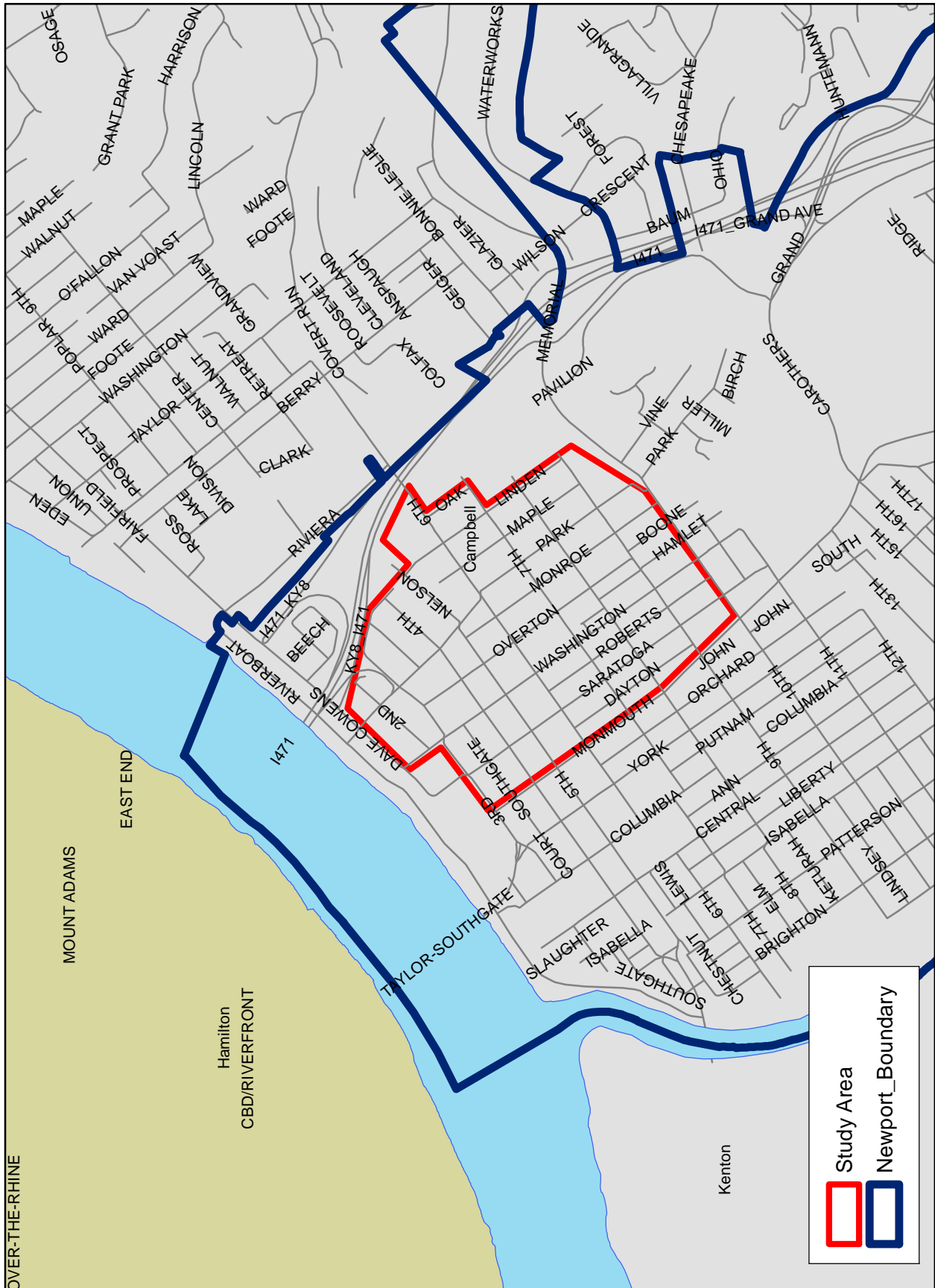


APPENDICES



TREE INVENTORY

East Row Tree Inventory 2013



ACTIVITY SINCE 2004 East Row Tree Inventory 2013



