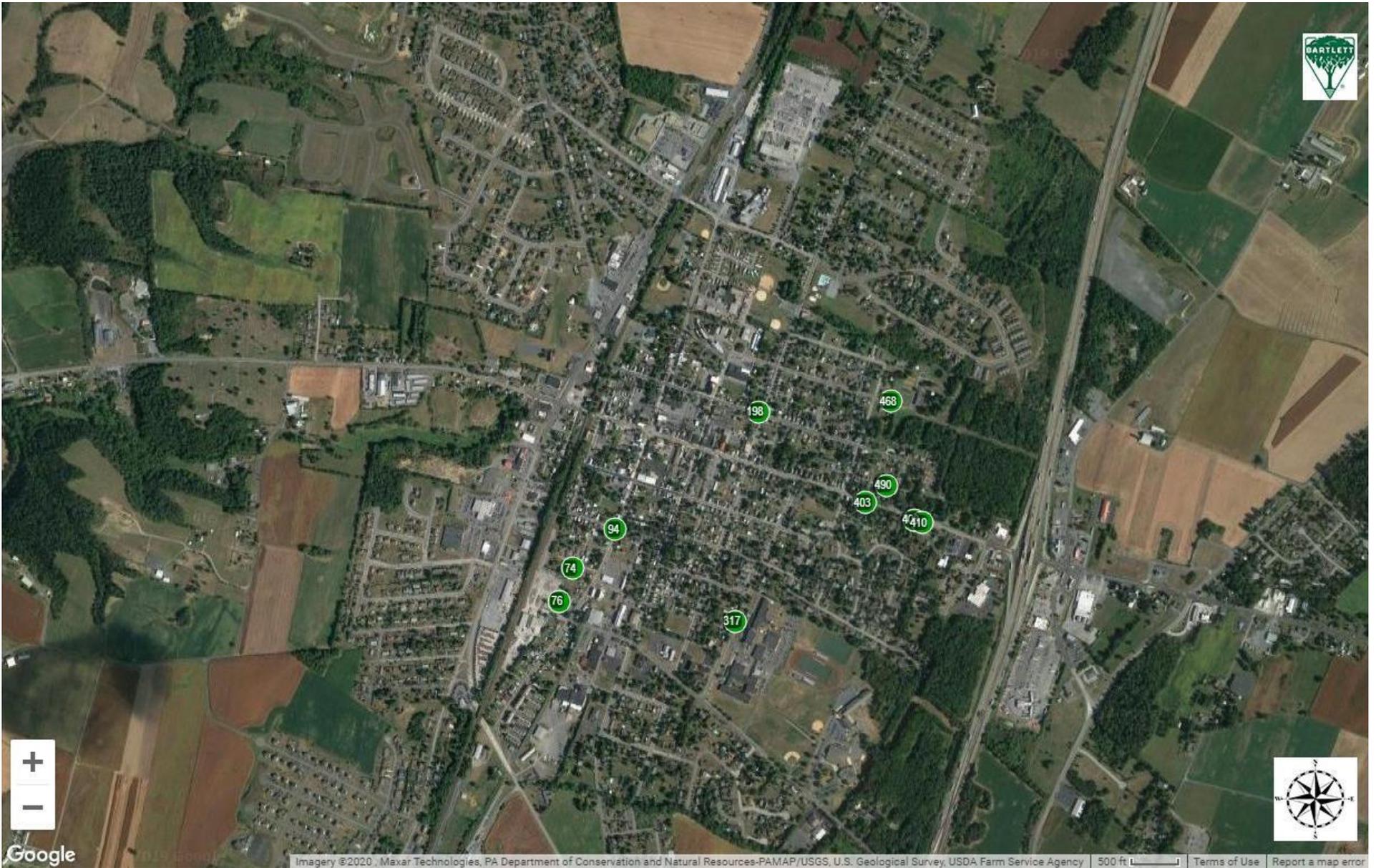
The estimated cumulative total value for all trees inventoried is **\$2,589,748.01**. The following table lists the ten trees with the highest Tree Asset Values:

**TOP TEN TREES - HIGHEST ESTIMATED TREE ASSET VALUE**

<b>Tree ID</b>	<b>Common Name</b>	<b>Genus</b>	<b>Species</b>	<b>DBH</b>	<b>Tree Asset Value</b>
<b>76</b>	Maple-Red	<i>Acer</i>	<i>rubrum</i>	58	\$46,445.46
<b>490</b>	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	45	\$37,295.51
<b>410</b>	Elm	<i>Ulmus</i>	sp.	46	\$35,807.66
<b>198</b>	Maple-Red	<i>Acer</i>	<i>rubrum</i>	45	\$34,809.14
<b>94</b>	Coffeetree-Kentucky	<i>Gymnocladus</i>	<i>dioicus</i>	41	\$31,955.98
<b>403</b>	Linden-American	<i>Tilia</i>	<i>americana</i>	41	\$31,955.98
<b>408</b>	Elm	<i>Ulmus</i>	sp.	42	\$31,710.18
<b>317</b>	Oak-Northern Red	<i>Quercus</i>	<i>rubra</i>	40	\$31,669.31
<b>74</b>	Coffeetree-Kentucky	<i>Gymnocladus</i>	<i>dioicus</i>	29,23	\$28,851.63
<b>468</b>	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	54	\$27,755.55



**TOP TEN TREES - HIGHEST TREE ASSET VALUE**



Google





## Tree Location Value

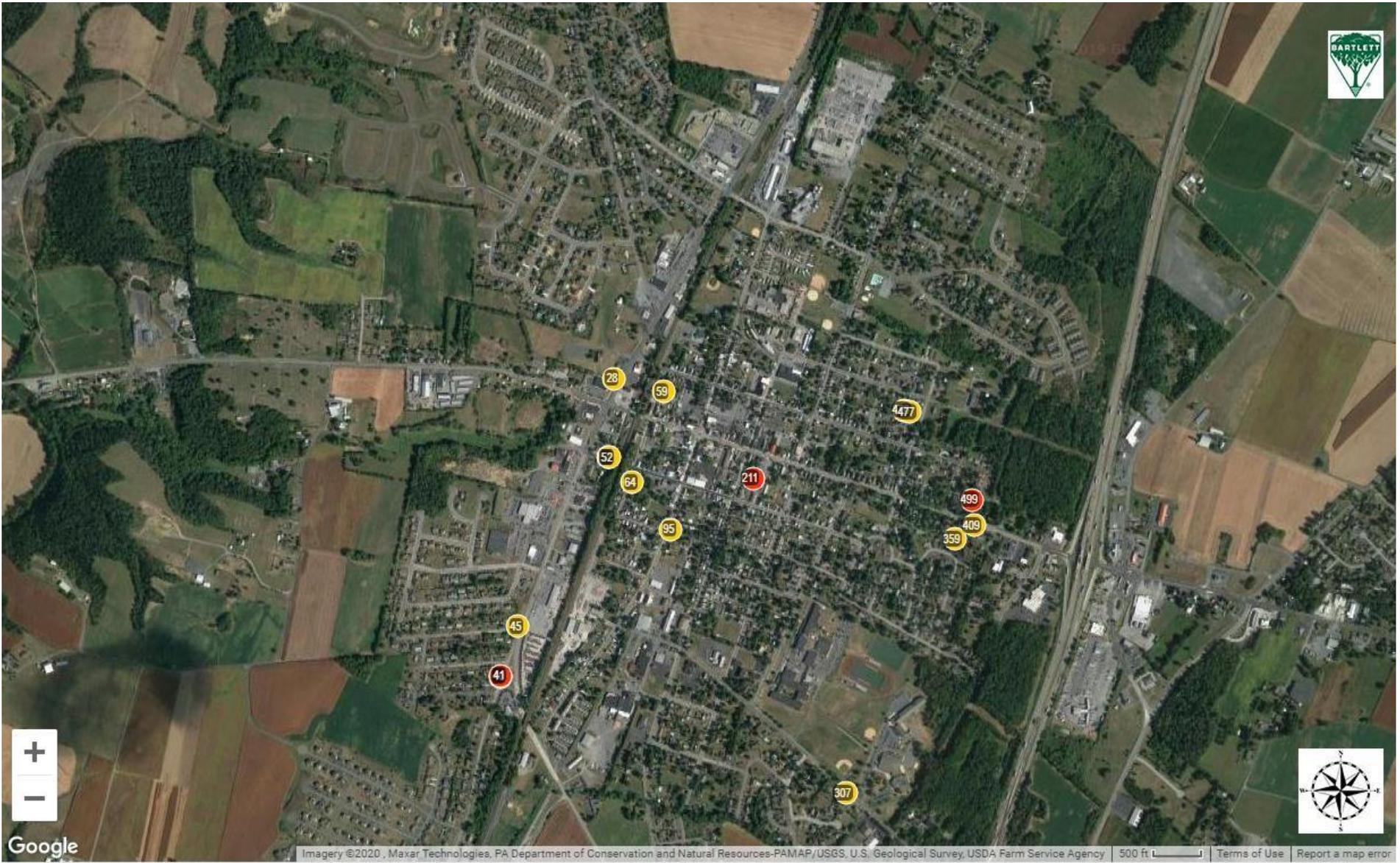
Each tree within Greencastle, PA was assigned a location value of good, fair, or poor. Twenty eight trees (4%) were assigned a location value of fair or poor due to present or anticipated conflicts with infrastructure or utilities. Trees with conflicts that can easily be mitigated with a one-time raise or reduction prune were not classified as existing in a fair or poor location.

It is recommended that the remaining 28 trees (4%) with fair or poor location values and not recommended for removal continue to be monitored for intolerable levels of conflict with the surrounding infrastructure. If the level of conflict continues to increase and cannot be easily mitigated, a removal and replacement program should be considered for these trees. If removal and replacement is deemed appropriate, please consult with your local Bartlett Arborist Representative for information on desirable replacement plantings.

### INVENTORIED TREES WITH A FAIR OR POOR LOCATION VALUE (28 Trees)

Tree ID	Common Name	Location Type	Location Value	DBH	Root Zone Infringement
40	Spruce-Norway	Street tree	Poor	15	25-50%
41	Spruce-White	Street tree	Poor	12	25-50%
51	Birch-Paper	Street tree	Poor	7	25-50%
211	Mulberry	Street tree	Poor	40	25-50%
499	Locust-Black	Street tree	Poor	14	25-50%
28	Mulberry	Street tree	Fair	41	25-50%
45	Magnolia-Saucer	Street tree	Fair	11	25-50%
52	Crabapple	Street tree	Fair	5	25-50%
59	Fir-White	Street tree	Fair	24	25-50%
64	Privet	Street tree	Fair	5	25-50%
95	Cherry-Flowering	Street tree	Fair	10	25-50%
307	Maple-Norway	Street tree	Fair	23	25-50%
359	Fir-Balsam	Street tree	Fair	3	25-50%
409	Elm	Street tree	Fair	5	25-50%
476	Redcedar-Western (13)	Street tree	Fair	4	25-50%
477	Cypress-Leyland	Street tree	Fair	8	25-50%

**INVENTORIED TREES WITH A FAIR OR POOR LOCATION VALUE**



**Location Value:** ● Good ● Fair ● Poor



# RECOMMENDATIONS



## RECOMMENDATIONS

In reviewing the results and recommendations, the reader will find useful the specifications and definitions detailed in the preceding methodology. We used the following categories to organize the results and recommendations, which are displayed in tables:

### **Recommendations**

- Soil Care
- Root Collar Excavation
- Plant Health Care
- Tree Pruning
- Structural Support Systems
- Lightning Protection Systems
- Tree Removal
- Vine Removal

## **Soil Care**

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 treatments should be applied as soon as possible, therefore they do not have a Tree & Shrub Work phase.

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 soil amendment 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, applying soil amendments (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.

### **Mulch Application**

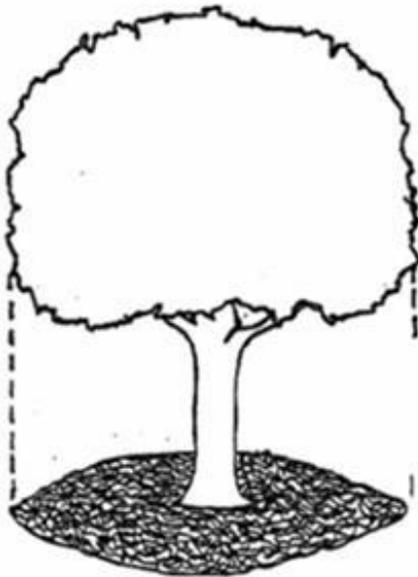
Proper mulching (top left and bottom left) provides many benefits to trees and shrubs. It moderates soil temperatures, reduces soil moisture loss, reduces soil compaction, provides nutrients, and improves soil structure. This practice results in more root growth and healthier plants. The image on the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



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



Example of root density under grass versus mulch.



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



Example of improper mulch application, known as "volcano mulch".

At the time of inventory, no trees were directly recommended for soil care. However, we recommend soil sampling across maintained areas with prominent landscape plantings to identify opportunities to optimize soil conditions moving forward.

### 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. Trees in the root collar excavation table do not have a Tree & Shrub Work phase and should be completed as soon as possible. The top image shows a buried root collar and the bottom image shows an exposed root collar.



**Example of a buried root collar.**



**Example of an exposed root collar.**

## **Girdling Roots**

Girdling roots (top left and right) restrict water and nutrient movement throughout the tree. If left untreated they can cause the tree to decline, fail (bottom), and eventually die in severe

cases. Girdling roots should be removed as soon as possible, unless removal of roots will significantly impact the condition or stability of the tree. In some cases, the presence of significant or severe girdling roots may cause the tree to be recommended for removal.



**Examples of girdling roots.**



**Example of tree failure from girdling roots.**

The following trees are recommended for a root collar excavation:

**INVENTORIED TREES RECOMMENDED FOR A ROOT COLLAR EXCAVATION (224 Trees)**

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b><i>Overall Tree Risk Rating</i></b>	<b>Root Collar Observation</b>
3	Cherry-Flowering	10	...	<input type="checkbox"/> Buried root collar
4	Cherry-Flowering	10	...	<input type="checkbox"/> Buried root collar
13	Cherry-Flowering	2	...	<input type="checkbox"/> Buried root collar
14	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
15	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
16	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
17	Cherry-Flowering	3	...	<input type="checkbox"/> Buried root collar
18	Crabapple	5	...	<input type="checkbox"/> Buried root collar
19	Cherry-Flowering	6	...	<input type="checkbox"/> Buried root collar
20	Crabapple	6	...	<input type="checkbox"/> Buried root collar
21	Cherry-Flowering	10	...	<input type="checkbox"/> Buried root collar
25	Cherry-Flowering	6	...	<input type="checkbox"/> Buried root collar
30	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
33	Cherry-Flowering	2	...	<input type="checkbox"/> Buried root collar
34	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
35	Pear-Callery	4	...	<input type="checkbox"/> Buried root collar
41	Spruce-White	12	...	<input type="checkbox"/> Buried root collar
42	Redbud-Eastern	19	...	<input type="checkbox"/> Buried root collar
45	Magnolia-Saucer	11	...	<input type="checkbox"/> Buried root collar
54	Crabapple	7,8	...	<input type="checkbox"/> Buried root collar
55	Lilac	4	...	<input type="checkbox"/> Buried root collar
63	Elm	2	...	<input type="checkbox"/> Buried root collar
72	Cherry-Flowering	8	...	<input type="checkbox"/> Buried root collar
82	Elm-American	8	...	<input type="checkbox"/> Buried root collar
83	Elm-Siberian	8	...	<input type="checkbox"/> Buried root collar
88	Lilac	7	...	<input type="checkbox"/> Buried root collar
89	Lilac	7	...	<input type="checkbox"/> Buried root collar
90	Lilac	10	...	<input type="checkbox"/> Buried root collar
91	Crabapple	12	...	<input type="checkbox"/> Buried root collar
93	Goldenraintree-Panicled	8	...	<input type="checkbox"/> Buried root collar

97	Pear-Callery	26	...	<input type="checkbox"/> Buried root collar
98	Pear-Callery	26	...	<input type="checkbox"/> Buried root collar
99	Ginkgo	2	...	<input type="checkbox"/> Buried root collar
100	Ginkgo	2	...	<input type="checkbox"/> Buried root collar
106	Crabapple	11	...	<input type="checkbox"/> Buried root collar
107	Pear-Callery	14	...	<input type="checkbox"/> Buried root collar
108	Zelkova-Japanese	5	...	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Overall Tree Risk Rating	Root Collar Observation
109	Maple	4	...	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Girdling roots present</li> </ul>
110	Lilac-Pekin	4	...	<input type="checkbox"/> Buried root collar
111	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
113	Pear-Callery	16	...	<input type="checkbox"/> Buried root collar
117	Crabapple	5	...	<input type="checkbox"/> Buried root collar
119	Lilac	3	...	<input type="checkbox"/> Buried root collar
120	Dogwood	5	...	<input type="checkbox"/> Buried root collar
121	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
126	Goldenraintree-Paniced	4	...	<input type="checkbox"/> Buried root collar
127	Cherry-Flowering	12	...	<input type="checkbox"/> Buried root collar
128	Pear-Callery	9	...	<input type="checkbox"/> Buried root collar
130	Pear-Callery	10	...	<input type="checkbox"/> Buried root collar
131	Pear-Callery	8	...	<input type="checkbox"/> Buried root collar
132	Maple	14	Low	<input type="checkbox"/> Buried root collar
134	Maple-Norway	17	...	<input type="checkbox"/> Buried root collar
137	Pear-Callery	11	...	<input type="checkbox"/> Buried root collar
138	Pear-Callery	10	...	<input type="checkbox"/> Buried root collar
141	Dogwood-Flowering	2	...	<input type="checkbox"/> Buried root collar
142	Dogwood-Flowering	2	...	<input type="checkbox"/> Buried root collar
144	Lilac	4	...	<input type="checkbox"/> Buried root collar
145	Pear-Callery	12	...	<input type="checkbox"/> Buried root collar
146	Lilac	8	...	<input type="checkbox"/> Girdling roots present
148	Pear-Callery	4	...	<input type="checkbox"/> Buried root collar
149	Pear-Callery	20	...	<input type="checkbox"/> Buried root collar

150	Lilac-Pekin	4	...	<input type="checkbox"/> Buried root collar
151	Pear-Callery	10	...	<input type="checkbox"/> Buried root collar
152	Pear-Callery	2	...	<input type="checkbox"/> Buried root collar
153	Honeylocust-Thornless Common	2	...	<input type="checkbox"/> Buried root collar
154	Pear-Callery	17	...	<input type="checkbox"/> Buried root collar
156	Ginkgo	2	...	<input type="checkbox"/> Buried root collar
157	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
161	Lilac-Pekin	4	...	<input type="checkbox"/> Buried root collar
164	Lilac	4	...	<input type="checkbox"/> Buried root collar
165	Yew	4,3,1	...	<input type="checkbox"/> Buried root collar
169	Cherry-Flowering	4	...	<input type="checkbox"/> Buried root collar
170	Pear-Callery	3	...	<input type="checkbox"/> Buried root collar
171	Pear-Callery	9	...	<input type="checkbox"/> Buried root collar
172	Pear-Callery	9	...	<input type="checkbox"/> Buried root collar
173	Ginkgo	3	...	<input type="checkbox"/> Buried root collar
175	Snowbell	4	...	<input type="checkbox"/> Buried root collar
176	Snowbell	5	...	<input type="checkbox"/> Buried root collar

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b><i>Overall Tree Risk Rating</i></b>	<b>Root Collar Observation</b>
178	Cherry-Flowering	8	...	<input type="checkbox"/> Buried root collar
180	Cherry-Flowering	8	...	<input type="checkbox"/> Buried root collar
182	Rose-of-Sharon	4	...	<input type="checkbox"/> Buried root collar
183	Lilac	5	...	<input type="checkbox"/> Buried root collar
185	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
186	Cherry-Flowering	18	...	<input type="checkbox"/> Buried root collar
190	Pear-Callery	8	...	<input type="checkbox"/> Buried root collar
192	Pear-Callery	11	...	<input type="checkbox"/> Buried root collar
200	Pear-Callery	20	...	<input type="checkbox"/> Buried root collar
203	Lilac	6	...	<input type="checkbox"/> Buried root collar
204	Zelkova-Japanese	2	...	<input type="checkbox"/> Buried root collar
209	Lilac	11	...	<input type="checkbox"/> Buried root collar
214	Pear-Callery	10	...	<input type="checkbox"/> Buried root collar
218	Hawthorn	2	...	<input type="checkbox"/> Buried root collar

