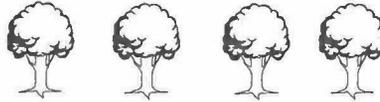


MAPLE GROVE
ARBOR COMMITTEE
REGULAR MEETING
MAY 12, 2016
7:00 PM – ROOM 183
MAYOR'S CONFERENCE ROOM



1. CALL TO ORDER

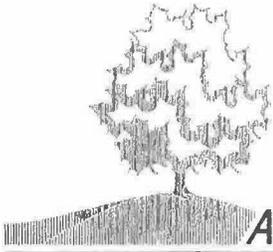
2. APPROVAL OF AGENDA AND MINUTES
 - A. APPROVAL OF AGENDA
 - B. APPROVAL OF MINUTES – APRIL 14, 2016 REGULAR MEETING

3. OLD BUSINESS
 - A. REVIEW OF 2016 ARBOR DAY EVENT
 - B. REVISED EAB MANAGEMENT PLAN

4. NEW BUSINESS
 - A. PRESTIGE SCHOOL LANDSCAPE PLAN
 - B. BOTTINEAU RIDGE 2ND ADDITION LANDSCAPE PLAN
 - C. AUTO ZONE LANDSCAPE PLAN

5. AREA REPORTS

6. ADJOURNMENT



MAPLE GROVE
ARBOR COMMITTEE

REQUEST FOR COMMITTEE ACTION

Item Number: 2 A & B

Meeting Date: May 12, 2016

Agenda Heading: Approval of Agenda and Minutes

Agenda Item: Approval of Agenda and Minutes

Recommended Committee Action:

Call by Chairperson _____ for any additions or revisions to the agenda.

Motion by Committee member _____, seconded by Committee member _____ to approve as proposed or approve as amended the agenda for the May 12, 2016 regular meeting.

Motion by Committee member _____, seconded by Committee member _____ to approve the minutes of the April 14, 2016 regular meeting as presented or as amended.

Discussion:

Committee Comments:

**MAPLE GROVE
ARBOR COMMITTEE
REGULAR MEETING
April 14, 2016
MAPLE GROVE GOVERNMENT CENTER
7:00 PM**

Call to Order

The regular meeting of the Arbor Committee was called to order by Chairperson Mary Parenteau at 7:00 pm.

Members Present

Mary Parenteau, Julie Gamber, Joe Hogeboom, Frank Kampel, Marilyn Arnlund, Terri Polski, Ed Reichow, Steve Courtney, Dan Sanford

Members Absent

Mary Lynn Kenknight, Rory Howell

Also Present

Kelly Matzke - Staff Representative
Judy Hanson, City Council Member Liaison

Oath of Office

Council Member Hanson conducted the Oath of Office for newly appointed Committee Member Dan Sanford. Sanford and his family are longtime Maple Grove residents and Sanford is a longtime employee of Grove Nursery. Sanford hopes his experience in the nursery industry can prove useful to his service on the Arbor Committee.

Approval of Agenda
and Minutes

Chairperson Parenteau asked if there were any additions or revisions to the agenda. Committee Member Arnlund proposed adding the following items:

- 4(C) – Tree Inventory Update
- 4(D) – MnDNR/Environment and Natural Resources Trust Fund Grant Application Update
- 5(C) – Commercial Stormwater Management Presentation Report

Staff Liaison Matzke proposed adding the following item:

- 5(D) – City Forester Update

Committee Member Courtney made a motion to approve the agenda with the proposed additions. The motion was seconded by Committee Member Arnlund and passed unanimously on a voice vote.

Chair Parenteau stated that reference to Maple Grove being designated as a "Tree City USA" was discussed at the March meeting, and should be reflected in the meeting minutes. Chair Parenteau asked if there were any additional revisions to the March 10, 2016 meeting minutes. Hearing none, Committee Member Kampel made a motion to approve the minutes with the proposed addition. The motion was seconded by Committee Member Courtney and passed unanimously on a voice vote.

Old Business

2016 Arbor Day Planning

Staff Liaison Matzke introduced this item, and stated that there were several items that need to be addressed in advance of the 2016 Arbor Day event, scheduled to be on Saturday, April 30th from 12-4 pm at the Maple Grove Community Center.

Staff Liaison Matzke stated that two local face painters from "Rainbow Party Arts" have been hired to work at the event from 1-3 pm.

Chair Parenteau stated that former Committee Member Michelle Burkes and Michelle's mother have offered to volunteer operating the tree medallion crafting area.

Committee Member Arnlund stated that the Master Gardener booth will be staffed by Master Gardeners, and not by Arbor Committee Members. Arnlund informed the Committee that Committee Member KenKnight will be unable to attend the Arbor Day event, and that her responsibilities will need to be reassigned.

Committee Member Sanford and Council Member Hanson stated that they are available to attend the Arbor Day event and assist as needed.

Staff Liaison Matzke stated that the National Honor Society has yet to commit volunteers for the event, and that he will continue to reach out to the staff contact for that group.

Committee Member Arnlund displayed an Emerald Ash Borer Nerf Dart game, as well as prizes associated with the game. Committee Member Reichow stated that he will provide plexiglass coverings for the game boards to ensure usability.

Chair Parenteau stated that artist Barb Boulka will be unable to attend this year's event, but that Ms. Boulka would still like to participate in future events.

Staff Liaison Matzke stated that the MnDNR will provide various handouts, but that Arbor Committee Members will need to distribute the information to attendees.

Committee Member Arnlund stated that she will provide information about the City's Tree Inventory program, and that she will aid in distributing information to residents.

Committee Member Polski stated that, while she is unable to attend this year's event, she will provide children's crafting and activity supplies as well as instructions on how to complete the crafts.

Committee Member Reichow stated that he will bring beverage supplies. Various members stated intent to bring cookies/refreshments to donate to the event.

Committee Member Reichow stated that he will provide resources for the tree mulching display.

Chair Parenteau requested Staff Liaison Matzke to research finding removable tattoos to distribute.

Chair Parenteau requested that Committee Members arrive at 10 am to the event to assist in set-up activities.

EAB Management Plan Update

Staff Liaison Matzke shared that City staff is moving forward with the production of a draft ordinance and an Emerald Ash Borer (EAB) Management Plan. Matzke provided a draft copy of the Plan for members to review, and requested that Committee Members provide feedback.

Committee Member Arnlund requested that the introduction paragraph be revised to reflect that EAB was discovered in the City of Plymouth in September of 2015, not the "summer" of 2015.

Chair Parenteau requested the ability for the Arbor Committee to review the Plan annually. Chair Parenteau also requested that the language in the "Administration" chapter be revised to provide greater detail on program administration.

Committee Member Arnlund requested that provisions be made to address trees that are vulnerable and stressed; not just for trees that are diseased or dying.

Committee Member Courtney requested that the reference to the City not replacing boulevard trees be removed, and that the City would instead reserve the right to evaluate replacement if feasible.

Committee Member Kampel requested that the Arbor Committee be added to the list of groups that would receive periodic updates about the Plan.

Committee Member Kampel suggested that if City trees that are planted in gravel beds are not ready for fall planting, perhaps they could be temporarily planted on City-owned land near the water tower on Sycamore Lane. Kampel stated that this area was at one time considered for a municipal nursery.

Chair Parenteau questioned whether or not the City's Tree Preservation Area could be addressed in the Plan.