ASH TREES East Row Tree Inventory 2013



ALB / EAB LOSS POTENTIAL East Row Tree Inventory 2013



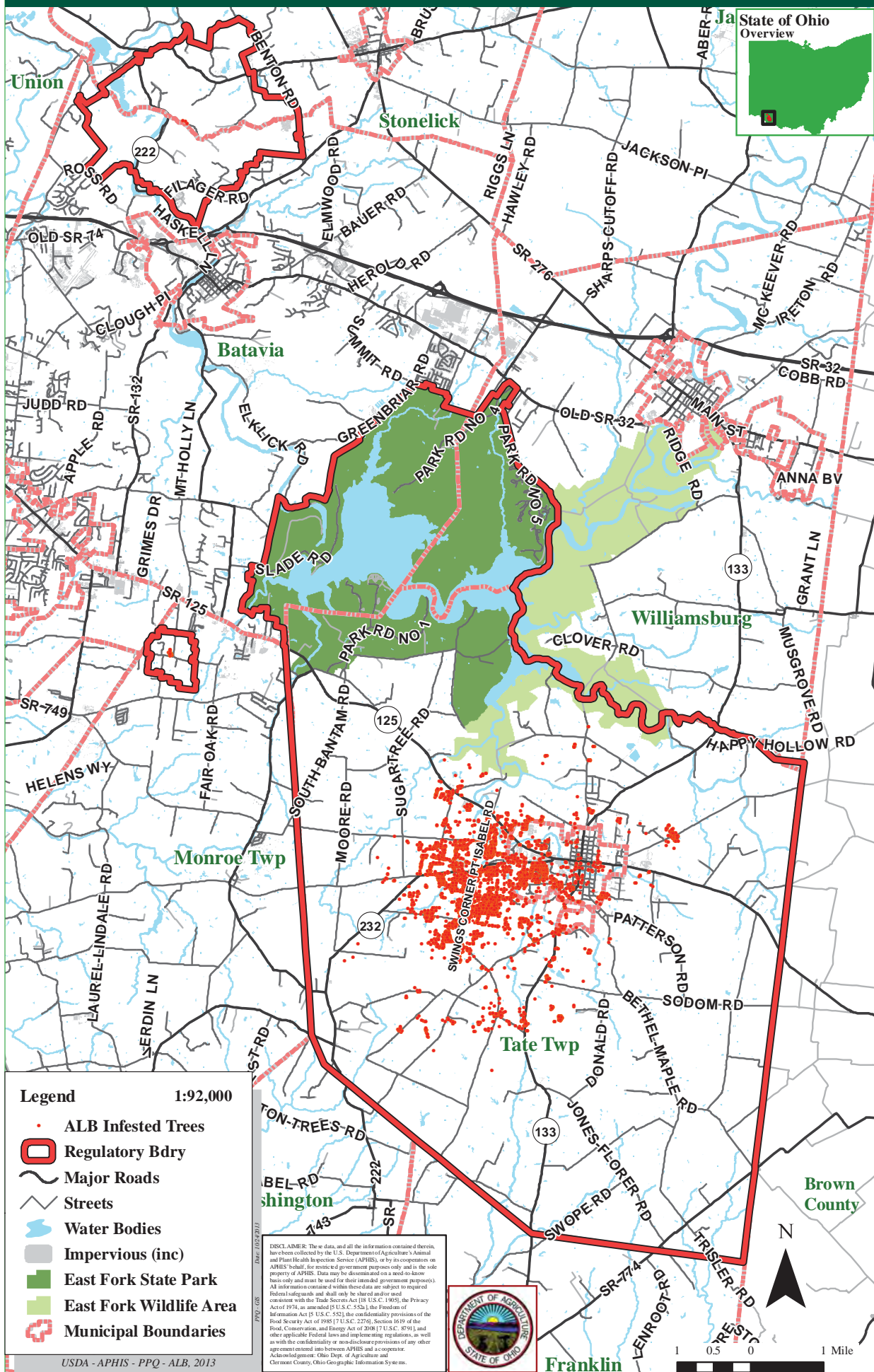


United States
Department of
Agriculture