219	Mulberry	2,2,2	...	<input type="checkbox"/> Buried root collar
222	Cherry-Flowering	5	...	<input type="checkbox"/> Buried root collar
226	Lilac	8	...	<input type="checkbox"/> Buried root collar
230	Crabapple	12	...	<input type="checkbox"/> Buried root collar
231	Cherry-Flowering	2	...	<input type="checkbox"/> Buried root collar
232	Cherry-Flowering	5	...	<input type="checkbox"/> Buried root collar
233	Cherry-Flowering	3	...	<input type="checkbox"/> Buried root collar
234	Pear-Callery	9	...	<input type="checkbox"/> Buried root collar
235	Lilac	6	...	<input type="checkbox"/> Buried root collar
236	Pear-Callery	10	...	<input type="checkbox"/> Buried root collar
238	Lilac	7	...	<input type="checkbox"/> Buried root collar
259	Maple-Red	3	...	<input type="checkbox"/> Buried root collar
262	Maple-Red	4	...	<input type="checkbox"/> Buried root collar
263	Maple-Red	4	...	<input type="checkbox"/> Buried root collar
265	Maple-Red	12	...	<input type="checkbox"/> Buried root collar
266	Lilac	9	...	<input type="checkbox"/> Buried root collar
267	Lilac	10	...	<input type="checkbox"/> Buried root collar
270	Maple-Red	11	...	<input type="checkbox"/> Buried root collar
278	Lilac	8	...	<input type="checkbox"/> Buried root collar
280	Lilac	6	...	<input type="checkbox"/> Buried root collar
286	Hemlock-Canadian	12	...	<input type="checkbox"/> Buried root collar
293	Elm	1	...	<input type="checkbox"/> Buried root collar
295	Elm	1	...	<input type="checkbox"/> Buried root collar
296	Crabapple	15	...	<input type="checkbox"/> Buried root collar
297	Crabapple	15	...	<input type="checkbox"/> Buried root collar
298	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
308	Dogwood-Flowering	6	...	<input type="checkbox"/> Buried root collar
315	Maple-Sugar	30	...	<input type="checkbox"/> Buried root collar
316	Maple-Sugar	25	...	<input type="checkbox"/> Buried root collar

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b><i>Overall Tree Risk Rating</i></b>	<b>Root Collar Observation</b>
318	Maple-Norway	32	...	<input type="checkbox"/> Buried root collar
324	Cherry-Flowering	10	...	<input type="checkbox"/> Buried root collar
325	Pear-Callery	13	...	<input type="checkbox"/> Buried root collar

330	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
335	Lilac	12	...	<input type="checkbox"/> Buried root collar
337	Pear-Callery	13	...	<input type="checkbox"/> Buried root collar
338	Plum-Purple Leaf	9,7,8	...	<input type="checkbox"/> Buried root collar
340	Dogwood-Kousa	4	...	<input type="checkbox"/> Buried root collar
342	Dogwood-Kousa	2	...	<input type="checkbox"/> Buried root collar
376	Holly-American	6,6,5	...	<input type="checkbox"/> Buried root collar
382	Maple-Japanese	8	...	<input type="checkbox"/> Buried root collar
389	Maple-Red	8	...	<input type="checkbox"/> Buried root collar
406	Maple-Red	9	...	<input type="checkbox"/> Buried root collar
409	Elm	5	...	<input type="checkbox"/> Buried root collar
421	Walnut-Persian	11	...	<input type="checkbox"/> Buried root collar
427	Redbud-Eastern	13	...	<input type="checkbox"/> Buried root collar
432	Cherry-Flowering	18	...	<input type="checkbox"/> Buried root collar
439	Goldenraintree-Paniced	11,9	...	<input type="checkbox"/> Buried root collar
465	Cherry-Flowering	4	...	<input type="checkbox"/> Buried root collar
469	Cherry-Flowering	6	...	<input type="checkbox"/> Buried root collar
471	Pear-Callery	5	...	<input type="checkbox"/> Buried root collar
474	Cherry-Flowering	4	...	<input type="checkbox"/> Buried root collar
488	Dogwood-Kousa	9	...	<input type="checkbox"/> Buried root collar
501	Pear-Callery	17	...	<input type="checkbox"/> Buried root collar
504	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
505	Dogwood-Flowering	4	...	<input type="checkbox"/> Buried root collar
506	Dogwood-Flowering	3	...	<input type="checkbox"/> Buried root collar
507	Redbud-Eastern	9,8,7	...	<input type="checkbox"/> Buried root collar
510	Dogwood-Flowering	4	...	<input type="checkbox"/> Buried root collar
513	Zelkova-Japanese	1	...	<input type="checkbox"/> Buried root collar
514	Zelkova-Japanese	1	...	<input type="checkbox"/> Buried root collar
515	Pear-Callery	5	...	<input type="checkbox"/> Buried root collar
516	Cherry-Flowering	12	...	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Girdling roots present</li> </ul>
517	Maple-Red	7	...	<input type="checkbox"/> Buried root collar
524	Lilac	5	...	<input type="checkbox"/> Buried root collar
525	Lilac	6	...	<input type="checkbox"/> Buried root collar
526	Cherry-Flowering	6	...	<input type="checkbox"/> Buried root collar

528	Maple-Red	10	...	<input type="checkbox"/> Buried root collar
529	Pear-Callery	16	...	<input type="checkbox"/> Buried root collar
530	Crabapple	11	...	<input type="checkbox"/> Buried root collar
531	Pear-Callery	14	...	<input type="checkbox"/> Buried root collar
532	Crabapple	11	...	<input type="checkbox"/> Buried root collar

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b><i>Overall Tree Risk Rating</i></b>	<b>Root Collar Observation</b>
533	Pear-Callery	15	...	<input type="checkbox"/> Buried root collar
534	Crabapple	9	...	<input type="checkbox"/> Buried root collar
535	Pear-Callery	13	...	<input type="checkbox"/> Buried root collar
536	Crabapple	11	...	<input type="checkbox"/> Buried root collar
537	Pear-Callery	14	...	<input type="checkbox"/> Buried root collar
538	Crabapple	11	...	<input type="checkbox"/> Buried root collar
539	Crabapple	10	...	<input type="checkbox"/> Buried root collar
541	Crabapple	10	...	<input type="checkbox"/> Buried root collar
542	Pear-Callery	13	...	<input type="checkbox"/> Buried root collar
543	Crabapple	8	...	<input type="checkbox"/> Buried root collar
544	Pear-Callery	9	...	<input type="checkbox"/> Buried root collar
547	Crabapple	10	...	<input type="checkbox"/> Buried root collar
550	Ginkgo	3	...	<input type="checkbox"/> Buried root collar
551	Pear-Callery	5	...	<input type="checkbox"/> Buried root collar
552	Maple-Red	3	...	<input type="checkbox"/> Buried root collar
553	Cherry-Flowering	5	...	<input type="checkbox"/> Buried root collar
554	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
555	Maple-Red	6	...	<input type="checkbox"/> Buried root collar
556	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
557	Ginkgo	3	...	<input type="checkbox"/> Buried root collar
560	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
561	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
562	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
563	Maple-Red	5	...	<input type="checkbox"/> Buried root collar
564	Pear-Callery	8	...	<input type="checkbox"/> Buried root collar
565	Maple-Red	6	...	<input type="checkbox"/> Buried root collar
575	Zelkova-Japanese	2	...	<input type="checkbox"/> Buried root collar

577	Lilac	3	...	<input type="checkbox"/> Buried root collar
578	Tuliptree	3	...	<input type="checkbox"/> Buried root collar
579	Cherry-Flowering	5	...	<input type="checkbox"/> Buried root collar
580	Birch	2	...	<input type="checkbox"/> Buried root collar
581	Pear-Callery	5	...	<input type="checkbox"/> Buried root collar
583	Cherry-Flowering	8	...	<input type="checkbox"/> Buried root collar
584	Pear-Callery	4	...	<input type="checkbox"/> Buried root collar
585	Cherry-Flowering	5	...	<input type="checkbox"/> Buried root collar
586	Pear-Callery	6	...	<input type="checkbox"/> Buried root collar
587	Cherry-Flowering	12	...	<input type="checkbox"/> Buried root collar
588	Ginkgo	1	...	<input type="checkbox"/> Buried root collar
589	Pear-Callery	7	...	<input type="checkbox"/> Buried root collar
591	Cherry-Flowering	8	...	<input type="checkbox"/> Buried root collar
593	Pear-Callery	8	...	<input type="checkbox"/> Buried root collar
594	Cherry-Flowering	5	...	<input type="checkbox"/> Buried root collar
599	Lilac	1	...	<input type="checkbox"/> Buried root collar
<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b>Overall Tree Risk Rating</b>	<b>Root Collar Observation</b>
601	Lilac	1	...	<input type="checkbox"/> Buried root collar
603	Crabapple	14	...	<input type="checkbox"/> Buried root collar
605	Elm	1	...	<input type="checkbox"/> Buried root collar
607	Serviceberry	1	...	<input type="checkbox"/> Buried root collar
608	Serviceberry	1	...	<input type="checkbox"/> Buried root collar
618	Crabapple	8	...	<input type="checkbox"/> Buried root collar
621	Dogwood-Flowering	6,5,5	...	<input type="checkbox"/> Buried root collar
632	Maple-Red	9	...	<input type="checkbox"/> Buried root collar
638	Lilac	1	...	<input type="checkbox"/> Buried root collar
639	Zelkova-Japanese	1	...	<input type="checkbox"/> Buried root collar
640	Sycamore-American	1	...	<input type="checkbox"/> Buried root collar
641	Sycamore-American	1	...	<input type="checkbox"/> Buried root collar
642	Sycamore-American	1	...	<input type="checkbox"/> Buried root collar
643	Maple-Red	5	...	<input type="checkbox"/> Buried root collar
647	Ginkgo	1	...	<input type="checkbox"/> Buried root collar
649	Snowbell	1	...	<input type="checkbox"/> Buried root collar
650	Dogwood-Kousa	4	...	<input type="checkbox"/> Buried root collar

<b>654</b>	Pear-Callery	8	...	<input type="checkbox"/> Buried root collar
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# 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. Plant Health Care treatments should be applied as soon as possible, therefore they do not have a Tree & Shrub Work phase. 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
- Gall Insects - on a variety of species
- Lacebugs - on a variety of species
- Scab and Rust Fungi - on crabapple and apple species.
- Suspected Phytophthora Root Rot and Canker - on a variety of tree species, especially beech species
- Scale Insects - on a variety of tree species, especially oak
- Spider Mites - on a variety of tree species



**Tree #552 with bagworms present.**

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

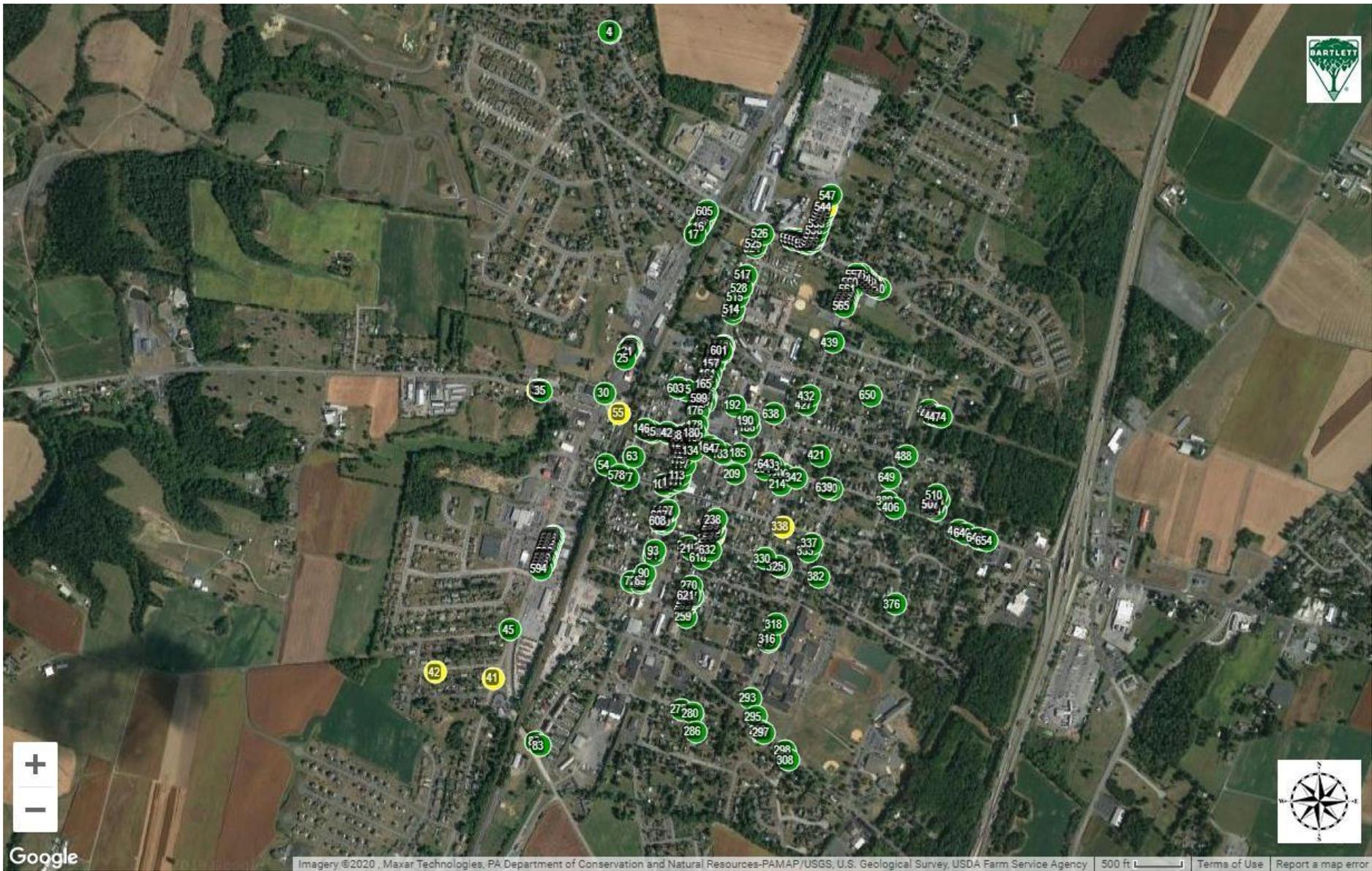
**INVENTORIED TREES IDENTIFIED FOR PLANT HEALTH CARE (15 Trees)**

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b>Pest(s) or Disease(s)</b>
7	Hemlock-Canadian	10	<input type="checkbox"/> Scale
8	Hemlock-Canadian	9	<input type="checkbox"/> Scale
103	Crabapple	7	<input type="checkbox"/> Scale
153	Honeylocust-Thornless Common	2	<input type="checkbox"/> Scale
203	Lilac	6	<input type="checkbox"/> Scale
238	Lilac	7	<input type="checkbox"/> Scale
294	Maple-Red	8	<input type="checkbox"/> Scale
301*	Ash-White	7	<input type="checkbox"/> Emerald ash borer (suspected)
498*	Ash-White	15	<input type="checkbox"/> Emerald ash borer (suspected)
539	Crabapple	10	<input type="checkbox"/> Scale
541	Crabapple	10	<input type="checkbox"/> Scale
552	Maple-Red	3	<input type="checkbox"/> Bagworms

<b>563</b>	Maple-Red	5	<input type="checkbox"/> Scale
<b>565</b>	Maple-Red	6	<input type="checkbox"/> Scale
<b>606</b>	Crabapple	7	<input type="checkbox"/> Scale

\* Trees that are recommended for removal in the Tree Removal Section

**INVENTORIED TREES IDENTIFIED FOR PLANT HEALTH CARE**





## 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 next page, top left.
- 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 next page, top right.
- Flush Cuts - pruning cut through the **branch collar**, flush against the trunk or parent stem, causing unnecessary injury. See next page, bottom.
- 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.



**Example of Lion's tailing.**



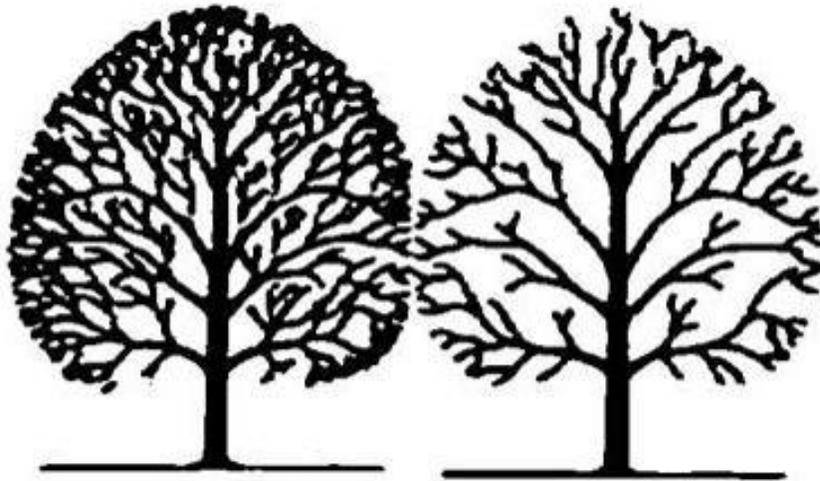
**Examples of topping.**



**Examples of flush cuts.**

## **Pruning with a Goal**

Below are illustrations of common pruning goals:



**Illustration of improving airflow to reduce disease.**



**Illustration of branch weight reduction.**

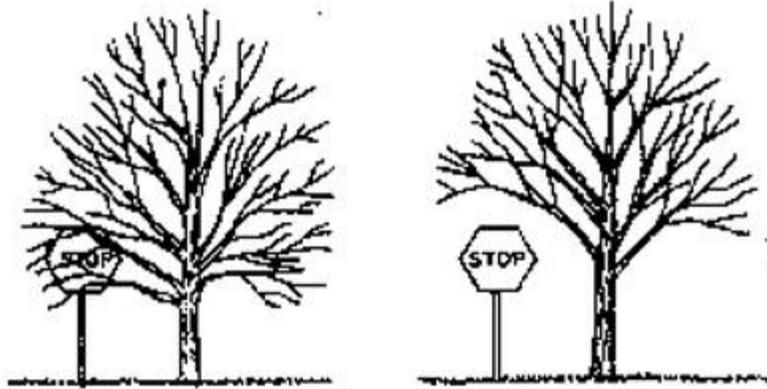


Illustration of raising branch elevation to improve clearance.

Without Development of Central Leader				
	At Planting	2-4 Years	5-7 Years	8-10 Years
With Development of Central Leader				
	At Planting	2-4 Years	5-7 Years	8-10 Years

Illustration of promoting a strong central leader.

### Pruning Category

All trees identified in this management plan that have pruning recommendations are listed with a specific pruning category. The listed order of these pruning categories are typical to most managers. Trees within each category are prioritized by the specific goals of most managers. It is recommended that specific goals be discussed with your local Bartlett

Arborist Representative. Pruning categories are separated into individual tables below where each table lists specific arboricultural pruning goals and recommendations for each tree.

**Risk Mitigation Pruning**

Any tree identified with a Risk Mitigation Pruning category to reduce the *Overall Tree Risk Rating*, was previously summarized in the Tree Risk Assessments and Mitigation section earlier in the document.

**Maintenance Pruning**

This goal typically requires routine pruning of large/mature trees. Includes branch removal and/or branch reduction to help reduce *likelihood of failure* and/or conflict with infrastructure. Trees with these goals are typically climbed or require the use of aerial lifts and/or other specialized equipment.