Committee Member Arnlund requested that all impacted staff from both the Public Works Department and the Parks Department receive adequate training to identify symptoms of stressed and diseased trees.

Committee Member Arnlund requested that the Plan include measures to educate residents about EAB.

Council Member Hanson requested that the Plan address disposal methods for trees. Committee Member Sanford stated that the City of Plymouth may have similar measures in place, and that staff may want to work with Plymouth staff to evaluate those measures.

Committee Member Arnlund requested that the Plan address the removal of Ash wood, including the possibility of working with various groups, such as "Wood in the Hood" for possible disposal/reuse of wood material.

Chair Parenteau requested that staff consider creating a budget that would accommodate the Plan's action items for 2017.

Staff Liaison Matzke stated that he will take the Arbor Committee's proposed changes to the City staff working group for evaluation and that he will bring a revised draft of the Plan to the May, 2016 Arbor Committee meeting for review.

Tree Inventory Update

Committee Member Arnlund distributed copies of the Maple Grove Tree Inventory – 2015 to the Committee. The report, which is attached, outlines the status of the City-wide tree inventory project through 2015. Arnlund also discussed an article that was featured in the City newsletter discussing the program. A copy of that article is also attached.

Arnlund stated that there are several volunteers already for the 2016 Tree Inventory, and that she hopes to have approximately ten additional volunteers this spring.

Chair Parenteau thanked Committee Member Arnlund for her time and effort in facilitating this program.

MnDNR/Environment and Natural Resources Trust Fund Grant Application Update

Committee Member Arnlund stated that the City has received word that it will receive a \$30,000 grant through the MnDNR and the Environment and Natural Resources Trust Fund for the purpose of growing trees for the community. In addition to the grant amount, the City has pledged a cash-in-kind amount of \$7,500.

Committee Member Arnlund listed the following items that will be provided through this grant:

- 450 trees will be grown within the next three years.
- Tree identification books will be purchased through the Arbor Day Foundation.
- Additional tape measurers and reflective vests may be purchased for Tree Inventory Volunteers to use (if the City is unable to secure items through corporate donations).
- Additional iPads will be purchased for use by Tree Inventory volunteers.
- Watering rings for trees will be purchased.
- \$10,000 will be allocated towards public education items, such as informational “tree wraps” for ash trees.
- Tree inspections training programs could be offered.

Committee Member Arnlund stated that grant funds could become available as early as this month. Chair Parenteau thanked Committee Member Arnlund for her work in securing this grant.

New Business

City of Maple Grove 2016-2018 Goals

Staff Liaison Matzke informed the Committee that the City Council held a goal-setting session, and established the following goals:

1. Create a proactive Economic Development Program to address Retention, Expansion and Recruitment of Industry in Maple Grove.
2. Embark on the Comprehensive Plan Update Process to create a long-term vision for the buildout of Maple Grove.
3. Prioritize Coordination and Leadership for Information Systems (IS) to support technology and efficiency advances throughout the organization.
4. Prioritize Succession Planning and Staff Development Efforts throughout the Organization.
5. Streamline Administrative and Hiring Processes.

Chair Parenteau stated that the City should consider preservation of natural areas during the 2018 Comprehensive Plan revision process.

Adopt a Street Spring Cleaning

The Arbor Committee consented to hold its spring cleaning of Vicksburg Lane, between Bass Lake Road and the Maple Grove/Plymouth border, on Thursday, May 26 at 5:30 pm. The Committee will meet in the parking lot of Basswood Elementary School.

Commercial Stormwater Management Presentation Report

Committee Member Arnlund and Staff Liaison Matzke stated that they attended a presentation by Barr Engineering regarding stormwater enhancements to the exterior areas of Maplewood Mall. Committee Member Hogeboom stated that he attended a tour of these facilities when they were under construction.

The Committee agreed that more information about commercial stormwater best management practices would be useful. Committee Member Arnlund agreed to contact the presenter and request that a similar presentation be given to the Arbor Committee this summer.

City Forester Update

Staff Liaison Matzke stated that the City Council determined that a consulting City Forester would be preferable at this time to a staff Forester. Matzke stated that City staff reviewed several firms' qualifications, and have decided to recommend YTS Companies, LLC. for

the work. YTS Companies, LLC. is located in Rogers, MN and provides forester/arborist consulting work for several cities in the metro area.

Staff Liaison Matzke stated that the people conducting the forester-related work would be certified arborists. Matzke will introduce company representatives to the Arbor Committee once a services contract has been formally approved by the City Council.

Area Reports

In response to an inquiry last month regarding the paving status of Elm Road, Staff Liaison Matzke stated that road is intended to be paved once the adjoining properties develop.

Adjournment

Committee Member Reichow made a motion to adjourn the meeting at 8:40 pm. The motion was seconded by Committee Member Kampel and passed unanimously on voice vote.

Respectfully submitted,



Joe Hogeboom, Secretary
City of Maple Grove Arbor Committee
April 15, 2016

Maple Grove Tree Inventory

2015



City of
Maple Grove
Tree Inventory



Introduction. The year started out a little shaky with my partner, Frank Kappel retiring in May 2015. The good news was that Rhonda Gazette, Engineering Secretary would continue to help send out resident letters, and sign out the mini i-pads for volunteers to use.

Frank's replacement Kelly Matzke started in August, 2015. As Kelly gets up to speed in his new position hopefully he will be able to assist as staff liaison with the tree inventory in 2016. I look forward to his involvement!

There were some really outstanding volunteers in 2015. The amazing number of trees inventoried in 2015 reflects this. It is remarkable that this inventory is being completely done with volunteers! As a volunteer myself I applaud every one of the volunteers who continue to inventory trees for this project!

An exciting development in 2015 was the transfer of the tree inventory data from our GIS Cloud application to the public works GIS data system by the City GIS personnel at the government center and public works. This will allow the public works personnel who plant and maintain the public trees to keep the data up to date. Life just doesn't get better than this! This makes the tree inventory even more important than ever before!

The personnel in the City departments who are involved in planting and maintaining trees began the process to develop an emerald ash borer (EAB) management plan. It was surprising to find out the EAB was discovered in September 2015 in our bordering city of Plymouth. I believe we all thought with the nearest infestation in Shoreview, MN... that we had 3 to 5 years before the EAB found its way to Maple Grove. The EAB only flies approximately 1 to 2 miles a year from its present location. It is most probable the EAB was transferred to Plymouth in firewood.

At the final year end get together meeting with tree inventory volunteers on November 2, 2015 we discussed possible ways to improve on the tree inventory. Transitioning the inventory to older neighborhoods of the City where there is a high percentage of ash trees was also discussed.

It has been the practice to assign volunteers who live in Maple grove the area/zone they live in to inventory. This has led to a greater number of newer areas of the City to be inventoried. With the EAB at our door step in the bordering City of Plymouth everyone agreed we need to move the volunteers

who are willing to inventory older neighborhoods with a higher number of ash trees. This information will become critical in the City EAB management plan when the EAB is discovered in Maple Grove.

The compiled data from 2013 through 2015 continues to show the need to diversify in the species of trees that are planted. Based on these inventory records Maple, Ash, Spruce and Crabapple make up 63.4% of our urban forest in Maple Grove!

We must get this information out to our residents so they understand how important it is to diversify when they choose a tree to plant in their yard.