Asian Longhorned Beetle Cooperative Eradication Program

10 / 24 / 2013

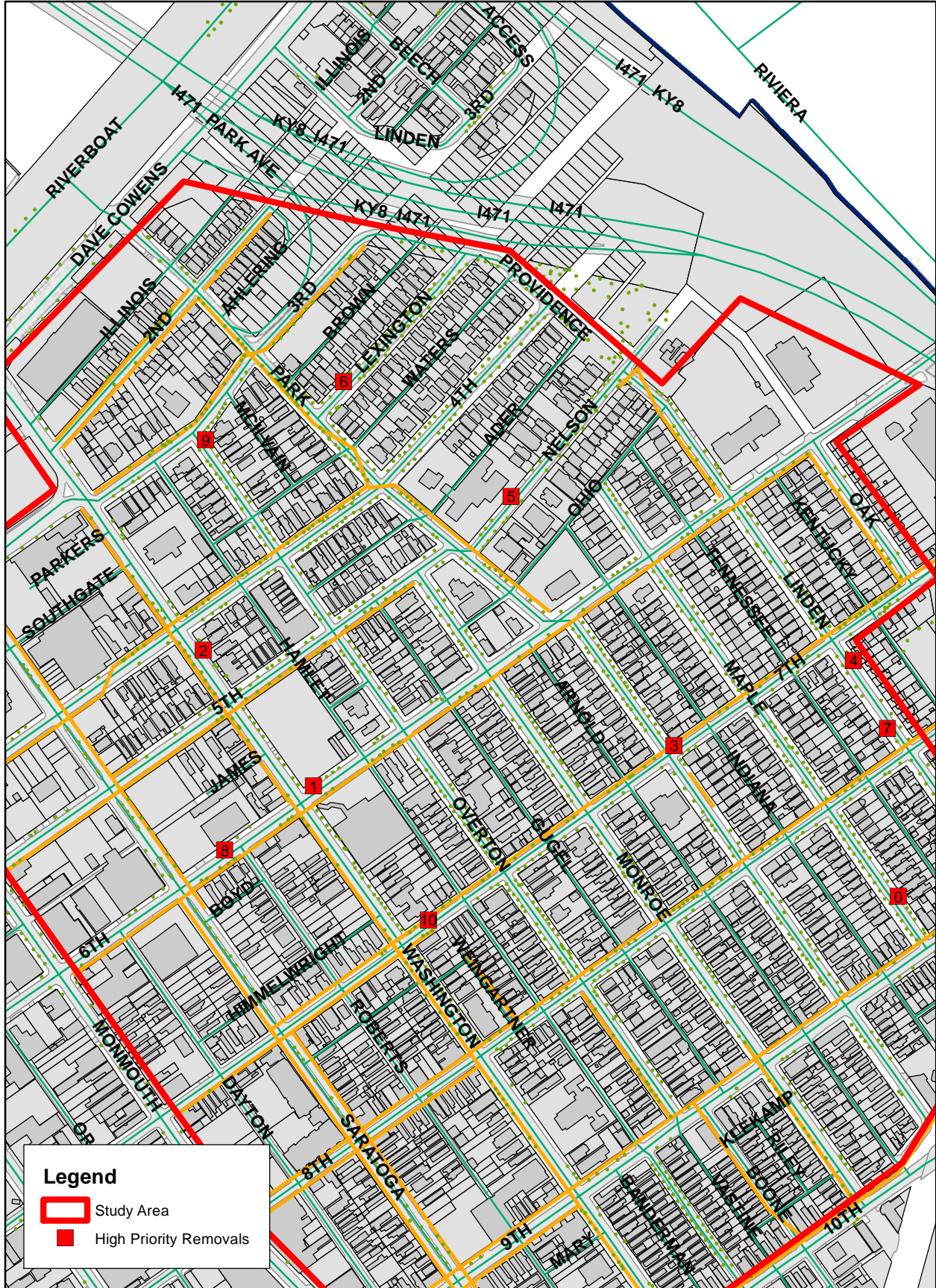
Clermont County, Ohio

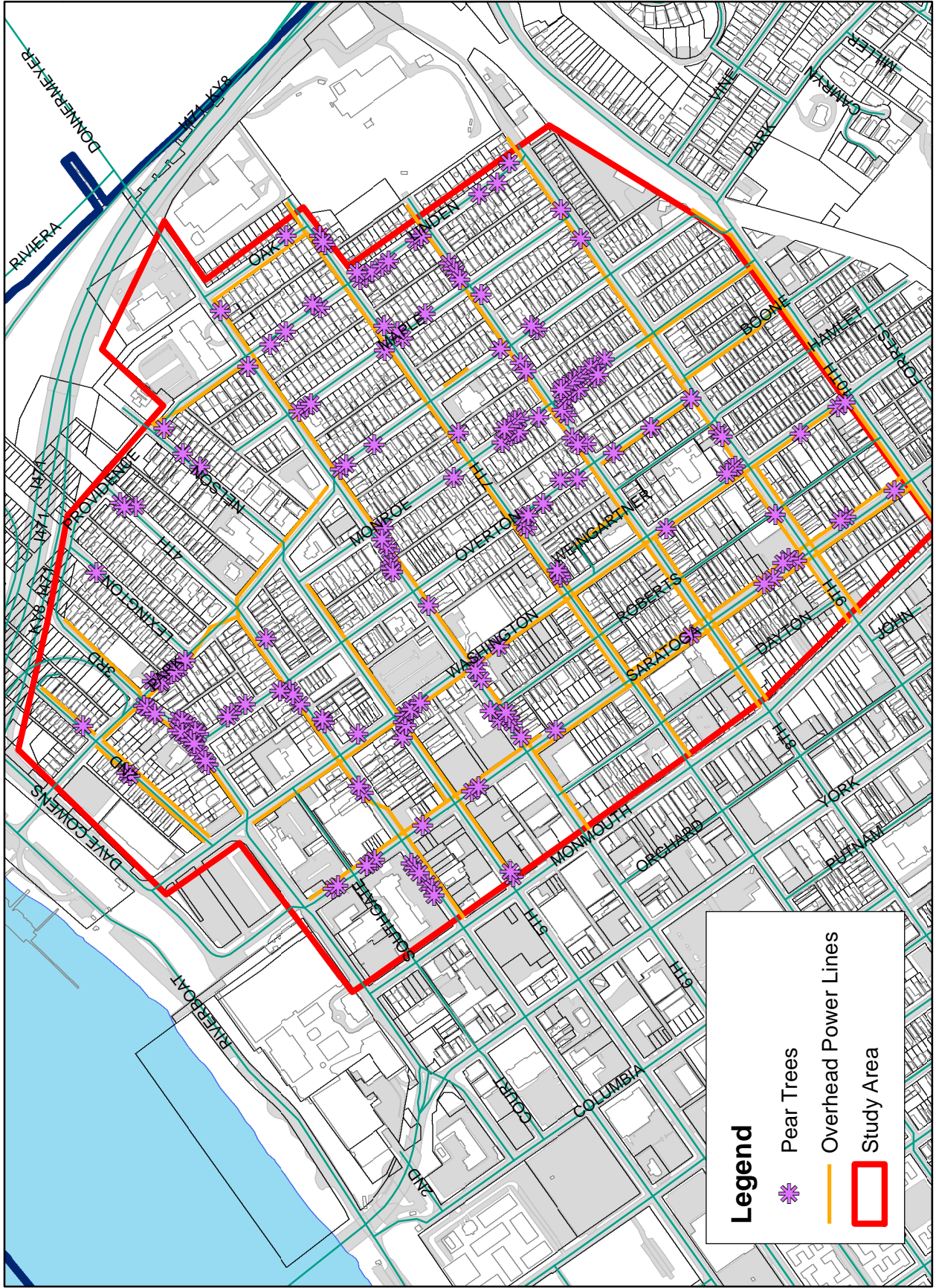