The trees in this table are recommended for maintenance pruning:

**INVENTORIED TREES RECOMMENDED FOR MAINTENANCE PRUNING (254 Trees)**

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b>Tree &amp; Shrub Work Phase</b>	<b>Pruning Goal</b>	<b>Defect(s) or Observation(s)</b>
28	Mulberry	41	1	☐ Clearance	☐ Poor branch structure
40	Spruce-Norway	15	1	☐ Clearance	☐ Dead branches >2
41	Spruce-White	12	1	☐ Clearance	• Buried root collar • Dead branches >2
44	Maple-Crimson King	23	1	☐ Clearance	• Dead branches >2 • Uneven crown
45	Magnolia-Saucer	11	1	☐ Clearance	☐ Buried root collar ☐ Topping/heading cuts
51	Birch-Paper	7,10	1	☐ Clearance	• Co-dominant stems • Dead branches >2

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
57	CoffeetreeKentucky	20	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
59	Fir-White	24	1	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2
64	Privet	5,5,4	1	<input type="checkbox"/> Clearance	...
73	Magnolia-Southern	18	1	<input type="checkbox"/> Clearance	...
74	CoffeetreeKentucky	29,23	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> </ul>
75	CoffeetreeKentucky	31	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Growing against object
76	Maple-Red	58	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Included bark</li> <li>• Poor branch structure</li> </ul>
77	Pear-Callery	24	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> <li>• Hanger</li> <li>• Included bark</li> </ul>
78	Pear-Callery	29	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> </ul>
94	CoffeetreeKentucky	41	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li><input type="checkbox"/> Sidewalk liftingminor</li> <li>• Uneven crown</li> </ul>
97	Pear-Callery	26	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li><input type="checkbox"/> Overextended branch</li> <li>• Poor branch structure</li> </ul>

98	Pear-Callery	26	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Co-dominant stems</li> <li>• Included bark</li> <li>• Poor branch structure</li> </ul>
104	Boxelder	24,19	1	<input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Co-dominant stems
107	Pear-Callery	14	1	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
113	Pear-Callery	16	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Poor branch structure
115	Pear-Callery	17	1	<input type="checkbox"/> Reduce weight of branch ends <input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Sidewalk lifting minor</li> </ul>
124	Locust-Black	40	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
125	Pear-Callery	8	1	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Poor branch structure
127	Cherry-Flowering	12	1	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Topping/heading cuts
128	Pear-Callery	9	1	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
130	Pear-Callery	10	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar

131	Pear-Callery	8	1	<input type="checkbox"/> Clearance <input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
133	Cherry-Flowering	15	1	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>Poor branch structure</li> <li>Topping/heading cuts</li> </ul>
134	Maple-Norway	17	1	<input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Co-dominant stems
136	Pear-Callery	25	1	<input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Included bark</li> </ul>
137	Pear-Callery	11	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Buried root collar</li> <li>Wound-branch</li> </ul>
138	Pear-Callery	10	1	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
143	Crabapple	8,7	1	<input type="checkbox"/> Clearance	<input type="checkbox"/> Co-dominant stems
147	Maple-Silver	24,21,18	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Dead branches &gt;2</li> </ul>

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
149	Pear-Callery	20	1	<input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Poor branch structure
158	Oak-Pin	29	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure <input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2 <input type="checkbox"/> Topping/heading cuts
179	Lilac	8	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Wound-stem</li> </ul>
180	Cherry-Flowering	8	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Buried root collar</li> <li>Wound-branch</li> </ul>
181	Pear-Callery	11	1	<input type="checkbox"/> Clearance <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Included bark</li> </ul>

184	Pear-Callery	12	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure
186	Cherry-Flowering	18	1	<input type="checkbox"/> Improve light and air penetration through crown <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
193	Maple-Norway	19	1	<input type="checkbox"/> Reduce weight of branch ends <input type="checkbox"/> Clearance	<input type="checkbox"/> Poor branch structure
194	Maple-Sugar	24	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> <li><input type="checkbox"/> Topping/heading cuts</li> </ul>
195	Maple	30	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Cavity-branch</li> <li>• Dead branches &gt;2</li> <li>• Hanger</li> </ul>
197	Maple-Norway	20	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Flush cuts</li> <li><input type="checkbox"/> Poor branch structure</li> </ul>
198	Maple-Red	45	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Broken branch(s)</li> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> </ul>
200	Pear-Callery	20	1	<input type="checkbox"/> Reduce weight of branch ends <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Co-dominant stems
208	Pear-Callery	11	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Broken branch(s)

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
217	Maple	21	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Hanger</li> </ul>

227	Pear-Callery	9	1	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Poor branch structure
228	Crabapple	13	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Hanger</li> <li>• Topping/heading cuts</li> </ul>
229	Pear-Callery	13	1	<input type="checkbox"/> Reduce weight of branch ends	<ul style="list-style-type: none"> <li>• Poor branch structure</li> <li>• Wound-stem</li> </ul>
230	Crabapple	12	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> </ul>
234	Pear-Callery	9	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
236	Pear-Callery	10	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
241	Arborvitae	19,18	1	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2
246	Pine-Eastern White	18	1	<input type="checkbox"/> Clearance	...
253	Oak-Pin	30	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure <input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Hanger</li> </ul>
256	Maple	16	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Wound-stem</li> </ul>
257	Maple	38	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Hanger</li> </ul>
270	Maple-Red	11	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
282	HoneylocustCommon	35	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
299	Locust-Black	35	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
300	Maple-Sugar	24	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure <input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Dead branches >2
303	Maple-Silver	27	1	<input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Girdling roots present (moderate)
304	Maple-Norway	15	1	<input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Girdling roots present (moderate)
305	Maple-Silver	14,13	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Girdling roots present
315	Maple-Sugar	30	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> <li><input type="checkbox"/> Topping/heading cuts</li> </ul>
317	Oak-Northern Red	40	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Hanger</li> </ul>
318	Maple-Norway	32	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> </ul>
319	Pear-Callery	21	1	<input type="checkbox"/> Develop branch structure	...
320	Pear-Callery	26	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Included bark</li> </ul>
321	Pear-Callery	24	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Co-dominant stems
322	Pear-Callery	28	1	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Reduce weight of branch ends</li> </ul>	<input type="checkbox"/> Co-dominant stems

325	Pear-Callery	13	1	<ul style="list-style-type: none"> <li>• Clearance</li> <li>• Improve light and air penetration through crown</li> <li>□ Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>□ Buried root collar</li> <li>□ Co-dominant stems</li> </ul>
328	Linden-Littleleaf	23,19	1	<ul style="list-style-type: none"> <li>□ Reduce risk of branch stem and/or root failure</li> </ul>	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> </ul>

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
341	Pear-Callery	10	1	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Improve light and air penetration through crown</li> </ul>	□ Butt swell
343	Pear-Callery	13	1	□ Develop branch structure	...
344	Pear-Callery	16	1	<ul style="list-style-type: none"> <li>□ Reduce weight of branch ends</li> <li>□ Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>□ Co-dominant stems</li> <li>□ Overextended branch</li> </ul>
345	Sweetgum	30	1	<ul style="list-style-type: none"> <li>• Reduce risk of branch stem and/or root failure</li> <li>• Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>• Topping/heading cuts</li> <li>• Uneven crown</li> </ul>
346	Sweetgum	25	1	<ul style="list-style-type: none"> <li>• Reduce risk of branch stem and/or root failure</li> <li>• Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>• Poor branch structure</li> <li>• Topping/heading cuts</li> </ul>
347	Sweetgum	29	1	<ul style="list-style-type: none"> <li>• Reduce risk of branch stem and/or root failure</li> <li>□ Develop branch structure</li> <li>• Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>□ Co-dominant stems</li> <li>□ Topping/heading cuts</li> </ul>

348	Maple-Norway	36	1	<ul style="list-style-type: none"> <li>• Clearance</li> <li>• Reduce risk of branch stem and/or root failure</li> <li>• Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Poor branch structure</li> <li>• Topping/heading cuts</li> <li>• Uneven crown</li> </ul>
349	Sweetgum	30	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Poor branch structure</li> </ul>
350	Cherry-Flowering	19	1	<input type="checkbox"/> Clearance <input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Topping/heading cuts

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
353	Hackberry	20	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
378	Maple-Norway	25	1	<input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Overextended branch
379	Maple-Norway	24	1	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Reduce risk of branch stem and/or root failure</li> <li><input type="checkbox"/> Clearance</li> </ul>	<input type="checkbox"/> Dead branches >2
390	Sycamore-American	39	1	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Improve light and air penetration through crown</li> </ul>	<input type="checkbox"/> Topping/heading cuts
391	Sycamore-American	35	1	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Reduce weight of branch ends</li> </ul>	...
392	Sycamore-American	34	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Hanger</li> </ul>

393	Sycamore-American	36	1	<input type="checkbox"/> Develop branch structure	...
394	Sycamore-American	33	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>Overextended branch</li> <li>Topping/heading cuts</li> </ul>
395	Sycamore-American	35	1	<ul style="list-style-type: none"> <li>Reduce weight of branch ends</li> <li>Improve light and air penetration through crown</li> </ul>	<input type="checkbox"/> Co-dominant stems
396	Sycamore-American	31	1	<input type="checkbox"/> Reduce weight of branch ends <input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Topping/heading cuts
397	Sycamore-American	34	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Reduce weight of branch ends</li> </ul>	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Poor branch structure

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
398	Sycamore-American	39	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Reduce weight of branch ends</li> </ul>	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Topping/heading cuts
399	Sycamore-American	31	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Reduce weight of branch ends</li> </ul>	...
400	Sycamore-American	32	1	<input type="checkbox"/> Reduce weight of branch ends <input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Topping/heading cuts
403	Linden-American	41	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Improve light and air penetration through crown</li> <li><input type="checkbox"/> Reduce</li> </ul>	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Poor branch structure</li> </ul>

				weight of branch ends	
404	Linden-American	21	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Improve light and air penetration through crown</li> <li>Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>Poor branch structure</li> <li>Topping/heading cuts</li> </ul>
407	Maple-Norway	29	1	<ul style="list-style-type: none"> <li>Reduce risk of branch stem and/or root failure</li> <li>Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>Dead branches &gt;2</li> <li>Poor branch structure</li> </ul>
410	Elm	46	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Reduce weight of branch ends</li> </ul>	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Dead branches &gt;2</li> <li>Poor branch structure</li> </ul>
415	Walnut-Black	30	1	<ul style="list-style-type: none"> <li>Reduce risk of branch stem and/or root failure</li> </ul>	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Dead branches &gt;2</li> <li>Wound-stem</li> </ul>
416	Walnut-Black	29	1	<ul style="list-style-type: none"> <li>Reduce risk of branch stem and/or root failure</li> </ul>	<ul style="list-style-type: none"> <li>Dead branches &gt;2</li> </ul>
417	Walnut-Black	31	1	<ul style="list-style-type: none"> <li>Reduce risk of branch stem and/or root failure</li> </ul>	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Dead branches &gt;2</li> </ul>

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
428	Walnut-Black	28	1	<ul style="list-style-type: none"> <li>Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>Dead branches &gt;2</li> </ul>

447	Pear-Callery	25	1	<input type="checkbox"/> Reduce weight of branch ends	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Poor branch structure</li> </ul>
448	Pear-Callery	30	1	<input type="checkbox"/> Reduce weight of branch ends <input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Overextended branch
459	Spruce	12	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
461	Maple-Norway	23	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Hanger</li> <li>• Topping/heading cuts</li> </ul>
468	Maple-Silver	54	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> </ul>
476	Redcedar-Western (13)	4	1	<input type="checkbox"/> Maintain size and shape	...
477	Cypress-Leyland	8	1	<input type="checkbox"/> Maintain size and shape	...
503	Pear-Callery	14	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Hanger</li> </ul>
595	Pear-Callery	11	1	<input type="checkbox"/> Develop branch structure	...
596	Pear-Callery	10	1	<input type="checkbox"/> Develop branch structure	...
597	Pear-Callery	11	1	<input type="checkbox"/> Develop branch structure	...
598	Pear-Callery	14	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Fungi/conks</li> </ul>
602	Crabapple	17	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2

603	Crabapple	14	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> </ul>
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Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
611	Maple-Norway	24	1	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	...
615	Maple-Red	13	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Co-dominant stems
623	Maple-Trident	13	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
624	Maple-Trident	17	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Dead branches >2
629	Maple-Red	23	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Dead branches >2
631	Maple-Norway	13	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Dead branches >2
634	Sycamore-American	34	1	<input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Co-dominant stems
652	Maple-Norway	32	1	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> </ul>
1	Birch-Paper	11	2	<input type="checkbox"/> Improve light and air penetration through crown	...
5	Cherry-Flowering	26	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Co-dominant stems
7	Hemlock-Canadian	10	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2
8	Hemlock-Canadian	9	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2

11	Birch-River	6,6,7	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Poor branch structure
15	Pear-Callery	7	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
16	Pear-Callery	7	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
42	Redbud-Eastern	19	2	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> <li>• Wound-stem</li> </ul>
43	Dogwood-Flowering	12,8	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Co-dominant stems <input type="checkbox"/> Girdling roots suspected
52	Crabapple	5	2	<input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>• Poor branch structure</li> <li>• Topping/heading cuts</li> </ul>
54	Crabapple	7,8	2	<input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> <li>• Poor branch structure</li> </ul>
60	RedcedarWestern	3,3,3	2	<input type="checkbox"/> Clearance	...
61	RedcedarWestern	3,3,2	2	<input type="checkbox"/> Clearance	...
69	Lilac-Japanese Tree	3,3,3	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Poor branch structure
70	Lilac-Japanese Tree	4,3,3	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Poor branch structure
71	Lilac-Japanese Tree	5,4,3	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Poor branch structure
85	Yew	4,4,4	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches <=2

86	Yew	4,4,4	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2
87	Yew	6,6,5	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2
91	Crabapple	12	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
92	GoldenraintreePanicked	8,8	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2
93	GoldenraintreePanicked	8	2	<input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Poor branch structure</li> </ul>
103	Crabapple	7	2	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<input type="checkbox"/> Broken branch(s)
110	Lilac-Pekin	4	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
114	Crabapple	12	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Poor branch structure
118	Pear-Callery	6	2	<input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Co-dominant stems
121	Pear-Callery	7	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
122	Pear-Callery	6	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>• Broken branch(s)</li> <li>• Co-dominant stems</li> </ul>
123	Pear-Callery	7	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Co-dominant stems
145	Pear-Callery	12	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
146	Lilac	8	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Girdling roots present
148	Pear-Callery	4	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
151	Pear-Callery	10	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Poor branch structure
154	Pear-Callery	17	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Topping/heading cuts

160	Maple-Norway	17	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Included bark</li> </ul>
162	Cherry-Flowering	9	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Topping/heading cuts
165	Yew	4,3,1	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
171	Pear-Callery	9	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
172	Pear-Callery	9	2	<input type="checkbox"/> Clearance <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-root flare</li> </ul>
183	Lilac	5	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Poor branch structure</li> </ul>
185	Pear-Callery	6	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
190	Pear-Callery	8	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
191	Pear-Callery	8	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Co-dominant stems
192	Pear-Callery	11	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
199	Pear-Callery	18	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<input type="checkbox"/> Poor branch structure
202	Lilac	11	2	<input type="checkbox"/> Improve light and air penetration through crown	<ul style="list-style-type: none"> <li>• Broken branch(s)</li> <li>• Wound-branch</li> </ul>

205	Pear-Callery	14	2	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Improve light and air penetration through crown</li> </ul>	<input type="checkbox"/> Poor branch structure
206	Lilac	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Dead branches <=2
209	Lilac	11	2	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Improve light and air penetration through crown</li> </ul>	<input type="checkbox"/> Buried root collar
210	Crabapple	15	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<ul style="list-style-type: none"> <li>Flush cuts</li> <li>Poor branch structure</li> <li>Wound-branch</li> </ul>
212	Pear-Callery	14	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Topping/heading cuts
214	Pear-Callery	10	2	<input type="checkbox"/> Clearance <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Buried root collar</li> <li>Wound-stem</li> </ul>
215	Pear-Callery	8	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<input type="checkbox"/> Poor branch structure
221	Cherry-Flowering	11	2	<input type="checkbox"/> Clearance <input type="checkbox"/> Develop branch structure	...
225	Crabapple	14	2	<input type="checkbox"/> Clearance <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Topping/heading cuts</li> <li>Wound-stem</li> </ul>
226	Lilac	8	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
240	Crapemyrtle	4,4,4	2	<input type="checkbox"/> Clearance	...
242	Arborvitae	20,19	2	<input type="checkbox"/> Clearance	...

Tree ID	Common Name	DBH	Tree & Shrub Work	Pruning Goal	Defect(s) or Observation(s)
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			<b>Phase</b>		
243	Crabapple	14	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Topping/heading cuts
244	Crabapple	10	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	...
274	Pear-Callery	14	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Topping/heading cuts
287	Cherry-Flowering	12	2	<input type="checkbox"/> Develop branch structure	...
288	Cherry-Flowering	11	2	<input type="checkbox"/> Develop branch structure	...
289	Cherry-Flowering	13	2	<input type="checkbox"/> Develop branch structure	...
316	Maple-Sugar	25	2	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li><input type="checkbox"/> Topping/heading cuts</li> <li>• Wound-stem</li> </ul>
323	Plum-Purple Leaf	8,7	2	<input type="checkbox"/> Clearance <input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Co-dominant stems
329	Magnolia-Saucer	6,5,4	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Poor branch structure</li> </ul>
333	Pear-Callery	12	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Co-dominant stems
335	Lilac	12	2	<input type="checkbox"/> Develop branch structure <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar
336	Pear-Callery	13	2	<input type="checkbox"/> Improve light and air penetration through crown <input type="checkbox"/> Develop branch structure	...

337	Pear-Callery	13	2	<input type="checkbox"/> Improve light and air penetration through crown <input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
354	Pear-Callery	13	2	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Co-dominant stems

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
368	Maple	22	2	<input type="checkbox"/> Improve light and air penetration through crown	...
384	Walnut-Persian	26	2	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>Dead branches &gt;2</li> <li>Hanger</li> </ul>
422	Magnolia-Saucer	19	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Poor branch structure
423	GoldenraintreePanicked	9	2	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Improve light and air penetration through crown</li> </ul>	<input type="checkbox"/> Poor branch structure
425	Cherry-Flowering	12	2	<ul style="list-style-type: none"> <li>Develop branch structure</li> <li>Improve light and air penetration through crown</li> </ul>	...
427	Redbud-Eastern	13	2	<ul style="list-style-type: none"> <li>Reduce risk of branch stem and/or root failure</li> <li> <input type="checkbox"/> Develop branch structure           </li> <li>Improve light and air penetration through crown</li> </ul>	<ul style="list-style-type: none"> <li>Buried root collar</li> <li>Dead branches &gt;2</li> <li> <input type="checkbox"/> Poor branch structure           </li> </ul>

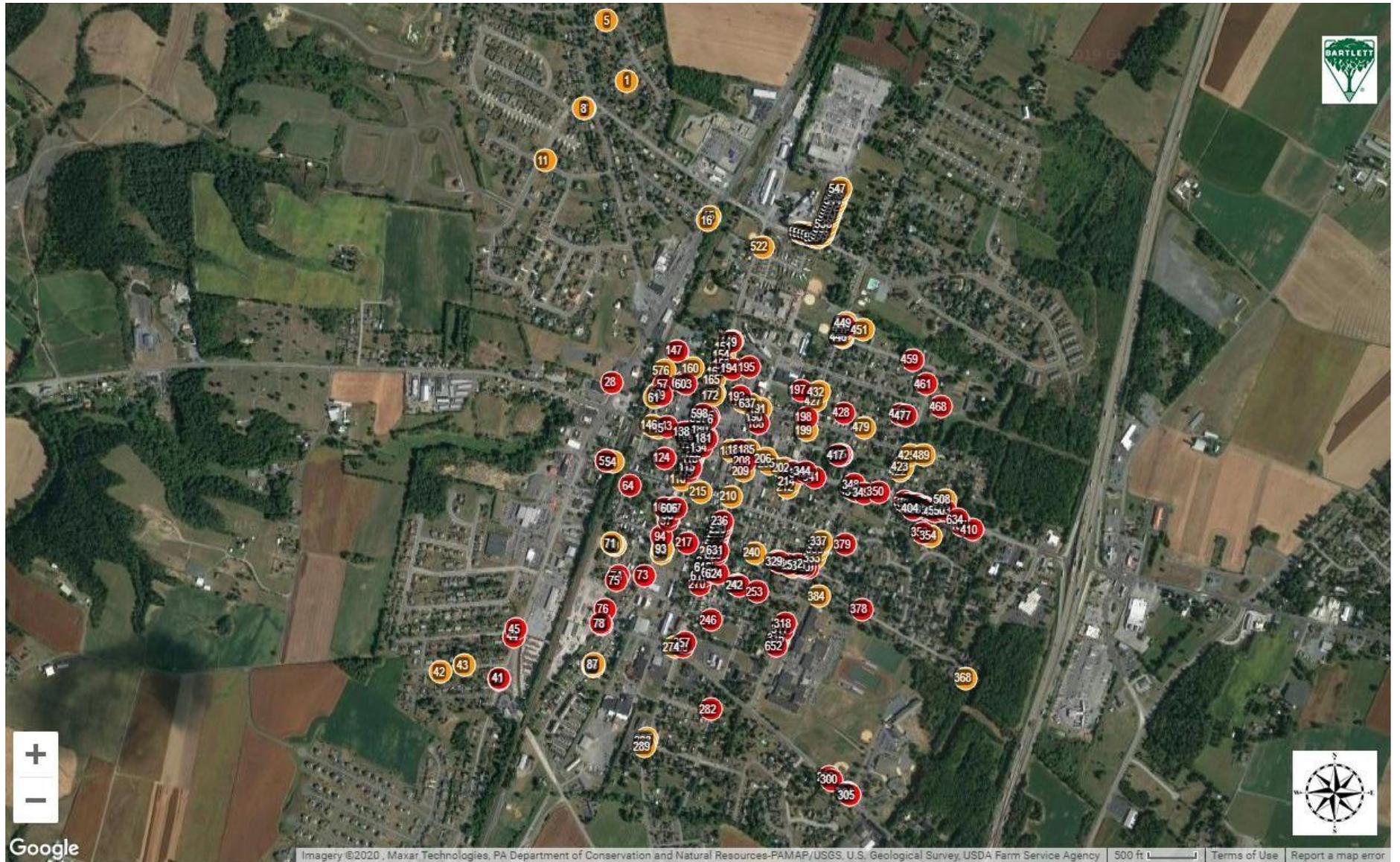
432	Cherry-Flowering	18	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Poor branch structure
439	GoldenraintreePanicked	11,9	2	<input type="checkbox"/> Reduce risk of branch stem and/or root failure <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> </ul>
446	Pear-Callery	20	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure
449	Pear-Callery	12	2	<input type="checkbox"/> Develop branch structure	...
451	Walnut-Black	24	2	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Dead branches &gt;2</li> </ul>

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
479	Elm	41	2	<input type="checkbox"/> Improve light and air penetration through crown <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Poor branch structure</li> </ul>
489	Maple-Red	15	2	<input type="checkbox"/> Reduce weight of branch ends	<input type="checkbox"/> Poor branch structure
502	Pear-Callery	22	2	<input type="checkbox"/> Reduce weight of branch ends <input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Poor branch structure</li> <li>• Topping/heading cuts</li> </ul>
507	Redbud-Eastern	9,8,7	2	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Improve light and air penetration through crown</li> </ul> <input type="checkbox"/> Clearance	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Poor branch structure
508	Dogwood-Flowering	9	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Dead branches >2
522	Cherry-Flowering	14	2	<input type="checkbox"/> Reduce weight of branch ends	...