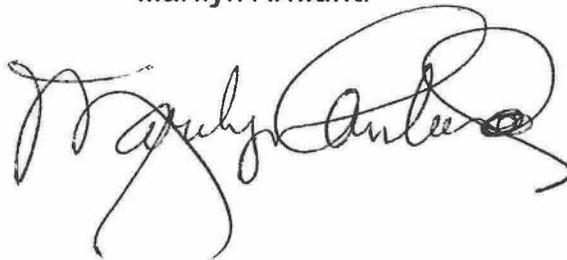
With other invasive pests on the horizon it is imperative that diversity be stressed. This information must also be passed on to the landscape architects who design landscapes as well as the nurseries who sell trees. These individuals and businesses must be persuaded to sway from the norm of selling and planting the typical Maple, Spruce and Crabapple trees!

2015 Report. This report is an extension of the 2013 and 2014 Report and Statistics. Please refer to the 2013 Report & Statistics for preliminary information.

The City of Maple Grove Inventory Management Team will continue to recruit volunteers to continue the inventory. It was initially estimated it would take 3 to 5 years to complete the inventory. It appears with approximately the same number of volunteers as in previous years this estimate continues to valid. This project is completely based on volunteers to conduct the inventory.

Once again, with pride, appreciation and respect of the truly awesome volunteers from Maple Grove and the surrounding communities who gave the City of Maple Grove the most precious thing a person can share – their time and talent. To thank them adequately is impossible. It is with this recognition I hope they know how much they are appreciated!

Marilyn Arnlund

A handwritten signature in black ink, appearing to read 'Marilyn Arnlund', written in a cursive style.

City of Maple Grove Tree Inventory Management Team

The City of Maple Grove Tree Inventory Management Team (MG-TIMT) is temporarily a one-person team! With the retirement of full time city employee, Frank Kampel, Staff Representative to the Maple Grove Arbor Committee, Marilyn Arnlund, Minnesota Tree Care Advisor/ Hennepin County Master Gardener, and committee member of the Maple Grove Arbor Committee took on the tree inventory management alone in 2015.

It is noted with appreciation of the help from Laura Feierabend, Minnesota Tree Care Advisor/Master Naturalist and Mary Lynn Kenknight, Minnesota Tree Care Advisor/ Hennepin County Master Gardener, and member of the Maple Grove Arbor Committee who helped with training of new volunteers and preparing supplies for volunteers.

To Maple Grove Tree Inventory Volunteers:

Thanks for volunteering and giving the City of Maple Grove the most precious thing you will ever own – your time and talent.

I know you have expended a great deal of personal effort in inventorying trees this past year! To thank you adequately is impossible. I do hope you have gained some inner satisfaction in knowing through your efforts you have made the City of Maple Grove a better place to live, work, learn and play.

The City is using the data this year in implementing the EAB Management Plan. It would not be possible without your help!

Thank you sincerely for all the wholehearted assistance.

Please come for a End of the Year Get Together

November 2, 2015

7:00 pm

**Maple Grove Government Center
Emergency Operations Center; Lower Level**

2015 Maple Grove Tree Inventory Volunteers

Farrand Ann Anderson
Roger Andre
Marilyn Arnlund
Doug Birkeland
Yvonne Boldt
Suzanne Born
Valerie Jean Bourassa
Deb Brandenburg
Roy Brandenburg
Tom Brunmeier
Jeff Christianson
Carol Cummins
Marie Digatono
Joyce Edmeier
Laura Feierabend
Julie Gamber
Barbara Gasterland
Constance Goerke

Sue Hanson
Ariel Haynes
Cyd Haynes
Rebecca Haynes
Bob Henke
Miriam (Mimi) Hottinger
David Hovet
Katherine Johnson
Barbara Jones
Frank Kampel
Mary Lynn KenKnight
Michael Koncar
Jack Kuismi
Craig Larsen
Daniel Martin
Del Miller
Rebecca Monson
Jon Nelson

William Ohland
Mary Parenteau
Terri Polski
Kim Redding
Charles Rogers
Cindy Rogers
Gregory Rosnow
Beth Schiestl
Bret Schuler
Brian Sjoquist
Jamie Sledd
Gwendolyn Sventol
David Swanson
Chuck Vossen
Chris Vossen
Sandra Winslow
Minnie Willette
Steve Zellinger



Volunteer Hours

The estimated value of volunteer time for 2015 is \$22.55 per hour.

The estimate helps acknowledge the millions of individuals who dedicate their time, talents, and energy to making a difference. Charitable organizations can use this estimate to quantify the enormous value volunteers provide.

The value of volunteer time is based on the hourly earnings (approximated from yearly values) of all production and non-supervisory workers on private non-farm payrolls average (based on yearly earnings provided by the Bureau of Labor Statistics). Independent Sector indexes this figure to determine state values and increases it by 12 percent to estimate for fringe benefits.

(The value of volunteer time is calculated using Independent Sector's 2011 nationally recognized formula (minus 12% fringe) to determine dollar value of volunteer time. For more information visit:

http://www.independentsector.org/volunteer_time)

There were 54 volunteers in 2015. Returning volunteers had the choice to attend a refresher course which lasted ~2.5 hours. All new volunteers attended a three and one half hour class which included classroom and hands-on training.

The Maple Grove Tree inventory Volunteers provided the citizens of Maple Grove approximately 729 hours of volunteer time! (Only 19 of the 54 volunteers turned in their hours.) Using the value of \$22.55 per hour, the total tree inventory hour in 2015 was: \$16,438.95!



Volunteers are Awesome!

TOP VOLUNTEERS

Mike Koncar and Sandy Winslow = 5,209 Trees!!!



Swinslow		5209
Zone	# of Trees	
24	6	
43	514	
46	610	
51	1	
52	327	
55	4	
58	1067	
66	3	
68	105	
70	940	
72	496	
73	4	
74	571	
92	561	

Chuck and Chris Vossen = 2,575 Trees!!!

cvossen		2575
Zone	# of Trees	
62	2558	
64	8	
83	9	

Del Miller and Barb Jones = 2,089 Trees!!!

dmiller		2089
Zone	# of Trees	
13	225	
31	27	
39	1837	
8	4	

Bob Henke and Doug Birkeland = 716 Trees!!!

bhenke	716
Zone	# of Trees
2	89
3	415
5	208
8	4

Carol Cummings and Suzanne Born = 715 Trees!!!

ccummins	715
Zone	# of Trees
61	715

Mary Lynn KenKnight and Laura Feierabend = 659 Trees!!!

Lfeierabend	659
Zone	# of Trees
23	3
24	598
74	57
88	1

Jack Kuismi and David Swanson = 468 Trees!!!

Jkuismi	468
Zone	# of Trees
36	468

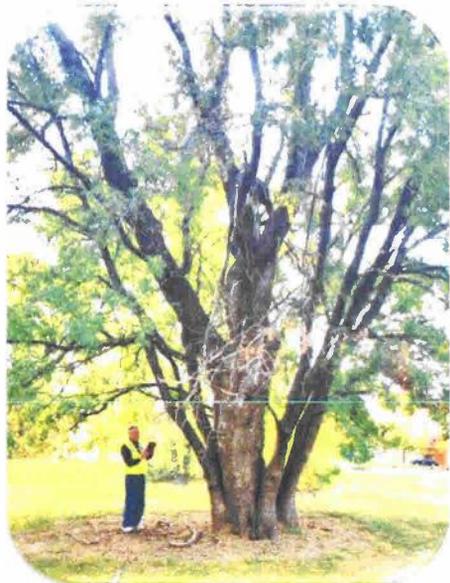
Deb and Roy Brandenburg = 378 Trees!!!

dbrandenburg	378
Zone	# of Trees
27	378

Minnie Willette and Greg Rosnow = 378 Trees!!!

mwillette	328
Zone	# of Trees
89	328

Trees in the Grove



110" Diameter Boxelder Tree!