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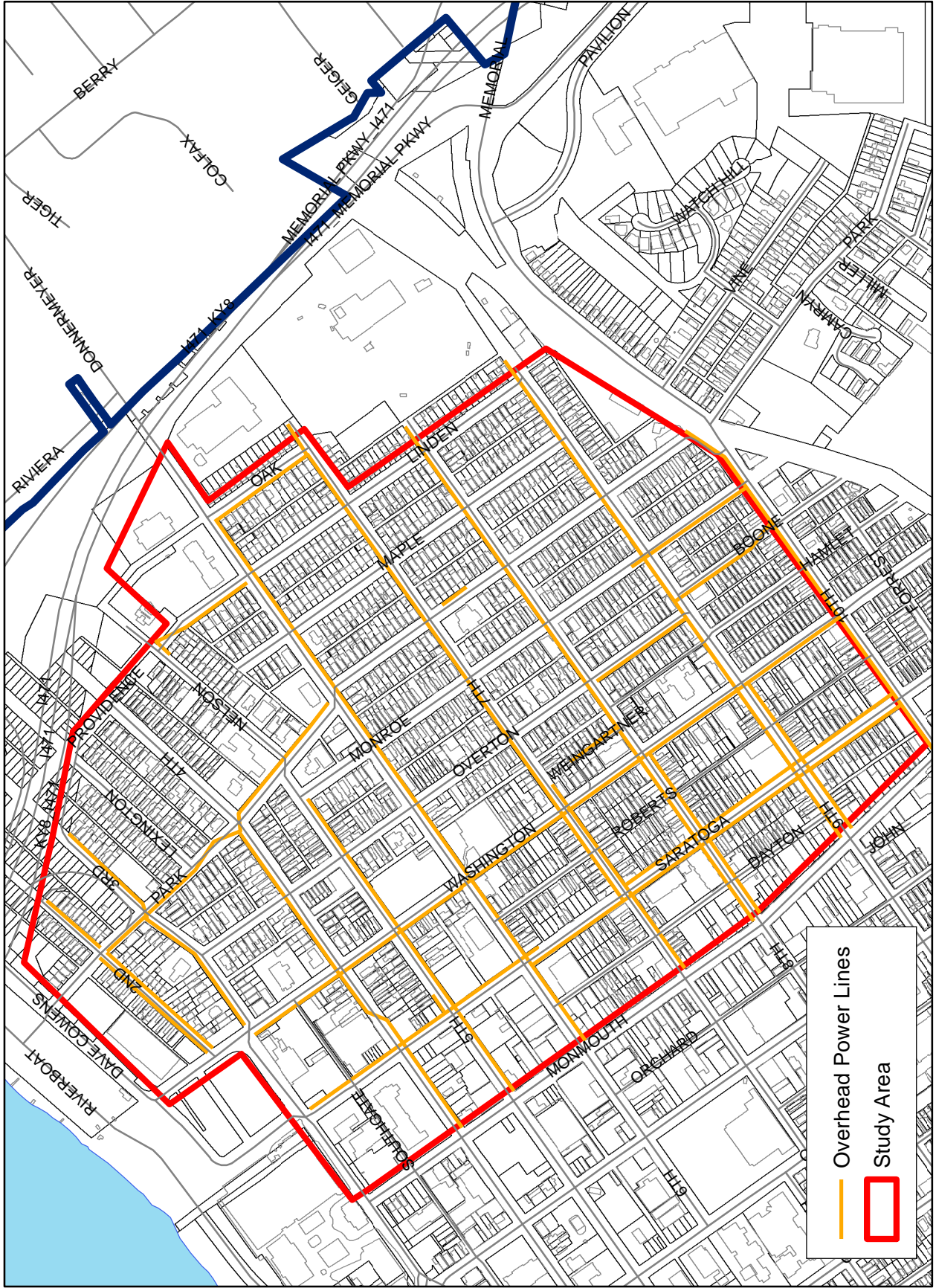
East Row Tree Inventory (9/27/2013) High Priority Removal List