529	Pear-Callery	16	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
530	Crabapple	11	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
531	Pear-Callery	14	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-stem</li> </ul>
532	Crabapple	11	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
533	Pear-Callery	15	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
534	Crabapple	9	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
535	Pear-Callery	13	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
536	Crabapple	11	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
537	Pear-Callery	14	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
538	Crabapple	11	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
539	Crabapple	10	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b>Tree &amp; Shrub Work Phase</b>	<b>Pruning Goal</b>	<b>Defect(s) or Observation(s)</b>
540	Pear-Callery	15	2	<input type="checkbox"/> Develop branch structure	...
541	Crabapple	10	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
542	Pear-Callery	13	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
543	Crabapple	8	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
544	Pear-Callery	9	2	<input type="checkbox"/> Reduce risk of branch stem and/or root failure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Dead branches &gt;2</li> </ul>
545	Crabapple	11	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar

<b>546</b>	Pear-Callery	15	2	<input type="checkbox"/> Develop branch structure	...
<b>547</b>	Crabapple	10	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
<b>576</b>	Zelkova-Japanese	25	2	<input type="checkbox"/> Improve light and air penetration through crown	...
<b>606</b>	Crabapple	7	2	<input type="checkbox"/> Develop branch structure	...
<b>616</b>	Crabapple	3,2,2	2	<input type="checkbox"/> Clearance	<input type="checkbox"/> Overextended branch
<b>637</b>	Crabapple	10	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure

# INVENTORIED TREES RECOMMENDED FOR MAINTENANCE PRUNING



## Developmental Pruning

This goal typically requires routine pruning of small/young trees. Includes structural pruning to develop a strong central stem, establish proper branch spacing, and/or develop branch structure.

The trees in this table are recommended for developmental pruning:

### INVENTORIED TREES RECOMMENDED FOR DEVELOPMENTAL PRUNING (182 Trees)

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
62	Oak-Pin	2	1	<input type="checkbox"/> Develop branch structure	...
63	Elm	2	1	<input type="checkbox"/> Promote development of strong central stem	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Poor branch structure</li> </ul>
126	Goldenraintree-Paniced	4	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Poor branch structure</li> </ul>
139	Lilac	8	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Girdling roots suspected
144	Lilac	4	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
178	Cherry-Flowering	8	1	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-stem</li> </ul>
182	Rose-of-Sharon	4	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
207	Maple-Red	9	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Co-dominant stems
264	Maple-Red	10	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Poor branch structure
265	Maple-Red	12	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar

293	Elm	1	1	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Promote development of strong central stem</li> </ul>	<input type="checkbox"/> Buried root collar
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Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
294	Maple-Red	8	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	...
295	Elm	1	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
342	Dogwood-Kousa	2	1	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Promote development of strong central stem</li> </ul>	<input type="checkbox"/> Buried root collar
389	Maple-Red	8	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
401	Cherry-Flowering	6	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure
402	Cherry-Flowering	7	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Girdling roots present (moderate)
405	Maple-Red	11	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Poor branch structure</li> <li>• Uneven crown</li> </ul>
406	Maple-Red	9	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Poor branch structure</li> </ul>
409	Elm	5	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
421	Walnut-Persian	11	1	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Poor branch structure</li> </ul>

435	Oak-White	3	1	<input type="checkbox"/> Promote development of strong central stem	...
463	Pear-Callery	7	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	...

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
464	Cherry-Flowering	9	1	<input type="checkbox"/> Develop branch structure	...
465	Cherry-Flowering	4	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
469	Cherry-Flowering	6	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
470	Cherry-Flowering	6	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Wound-branch
471	Pear-Callery	5	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>Broken branch(s)</li> <li>Buried root collar</li> </ul>
472	Pear-Callery	5	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	...
473	Cherry-Flowering	9	1	<input type="checkbox"/> Develop branch structure	...
474	Cherry-Flowering	4	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
515	Pear-Callery	5	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
517	Maple-Red	7	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
519	Maple-Red	7	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	...
521	Maple-Red	6	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	...

528	Maple-Red	10	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
550	Ginkgo	3	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
551	Pear-Callery	5	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
552	Maple-Red	3	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
553	Cherry-Flowering	5	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
554	Pear-Callery	6	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
555	Maple-Red	6	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
556	Pear-Callery	6	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
557	Ginkgo	3	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
558	Pear-Callery	6	1	<input type="checkbox"/> Promote development of strong central stem	...
559	Elm	3	1	<input type="checkbox"/> Promote development of strong central stem	...
560	Pear-Callery	7	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
561	Pear-Callery	7	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar

562	Pear-Callery	7	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
563	Maple-Red	5	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
564	Pear-Callery	8	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
565	Maple-Red	6	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
566	Pear-Callery	8	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	...
575	Zelkova-Japanese	2	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
599	Lilac	1	1	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
635	Elm	2	1	<input type="checkbox"/> Promote development of strong central stem	<ul style="list-style-type: none"> <li>Wound-root flare</li> <li>Wound-stem</li> </ul>
640	Sycamore-American	1	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
642	Sycamore-American	1	1	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
643	Maple-Red	5	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> <li>Clearance</li> </ul>	<input type="checkbox"/> Buried root collar
644	Maple-Red	6	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	<ul style="list-style-type: none"> <li>Co-dominant stems</li> <li>Wound-stem</li> </ul>

645	Maple-Red	6	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	...
646	Maple-Red	3	1	<ul style="list-style-type: none"> <li>Promote development of strong central stem</li> <li>Develop branch structure</li> </ul>	...
13	Cherry-Flowering	2	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Buried root collar</li> <li>Poor branch structure</li> </ul>
14	Pear-Callery	7	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
17	Cherry-Flowering	3	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
18	Crabapple	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
19	Cherry-Flowering	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
20	Crabapple	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
21	Cherry-Flowering	10	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
22	Cherry-Flowering	8	2	<input type="checkbox"/> Develop branch structure	...
23	Cherry-Flowering	11	2	<input type="checkbox"/> Develop branch structure	...
24	Crabapple	5	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Uneven crown</li> <li>Wound-stem</li> </ul>
25	Cherry-Flowering	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Overextended branch
26	Yellowwood	3	2	<input type="checkbox"/> Promote development of strong central stem	...
29	Pear-Callery	5	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Poor branch structure
30	Pear-Callery	6	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>Buried root collar</li> <li>Poor branch structure</li> </ul>

31	Pear-Callery	8	2	<input type="checkbox"/> Develop branch structure	...
32	Maple	4	2	<input type="checkbox"/> Promote development of strong central stem	...
33	Cherry-Flowering	2	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-stem</li> </ul>
34	Pear-Callery	6	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
35	Pear-Callery	4	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
36	Pear-Callery	6	2	<input type="checkbox"/> Promote development of strong central stem	...
37	Pear-Callery	7	2	<input type="checkbox"/> Develop branch structure	...
55	Lilac	4	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-stem</li> </ul>
56	Lilac	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
82	Elm-American	8	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Poor branch structure</li> </ul>
83	Elm-Siberian	8	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
84	Elm-Siberian	8	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure
95	Cherry-Flowering	10	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Poor branch structure</li> <li>• Sidewalk lifting-minor</li> </ul>
96	Lilac	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure
99	Ginkgo	2	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
100	Ginkgo	2	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
101	Pear-Callery	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Poor branch structure

106	Crabapple	11	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
108	Zelkova-Japanese	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
109	Maple	4	2	<input type="checkbox"/> Promote development of strong central stem	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Girdling roots present</li> </ul>
111	Pear-Callery	6	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
116	Hornbeam-European	4	2	<input type="checkbox"/> Improve light and air penetration through crown	...
119	Lilac	3	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
120	Dogwood	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
135	Hornbeam-European	2	2	<input type="checkbox"/> Promote development of strong central stem	...
140	Ginkgo	2	2	<input type="checkbox"/> Promote development of strong central stem	...
150	Lilac-Pekin	4	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
152	Pear-Callery	2	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
153	Honeylocust-Thornless Common	2	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
155	Pear-Callery	3	2	<input type="checkbox"/> Develop branch structure	...
156	Ginkgo	2	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
157	Pear-Callery	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Co-dominant stems
159	Lilac	5	2	<input type="checkbox"/> Develop branch structure	...
161	Lilac-Pekin	4	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar

164	Lilac	4	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
167	Pear-Callery	4	2	<input type="checkbox"/> Promote development of strong central stem	...
169	Cherry-Flowering	4	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Broken branch(s)</li> <li>• Buried root collar</li> </ul>
170	Pear-Callery	3	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
173	Ginkgo	3	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
175	Snowbell	4	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-stem</li> </ul>
176	Snowbell	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
177	Yellowwood	3	2	<input type="checkbox"/> Develop branch structure	...
201	Lilac	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Flush cuts
203	Lilac	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
204	Zelkova-Japanese	2	2	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Overextended branch
222	Cherry-Flowering	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
223	Cherry-Flowering	5	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Poor branch structure</li> <li>• Wound-stem</li> </ul>
224	Lilac	6	2	<input type="checkbox"/> Develop branch structure	...
232	Cherry-Flowering	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
233	Cherry-Flowering	3	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
235	Lilac	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
237	Lilac	6	2	<input type="checkbox"/> Develop branch structure	...

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
238	Lilac	7	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar

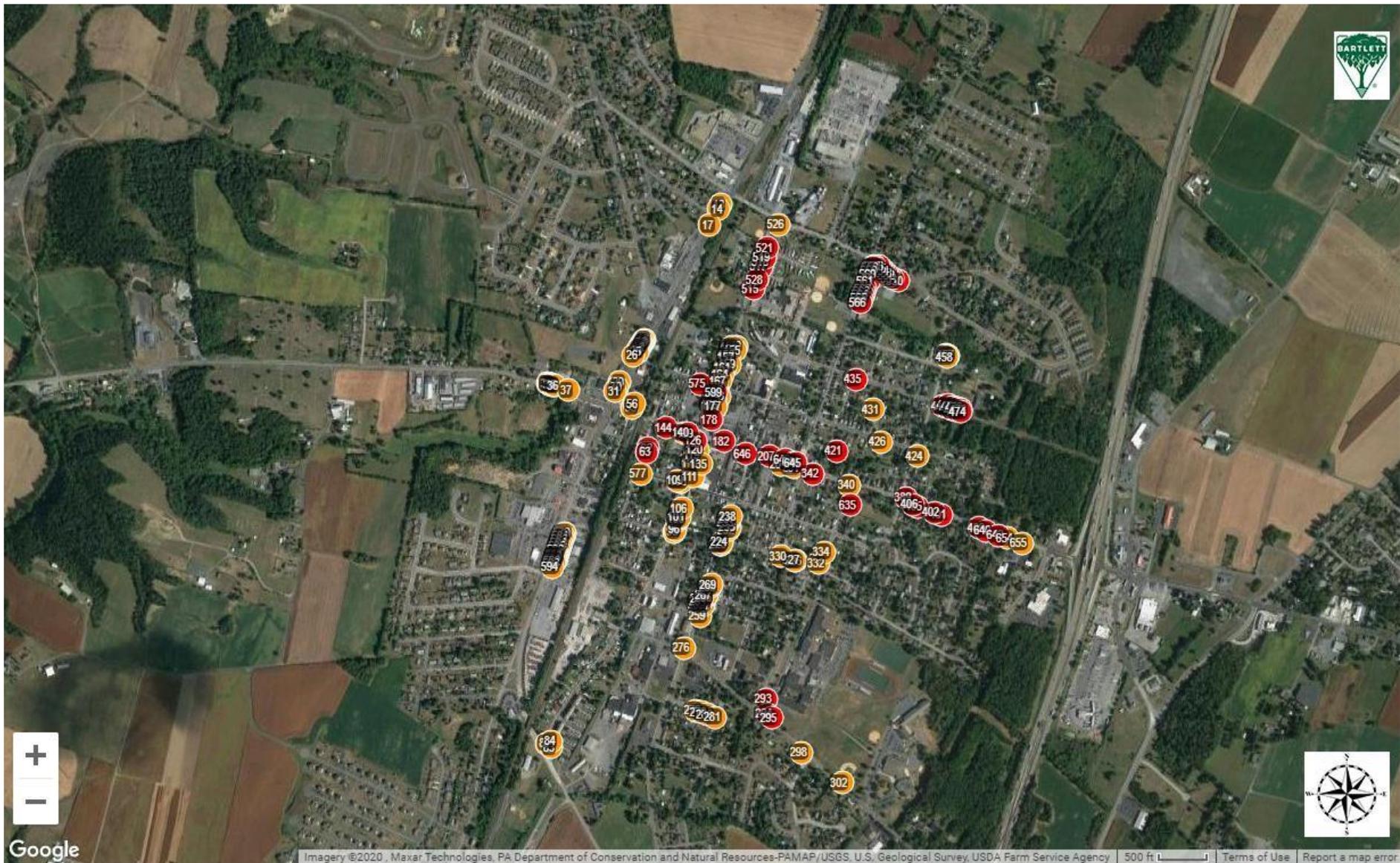
259	Maple-Red	3	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
261	Cherry-Flowering	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Topping/heading cuts
262	Maple-Red	4	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
263	Maple-Red	4	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
266	Lilac	9	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
267	Lilac	10	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
268	Crabapple	9	2	<input type="checkbox"/> Develop branch structure	...
269	Crabapple	7	2	<input type="checkbox"/> Develop branch structure	...
276	Pear-Callery	8	2	<input type="checkbox"/> Develop branch structure	...
278	Lilac	8	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
279	Lilac	7	2	<input type="checkbox"/> Develop branch structure	...
280	Lilac	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
281	Lilac	8	2	<input type="checkbox"/> Develop branch structure	...
298	Pear-Callery	7	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
302	Maple-Norway	11,9,9	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Co-dominant stems
326	Lilac	4	2	<input type="checkbox"/> Develop branch structure	...
327	Lilac	3	2	<input type="checkbox"/> Develop branch structure	...
330	Pear-Callery	7	2	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
332	Cherry-Flowering	7	2	<input type="checkbox"/> Develop branch structure	...
334	Lilac	6	2	<input type="checkbox"/> Develop branch structure	...
340	Dogwood-Kousa	4	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar

424	Cherry-Flowering	11	2	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Improve light and air penetration through crown</li> </ul>	...
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Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
426	Maple-Norway	14	2	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Poor branch structure
431	Maple-Norway (8)	6	2	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Poor branch structure
456	Maple-Silver	7	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Co-dominant stems
457	Maple-Red	4	2	<input type="checkbox"/> Promote development of strong central stem	...
458	Willow-Babylon Weeping	12	2	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Improve light and air penetration through crown</li> </ul>	<input type="checkbox"/> Poor branch structure
518	Cherry-Flowering	9	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Lion tailing
526	Cherry-Flowering	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
577	Lilac	3	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
579	Cherry-Flowering	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
581	Pear-Callery	5	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
583	Cherry-Flowering	8	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
584	Pear-Callery	4	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar
585	Cherry-Flowering	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
586	Pear-Callery	6	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Buried root collar

587	Cherry-Flowering	12	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
588	Ginkgo	1	2	<input type="checkbox"/> Develop branch structure	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-stem</li> </ul>
589	Pear-Callery	7	2	<ul style="list-style-type: none"> <li>• Develop branch structure</li> <li>• Promote development of strong central stem</li> </ul>	<input type="checkbox"/> Buried root collar
<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b>Tree &amp; Shrub Work Phase</b>	<b>Pruning Goal</b>	<b>Defect(s) or Observation(s)</b>
590	Ginkgo	1	2	<input type="checkbox"/> Promote development of strong central stem	...
591	Cherry-Flowering	8	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
592	Ginkgo	1	2	<input type="checkbox"/> Promote development of strong central stem	<input type="checkbox"/> Wound-stem
593	Pear-Callery	8	2	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
594	Cherry-Flowering	5	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
654	Pear-Callery	8	2	<ul style="list-style-type: none"> <li>• Promote development of strong central stem</li> <li>• Develop branch structure</li> </ul>	<input type="checkbox"/> Buried root collar
655	Lilac	6	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Dead branches >2

**INVENTORIED TREES RECOMMENDED FOR DEVELOPMENTAL PRUNING**



## Ornamental Pruning

This goal typically requires pruning of small trees. Includes reduction and/or shearing to its desired shape, size, and/or structure.

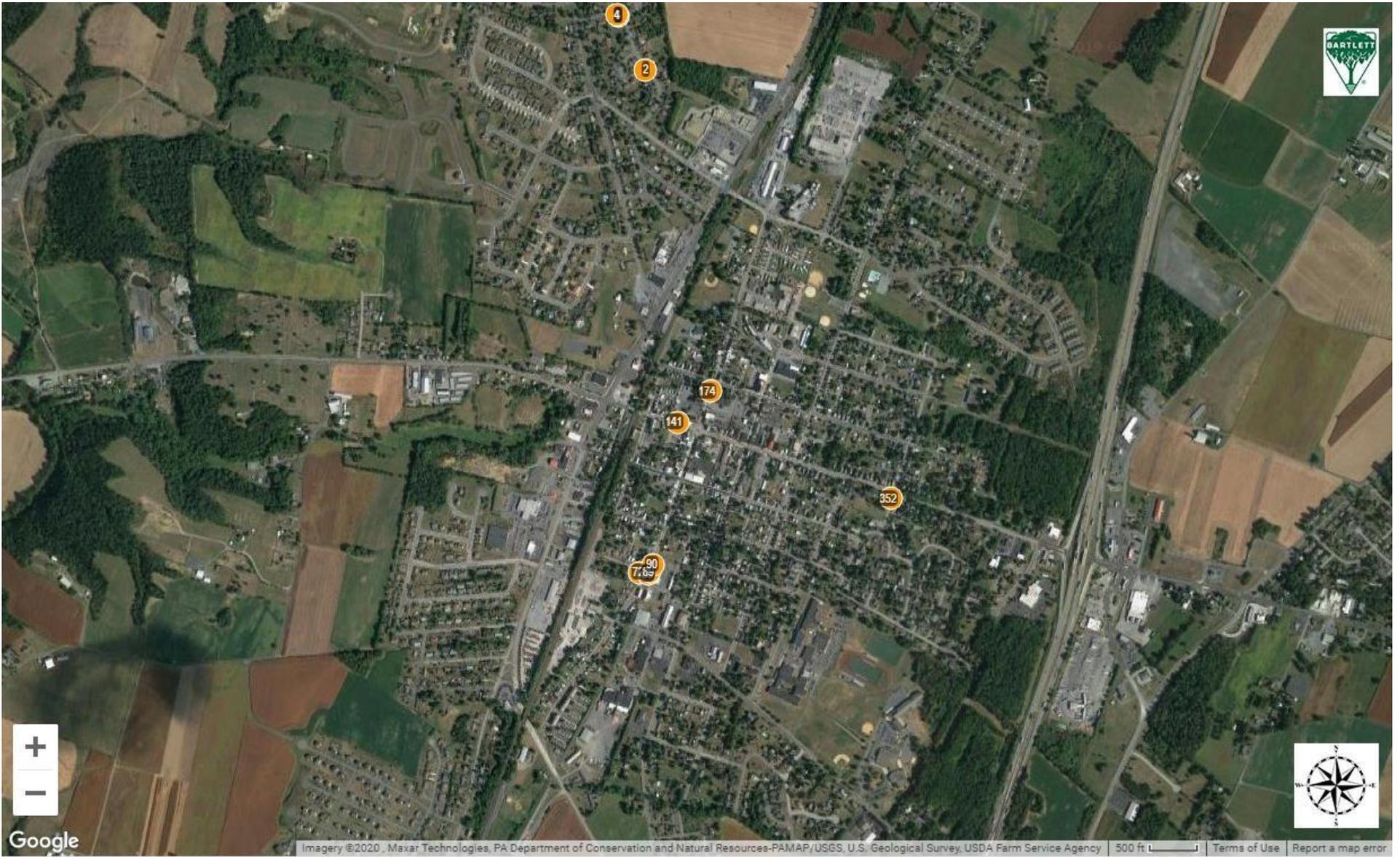
The trees in this table are recommended for ornamental pruning:

### INVENTORIED TREES RECOMMENDED FOR ORNAMENTAL PRUNING (10 Trees)

Tree ID	Common Name	DBH	Tree & Shrub Work Phase	Pruning Goal	Defect(s) or Observation(s)
2	Maple-Japanese	4	2	<input type="checkbox"/> Improve light and air penetration through crown	...
3	Cherry-Flowering	10	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar <input type="checkbox"/> Poor branch structure
4	Cherry-Flowering	10	2	<input type="checkbox"/> Develop branch structure	• Buried root collar • Dead branches >2
72	Cherry-Flowering	8	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
88	Lilac	7	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
89	Lilac	7	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
90	Lilac	10	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Buried root collar
141	Dogwood-Flowering	2	2	<input type="checkbox"/> Develop branch structure	<input type="checkbox"/> Buried root collar
174	Crapemyrtle	2,2,2	2	<input type="checkbox"/> Improve light and air penetration through crown	...
352	Crapemyrtle	3,3,2	2	<input type="checkbox"/> Improve light and air penetration through crown	<input type="checkbox"/> Poor branch structure



**INVENTORIED TREES RECOMMENDED FOR ORNAMENTAL PRUNING**



**Tree & Shrub Work Phase:** ● ASAP ● 1 ● 2 ● 3 ● 4 ● 5 ● N/A



## **Specialized Pruning**

Trees with this goal require a unique treatment that may include, but not limited to, targeted pruning cuts, removal of nuisance fruit/parasitic plants, and/or rejuvenation/internodal pruning.