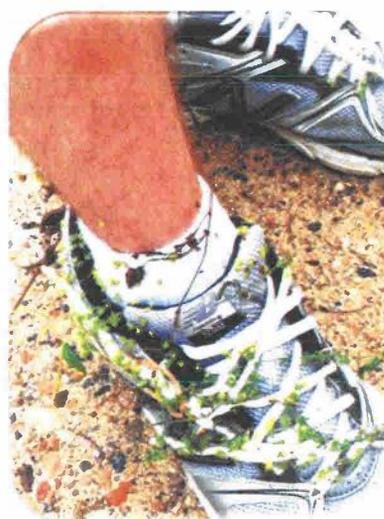
Girdling Roots
This tree will not live a long life!



Can you guess the
Live Crown Ratio?

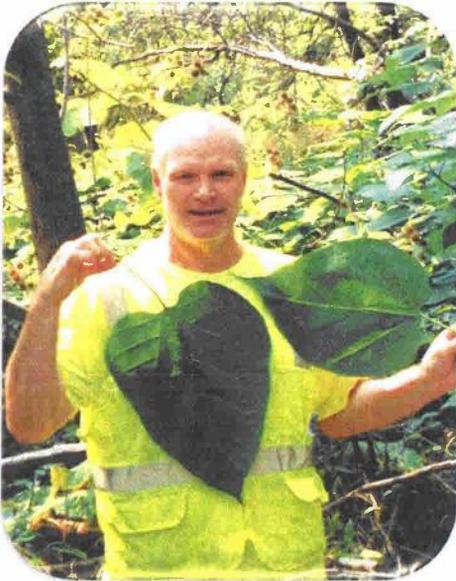


The perils of a tree inventory volunteer!



The trunk of this tree looks like a like a pole going straight into the ground. A sure sign of a tree planted too deep.

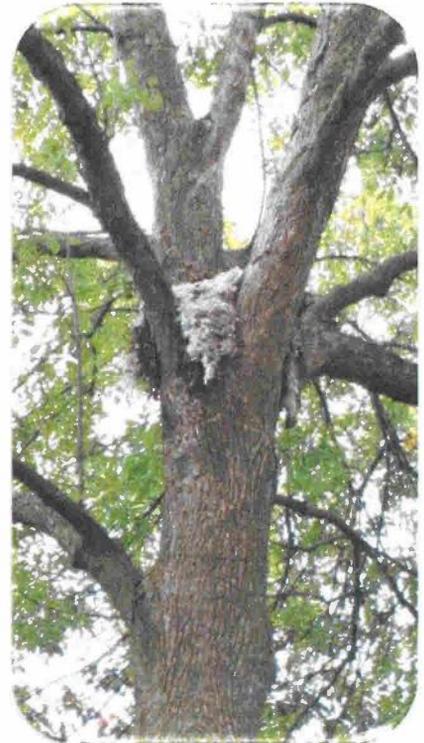
Signs of trees suffering as a result of deep planting include girdling or fewer roots; yellowing, undersized or fewer leaves; and stunted height. A tree planted too deep will probably die by age 15 years.



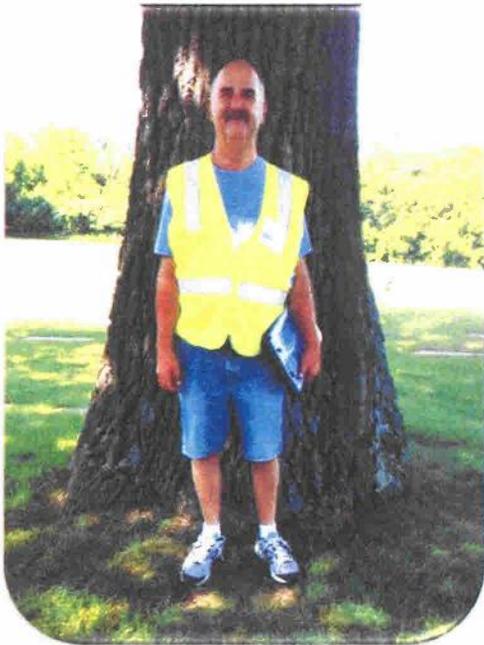
A catalpa leaf



A very bad pruning job; this wound will probably never heal.



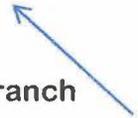
A nest in the tree?



A really big tree!



Sticky gum exudes from branch cankers. The blisters are actually hardened globs of sap. Prunus (Plum) trees are known for exuding copious sticky sap when wounded or infected by a pathogen. This is often called gummosis. It starts out sticky but dries into hard resin drops.





The tree is growing over a gravestone



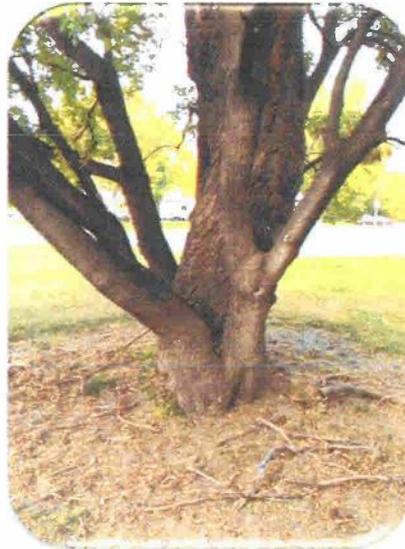
Common split when there are included branch unions



Girdling roots are common when a tree has grown in a container too long and not corrected before it is planted.



Home Sweet Home



How many trees do you see?