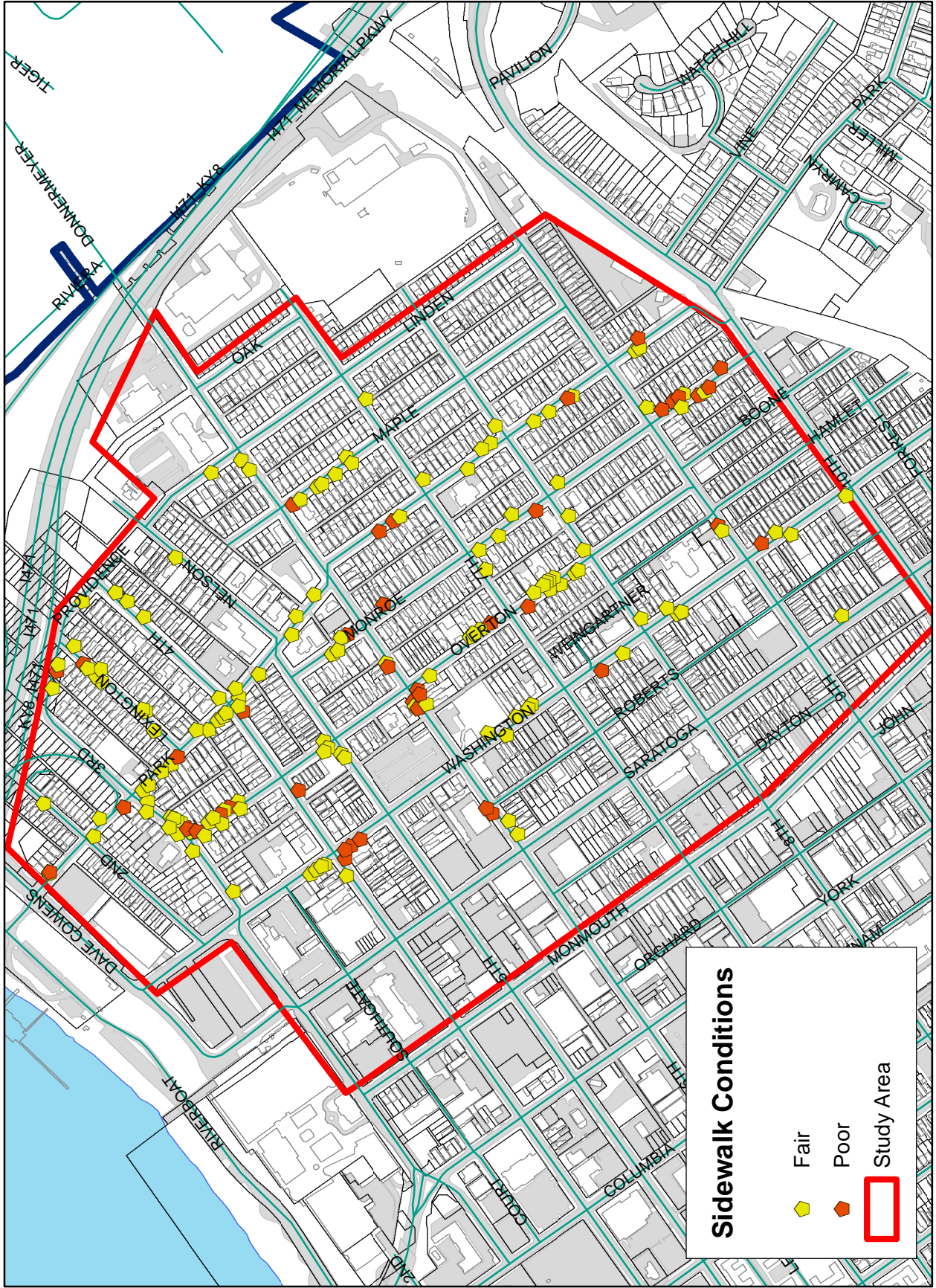




Legend

-  Pear Trees
-  Overhead Power Lines
-  Study Area



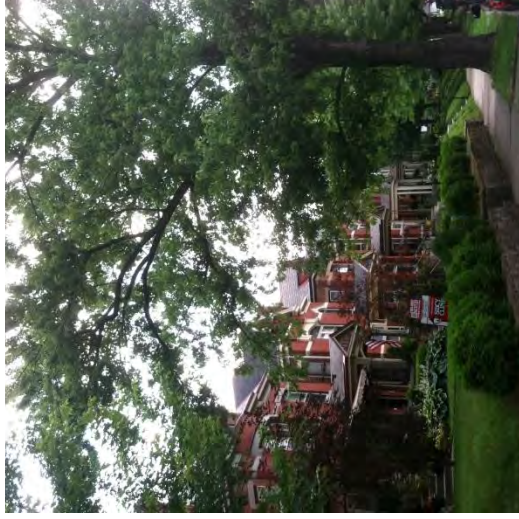


Sidewalk Conditions

- Fair
- Poor
- Study Area

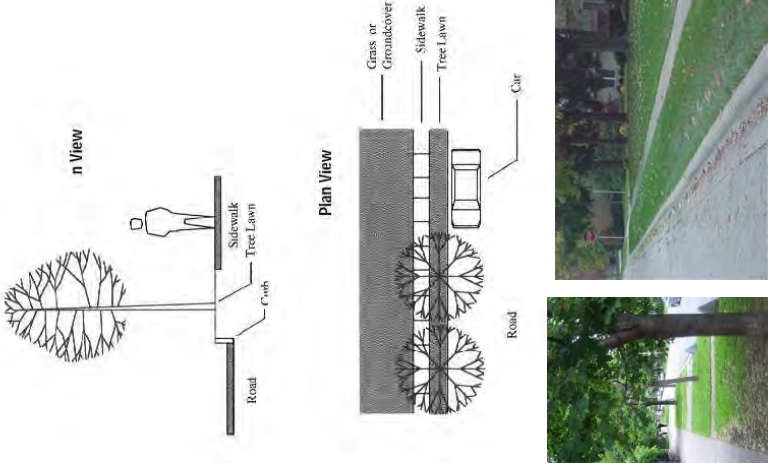
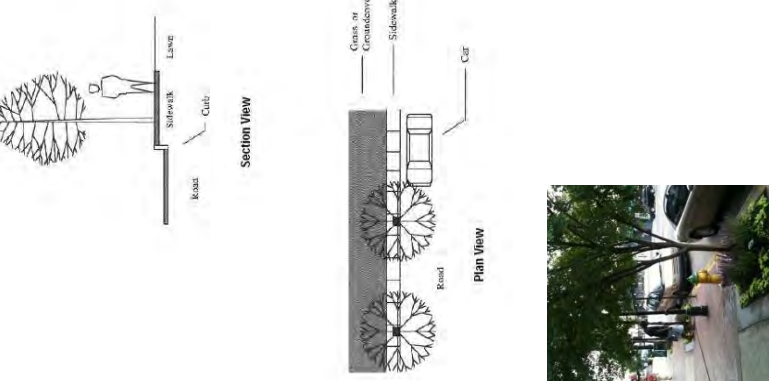

East Row Street Tree Inventory Manual

Summer 2013



What is a street tree?