At the time of inventory, no trees were recommended for specialized pruning. However, we recommend close monitoring of trees for changes in condition, especially after weather events not considered normal for the area.

## **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.

### **Cabling**

Cabling is the process of connecting two or more upright stems 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 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.



**Tree #98 is recommended for cabling and bracing due to its large codominant leaders with included bark.**

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b>Overall Tree Risk Rating</b>	<b>Tree &amp; Shrub Work Phase</b>	<b>Structural Support</b>
408	Elm	42	Low	ASAP	<input type="checkbox"/> Cable: New 1
76	Maple-Red	58	...	1	<input type="checkbox"/> Cable: New 1
97	Pear-Callery	26	...	1	<input type="checkbox"/> Cable: New 1
98	Pear-Callery	26	...	1	<ul style="list-style-type: none"> <li>• Cable: New 1</li> <li>• Brace Rod: New 1</li> </ul>
104	Boxelder	24,19	...	1	<input type="checkbox"/> Cable: New 3

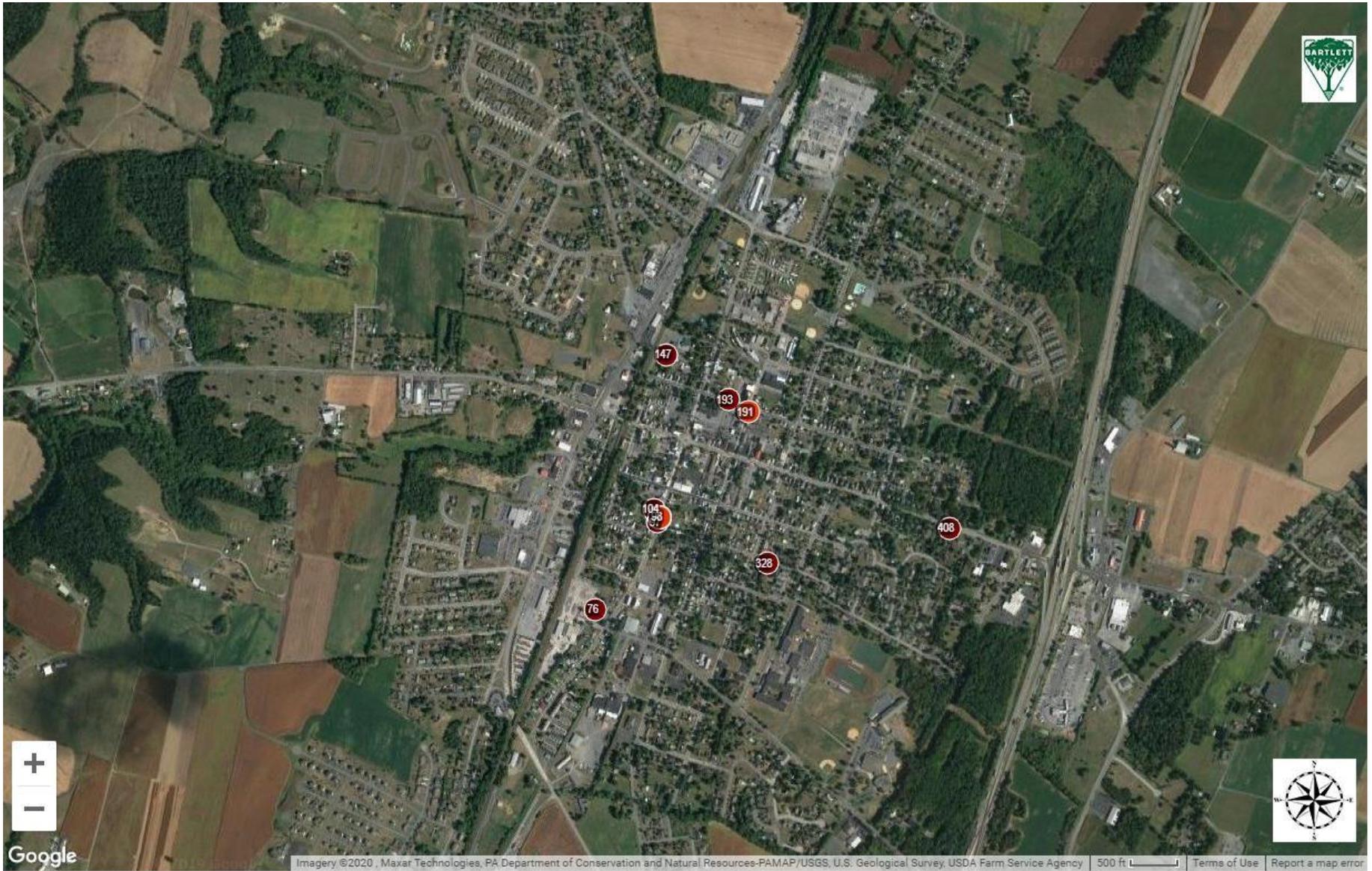
<b>147</b>	Maple-Silver	24,21,18	...	1	<input type="checkbox"/> Cable: New 3
<b>193</b>	Maple-Norway	19	...	1	<input type="checkbox"/> Cable: New 1

The following table lists all inventoried trees with structural support system recommendations:

**INVENTORIED TREES WITH STRUCTURAL SUPPORT SYSTEM RECOMMENDATIONS (9 Trees)**

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b><i>Overall Tree Risk Rating</i></b>	<b>Tree &amp; Shrub Work Phase</b>	<b>Structural Support</b>
<b>328</b>	Linden-Littleleaf	23,19	...	1	<input type="checkbox"/> Cable: New 1
<b>191</b>	Pear-Callery	8	...	2	<input type="checkbox"/> Brace Rod: New 1

**INVENTORIED TREES WITH STRUCTURAL SUPPORT SYSTEM RECOMMENDATIONS**



**Structural Support:** Cable, Brace Rod Cable Brace Rod



## **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.

At the time of inventory, no trees were recommended for lightning protection systems. However, as trees continue to grow and site changes occur, we recommend continual consultation with your local Bartlett Arborist Representative to determine if lightning protection systems are warranted in the future.

## 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:

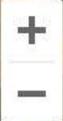
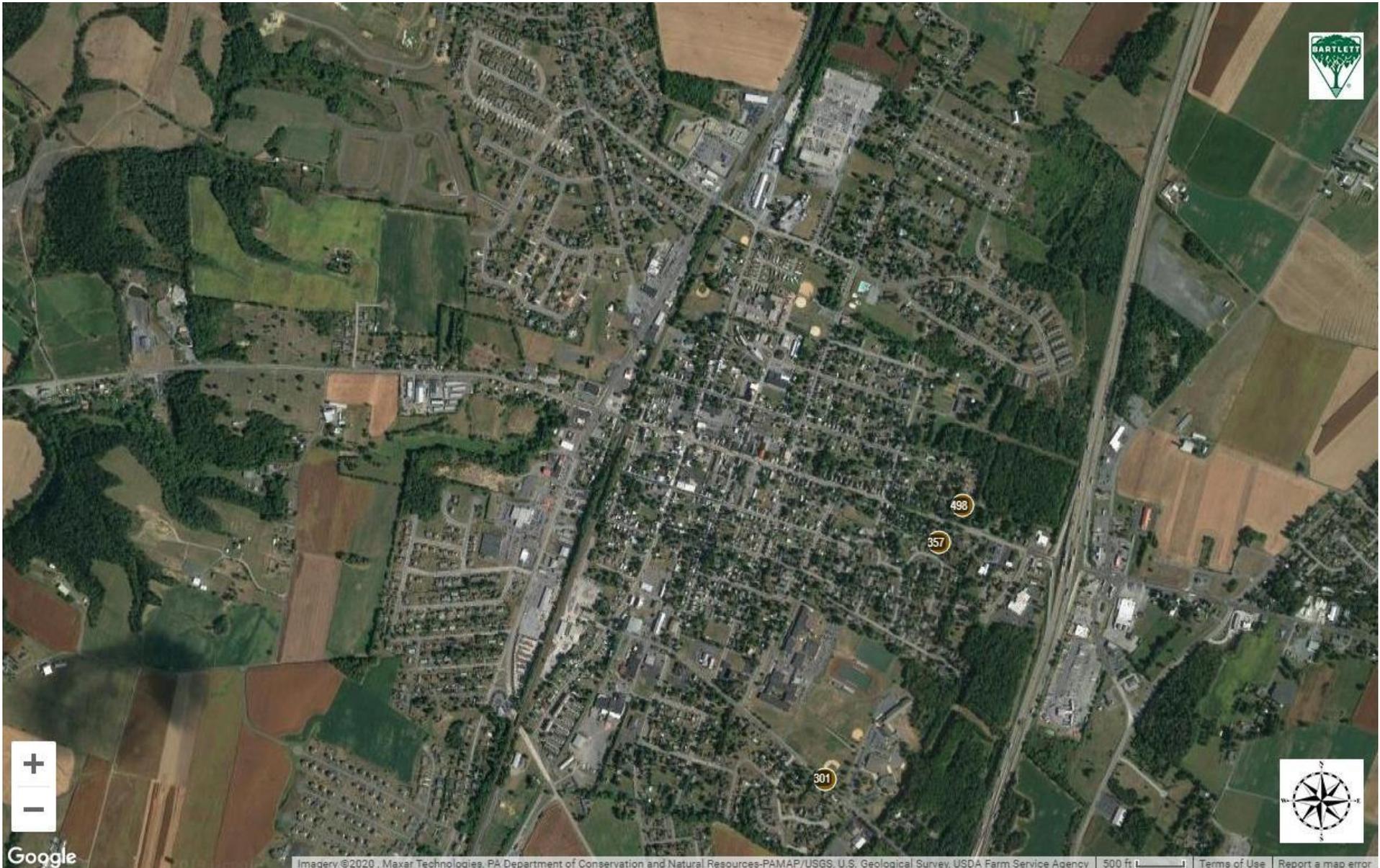
- The tree is dead;
- The tree is in poor condition and thought to be beyond rehabilitation;
- The tree is over-mature and will continue to decline in condition;
- The tree has significant structural weaknesses that cannot be addressed;
- The tree is already or will interfere with infrastructure (overhead 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.

The trees listed in the table below are recommended for removal:

### INVENTORIED TREES RECOMMENDED FOR REMOVAL (3 Trees)

Tree ID	Common Name	DBH	Condition	Tree & Shrub Work Phase	Defect(s) or Observation(s)
498	Ash-White	15	Poor	ASAP	...
301	Ash-White	7	Poor	1	...
357	Cypress-Leyland	11	Fair	2	☐ Lean

**INVENTORIED TREES RECOMMENDED FOR REMOVAL**



Google



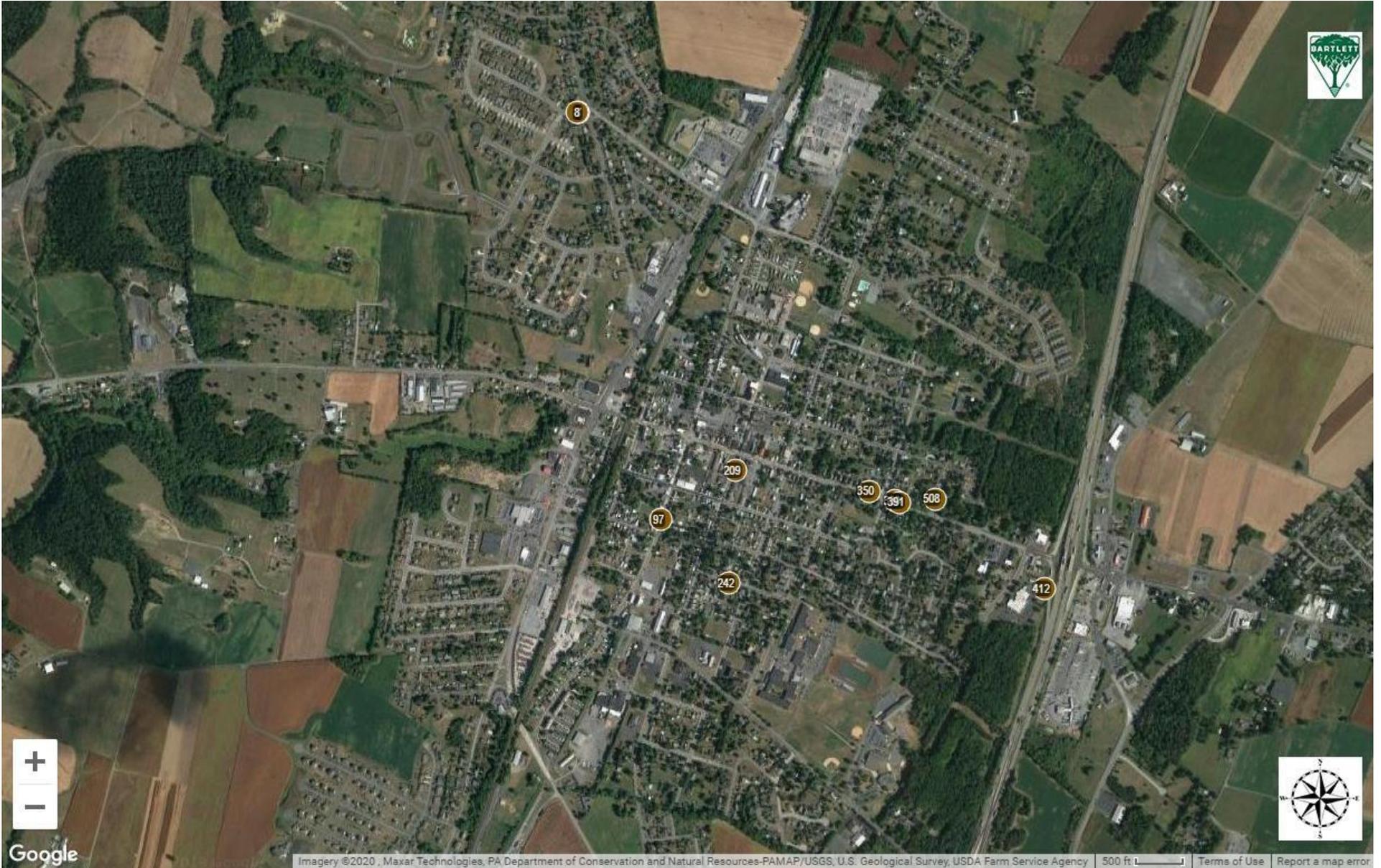
## Vine Removal

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

### INVENTORIED TREES RECOMMENDED FOR VINE REMOVAL (10 Trees)

<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>
7	Hemlock-Canadian	10
8	Hemlock-Canadian	9
97	Pear-Callery	26
209	Lilac	11
242	Arborvitae	20,19
350	Cherry-Flowering	19
390	Sycamore-American	39
391	Sycamore-American	35
412	Hackberry	18,18,17
508	Dogwood-Flowering	9

**INVENTORIED TREES RECOMMENDED FOR VINE REMOVAL**



Google





## DEDICATED OR MEMORIAL TREES



### DEDICATED OR MEMORIAL TREES

The following table displays the inventoried dedicated or memorial trees on the Greencastle. The following image shows a dedicated tree on the site.



Dedicated tree #62.

**INVENTORIED DEDICATED OR MEMORIAL TREES (2 Trees)**

<b>Tree ID</b>	<b>Common Name</b>	<b>Honoree</b>	<b>Dedication Year</b>
62	Oak-Pin	John Kinney	2017
63	Elm	Roger Johnston	N/A

**INVENTORIED DEDICATED OR MEMORIAL TREES ON SOUTH JEFFERSON STREET**



Google



## DEFECTS OR OBSERVATIONS



### DEFECTS OR OBSERVATIONS

The following table lists inventoried trees for which we noted defects, observations, or other structural issues and were not assigned an *overall tree risk rating*, recommended for a *Level 3 Advanced assessment*, or have pruning and/or removal recommendations that were previously reported.

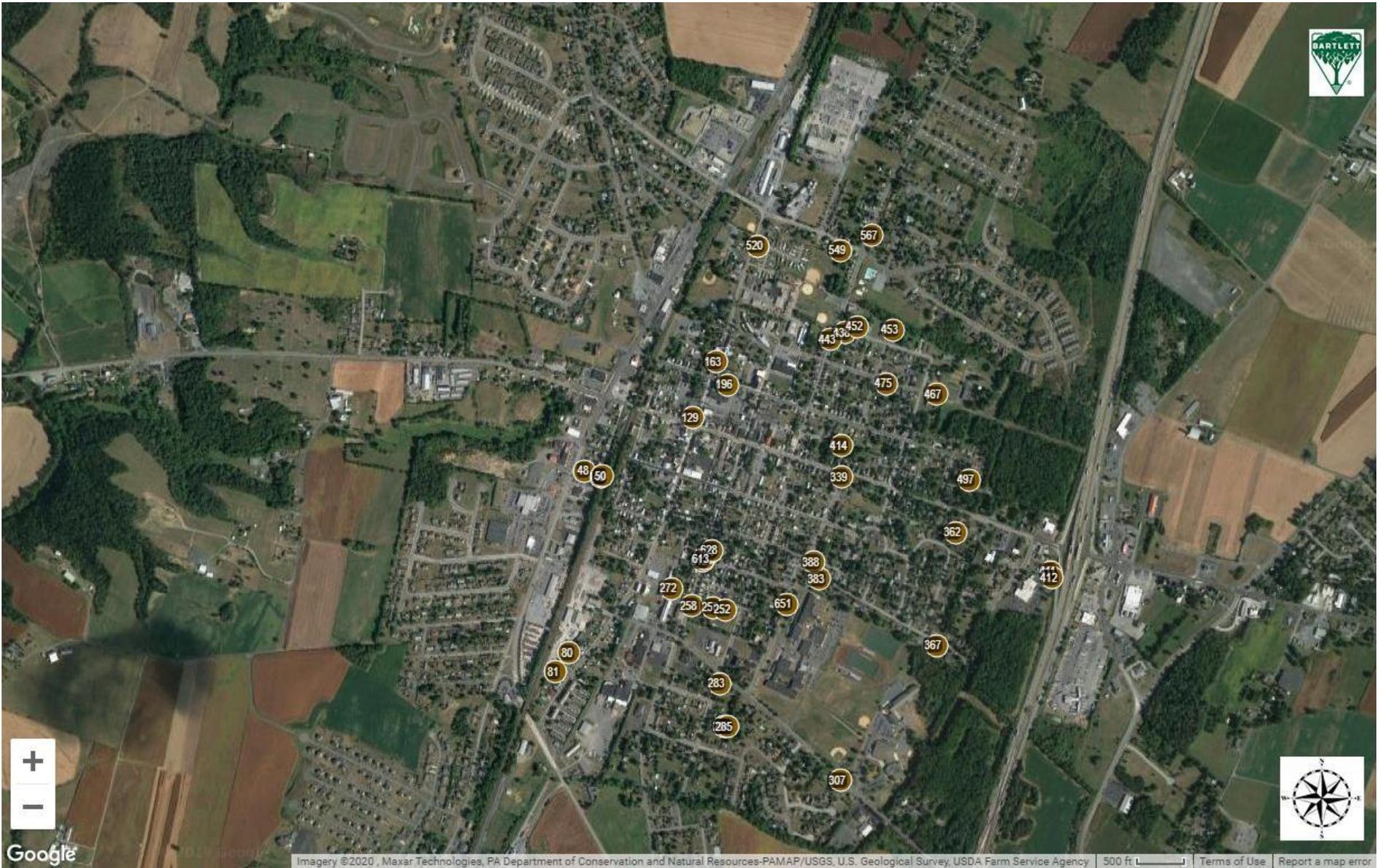
#### INVENTORIED TREES WITH DEFECTS, OBSERVATIONS, OR OTHER STRUCTURAL ISSUES (46 Trees)

Tree ID	Common Name	DBH	Defect(s) or Observation(s)
48	Elm-Siberian	6,5,5	<input type="checkbox"/> Poor branch structure
49	Walnut-Black	15	<input type="checkbox"/> Wound-stem
50	Elm-American	11	<ul style="list-style-type: none"> <li>• Uneven crown</li> <li>• Storm damage</li> </ul>
80	Maple-Norway	4	<input type="checkbox"/> Growing against object
81	Redcedar-Western (8)	2,2,2	<ul style="list-style-type: none"> <li>• Topping/heading cuts</li> <li>• Storm damage</li> </ul>
129	Maple-Norway	12	<input type="checkbox"/> Topping/heading cuts
163	Cherry-Flowering	6	<ul style="list-style-type: none"> <li>• Wound-branch</li> <li>• Poor branch structure</li> </ul>