Tree Volunteer at Work
😊



Oh my...
Planted too deep
Cavity and decay
Won't see old

Total Number of Trees Inventoried

2015 = 13,964

2014 = 5,943

2013 = 10,707

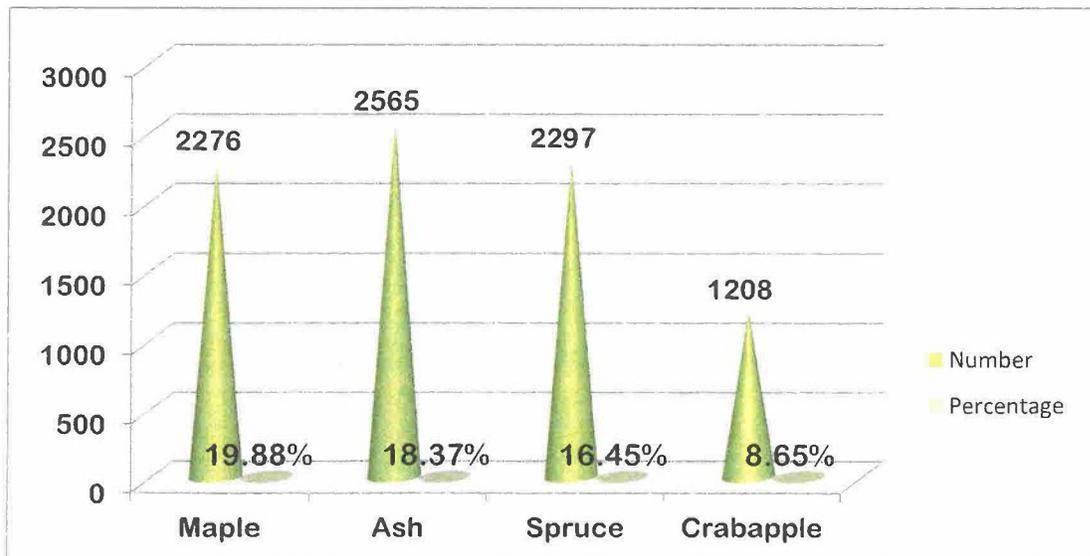


**Total Number of Trees for 2015
by Species and Percentage for
Public and Private Combined**

Species	Count	Percentage
Maple	2776	19.88%
Ash	2565	18.37%
Spruce	2297	16.45%
Crabapple	1208	8.65%
Birch	550	3.94%
Pine	467	3.34%
Cottonwood	461	3.30%
Basswood	425	3.04%
Linden	394	2.82%
Honeylocust	314	2.25%
Japanese Lilac	270	1.93%
Elm	225	1.61%
Willow	211	1.51%
Cedar	201	1.44%
Black Locust	157	1.12%
Boxelder	146	1.05%
Bur Oak	133	0.95%
Red Oak	124	0.89%
Chokecherry	116	0.83%
Ironwood	106	0.76%
Apple	100	0.72%
Cherry	94	0.67%
Swamp Oak	74	0.53%
Amur Maple	61	0.44%
White Oak	61	0.44%
Poplar	59	0.42%
Hackberry	58	0.42%
Northern Pin Oak	52	0.37%
Lilac	37	0.26%
Walnut	34	0.24%

**Total Number of Trees for 2015
by Species and Percentage for
Public and Private Combined Cont.**

Species	Count	Percentage
European Buckthorn	19	0.14%
Other	19	0.14%
Hickory	18	0.13%
Fir	14	0.10%
Catalpa	12	0.09%
Plum	12	0.09%
Serviceberry	10	0.07%
Ohio Buckeye	8	0.06%
Dogwood	7	0.05%
Magnolia	7	0.05%
Mulberry	7	0.05%
Tamarack	7	0.05%
Amur Maackia	5	0.04%
Hawthorn	5	0.04%
Hydrangea	5	0.04%
Prickly Ash	4	0.03%
Ginkgo	3	0.02%
Beech Hornbeam	2	0.01%
Mountain Ash	2	0.01%
Butternut	1	0.01%
East Hemlock	1	0.01%
Horsechestnut	1	0.01%
Juniper	1	0.01%
Kentucky Coffeetree	1	0.01%
Pear	1	0.01%
Total	13,964	100.00%

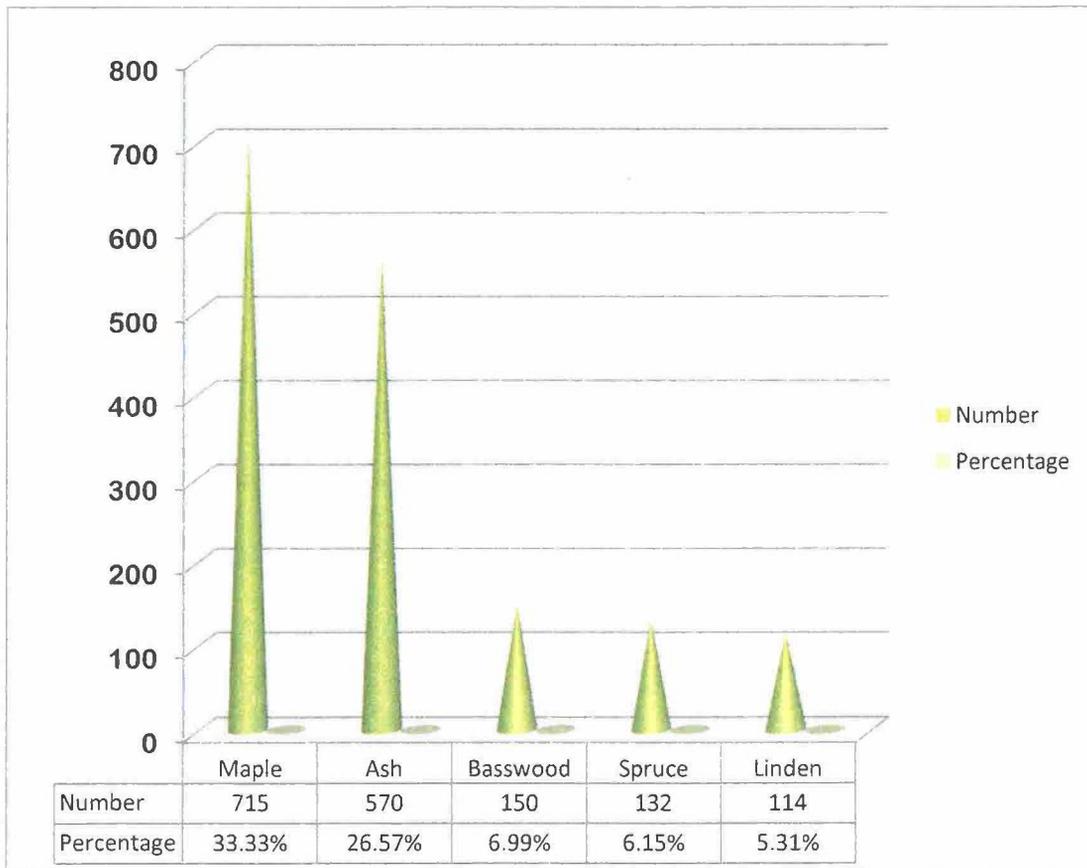


**Total Number of Public Trees for 2015
by Species and Percentage**

2015 number of public trees by species with percentage		
Species	Count	Percentage
Maple	715	33.33%
Ash	570	26.57%
Basswood	150	6.99%
Spruce	132	6.15%
Linden	114	5.31%
Ironwood	55	2.56%
Bur Oak	52	2.42%
Crabapple	50	2.33%
Honeylocust	49	2.28%
Elm	40	1.86%
Northern Pin Oak	37	1.72%
Red Oak	30	1.40%
Swamp Oak	29	1.35%
Boxelder	27	1.26%
Pine	26	1.21%
Birch	9	0.42%
Chokecherry	9	0.42%
Hackberry	9	0.42%
European Buckthorn	5	0.23%
Walnut	5	0.23%
Black Locust	4	0.19%
Japanese Lilac	4	0.19%
Apple	3	0.14%
Catalpa	3	0.14%
Lilac	2	0.09%
Ohio Buckeye	2	0.09%
Prickly Ash	2	0.09%
White Oak	2	0.09%
Willow	2	0.09%
Amur Maple	1	0.05%

**2015 number of public trees by species
with percentage Cont.**

Species	Count	Percentage
Cherry	1	0.05%
Cottonwood	1	0.05%
Fir	1	0.05%
Hawthorn	1	0.05%
Poplar	1	0.05%
Serviceberry	1	0.05%
Total	2,145	100.00%