A street tree is one that is located within the right-of-way or layout of a public road. Usually the laws of the individual state grant authority to the local municipalities for the street trees and public shade trees within their geographical area. Inventory volunteers should follow the guidelines below to determine whether a particular tree should be counted. A street tree will be located relative to a public street in one of the following ways:

<p>Tree Lawn: The tree is located between the curb and the sidewalk.</p>		<p>Tree Well: The tree is located within the sidewalk in a tree well or pit.</p>	
<p>Median: The tree is located on a traffic island or median strip.</p>			

What is NOT a street tree? A tree located between the sidewalk and house or in the front yard of a property. A tree might appear to be a street tree because it arches over the street. While that tree is a valuable component of the community forest, it will not be counted in the inventory. These trees are the responsibility of the property owner to maintain.

PROCESS

Data to be collected in teams of two. You will choose your block area(s) and receive a data entry form and a map. Your team will then have two weeks to return the map/forms. Tree number and utility lines need to be drawn on map. All other data is recorded on the data form provided.

1. Tree Location

Assign a location to the tree and note it in two places – a number on the map, and an address on the form. If a tree falls in between two homes, just choose the closest property address.

2. Size (DBH)

Trees will be measured at DBH (Diameter at Breast Height) which is considered 4.5' above ground level.

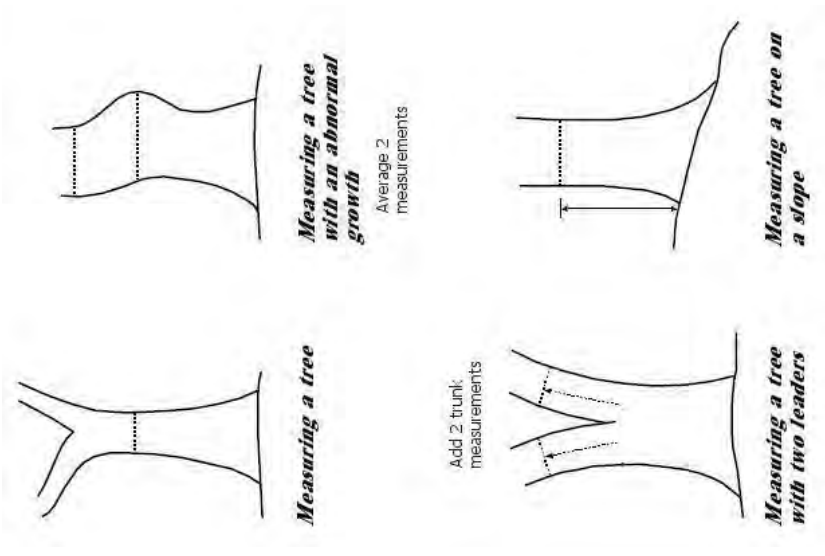
Two common ways to measure DBH:

- a. Use a standard tape measure around the trunk of the tree. Calculate diameter with the following equation:

$$\text{Diameter} = \text{Circumference} / 3.14$$

- b. Using a tree tape.




All trees are not the same shape, and because of this characteristic you may run into some problems measuring DBH. To get accurate measurements, you must adjust the position of the measurement. Some of the common problems you might face when measuring DBH are shown to the right.



3. Utility Lines Overhead

Please note whether there are lines overhead, and draw in the lines locations on the map provided.



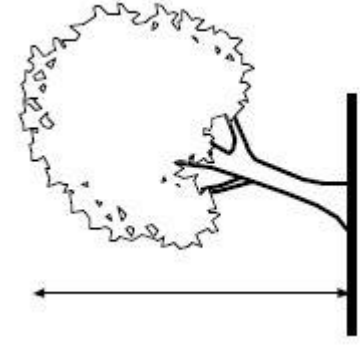

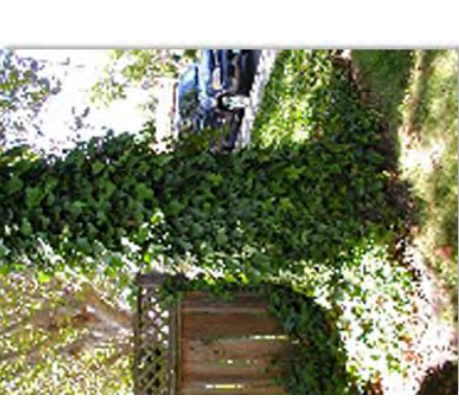
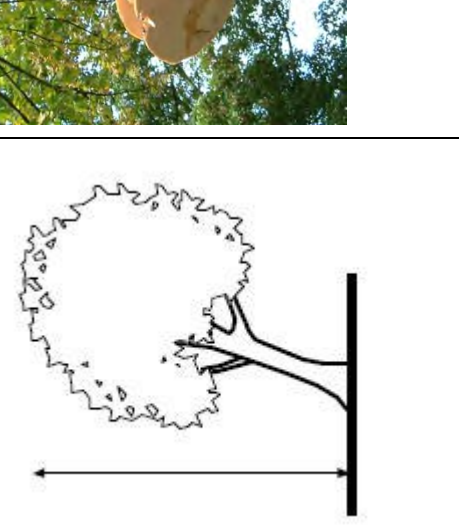

4. Growing Space Type & Size

GROWSPACE Type	Picture Example	SIZE of Growspace
Tree Lawn		Measure depth of tree lawn only – linear distance from sidewalk to street. Example: 10 lf (linear feet)
Tree Well		Measure square footage of tree well opening. Example: 6 sf (square feet)
Median		Measure width of green space in median. Example: 6 lf (linear feet)
Open/Unrestricted	Parks, right of ways ,etc.	No measurement needed.