196	Redcedar-Western	3,3,3	<ul style="list-style-type: none"> <li>• Wound-stem</li> <li>• Flush cuts</li> <li>• Uneven crown</li> </ul>
250	Pine-Eastern White	18	<input type="checkbox"/> Lean
252	Mulberry	11,12,8	<input type="checkbox"/> Broken branch(s)
258	Maple	25	<input type="checkbox"/> Lion tailing
272	Arborvitae	8,7,5	<ul style="list-style-type: none"> <li>• Wound-stem</li> <li>• Flush cuts</li> </ul>
283	Maple-Sugar	20	<ul style="list-style-type: none"> <li>• Topping/heading cuts</li> <li>• Lion tailing</li> </ul>
284	Walnut-Black	19	<input type="checkbox"/> Dead branches >2
285	Maple-Norway	29	<input type="checkbox"/> Dead branches >2
307	Maple-Norway	23	<input type="checkbox"/> Topping/heading cuts
339	Rose-of-Sharon	7	<input type="checkbox"/> Topping/heading cuts
362	Redbud-Eastern	15	<input type="checkbox"/> Dead branches >2
367	Dogwood-Flowering	6,5,5	<input type="checkbox"/> Co-dominant stems
383	Lilac	3,2,2	<ul style="list-style-type: none"> <li>• Wound-stem</li> <li>• Topping/heading cuts</li> <li>• Dead branches &lt;=2</li> </ul>
388	Dogwood-Flowering	11	<input type="checkbox"/> Wound-stem
411	Maple-Norway	18	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Wound-stem</li> </ul>
412	Hackberry	18,18,17	<ul style="list-style-type: none"> <li>• Dead branches &gt;2</li> <li>• Co-dominant stems</li> </ul>
<b>Tree ID</b>	<b>Common Name</b>	<b>DBH</b>	<b>Defect(s) or Observation(s)</b>
414	Hackberry	7	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Wound-stem</li> <li>• Overextended branch</li> </ul>
438	Spruce-Colorado Blue	20	<input type="checkbox"/> Dead branches <=2
443	Maple-Japanese	5,3,3	<ul style="list-style-type: none"> <li>• Buried root collar</li> <li>• Wound-stem</li> </ul>
452	Maple-Norway	35	<input type="checkbox"/> Topping/heading cuts
453	Maple-Silver	44	<ul style="list-style-type: none"> <li>• Co-dominant stems</li> <li>• Cavity-stem</li> </ul>
467	Maple-Norway	13	<input type="checkbox"/> Dead branches >2
475	Maple-Japanese	9,11,8	<ul style="list-style-type: none"> <li>• Girdling roots present</li> <li>• Lion tailing</li> </ul>

<b>497</b>	Maple-Silver	49	<input type="checkbox"/> Co-dominant stems
<b>520</b>	Cherry-Flowering	9	<input type="checkbox"/> Girdling roots present
<b>549</b>	Maple-Norway	20	<ul style="list-style-type: none"> <li>• Wound-root</li> <li>• Topping/heading cuts</li> </ul>
<b>567</b>	Maple-Norway	18	<input type="checkbox"/> Wound-stem
<b>612</b>	Cherry-Flowering	19	<input type="checkbox"/> Topping/heading cuts
<b>613</b>	Crabapple	11	<input type="checkbox"/> Topping/heading cuts
<b>627</b>	Boxwood-Common	10	<input type="checkbox"/> Wound-stem
<b>628</b>	Zelkova-Japanese	18	<input type="checkbox"/> Dead branches >2
<b>651</b>	Maple-Norway	23	<input type="checkbox"/> Topping/heading cuts

**INVENTORIED TREES WITH DEFECTS, OBSERVATIONS, OR OTHER STRUCTURAL ISSUES (NORTH)**



# ENTIRE INVENTORY



**ENTIRE INVENTORY (739 Trees)**

<b>Tree ID</b>	<b>Common Name</b>	<b>Genus</b>	<b>Species</b>	<b>DBH</b>	<b>Height Class</b>	<b>Age Class</b>	<b>Condition Class</b>	<b>Tree &amp; Shrub Work Phase</b>	<b>Tree Asset Value</b>
1	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	11	Medium	Mature	Good	2	\$2,443.49
2	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	4	Small	Mature	Good	2	\$369.26
3	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	10	Small	Semi-mature	Good	2	\$1,586.68
4	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	10	Small	Semi-mature	Good	2	\$1,586.68
5	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	26	Medium	Mature	Good	2	\$10,725.96
6	Spruce-Norway	<i>Picea</i>	<i>abies</i>	12	Medium	Mature	Good	...	\$2,284.82
7	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	10	Medium	Semi-mature	Good	2	\$1,730.92
8	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	9	Medium	Young	Good	2	\$1,402.05
9	Juniper	<i>Juniperus</i>	sp.	4,3,3	Medium	Mature	Good	...	\$686.60
10	Redcedar-Eastern	<i>Juniperus</i>	<i>virginiana</i>	8,6	Medium	Mature	Good	...	\$2,163.66
11	Birch-River	<i>Betula</i>	<i>nigra</i>	6,6,7	Medium	Semi-mature	Good	2	\$2,443.49
12	Viburnum	<i>Viburnum</i>	sp.	4,3	Small	Mature	Good	...	\$504.85
13	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	2	Small	Young	Good	2	\$63.47
14	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	2	\$706.79
15	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	2	\$706.79
16	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	2	\$706.79
17	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	3	Small	Young	Good	2	\$142.80
18	Crabapple	<i>Malus</i>	sp.	5	Small	Semi-mature	Good	2	\$454.37
19	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Small	Semi-mature	Good	2	\$571.21
20	Crabapple	<i>Malus</i>	sp.	6	Small	Semi-mature	Good	2	\$654.29
21	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	10	Medium	Semi-mature	Good	2	\$1,586.68
22	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	8	Medium	Mature	Good	2	\$1,015.48

23	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	11	Medium	Semi-mature	Good	2	\$1,919.88
24	Crabapple	<i>Malus</i>	sp.	5	Small	Semi-mature	Good	2	\$454.37
25	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Small	Semi-mature	Good	2	\$571.21
26	Yellowwood	<i>Cladrastis</i>	<i>kentukea</i>	3	Small	Young	Good	2	\$155.78
27	Arborvitae-Eastern	<i>Thuja</i>	<i>occidentalis</i>	5,5,5	Medium	Mature	Good	...	\$1,298.19
28	Mulberry	<i>Morus</i>	sp.	41	Medium	Mature	Fair	1	\$10,050.46
29	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Semi-mature	Good	2	\$360.61

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
30	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
31	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Mature	Good	2	\$923.16
32	Maple	<i>Acer</i>	sp.	4	Medium	Young	Good	2	\$323.11
33	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	2	Small	Young	Fair	2	\$45.33
34	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
35	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Small	Semi-mature	Good	2	\$230.79
36	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
37	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Mature	Good	2	\$706.79
38	Cedar-Deodar	<i>Cedrus</i>	<i>deodara</i>	10	Medium	Mature	Good	...	\$1,442.44
39	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i> var. <i>inermis</i>	23	Medium	Semi-mature	Good	ASAP	\$10,682.69
40	Spruce-Norway	<i>Picea</i>	<i>abies</i>	15	Medium	Mature	Fair	1	\$1,092.87
41	Spruce-White	<i>Picea</i>	<i>glauca</i>	12	Medium	Mature	Fair	1	\$699.43
42	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	19	Medium	Over-mature	Fair	2	\$5,430.37
43	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	12,8	Medium	Mature	Good	2	\$3,600.32
44	Maple-Crimson King	<i>Acer</i>	<i>platanoides</i> var. 'Crimson King'	23	Medium	Semi-mature	Fair	1	\$6,540.42

45	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	11	Medium	Mature	Good	1	\$1,745.35
46	Redcedar-Eastern	<i>Juniperus</i>	<i>virginiana</i>	5,5	Medium	Mature	Good	...	\$1,081.83
47	Redcedar-Eastern	<i>Juniperus</i>	<i>virginiana</i>	5,4,5	Medium	Mature	Good	...	\$1,428.01
48	Elm-Siberian	<i>Ulmus</i>	<i>pumila</i>	6,5,5	Medium	Young	Good	...	\$868.35
49	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	15	Large	Semi-mature	Good	...	\$4,413.86
50	Elm-American	<i>Ulmus</i>	<i>americana</i>	11	Medium	Semi-mature	Good	...	\$1,850.07
51	Birch-Paper	<i>Betula</i>	<i>papyrifera</i>	7,10	Medium	Mature	Fair	1	\$921.10
52	Crabapple	<i>Malus</i>	sp.	5	Small	Mature	Good	2	\$324.55
53	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	5	Small	Mature	Good	...	\$576.98
54	Crabapple	<i>Malus</i>	sp.	7,8	Small	Mature	Good	2	\$2,053.74
55	Lilac	<i>Syringa</i>	sp.	4	Small	Young	Fair	2	\$230.79
56	Lilac	<i>Syringa</i>	sp.	6	Small	Semi-mature	Good	2	\$726.99
57	Coffeetree-Kentucky	<i>Gymnocladus</i>	<i>dioicus</i>	20	Large	Mature	Good	1	\$8,423.83
58	Spruce-White	<i>Picea</i>	<i>glauca</i>	4	Small	Mature	Good	...	\$253.87

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
59	Fir-White	<i>Abies</i>	<i>concolor</i>	24	Large	Mature	Good	1	\$7,477.60
60	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	3,3,3	Small	Semi-mature	Good	2	\$467.35
61	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	3,3,2	Small	Semi-mature	Good	2	\$380.80
62	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	2	Medium	Young	Good	1	\$75.01
63	Elm	<i>Ulmus</i>	sp.	2	Medium	Young	Good	1	\$80.78
64	Privet	<i>Ligustrum</i>	sp.	5,5,4	Medium	Mature	Good	1	\$952.01
65	Hackberry	<i>Celtis</i>	<i>occidentalis</i>	3	Medium	Young	Good	...	\$163.57
66	Crabapple	<i>Malus</i>	sp.	6	Small	Mature	Good	...	\$654.29
67	Crabapple	<i>Malus</i>	sp.	3	Small	Semi-mature	Good	...	\$163.57
68	Crabapple	<i>Malus</i>	sp.	4,4	Small	Mature	Good	...	\$581.59
69	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	3,3,3	Medium	Mature	Good	2	\$584.19

70	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	4,3,3	Medium	Mature	Good	2	\$735.64
71	Lilac-Japanese Tree	<i>Syringa</i>	<i>reticulata</i>	5,4,3	Medium	Mature	Good	2	\$1,081.83
72	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	8	Medium	Mature	Good	2	\$1,015.48
73	Magnolia-Southern	<i>Magnolia</i>	<i>grandiflora</i>	18	Medium	Mature	Good	1	\$6,542.90
74	Coffeetree-Kentucky	<i>Gymnocladus</i>	<i>dioicus</i>	29,23	Large	Mature	Good	1	\$28,851.63
75	Coffeetree-Kentucky	<i>Gymnocladus</i>	<i>dioicus</i>	31	Large	Mature	Good	1	\$19,835.31
76	Maple-Red	<i>Acer</i>	<i>rubrum</i>	58	Large	Mature	Good	1	\$46,445.46
77	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	24	Medium	Mature	Good	1	\$8,308.44
78	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	29	Medium	Mature	Good	1	\$12,130.90
79	Redcedar-Western (25)	<i>Thuja</i>	<i>plicata</i>	5,5,5	Medium	Mature	Fair	...	\$927.28
80	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	4	Medium	Young	Good	...	\$253.87
81	Redcedar-Western (8)	<i>Thuja</i>	<i>plicata</i>	2,2,2	Small	Semi-mature	Fair	...	\$148.37
82	Elm-American	<i>Ulmus</i>	<i>americana</i>	8	Medium	Young	Good	2	\$978.55
83	Elm-Siberian	<i>Ulmus</i>	<i>pumila</i>	8	Medium	Young	Good	2	\$646.21
84	Elm-Siberian	<i>Ulmus</i>	<i>pumila</i>	8	Medium	Young	Good	2	\$646.21
85	Yew	<i>Taxus</i>	sp.	4,4,4	Medium	Mature	Good	2	\$969.32
86	Yew	<i>Taxus</i>	sp.	4,4,4	Medium	Mature	Good	2	\$969.32
87	Yew	<i>Taxus</i>	sp.	6,6,5	Medium	Mature	Good	2	\$1,958.83
88	Lilac	<i>Syringa</i>	sp.	7	Medium	Mature	Good	2	\$989.51
89	Lilac	<i>Syringa</i>	sp.	7	Medium	Mature	Good	2	\$989.51

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
90	Lilac	<i>Syringa</i>	sp.	10	Medium	Mature	Good	2	\$2,019.41
91	Crabapple	<i>Malus</i>	sp.	12	Medium	Mature	Good	2	\$2,617.16
92	GoldenraintreePanicked	<i>Koelreuteria</i>	<i>paniculata</i>	8,8	Medium	Mature	Good	2	\$2,326.36

93	GoldenraintreePanicked	<i>Koelreuteria</i>	<i>paniculata</i>	8	Medium	Mature	Good	2	\$1,163.18
94	Coffeetree-Kentucky	<i>Gymnocladus</i>	<i>dioicus</i>	41	Large	Mature	Good	1	\$31,955.98
95	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	10	Medium	Semi-mature	Good	2	\$1,133.34
96	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99
97	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	26	Medium	Mature	Good	1	\$9,750.88
98	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	26	Medium	Mature	Good	1	\$9,750.88
99	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	Good	2	\$80.78
100	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	Good	2	\$80.78
101	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Semi-mature	Good	2	\$360.61
102	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	8	Medium	Semi-mature	Good	...	\$1,015.48
103	Crabapple	<i>Malus</i>	sp.	7	Medium	Mature	Good	2	\$890.56
104	Boxelder	<i>Acer</i>	<i>negundo</i>	24,19	Large	Semi-mature	Good	1	\$10,812.51
105	Spruce-Norway	<i>Picea</i>	<i>abies</i>	20	Large	Mature	Good	...	\$6,346.73
106	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	2	\$2,199.14
107	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	1	\$2,827.18
108	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	5	Medium	Young	Good	2	\$540.91
109	Maple	<i>Acer</i>	sp.	4	Small	Young	Good	2	\$323.11
110	Lilac-Pekin	<i>Syringa</i>	<i>pekinensis</i>	4	Medium	Semi-mature	Good	2	\$323.11
111	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
112	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	3	Medium	Young	Good	2	\$181.75
113	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	16	Medium	Mature	Good	1	\$3,692.64
114	Crabapple	<i>Malus</i>	sp.	12	Medium	Mature	Good	2	\$2,617.16
115	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	17	Medium	Mature	Good	1	\$4,168.64
116	Hornbeam-European	<i>Carpinus</i>	<i>betulus</i>	4	Medium	Semi-mature	Good	2	\$369.26
117	Crabapple	<i>Malus</i>	sp.	5	Small	Semi-mature	Good	...	\$454.37
118	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
119	Lilac	<i>Syringa</i>	sp.	3	Medium	Semi-mature	Good	2	\$181.75

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
120	Dogwood	<i>Cornus</i>	sp.	5	Medium	Mature	Good	2	\$504.85
121	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	2	\$706.79
122	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
123	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Mature	Good	2	\$706.79
124	Locust-Black	<i>Robinia</i>	<i>pseudoacacia</i>	40	Large	Mature	Fair	1	\$16,588.69
125	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Mature	Good	1	\$923.16
126	GoldenraintreePanicked	<i>Koelreuteria</i>	<i>paniculata</i>	4	Medium	Semi-mature	Good	1	\$290.80
127	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	12	Medium	Semi-mature	Good	1	\$2,284.82
128	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Good	1	\$1,168.37
129	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	12	Medium	Semi-mature	Good	...	\$2,284.82
130	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	1	\$1,442.44
131	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Mature	Good	1	\$923.16
132	Maple	<i>Acer</i>	sp.	14	Medium	Semi-mature	Good	ASAP	\$3,958.05
133	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	15	Medium	Semi-mature	Good	1	\$3,570.03
134	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	17	Medium	Semi-mature	Good	1	\$4,585.51
135	Hornbeam-European	<i>Carpinus</i>	<i>betulus</i>	2	Small	Young	Good	2	\$92.32
136	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	25	Medium	Mature	Good	1	\$9,015.23
137	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	Good	1	\$1,745.35
138	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	1	\$1,442.44
139	Lilac	<i>Syringa</i>	sp.	8	Medium	Mature	Good	1	\$1,292.42
140	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	Good	2	\$80.78
141	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	2	Small	Young	Good	2	\$69.24
142	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	2	Small	Young	Good	...	\$69.24
143	Crabapple	<i>Malus</i>	sp.	8,7	Medium	Mature	Good	1	\$2,053.74
144	Lilac	<i>Syringa</i>	sp.	4	Medium	Mature	Good	1	\$323.11

145	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	12	Medium	Mature	Good	2	\$2,077.11
146	Lilac	<i>Syringa</i>	sp.	8	Medium	Mature	Good	2	\$1,292.42
147	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	24,21,18	Large	Semi-mature	Good	1	\$17,408.78
148	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Medium	Semi-mature	Good	2	\$230.79
149	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	20	Medium	Mature	Good	1	\$5,769.75

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
150	Lilac-Pekin	<i>Syringa</i>	<i>pekinensis</i>	4	Medium	Mature	Good	2	\$323.11
151	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	2	\$1,442.44
152	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	2	Small	Young	Good	2	\$57.70
153	Honeylocust-Thornless Common	<i>Gleditsia</i>	<i>triacanthos</i> var. <i>inermis</i>	2	Medium	Young	Good	2	\$80.78
154	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	17	Medium	Mature	Good	2	\$4,168.64
155	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	3	Medium	Young	Good	2	\$129.82
156	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	2	Small	Young	Good	2	\$80.78
157	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
158	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	29	Large	Mature	Good	1	\$15,770.17
159	Lilac	<i>Syringa</i>	sp.	5	Medium	Mature	Good	2	\$504.85
160	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	17	Medium	Semi-mature	Good	2	\$4,585.51
161	Lilac-Pekin	<i>Syringa</i>	<i>pekinensis</i>	4	Medium	Semi-mature	Good	2	\$323.11
162	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	9	Medium	Mature	Good	2	\$1,285.21
163	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Small	Semi-mature	Fair	...	\$408.00
164	Lilac	<i>Syringa</i>	sp.	4	Small	Semi-mature	Good	2	\$323.11
165	Yew	<i>Taxus</i>	sp.	4,3,1	Small	Mature	Good	2	\$525.05
166	Crabapple	<i>Malus</i>	sp.	18	Medium	Mature	Good	...	\$5,888.61
167	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Medium	Semi-mature	Good	2	\$230.79

168	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	7	Medium	Mature	Good	...	\$848.15
169	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	4	Small	Semi-mature	Good	2	\$253.87
170	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	3	Medium	Young	Good	2	\$129.82
171	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Good	2	\$1,168.37
172	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Good	2	\$1,168.37
173	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	3	Medium	Young	Good	2	\$181.75
174	Crapemyrtle	<i>Lagerstroemia</i>	sp.	2,2,2	Medium	Semi-mature	Good	2	\$242.33
175	Snowbell	<i>Styrax</i>	sp.	4	Small	Young	Good	2	\$369.26
176	Snowbell	<i>Styrax</i>	sp.	5	Small	Semi-mature	Good	2	\$576.98
177	Yellowwood	<i>Cladrastis</i>	<i>kentukea</i>	3	Small	Young	Good	2	\$155.78
178	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	8	Medium	Semi-mature	Good	1	\$1,015.48
179	Lilac	<i>Syringa</i>	sp.	8	Medium	Mature	Good	1	\$1,292.42
180	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	8	Medium	Mature	Good	1	\$1,015.48

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
181	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	Good	1	\$1,745.35
182	Rose-of-Sharon	<i>Hibiscus</i>	<i>syriacus</i>	4	Medium	Semi-mature	Good	1	\$323.11
183	Lilac	<i>Syringa</i>	sp.	5	Medium	Mature	Good	2	\$504.85
184	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	12	Medium	Mature	Good	1	\$2,077.11
185	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Mature	Good	2	\$519.28
186	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	18	Medium	Semi-mature	Good	1	\$5,140.85
187	Falsecypress-Hinoki	<i>Chamaecyparis</i>	<i>obtusa</i>	2	Small	Mature	Good	...	\$80.78
188	Falsecypress-Hinoki	<i>Chamaecyparis</i>	<i>obtusa</i>	3	Small	Mature	Good	...	\$181.75
189	Falsecypress-Hinoki	<i>Chamaecyparis</i>	<i>obtusa</i>	3	Small	Mature	Good	...	\$181.75
190	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Mature	Good	2	\$923.16
191	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Mature	Good	2	\$923.16
192	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	Good	2	\$1,745.35