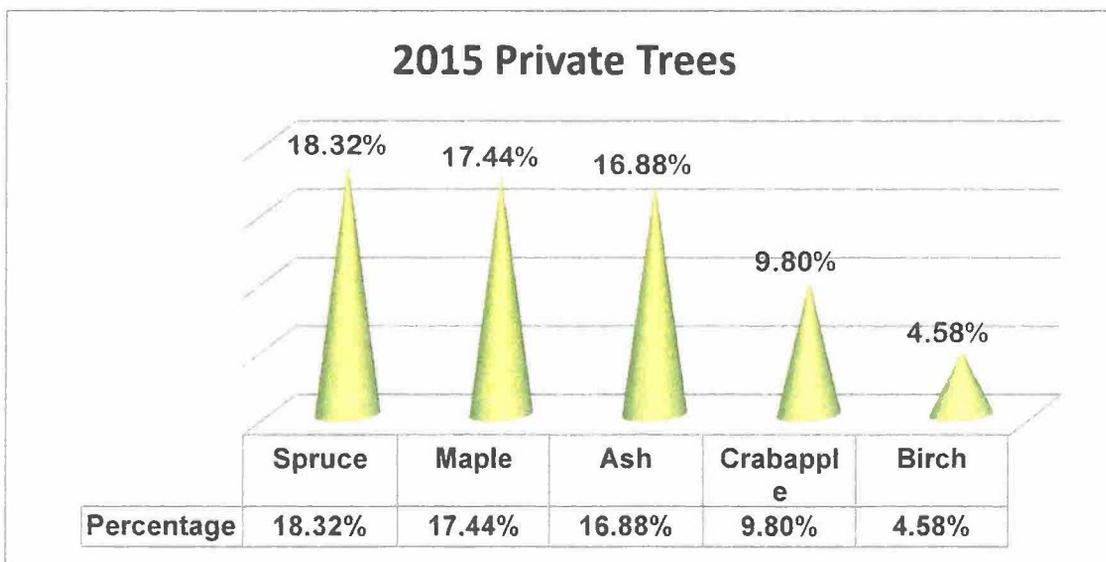
2015 Public Trees – Top Five Species

**Total Number of Private Trees for 2015
by Species and Percentage**

2015 number of private trees by species with percentage		
Species	Count	Percentage
Spruce	2165	18.32%
Maple	2061	17.44%
Ash	1995	16.88%
Crabapple	1158	9.80%
Birch	541	4.58%
Cottonwood	460	3.89%
Pine	441	3.73%
Linden	280	2.37%
Basswood	275	2.33%
Japanese Lilac	266	2.25%
Honeylocust	265	2.24%
Willow	209	1.77%
Cedar	201	1.70%
Elm	185	1.57%
Black Locust	153	1.29%
Boxelder	119	1.01%
Chokecherry	107	0.91%
Apple	97	0.82%
Red Oak	94	0.80%
Cherry	93	0.79%
Bur Oak	81	0.69%
Amur Maple	60	0.51%
White Oak	59	0.50%
Poplar	58	0.49%
Ironwood	51	0.43%
Hackberry	49	0.41%
Swamp Oak	45	0.38%
Lilac	35	0.30%
Walnut	29	0.25%
Other	19	0.16%
Hickory	18	0.15%
Russian Olive	16	0.14%
Northern Pin Oak	15	0.13%

2015 number of private trees by species with percentage

Species	Count	Percentage
European Buckthorn	14	0.12%
Fir	13	0.11%
Plum	12	0.10%
Catalpa	9	0.08%
Serviceberry	9	0.08%
Dogwood	7	0.06%
Magnolia	7	0.06%
Mulberry	7	0.06%
Tamarack	7	0.06%
Ohio Buckeye	6	0.05%
Amur Maackia	5	0.04%
Hydrangea	5	0.04%
Hawthorn	4	0.03%
Ginkgo	3	0.03%
Beech Hornbeam	2	0.02%
Prickly Ash	2	0.02%
Butternut	1	0.01%
East Hemlock	1	0.01%
Horsechestnut	1	0.01%
Juniper	1	0.01%
Kentucky Coffeetree	1	0.01%
Mountain Ash	1	0.01%
Total	11,819	100.00%



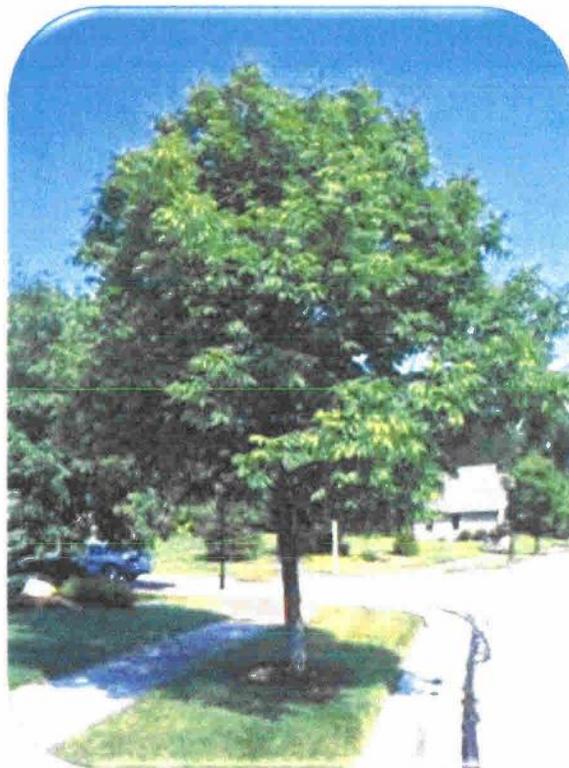
Number of Trees Private vs Public

2015 – 11,819 Private vs 2,145 Public

2013-2015 – 24,384 Private vs 5,776 Public

Total number of Public Ash and Private Ash

3,845 Private vs 1,379 Public



Average DBH of Private Trees and # of stems*

D.B.H. is the measurement of the diameter (width) of the tree trunk at the height of 4.5 feet above the ground. This measurement is used to approximate the age of the tree as well as the potential cost for removal or chemical treatment for EAB in the case of ash trees. *Not until 2014 were the number of stems counted.

Average DBH of Private Trees by Species

Species	Average DBH	Average # of Stems
Amur Corktree	5.67	1
Amur Maackia	14.00	3
Amur Maple	15.65	3
Apple	15.46	2
Ash	11.84	1
Basswood	15.42	1
Beech Hornbeam	14.00	4
Birch	13.55	3
Black Locust	9.44	1
Boxelder	12.60	1
Buckthorn	2.00	1
Bur Oak	18.64	1
Butternut	10.33	1
Catalpa	9.58	1
Cedar	8.78	3
Cherry	6.33	1
Chokecherry	7.54	1
Cottonwood	12.82	1
Crabapple	9.78	1
Dogwood	6.65	2
East Hemlock	10.00	1
Elm	8.36	1
European Buckthorn	6.05	1
Fir	8.53	1
Ginkgo	4.40	1
Hackberry	8.93	1
Hawthorn	4.59	1
Hickory	7.82	1

Average DBH of Private Trees by Species

Species	Average DBH	Average # of Stems
Honeylocust	10.43	1
Horsechestnut	15.67	1
Hydrangea	5.59	2
Ironwood	5.80	1
Japanese Lilac	8.49	2
Juniper	5.17	1
Kentucky Coffeetree	12.00	1
Lilac	6.32	2
Linden	7.89	1
Locust	10.00	1
Magnolia	10.50	2
Maple	9.74	1
Mountain Ash	8.42	1
Mulberry	9.50	1
Northern Pin Oak	7.46	1
Ohio Buckeye	9.50	1
Other	9.43	1
Pear	12.90	1
Pine	9.71	1
Plum	13.98	2
Poplar	6.03	1
Prickly Ash	19.70	13
Red Oak	11.64	1
Russian Olive	12.54	2
Serviceberry	7.00	3
Spruce	8.00	1
Swamp Oak	6.02	1
Tamarack	7.27	1
Unknown	12.40	1
Walnut	12.30	1
White Oak	12.62	1
Willow	14.10	1