5. Sidewalk Condition

Condition	Picture Example	Description
<p>GOOD</p>		<p>Mostly level Only minor defects</p>
<p>FAIR</p>		<p>Some damage Bumps under 2" Still navigable</p>
<p>POOR</p>		<p>Severe trip hazard (over 2") Would not be able to get stroller or walker over without problems.</p>

6. Observations / Notes

<p>POWER LINES OBSTRUCTION</p> 	<p>TRUNK IVY</p> 	<p>LEANING</p> 	<p>CONKS / FUNGI</p> 
<p>CANOPY DIEBACK</p> 		<p>MULCH VOLCANOS</p> 	
<p>CANOPY TOO LOW</p> <p>(can't drive or walk under)</p> 		<p>OTHER NOTES</p> <p>Possible things: mechanical injury, bark falling off, etc.</p>	

7. Tree ID

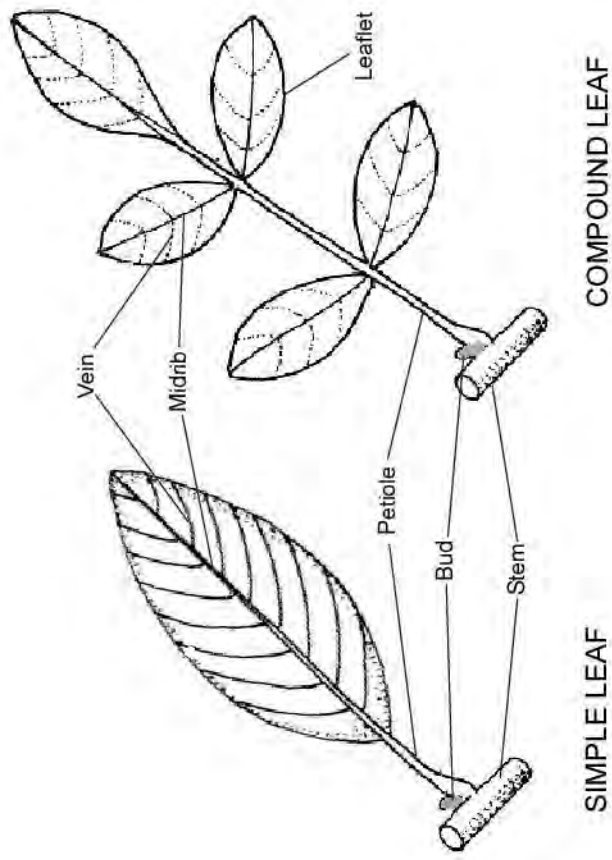
Options. 90% of the street trees in the East Row will fall under one of these genus/species below.

Apple / Crabapple	Locust, Black	Sweetgum
Catalpa	Locust, Honey	Tree Lilac
Cottonwood	Maple, Red	Tuliptree
Dogwood	Maple, Silver	Yellowwood
Elm	Maple, Sugar	Zelkova
Ginkgo	Oak	
Goldenraintree	Pear	Stump
Hawthorn	Planetree	Unknown
Linden	Redbud	

Leaf Parts & Terms.

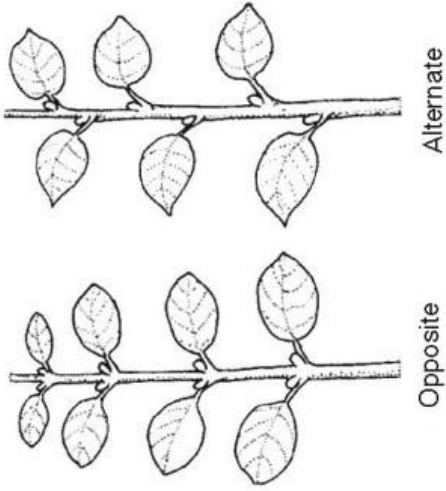
To identify genus or species of tree, we will use a tree key.

In order to use the tree key, a basic knowledge of tree parts and terminology is required.

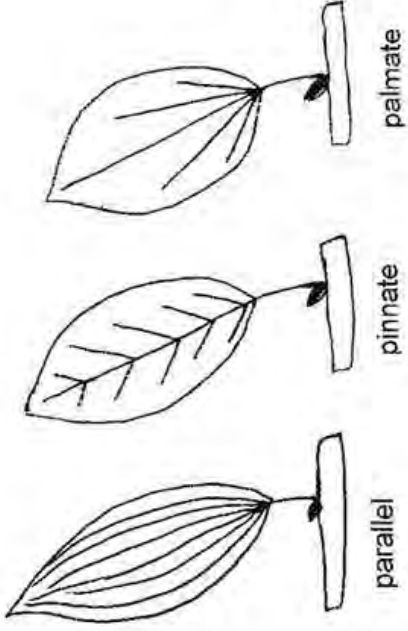


BRANCH/LEAF PATTERN

The pattern can sometimes be difficult to ascertain in older growth. Be sure to look at many different branches to determine the dominant pattern.