193	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	19	Medium	Semi-mature	Good	1	\$5,727.92
194	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	24	Medium	Semi-mature	Good	1	\$12,462.66
195	Maple	<i>Acer</i>	sp.	30	Large	Mature	Good	1	\$18,174.71
196	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	3,3,3	Small	Mature	Fair	...	\$333.82
197	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	20	Medium	Semi-mature	Good	1	\$6,346.73
198	Maple-Red	<i>Acer</i>	<i>rubrum</i>	45	Large	Mature	Good	1	\$34,809.14
199	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	18	Medium	Mature	Good	2	\$4,673.50
200	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	20	Medium	Mature	Good	1	\$5,769.75
201	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99
202	Lilac	<i>Syringa</i>	sp.	11	Medium	Mature	Good	2	\$2,443.49
203	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99
204	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	2	Medium	Young	Good	2	\$86.55
205	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	2	\$2,827.18
206	Lilac	<i>Syringa</i>	sp.	5	Small	Mature	Good	2	\$504.85
207	Maple-Red	<i>Acer</i>	<i>rubrum</i>	9	Medium	Young	Good	1	\$1,635.72
208	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	Good	1	\$1,745.35
209	Lilac	<i>Syringa</i>	sp.	11	Medium	Mature	Good	2	\$2,443.49
210	Crabapple	<i>Malus</i>	sp.	15	Medium	Mature	Good	2	\$4,089.31
211	Mulberry	<i>Morus</i>	sp.	40	Medium	Mature	Fair	ASAP	\$5,816.81
212	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	2	\$2,827.18

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
213	Crabapple	<i>Malus</i>	sp.	8	Small	Mature	Good	...	\$1,163.18
214	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	2	\$1,442.44
215	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	Good	2	\$923.16
216	Maple	<i>Acer</i>	sp.	20	Large	Semi-mature	Good	...	\$8,077.65
217	Maple	<i>Acer</i>	sp.	21	Large	Semi-mature	Good	1	\$8,905.61

218	Hawthorn	<i>Crataegus</i>	sp.	2	Small	Young	Good	...	\$66.93
219	Mulberry	<i>Morus</i>	sp.	2,2,2	Small	Young	Good	...	\$155.78
220	Magnolia-Southern	<i>Magnolia</i>	<i>grandiflora</i>	9	Medium	Mature	Good	...	\$1,635.72
221	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	11	Medium	Semi-mature	Good	2	\$1,919.88
222	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	5	Medium	Semi-mature	Good	2	\$396.67
223	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	5	Small	Semi-mature	Good	2	\$396.67
224	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99
225	Crabapple	<i>Malus</i>	sp.	14	Medium	Mature	Good	2	\$3,562.24
226	Lilac	<i>Syringa</i>	sp.	8	Medium	Mature	Good	2	\$1,292.42
227	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Good	1	\$1,168.37
228	Crabapple	<i>Malus</i>	sp.	13	Medium	Mature	Good	1	\$3,071.53
229	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	1	\$2,437.72
230	Crabapple	<i>Malus</i>	sp.	12	Medium	Mature	Good	1	\$2,617.16
231	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	2	Small	Young	Fair	...	\$45.33
232	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	5	Small	Semi-mature	Good	2	\$396.67
233	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	3	Small	Semi-mature	Good	2	\$142.80
234	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Good	1	\$1,168.37
235	Lilac	<i>Syringa</i>	sp.	6	Medium	Semi-mature	Good	2	\$726.99
236	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	1	\$1,442.44
237	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99
238	Lilac	<i>Syringa</i>	sp.	7	Medium	Mature	Good	2	\$989.51
239	Arborvitae	<i>Thuja</i>	sp.	8,7,7	Medium	Mature	Good	...	\$2,804.10
240	Crapemyrtle	<i>Lagerstroemia</i>	sp.	4,4,4	Medium	Mature	Good	2	\$969.32
241	Arborvitae	<i>Thuja</i>	sp.	19,18	Large	Mature	Fair	1	\$8,469.17
242	Arborvitae	<i>Thuja</i>	sp.	20,19	Large	Mature	Good	2	\$13,172.34
243	Crabapple	<i>Malus</i>	sp.	14	Medium	Mature	Good	2	\$3,562.24
244	Crabapple	<i>Malus</i>	sp.	10	Medium	Mature	Good	2	\$1,817.47

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
245	Spruce-Norway	<i>Picea</i>	<i>abies</i>	4	Medium	Young	Good	...	\$253.87
246	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	18	Large	Semi-mature	Good	1	\$5,140.85
247	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	7	Medium	Semi-mature	Good	...	\$777.47
248	Spruce-Norway	<i>Picea</i>	<i>abies</i>	4	Medium	Young	Good	...	\$253.87
249	Cherry-Black	<i>Prunus</i>	<i>serotina</i>	8	Medium	Young	Good	...	\$1,015.48
250	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	18	Medium	Semi-mature	Good	...	\$5,140.85
251	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	6	Medium	Mature	Good	...	\$623.13
252	Mulberry	<i>Morus</i>	sp.	11,12,8	Medium	Semi-mature	Good	...	\$4,271.06
253	Oak-Pin	<i>Quercus</i>	<i>palustris</i>	30	Large	Mature	Poor	1	\$7,232.79
254	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	6,5,4	Medium	Mature	Good	...	\$1,554.95
255	Spruce-Norway	<i>Picea</i>	<i>abies</i>	20	Large	Mature	Good	...	\$6,346.73
256	Maple	<i>Acer</i>	sp.	16	Large	Semi-mature	Fair	1	\$3,692.64
257	Maple	<i>Acer</i>	sp.	38	Large	Mature	Good	1	\$27,336.93
258	Maple	<i>Acer</i>	sp.	25	Large	Mature	Good	...	\$12,621.33
259	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Medium	Young	Good	2	\$181.75
260	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Good	...	\$1,168.37
261	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Medium	Semi-mature	Good	2	\$571.21
262	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	Good	2	\$323.11
263	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	Good	2	\$323.11
264	Maple-Red	<i>Acer</i>	<i>rubrum</i>	10	Medium	Semi-mature	Good	1	\$2,019.41
265	Maple-Red	<i>Acer</i>	<i>rubrum</i>	12	Medium	Semi-mature	Good	1	\$2,907.95
266	Lilac	<i>Syringa</i>	sp.	9	Medium	Mature	Good	2	\$1,635.72
267	Lilac	<i>Syringa</i>	sp.	10	Medium	Mature	Good	2	\$2,019.41
268	Crabapple	<i>Malus</i>	sp.	9	Medium	Mature	Good	2	\$1,472.15
269	Crabapple	<i>Malus</i>	sp.	7	Medium	Mature	Good	2	\$890.56
270	Maple-Red	<i>Acer</i>	<i>rubrum</i>	11	Medium	Semi-mature	Good	1	\$2,443.49

271	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	8,8,8	Medium	Mature	Good	...	\$4,431.17
272	Arborvitae	<i>Thuja</i>	sp.	8,7,5	Medium	Mature	Good	...	\$2,388.68
273	Arborvitae	<i>Thuja</i>	sp.	10,7,6	Medium	Mature	Good	...	\$3,202.21
274	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	2	\$2,827.18
275	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	2	\$2,827.18
276	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Mature	Good	2	\$923.16

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
277	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	...	\$1,442.44
278	Lilac	<i>Syringa</i>	sp.	8	Medium	Mature	Good	2	\$1,292.42
279	Lilac	<i>Syringa</i>	sp.	7	Medium	Mature	Good	2	\$989.51
280	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99
281	Lilac	<i>Syringa</i>	sp.	8	Medium	Mature	Good	2	\$1,292.42
282	Honeylocust-Common	<i>Gleditsia</i>	<i>triacanthos</i>	35	Large	Mature	Good	1	\$18,759.73
283	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	20	Medium	Semi-mature	Good	...	\$8,654.62
284	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	19	Large	Semi-mature	Good	...	\$7,081.79
285	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	29	Large	Mature	Good	...	\$13,343.99
286	Hemlock-Canadian	<i>Tsuga</i>	<i>canadensis</i>	12	Medium	Semi-mature	Good	...	\$2,492.53
287	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	12	Medium	Semi-mature	Good	2	\$2,284.82
288	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	11	Medium	Semi-mature	Good	2	\$1,919.88
289	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	13	Medium	Semi-mature	Good	2	\$2,681.49
290	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	33	Large	Mature	Good	...	\$19,948.09
291	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	24	Large	Semi-mature	Good	...	\$10,800.97
292	Planetree-London	<i>Platanus</i>	<i>x acerifolia</i>	21	Large	Semi-mature	Good	...	\$8,269.49
293	Elm	<i>Ulmus</i>	sp.	1	Small	Young	Good	1	\$20.19
294	Maple-Red	<i>Acer</i>	<i>rubrum</i>	8	Medium	Young	Good	1	\$1,292.42
295	Elm	<i>Ulmus</i>	sp.	1	Small	Young	Good	1	\$20.19

296	Crabapple	<i>Malus</i>	sp.	15	Medium	Mature	Good	...	\$4,089.31
297	Crabapple	<i>Malus</i>	sp.	15	Medium	Mature	Good	...	\$4,089.31
298	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	2	\$706.79
299	Locust-Black	<i>Robinia</i>	<i>pseudoacacia</i>	35	Medium	Mature	Good	1	\$18,759.73
300	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	24	Medium	Semi-mature	Good	1	\$12,462.66
301	Ash-White	<i>Fraxinus</i>	<i>americana</i>	7	Medium	Semi-mature	Poor	1	\$321.09
302	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	11,9,9	Medium	Semi-mature	Good	2	\$4,490.31
303	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	27	Large	Mature	Good	1	\$9,463.83
304	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	15	Medium	Semi-mature	Good	1	\$3,570.03
305	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	14,13	Medium	Semi-mature	Good	1	\$4,738.41
306	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	13,12,1 4	Medium	Semi-mature	Fair	ASAP	\$4,719.86
307	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	23	Medium	Semi-mature	Good	...	\$5,995.39

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
308	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6	Medium	Mature	Good	...	\$623.13
309	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	12	Medium	Mature	Good	...	\$2,284.82
310	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	10	Medium	Mature	Good	...	\$1,730.92
311	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	9	Medium	Mature	Good	...	\$1,402.05
312	Cedar-Atlas	<i>Cedrus</i>	<i>atlantica</i>	11,7	Medium	Mature	Good	...	\$2,942.57
313	Holly-Foster's	<i>Ilex</i>	<i>x attenuata</i>	5,5	Medium	Mature	Good	...	\$1,009.71
314	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	8	Small	Mature	Good	...	\$1,624.76
315	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	30	Medium	Mature	Good	1	\$19,472.91
316	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	25	Medium	Mature	Good	2	\$13,522.85
317	Oak-Northern Red	<i>Quercus</i>	<i>rubra</i>	40	Large	Mature	Good	1	\$31,669.31
318	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	32	Large	Mature	Good	1	\$15,918.56
319	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	21	Medium	Mature	Good	1	\$6,361.15

320	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	26	Medium	Mature	Good	1	\$9,750.88
321	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	24	Medium	Mature	Good	1	\$8,308.44
322	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	28	Medium	Mature	Good	1	\$11,308.71
323	Plum-Purple Leaf	<i>Prunus</i>	<i>cerasifera</i>	8,7	Medium	Mature	Good	2	\$1,792.95
324	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	10	Medium	Semi-mature	Good	...	\$1,586.68
325	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	1	\$2,437.72
326	Lilac	<i>Syringa</i>	sp.	4	Medium	Semi-mature	Good	2	\$323.11
327	Lilac	<i>Syringa</i>	sp.	3	Medium	Semi-mature	Good	2	\$181.75
328	Linden-Littleleaf	<i>Tilia</i>	<i>cordata</i>	23,19	Large	Semi-mature	Good	1	\$18,743.03
329	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	6,5,4	Medium	Mature	Good	2	\$1,554.95
330	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	2	\$706.79
331	Redcedar-Western (9)	<i>Thuja</i>	<i>plicata</i>	4	Medium	Mature	Good	...	\$276.95
332	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	7	Medium	Semi-mature	Good	2	\$777.47
333	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	12	Medium	Mature	Good	2	\$2,077.11
334	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99
335	Lilac	<i>Syringa</i>	sp.	12	Medium	Mature	Good	2	\$2,907.95
336	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	2	\$2,437.72
337	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	2	\$2,437.72
338	Plum-Purple Leaf	<i>Prunus</i>	<i>cerasifera</i>	9,7,8	Medium	Mature	Fair	...	\$2,198.69
339	Rose-of-Sharon	<i>Hibiscus</i>	<i>syriacus</i>	7	Medium	Mature	Good	...	\$989.51

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
340	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Medium	Semi-mature	Good	2	\$406.19
341	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	1	\$1,442.44
342	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	2	Small	Mature	Good	1	\$101.55
343	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	1	\$2,437.72
344	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	16	Medium	Mature	Good	1	\$3,692.64

345	Sweetgum	<i>Liquidambar</i>	<i>styraciflua</i>	30	Large	Mature	Good	1	\$16,876.52
346	Sweetgum	<i>Liquidambar</i>	<i>styraciflua</i>	25	Large	Mature	Good	1	\$11,719.80
347	Sweetgum	<i>Liquidambar</i>	<i>styraciflua</i>	29	Large	Mature	Good	1	\$15,770.17
348	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	36	Large	Mature	Good	1	\$19,679.70
349	Sweetgum	<i>Liquidambar</i>	<i>styraciflua</i>	30	Large	Mature	Good	1	\$16,876.52
350	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	19	Medium	Semi-mature	Good	1	\$5,727.92
351	Spruce-White	<i>Picea</i>	<i>glauca</i>	11	Medium	Mature	Good	...	\$1,919.88
352	Crapemyrtle	<i>Lagerstroemia</i>	sp.	3,3,2	Medium	Mature	Good	2	\$444.27
353	Hackberry	<i>Celtis</i>	<i>occidentalis</i>	20	Medium	Semi-mature	Good	1	\$7,269.88
354	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	2	\$2,437.72
355	Cypress-Leyland (3)	<sup>x</sup> <i>Cupressocyparis</i>	<i>leylandii</i>	9	Medium	Mature	Good	...	\$1,402.05
356	Redcedar-Western (8)	<i>Thuja</i>	<i>plicata</i>	3	Medium	Semi-mature	Good	...	\$155.78
357	Cypress-Leyland	<sup>x</sup> <i>Cupressocyparis</i>	<i>leylandii</i>	11,6	Medium	Mature	Fair	2	\$1,941.11
358	Cypress-Leyland	<sup>x</sup> <i>Cupressocyparis</i>	<i>leylandii</i>	17	Medium	Mature	Good	...	\$5,002.37
359	Fir-Balsam	<i>Abies</i>	<i>balsamea</i>	3	Small	Young	Good	...	\$107.56
360	Fir-Balsam	<i>Abies</i>	<i>balsamea</i>	4	Small	Young	Good	...	\$267.72
361	Privet	<i>Ligustrum</i>	sp.	5,4,4	Medium	Mature	Good	...	\$1,151.07
362	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	15	Medium	Mature	Fair	...	\$3,384.58
363	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	4	Medium	Mature	Good	...	\$276.95
364	Firethorn	<i>Pyracantha</i>	sp.	3,3,3	Small	Mature	Good	...	\$545.24
365	Redcedar-Western (8)	<i>Thuja</i>	<i>plicata</i>	4	Medium	Mature	Good	...	\$276.95
366	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	4,3,3	Medium	Mature	Good	...	\$784.69
367	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6,5,5	Medium	Mature	Good	...	\$1,488.60
368	Maple	<i>Acer</i>	sp.	22	Medium	Semi-mature	Good	2	\$9,773.96

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
369	Spruce-Norway	<i>Picea</i>	<i>abies</i>	15	Medium	Mature	Good	...	\$3,570.03
370	Japanese Cryptomeria	<i>Cryptomeria</i>	<i>japonica</i>	14	Medium	Mature	Good	...	\$3,958.05
371	Plum-Purple Leaf	<i>Prunus</i>	<i>cerasifera</i>	15	Medium	Mature	Good	...	\$3,570.03
372	Plum-Purple Leaf	<i>Prunus</i>	<i>cerasifera</i>	9	Medium	Mature	Good	...	\$1,285.21
373	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	7,6,8	Medium	Mature	Good	...	\$2,579.08
374	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	12	Medium	Mature	Good	...	\$2,492.53
375	Holly-American	<i>Ilex</i>	<i>opaca</i>	10,6	Medium	Mature	Good	...	\$2,864.10
376	Holly-American	<i>Ilex</i>	<i>opaca</i>	6,6,5	Medium	Mature	Good	...	\$2,042.78
377	Holly-American	<i>Ilex</i>	<i>opaca</i>	27	Medium	Mature	Good	...	\$15,352.44
378	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	25	Medium	Mature	Good	1	\$9,916.76
379	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Medium	Semi-mature	Good	1	\$9,139.28
380	Privet	<i>Ligustrum</i>	sp.	2,2,2	Small	Mature	Good	...	\$242.33
381	Privet	<i>Ligustrum</i>	sp.	2,2,2	Small	Mature	Good	...	\$242.33
382	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	8	Small	Mature	Good	...	\$1,477.06
383	Lilac	<i>Syringa</i>	sp.	3,2,2	Medium	Mature	Fair	...	\$245.21
384	Walnut-Persian	<i>Juglans</i>	<i>regia</i>	26	Medium	Mature	Good	2	\$13,261.19
385	Redcedar-Eastern	<i>Juniperus</i>	<i>virginiana</i>	4	Medium	Mature	Good	...	\$346.19
386	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	22	Medium	Semi-mature	Good	...	\$11,170.24
387	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	9	Medium	Young	Good	...	\$1,285.21
388	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	11	Medium	Mature	Good	...	\$2,094.42
389	Maple-Red	<i>Acer</i>	<i>rubrum</i>	8	Medium	Young	Good	1	\$1,292.42
390	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	39	Large	Mature	Good	1	\$23,577.91
391	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	35	Large	Mature	Good	1	\$19,782.98
392	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	34	Large	Mature	Good	1	\$18,798.55
393	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	36	Large	Mature	Good	1	\$20,753.14
394	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	33	Large	Mature	Good	1	\$17,799.84

395	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	35	Large	Mature	Good	1	\$19,782.98
396	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	31	Large	Mature	Good	1	\$15,759.57
397	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	34	Large	Mature	Good	1	\$18,798.55
398	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	39	Large	Mature	Good	1	\$23,577.91
399	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	31	Large	Mature	Good	1	\$15,759.57
400	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	32	Large	Mature	Good	1	\$16,786.84

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
401	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Medium	Semi-mature	Good	1	\$571.21
402	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	7	Medium	Semi-mature	Good	1	\$777.47
403	Linden-American	<i>Tilia</i>	<i>americana</i>	41	Large	Mature	Good	1	\$31,955.98
404	Linden-American	<i>Tilia</i>	<i>americana</i>	21	Large	Semi-mature	Good	1	\$9,287.28
405	Maple-Red	<i>Acer</i>	<i>rubrum</i>	11	Medium	Semi-mature	Good	1	\$2,443.49
406	Maple-Red	<i>Acer</i>	<i>rubrum</i>	9	Medium	Young	Good	1	\$1,635.72
407	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	29	Large	Mature	Good	1	\$13,343.99
408	Elm	<i>Ulmus</i>	sp.	42	Large	Mature	Good	ASAP	\$31,710.18
409	Elm	<i>Ulmus</i>	sp.	5	Medium	Young	Good	1	\$360.61
410	Elm	<i>Ulmus</i>	sp.	46	Large	Mature	Good	1	\$35,807.66
411	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Medium	Semi-mature	Fair	...	\$3,672.03
412	Hackberry	<i>Celtis</i>	<i>occidentalis</i>	18,18,17	Large	Semi-mature	Good	...	\$17,029.71
413	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	6,6,5	Medium	Mature	Good	...	\$2,462.53
414	Hackberry	<i>Celtis</i>	<i>occidentalis</i>	7	Medium	Young	Good	...	\$890.56
415	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	30	Large	Mature	Good	1	\$17,655.44
416	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	29	Large	Mature	Good	1	\$16,498.02
417	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	31	Large	Mature	Good	1	\$18,476.73
418	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	33	Large	Mature	Good	ASAP	\$20,868.77

419	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	23	Large	Semi-mature	Good	ASAP	\$10,377.47
420	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	19	Medium	Semi-mature	Good	ASAP	\$5,727.92
421	Walnut-Persian	<i>Juglans</i>	<i>regia</i>	11	Medium	Semi-mature	Good	1	\$2,373.68
422	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	19	Medium	Mature	Good	2	\$7,290.08
423	GoldenraintreePanicked	<i>Koelreuteria</i>	<i>paniculata</i>	9	Medium	Mature	Good	2	\$1,472.15
424	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	11	Medium	Semi-mature	Good	2	\$1,919.88
425	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	12	Medium	Semi-mature	Good	2	\$2,284.82
426	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	14	Medium	Semi-mature	Good	2	\$3,109.90
427	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	13	Medium	Mature	Good	2	\$3,559.07
428	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	28	Large	Mature	Good	1	\$15,379.85
429	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	31	Large	Mature	Good	ASAP	\$18,476.73
430	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	30	Large	Mature	Good	ASAP	\$17,655.44