Average DBH of Public Trees and # of stems

Average DBH of Public Trees by Species

Species	Average DBH	Average # of Stems
Willow	49.25	2
Cottonwood	25.31	1
Plum	17.00	3
Amur Maple	16.71	3
Poplar	15.50	1
Ash	14.32	1
Birch	13.77	2
Apple	13.00	1
Unknown	12.20	1
Pine	11.70	1
Catalpa	11.00	1
Ohio Buckeye	11.00	1
Prickly Ash	10.67	1
White Oak	10.24	1
Mountain Ash	10.14	1
Horsechestnut	10.00	1
Russian Olive	10.00	1
Walnut	9.93	1
Basswood	9.81	1
Hackberry	9.48	1
Other	9.19	1
Crabapple	9.18	1
Bur Oak	8.84	1
Cherry	8.70	2
Ironwood	8.51	1
Maple	8.05	1
Cedar	7.93	3
Spruce	7.89	1
Elm	7.79	1
Honeylocust	7.79	1
Boxelder	7.78	1
Hawthorn	7.75	2
Serviceberry	7.40	6
Red Oak	7.06	1
Fir	7.00	1

Average DBH of Public Trees by Species

Species	Average DBH	Average # of Stems
Hydrangea	7.00	1
Chokecherry	6.79	1
Black Locust	6.10	1
Swamp Oak	5.46	1
Northern Pin Oak	5.16	1
Butternut	5.00	1
Kentucky Coffeetree	5.00	1
Hickory	4.83	1
Japanese Lilac	4.44	1
European Buckthorn	4.00	1
Buckthorn	3.20	2
Lilac	3.00	1

Total Average DBH of Private and of Public

Average DBH by Species

Species	Average DBH	Average Stems
Amur Corktree	5.67	1
Amur Maackia	14.00	3
Amur Maple	15.76	3
Apple	15.34	2
Ash	12.50	1
Basswood	13.74	1
Beech Hornbeam	14.00	4
Birch	13.56	3
Black Locust	8.95	1
Boxelder	11.92	1
Buckthorn	3.00	2
Bur Oak	15.39	1
Butternut	8.20	1
Catalpa	9.96	1
Cedar	8.72	3
Cherry	6.53	1
Chokecherry	7.47	1
Cottonwood	13.06	1

Average DBH by Species

Species	Average DBH	Average Stems
Crabapple	9.74	1
Dogwood	6.65	2
Eastern Hemlock	10.00	1
Elm	8.21	1
European Buckthorn	5.59	1
Fir	8.21	1
Ginkgo	4.40	1
Hackberry	9.05	1
Hawthorn	4.88	1
Hickory	6.12	1
Honeylocust	10.01	1
Horsechestnut	14.25	1
Hydrangea	5.67	2
Ironwood	6.93	1
Japanese Lilac	8.07	2
Juniper	5.17	1
Kentucky Coffeetree	10.25	1
Lilac	5.79	2
Linden	7.55	1
Locust	10.00	1
Magnolia	10.50	2
Maple	9.16	1
Mountain Ash	8.90	1
Mulberry	9.50	1
Northern Pin Oak	6.44	1
Ohio Buckeye	9.85	1
Other	9.39	1
Pear	12.90	1
Pine	9.91	1
Plum	14.04	2
Poplar	6.50	1
Prickly Ash	14.28	6
Red Oak	10.77	1
Russian Olive	12.44	2
Serviceberry	7.04	3
Spruce	7.66	1
Swamp Oak	5.82	1
Tamarack	7.27	1
Unknown	12.32	1
Walnut	11.72	1
White Oak	11.99	1
Willow	14.52	1

Public Trees Average Deduction of Crown Condition

Condition of the canopy (the leafy crown of the tree) is an evaluation of both the health and the integrity of its overall structure. The evaluation is based on a point-system, rather than a descriptive-system; therefore, each tree has a recorded condition-rating ranging from 0 (major defects) to 4 (no apparent defects) for the crown. The Crown Assessment includes:

Stagheading: A condition where an entire main branch is dead from the top all the way back to the main stem or another major branch. Points are deducted based on the size of the dead branch and the percentage of the crown affected.

Tip Die Back: A condition where there is significant death at the tops of the branches.

Symmetry: The general shape and condition of the crown is the same from all visible angles.

Live Crown Ratio: The ratio of the crown length to total tree. Live crown length is the distance from the live crown top (dieback in the upper portion of the crown is not part of the live crown) to the "obvious live crown" base.

Species	Average of Crown Deduction
Amur Maple	-0.10
Apple	-0.25
Ash	-0.23
Basswood	-0.38
Birch	-0.17
Black Locust	-0.08
Boxelder	-0.39
Buckthorn	-0.10
Bur Oak	-0.08
Butternut	0.00

Species	Average of Crown Deduction
Catalpa	0.00
Cedar	-0.06
Cherry	-0.08
Chokecherry	-0.04
Cottonwood	-0.13
Crabapple	-0.14
Elm	-0.19
European Buckthorn	-0.08
Fir	-0.15
Hackberry	-0.09
Hawthorn	-0.88
Hickory	-0.10
Honeylocust	-0.08
Horsechestnut	0.00
Hydrangea	-1.00
Ironwood	-0.04
Japanese Lilac	-0.13
Kentucky Coffeetree	0.00
Lilac	-0.07
Linden	-0.10
Mountain Ash	-0.09
Northern Pin Oak	-0.68
Ohio Buckeye	-0.08
Other	-0.21
Pine	-0.33
Plum	-1.25
Poplar	-0.29
Prickly Ash	0.00
Red Oak	-0.42
Russian Olive	-1.00
Serviceberry	0.00
Spruce	-0.11
Swamp Oak	-0.11
Unknown	-0.19
Walnut	-0.04
White Oak	-0.10
Willow	-0.56

Public Tree Average Deduction of Stem Condition

Each inventoried tree was evaluated for the condition of the stem (trunk). The evaluation is based on a point-system, rather than a descriptive-system; therefore, each tree has a recorded condition-rating ranging from 0 (major defects) to 8 (no apparent defects) for the stem (trunk). The Stem Assessment includes:

Cambium Loss: Any loss of cambium due to pruning wounds, accidental damage, vandalism, issues of stem girdling, and winter injury.

Exposed and /or Decayed: Decay indicators are symptoms and signs associated with the fungal deterioration of wood in trees.

Sprouts/Suckers: Typically grow as a result of a wound or stressor (e.g. drought, disease, insects, and root zone disruption) and can often be harmful to a tree's health. These suckers are wild leafy shoots that grow out from the tree's lower trunk.

Stem Cracks: A separation of the wood; a split through the bark into the wood.

Included Bark Unions: Bark that has grown in between the joint of a branch and stem or two branches, creating a weak attachment. Often has a "rolled under" appearance. As more and more bark is included inside the tree, the weak branch union is formed that is more likely to fail.