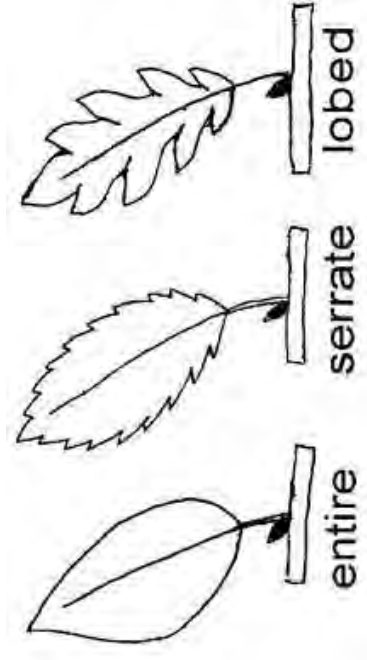


VEIN LAYOUT



(Pinnate -branching from an axis) (Palmate -branching from a point)

LEAF MARGINS and SHAPES



Entire - edge margin of leaf lacks teeth or lobes

Serrate -edge margin of leaf has teeth

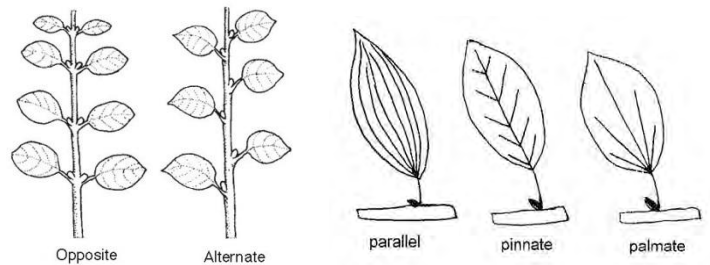
Lobed - having deeply indented margins

EAST ROW TREE KEY

1. Leaves/branches opposite. 2
1. Leaves/branches alternate. 4

OPPOSITE

2. Leaves simple. 3
2. Leaves compound. ASH













3. Leaves pinnately veined. TREE LILAC, CATALPA, DOGWOOD (go to photo box A)
3. Leaves palmately veined. MAPLE species (go to photo box B).

ALTERNATE

4. Leaves compound. LOCUST, GOLDENRAINTREE, YELLOWWOOD (go to photo box C)
4. Leaves simple. 5
5. Leaves lobed. 6
5. Leaves not lobed. 8
6. Leaves palmately veined. PLANETREE, SWEETGUM (go to photo box D)
6. Leaves pinnately veined. 7
7. Has thorns HAWTHORN
7. No thorns OAK, TULIPTREE (go to photo box E)
8. Leaves pinnately veined. 9
8. Leaves palmately veined. GINGKO, REDBUD, LINDEN (go to photo box F)
9. Petiole is long (more than 1/2 as long as leaf blade, often as long). PEAR or COTTONWOOD (go to photo box G)
9. Petiole is short (less than 1/2 as long as leaf blade). ELM, ZELKOVA, BIRCH (go to photo box H)

PHOTO BOXES for TREE KEY

<p>A</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>JAP. TREE LILAC <i>Syringa reticulata</i></p> <p>Dark green color on top Lilac flower remnants *Horizontal lenticels</p> </div> <div style="text-align: center;">  <p>CATALPA <i>Catalpa sp.</i></p> <p>Heart shape Large leaves *Beans</p> </div> <div style="text-align: center;">  <p>DOGWOOD <i>Cornus sp.</i></p> <p>Elliptical shape *Veins curve upward along leaf Pointy tip</p> </div> </div>
<p>B</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>SUGAR MAPLE</p> </div> <div style="text-align: center;">  <p>SILVER MAPLE</p> </div> <div style="text-align: center;">  <p>RED MAPLE</p> </div> <div style="text-align: center;">  <p>JAPANESE MAPLE</p> </div> </div>
<p>C</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>YELLOWWOOD Odd number of leaflets (7-9) Smooth bark</p> </div> <div style="text-align: center;">  <p>BLACK LOCUST Ovate (egg-shaped) leaflets, usually once compound only. Less than 20 leaflets per leaf.</p> <p>HONEY LOCUST Lanceolate (narrow) leaflets, multiple compounded. Often more than 20 leaflets per leaf.</p> </div> <div style="text-align: center;">  <p>GOLDENRAINTREE Serrated leaflets Yellow flowers, large seed pods</p> </div> </div>

D

PLANETREE
* smooth white/yellow bark, like a sycamore



SWEETGUM



E

TULIPTREE / TULIP POPLAR



OAK Sp.



F

GINGKO










REDBUD



LINDEN
*seed pod



<p>G</p>	<p>PEAR - look for fruit, shiny leaves</p>  	<p>COTTONWOOD - very large leaves, chunky bark</p> 	
<p>H</p>	<p>ELM - Doubly serrated **uneven at base</p> 	<p>ZELKOVA - singly serrated, somewhat scalloped shape teeth</p>  <p>Zelkova</p>	<p>BIRCH - peeling bark, often multistemmed - triangle shaped leaf -doubly serrated</p>  

EAST ROW TREE INVENTORY PROJECT

DIRECTIONS:

1. Record tree number on map.
2. Draw in any overhead utility lines.

Assignment: _____