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
431	Maple-Norway (8)	<i>Acer</i>	<i>platanooides</i>	6	Medium	Young	Good	2	\$571.21
432	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	18	Medium	Semi-mature	Good	2	\$5,140.85
433	Spruce-Norway	<i>Picea</i>	<i>abies</i>	12	Medium	Mature	Good	...	\$2,284.82
434	Spruce-Norway	<i>Picea</i>	<i>abies</i>	7	Medium	Semi-mature	Good	...	\$777.47
435	Oak-White	<i>Quercus</i>	<i>alba</i>	3	Medium	Young	Good	1	\$228.48
436	Holly-American	<i>Ilex</i>	<i>opaca</i>	5,5	Small	Mature	Good	...	\$1,052.98
437	Holly-American	<i>Ilex</i>	<i>opaca</i>	8,7,4	Medium	Mature	Good	...	\$2,716.69
438	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	20	Medium	Mature	Fair	...	\$4,533.38
439	GoldenraintreePanicked	<i>Koelreuteria</i>	<i>paniculata</i>	11,9	Medium	Mature	Good	2	\$3,671.29
440	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	30	Large	Mature	Good	ASAP	\$14,280.13
441	Mulberry	<i>Morus</i>	sp.	31	Large	Mature	Good	...	\$12,227.25

442	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	4,3,3	Medium	Mature	Good	...	\$784.69
443	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	5,3,3	Medium	Mature	Good	...	\$992.40
444	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	13	Medium	Mature	Good	...	\$3,412.81
445	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	2	Small	Young	Good	...	\$84.24
446	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	20	Medium	Mature	Good	2	\$5,769.75
447	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	25	Medium	Mature	Good	1	\$9,015.23
448	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	30	Medium	Mature	Good	1	\$12,981.94
449	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	12	Medium	Mature	Good	2	\$2,077.11
450	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	33	Large	Mature	Good	ASAP	\$16,879.16
451	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	24	Large	Semi-mature	Good	2	\$11,299.48
452	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	35	Large	Mature	Good	...	\$18,759.73
453	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	44	Large	Mature	Good	...	\$21,724.32
454	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	6	Medium	Young	Good	...	\$571.21
455	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	12	Medium	Semi-mature	Good	...	\$1,869.40
456	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	7	Medium	Young	Good	2	\$636.11
457	Maple-Red	<i>Acer</i>	<i>rubrum</i>	4	Medium	Young	Good	2	\$323.11
458	Willow-Babylon Weeping	<i>Salix</i>	<i>babylonica</i>	12	Medium	Mature	Good	2	\$2,077.11
459	Spruce	<i>Picea</i>	sp.	12	Large	Mature	Fair	1	\$1,632.02
460	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	...	\$2,199.14

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
461	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	23	Medium	Semi-mature	Good	1	\$8,393.54
462	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	Good	...	\$923.16
463	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	1	\$706.79
464	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	9	Medium	Semi-mature	Good	1	\$1,285.21
465	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	4	Medium	Semi-mature	Good	1	\$253.87

466	Ash-White	<i>Fraxinus</i>	<i>americana</i>	19	Large	Mature	Good	...	\$5,519.63
467	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	13	Medium	Semi-mature	Good	...	\$2,681.49
468	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	54	Large	Mature	Good	1	\$27,755.55
469	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Medium	Semi-mature	Good	1	\$571.21
470	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Medium	Semi-mature	Good	1	\$571.21
471	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Semi-mature	Good	1	\$360.61
472	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Semi-mature	Good	1	\$360.61
473	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	9	Medium	Semi-mature	Good	1	\$1,285.21
474	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	4	Medium	Semi-mature	Good	1	\$253.87
475	Maple-Japanese	<i>Acer</i>	<i>palmatum</i>	9,11,8	Medium	Mature	Good	...	\$6,139.01
476	Redcedar-Western (13)	<i>Thuja</i>	<i>plicata</i>	4	Medium	Mature	Good	1	\$197.82
477	Cypress-Leyland	<sup>x</sup> <i>Cupressocyparis</i>	<i>leylandii</i>	8	Medium	Mature	Good	1	\$791.28
478	Lilac	<i>Syringa</i>	sp.	2,2,2	Medium	Mature	Good	...	\$242.33
479	Elm	<i>Ulmus</i>	sp.	41	Medium	Mature	Fair	2	\$21,887.66
480	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	20	Large	Semi-mature	Good	...	\$6,692.91
481	Spruce-Colorado Blue (4)	<i>Picea</i>	<i>pungens</i>	13	Medium	Mature	Good	...	\$2,681.49
482	Walnut-Black	<i>Juglans</i>	<i>nigra</i>	25	Large	Mature	Good	...	\$12,260.72
483	Spruce-Norway	<i>Picea</i>	<i>abies</i>	6	Medium	Semi-mature	Good	...	\$571.21
484	Falsecypress-Hinoki	<i>Chamaecyparis</i>	<i>obtusa</i>	5	Small	Mature	Good	...	\$504.85
485	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	3	Medium	Semi-mature	Good	...	\$155.78
486	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	3	Medium	Semi-mature	Good	...	\$155.78
487	Redcedar-Western	<i>Thuja</i>	<i>plicata</i>	3	Medium	Semi-mature	Good	...	\$155.78
488	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	9	Medium	Mature	Good	...	\$2,056.34
489	Maple-Red	<i>Acer</i>	<i>rubrum</i>	15	Medium	Semi-mature	Good	2	\$4,543.68

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
490	Maple-Sugar	<i>Acer</i>	<i>saccharum</i>	45	Large	Mature	Good	ASAP	\$37,295.51
491	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	2,2,2	Small	Semi-mature	Good	...	\$304.64
492	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	6	Medium	Semi-mature	Good	...	\$726.99
493	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	6	Medium	Semi-mature	Good	...	\$726.99
494	Arborvitae	<i>Thuja</i>	sp.	5	Medium	Semi-mature	Good	...	\$432.73
495	Crabapple	<i>Malus</i>	sp.	3	Small	Young	Good	...	\$163.57
496	Juniper	<i>Juniperus</i>	sp.	23	Large	Mature	Good	...	\$10,682.69
497	Maple-Silver	<i>Acer</i>	<i>saccharinum</i>	49	Large	Mature	Good	...	\$24,878.44
498	Ash-White	<i>Fraxinus</i>	<i>americana</i>	15	Large	Mature	Poor	ASAP	\$1,474.38
499	Locust-Black	<i>Robinia</i>	<i>pseudoacacia</i>	14,9	Medium	Semi-mature	Fair	ASAP	\$1,345.44
500	Spruce-Colorado Blue	<i>Picea</i>	<i>pungens</i>	12	Medium	Mature	Fair	...	\$1,632.02
501	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	17	Medium	Mature	Good	...	\$4,168.64
502	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	22	Medium	Mature	Good	2	\$6,981.40
503	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Fair	1	\$2,019.41
504	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	...	\$519.28
505	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	4	Medium	Mature	Good	...	\$276.95
506	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	3	Medium	Mature	Fair	...	\$111.27
507	Redbud-Eastern	<i>Cercis</i>	<i>canadensis</i>	9,8,7	Medium	Mature	Good	2	\$4,085.56
508	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	9	Medium	Mature	Fair	2	\$1,001.46
509	Cypress-Leyland (5)	<sup>x</sup> <i>Cupressocyparis</i>	<i>leylandii</i>	7	Medium	Mature	Good	...	\$848.15
510	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	4	Small	Semi-mature	Good	...	\$276.95
511	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	...	\$2,199.14
512	Crabapple	<i>Malus</i>	sp.	16	Medium	Mature	Good	...	\$4,652.73
513	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	1	Small	Young	Good	...	\$21.64
514	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	1	Small	Young	Good	...	\$21.64

515	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Young	Good	1	\$360.61
516	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	12	Medium	Semi-mature	Good	...	\$2,284.82
517	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	Good	1	\$989.51
518	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	9	Medium	Mature	Good	2	\$1,285.21
519	Maple-Red	<i>Acer</i>	<i>rubrum</i>	7	Medium	Young	Good	1	\$989.51
520	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	9	Medium	Semi-mature	Good	...	\$1,285.21

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
521	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	Good	1	\$726.99
522	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	14	Medium	Semi-mature	Good	2	\$3,109.90
523	Pine-Eastern White	<i>Pinus</i>	<i>strobus</i>	3	Small	Young	Good	...	\$142.80
524	Lilac	<i>Syringa</i>	sp.	5	Medium	Mature	Good	...	\$504.85
525	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	...	\$726.99
526	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	6	Medium	Mature	Good	2	\$571.21
527	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	15	Medium	Semi-mature	Good	...	\$3,570.03
528	Maple-Red	<i>Acer</i>	<i>rubrum</i>	10	Medium	Semi-mature	Good	1	\$2,019.41
529	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	16	Medium	Mature	Good	2	\$3,692.64
530	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	2	\$2,199.14
531	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	2	\$2,827.18
532	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	2	\$2,199.14
533	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	15	Medium	Mature	Good	2	\$3,245.48
534	Crabapple	<i>Malus</i>	sp.	9	Medium	Mature	Good	2	\$1,472.15
535	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	2	\$2,437.72
536	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	2	\$2,199.14
537	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	2	\$2,827.18
538	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	2	\$2,199.14
539	Crabapple	<i>Malus</i>	sp.	10	Medium	Mature	Good	2	\$1,817.47

540	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	15	Medium	Mature	Good	2	\$3,245.48
541	Crabapple	<i>Malus</i>	sp.	10	Medium	Mature	Good	2	\$1,817.47
542	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	2	\$2,437.72
543	Crabapple	<i>Malus</i>	sp.	8	Medium	Mature	Good	2	\$1,163.18
544	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Fair	2	\$834.55
545	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	2	\$2,199.14
546	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	15	Medium	Mature	Good	2	\$3,245.48
547	Crabapple	<i>Malus</i>	sp.	10	Medium	Mature	Good	2	\$1,817.47
548	Magnolia-Saucer	<i>Magnolia</i>	<i>x soulangiana</i>	14,11,1 1	Medium	Mature	Good	...	\$8,845.03
549	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	20	Medium	Semi-mature	Fair	...	\$4,533.38
550	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	3	Small	Young	Good	1	\$181.75
551	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Semi-mature	Good	1	\$360.61

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
552	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Medium	Young	Fair	1	\$129.82
553	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	5	Medium	Semi-mature	Good	1	\$396.67
554	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	1	\$519.28
555	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	Good	1	\$726.99
556	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	1	\$519.28
557	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	3	Medium	Semi-mature	Good	1	\$181.75
558	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	1	\$519.28
559	Elm	<i>Ulmus</i>	sp.	3	Medium	Young	Good	1	\$181.75
560	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	1	\$706.79
561	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	1	\$706.79
562	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	1	\$706.79
563	Maple-Red	<i>Acer</i>	<i>rubrum</i>	5	Medium	Young	Good	1	\$504.85

564	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	Good	1	\$923.16
565	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	Good	1	\$726.99
566	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	Good	1	\$923.16
567	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	18	Medium	Semi-mature	Good	...	\$5,140.85
568	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	32	Large	Mature	Good	...	\$16,786.84
569	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	36	Large	Mature	Good	...	\$20,753.14
570	Pine-Japanese Black	<i>Pinus</i>	<i>thunbergii</i>	12	Medium	Semi-mature	Fair	...	\$2,225.48
571	Pine-Japanese Black	<i>Pinus</i>	<i>thunbergii</i>	12	Medium	Semi-mature	Fair	...	\$2,225.48
572	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	...	\$2,437.72
573	Pear-Callery (4)	<i>Pyrus</i>	<i>calleryana</i>	13	Medium	Mature	Good	...	\$2,437.72
574	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	9	Medium	Mature	Good	...	\$1,168.37
575	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	2	Medium	Young	Good	1	\$86.55
576	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	25	Medium	Mature	Good	2	\$13,522.85
577	Lilac	<i>Syringa</i>	sp.	3	Medium	Young	Good	2	\$181.75
578	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	3	Medium	Young	Good	...	\$181.75
579	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	5	Small	Young	Good	2	\$396.67
580	Birch	<i>Betula</i>	sp.	2	Medium	Young	Good	...	\$80.78
581	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	5	Medium	Semi-mature	Good	2	\$360.61
582	Birch	<i>Betula</i>	sp.	2	Medium	Semi-mature	Good	...	\$80.78
583	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	8	Medium	Semi-mature	Good	2	\$1,015.48

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
584	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	4	Medium	Semi-mature	Good	2	\$230.79
585	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	5	Medium	Semi-mature	Good	2	\$396.67
586	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	6	Medium	Semi-mature	Good	2	\$519.28
587	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	12	Medium	Semi-mature	Good	2	\$2,284.82
588	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	1	Small	Young	Good	2	\$20.19

589	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	7	Medium	Semi-mature	Good	2	\$706.79
590	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	1	Small	Young	Good	2	\$20.19
591	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	8	Medium	Semi-mature	Good	2	\$1,015.48
592	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	1	Small	Young	Good	2	\$20.19
593	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Semi-mature	Good	2	\$923.16
594	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	5	Medium	Semi-mature	Good	2	\$396.67
595	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	Good	1	\$1,745.35
596	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	10	Medium	Mature	Good	1	\$1,442.44
597	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	11	Medium	Mature	Good	1	\$1,745.35
598	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	14	Medium	Mature	Good	1	\$2,827.18
599	Lilac	<i>Syringa</i>	sp.	1	Small	Young	Good	1	\$20.19
600	Lilac	<i>Syringa</i>	sp.	1	Small	Young	Good	...	\$20.19
601	Lilac	<i>Syringa</i>	sp.	1	Small	Young	Good	...	\$20.19
602	Crabapple	<i>Malus</i>	sp.	17	Medium	Mature	Good	1	\$5,252.49
603	Crabapple	<i>Malus</i>	sp.	14	Medium	Mature	Good	1	\$3,562.24
604	Elm	<i>Ulmus</i>	sp.	1	Medium	Young	Good	...	\$20.19
605	Elm	<i>Ulmus</i>	sp.	1	Small	Young	Good	...	\$20.19
606	Crabapple	<i>Malus</i>	sp.	7	Medium	Mature	Good	2	\$890.56
607	Serviceberry	<i>Amelanchier</i>	sp.	1	Small	Young	Good	...	\$23.08
608	Serviceberry	<i>Amelanchier</i>	sp.	1	Small	Young	Good	...	\$23.08
609	Serviceberry	<i>Amelanchier</i>	sp.	1	Small	Young	Good	...	\$23.08
610	Serviceberry	<i>Amelanchier</i>	sp.	1	Small	Young	Good	...	\$23.08
611	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	24	Medium	Semi-mature	Good	1	\$9,139.28
612	Cherry-Flowering	<i>Prunus</i>	<i>serrulata</i>	19	Medium	Semi-mature	Good	...	\$5,727.92
613	Crabapple	<i>Malus</i>	sp.	11	Medium	Mature	Good	...	\$2,199.14
614	Lilac	<i>Syringa</i>	sp.	9	Medium	Mature	Good	...	\$1,635.72
615	Maple-Red	<i>Acer</i>	<i>rubrum</i>	13	Medium	Semi-mature	Good	1	\$3,412.81

Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
616	Crabapple	<i>Malus</i>	sp.	3,2,2	Medium	Mature	Good	2	\$308.97
617	Lilac	<i>Syringa</i>	sp.	10	Medium	Mature	Good	...	\$2,019.41
618	Crabapple	<i>Malus</i>	sp.	8	Medium	Mature	Good	...	\$1,163.18
619	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	10	Medium	Mature	Good	...	\$2,538.69
620	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	5	Medium	Mature	Good	...	\$634.67
621	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	6,5,5	Medium	Mature	Good	...	\$1,488.60
622	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	1	Medium	Young	Good	...	\$21.64
623	Maple-Trident	<i>Acer</i>	<i>buergeranum</i>	13	Large	Semi-mature	Good	1	\$3,412.81
624	Maple-Trident	<i>Acer</i>	<i>buergeranum</i>	17	Large	Semi-mature	Good	1	\$5,836.10
625	Dogwood-Flowering	<i>Cornus</i>	<i>florida</i>	1	Small	Young	Good	...	\$17.31
626	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	1	Small	Young	Good	...	\$21.64
627	Boxwood-Common	<i>Buxus</i>	<i>sempervirens</i>	10	Medium	Mature	Good	...	\$2,019.41
628	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	18	Medium	Semi-mature	Good	...	\$7,010.25
629	Maple-Red	<i>Acer</i>	<i>rubrum</i>	23	Large	Semi-mature	Fair	1	\$7,630.49
630	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	13	Medium	Semi-mature	Good	...	\$3,656.58
631	Maple-Norway	<i>Acer</i>	<i>platanoides</i>	13	Medium	Semi-mature	Good	1	\$2,681.49
632	Maple-Red	<i>Acer</i>	<i>rubrum</i>	9	Medium	Young	Good	...	\$1,635.72
633	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	33	Large	Mature	Good	...	\$17,799.84
634	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	34	Large	Mature	Good	1	\$18,798.55
635	Elm	<i>Ulmus</i>	sp.	2	Medium	Young	Fair	1	\$57.70
636	Tuliptree	<i>Liriodendron</i>	<i>tulipifera</i>	1	Small	Young	Good	...	\$20.19
637	Crabapple	<i>Malus</i>	sp.	10	Medium	Mature	Good	2	\$1,817.47
638	Lilac	<i>Syringa</i>	sp.	1	Small	Young	Good	...	\$20.19
639	Zelkova-Japanese	<i>Zelkova</i>	<i>serrata</i>	1	Medium	Young	Good	...	\$21.64
640	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	1	Medium	Young	Good	1	\$16.73
641	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	1	Medium	Young	Good	...	\$16.73

642	Sycamore-American	<i>Platanus</i>	<i>occidentalis</i>	1	Medium	Young	Good	1	\$16.73
643	Maple-Red	<i>Acer</i>	<i>rubrum</i>	5	Medium	Young	Good	1	\$504.85
644	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	Good	1	\$726.99
645	Maple-Red	<i>Acer</i>	<i>rubrum</i>	6	Medium	Young	Good	1	\$726.99
646	Maple-Red	<i>Acer</i>	<i>rubrum</i>	3	Medium	Semi-mature	Good	1	\$181.75
647	Ginkgo	<i>Ginkgo</i>	<i>biloba</i>	1	Small	Young	Good	...	\$20.19
Tree ID	Common Name	Genus	Species	DBH	Height Class	Age Class	Condition Class	Tree & Shrub Work Phase	Tree Asset Value
648	Serviceberry	<i>Amelanchier</i>	sp.	1	Small	Young	Good	...	\$23.08
649	Snowbell	<i>Styrax</i>	sp.	1	Small	Young	Good	...	\$23.08
650	Dogwood-Kousa	<i>Cornus</i>	<i>kousa</i>	4	Small	Semi-mature	Good	...	\$406.19
651	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	23	Medium	Semi-mature	Good	...	\$8,393.54
652	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	32	Medium	Mature	Good	1	\$15,918.56
653	Maple-Norway	<i>Acer</i>	<i>platanooides</i>	28	Medium	Mature	Good	ASAP	\$12,439.58
654	Pear-Callery	<i>Pyrus</i>	<i>calleryana</i>	8	Medium	Mature	Good	2	\$923.16
655	Lilac	<i>Syringa</i>	sp.	6	Medium	Mature	Good	2	\$726.99

## APPENDIX



### ADDITIONAL RESOURCES

Bartlett publishes a variety of tree-resource documents, including technical reports, plant health care recommendations, and service brochures. The following technical reports may be pertinent to your inventory. To access these documents and view the complete Bartlett Resource Library online, please follow this URL:

<https://www.bartlett.com/resourcelist.cfm>

**Girdling Roots**

**Maintenance Pruning Program**

**Monitor IPM Program**

**Mulch Application Guidelines**

**Tree Risk Assessments**

**Tree Structure Evaluation**

## GLOSSARY OF TERMS

**air pollution removal:** removal of pollutants from the air by plants through natural processes

**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]

**cabbling:** 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

**carbon sequestration:** removal of carbon from the air by plants through natural processes

**carbon storage:** storage of carbon removed from the air in plant tissues

**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 non-fruiting 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 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]

**noise attenuation:** reducing sound levels via materials, structures, plants, etc.

**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 Z133.12000 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 Management]

**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]

**soil pH:** A measure of the acidity or alkalinity of the soil.

**stormwater runoff:** water (generally from rain or snow melt) that flows over the ground after storm events.

**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 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]

**trunk:** That portion of a stem or stems of a tree before branching occurs. [ANSA Z60.12004 Nursery Stock]

**vigor:** Overall health. Capacity to grow and resist stress. [ISA Municipal Specialist Certification Study Guide 2008]

**wound:** An opening that is created when the bark of a living branch or stem is penetrated, cut, or removed. [ANSI A300 (Part 1)-2001 Pruning]