Species	Average of Stem Deduction
Basswood	-1.01
Birch	-0.55
Black Locust	-0.76
Boxelder	-0.81
Buckthorn	-1.30
Bur Oak	-0.47
Butternut	-1.13
Catalpa	-0.46
Cedar	-0.64
Cherry	-0.66
Chokecherry	-1.07

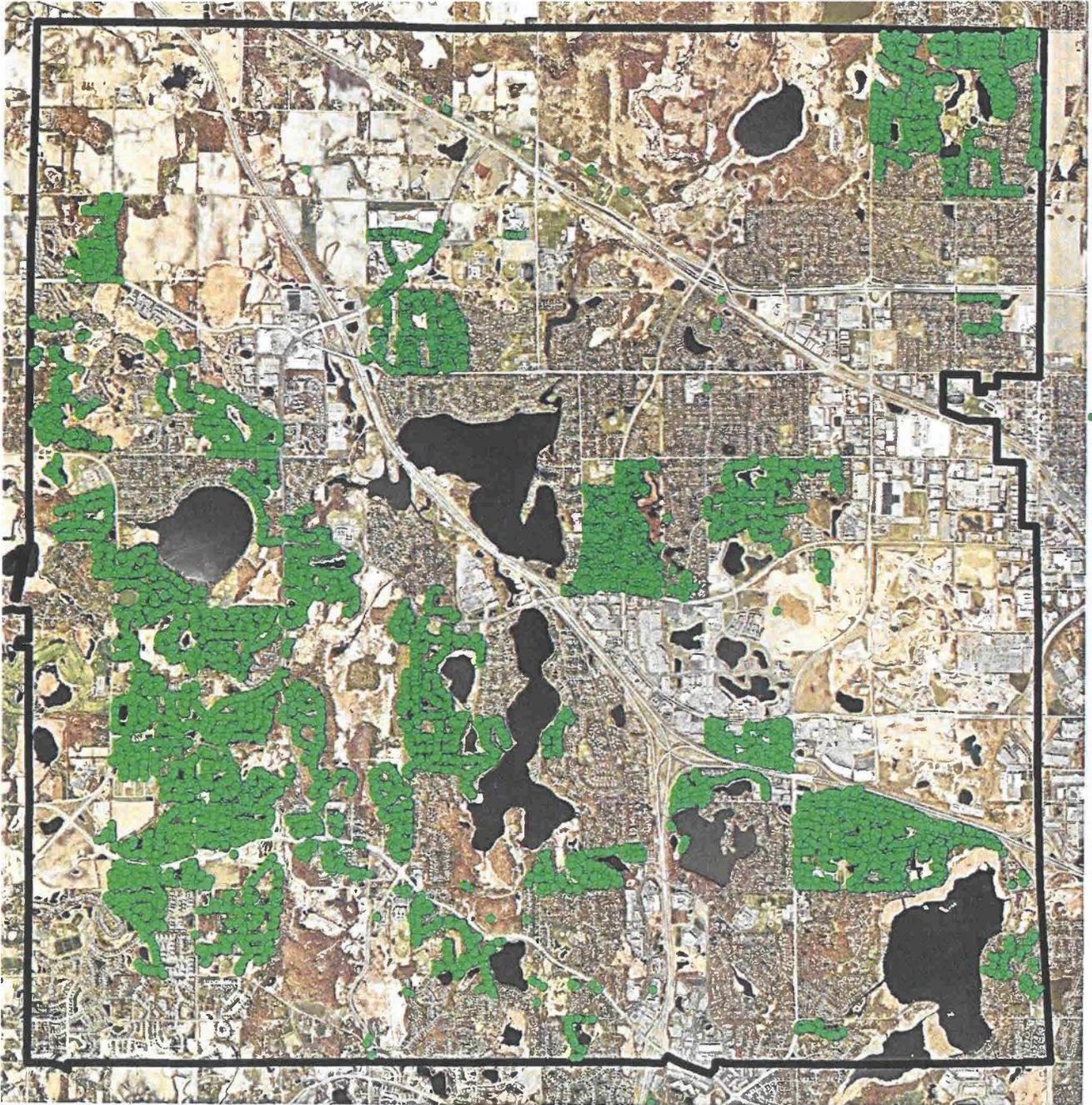
Species	Average of Stem Deduction
Cottonwood	-0.63
Crabapple	-0.68
Elm	-0.37
European Buckthorn	-0.50
Fir	-1.18
Hackberry	-0.50
Hawthorn	-2.38
Hickory	-0.10
Honeylocust	-0.36
Horsechestnut	-0.50
Hydrangea	-0.75
Ironwood	-0.21
Japanese Lilac	-0.21
Kentucky Coffeetree	-0.50
Linden	-0.78
Maple	-0.91
Mountain Ash	-0.82
Northern Pin Oak	-0.54
Ohio Buckeye	-0.50
Other	-0.97
Pine	-0.41
Plum	-7.75
Poplar	-1.92
Prickly Ash	-0.27
Red Oak	-0.84
Russian Olive	-0.50
Serviceberry	0.00
Spruce	-0.25
Swamp Oak	-0.15
Unknown	-0.26
Walnut	-0.16
White Oak	-0.29
Willow	-1.31

Trees Inventoried By Zone

Maps

The following maps show the zones as well as well as where the zone is located in the City. Above each map is a listing of the trees inventoried. There were 68 trees were located on the border of another zone and are not shown on maps.

This map of the City (35 square miles) shows how the City was divided into 96 zones. If one of the volunteers on a team lives in Maple Grove, the team is assigned a zone in the neighborhood they live in. When the zone is finished they were assigned the next closest zone to their home.

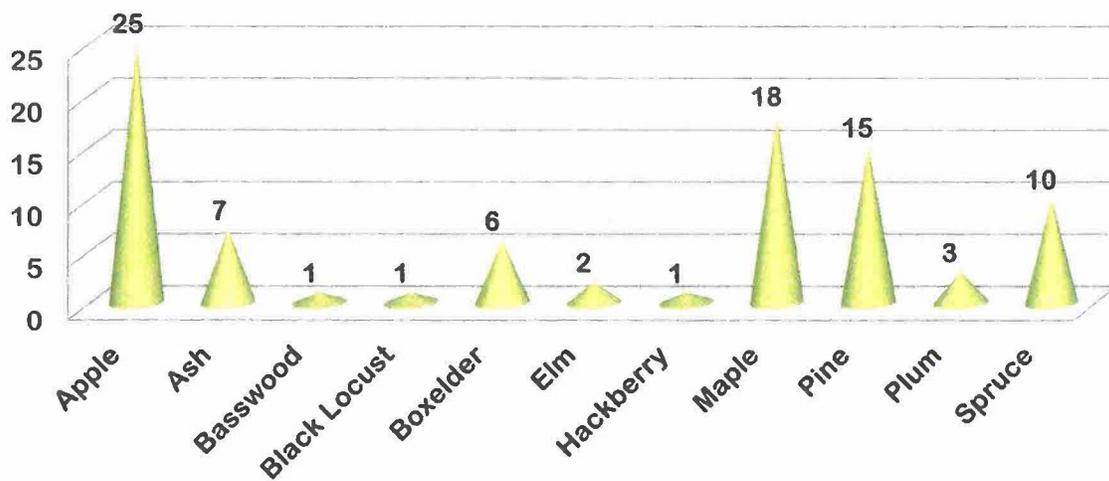


The zones on the following pages which are completed are highlighted in yellow.

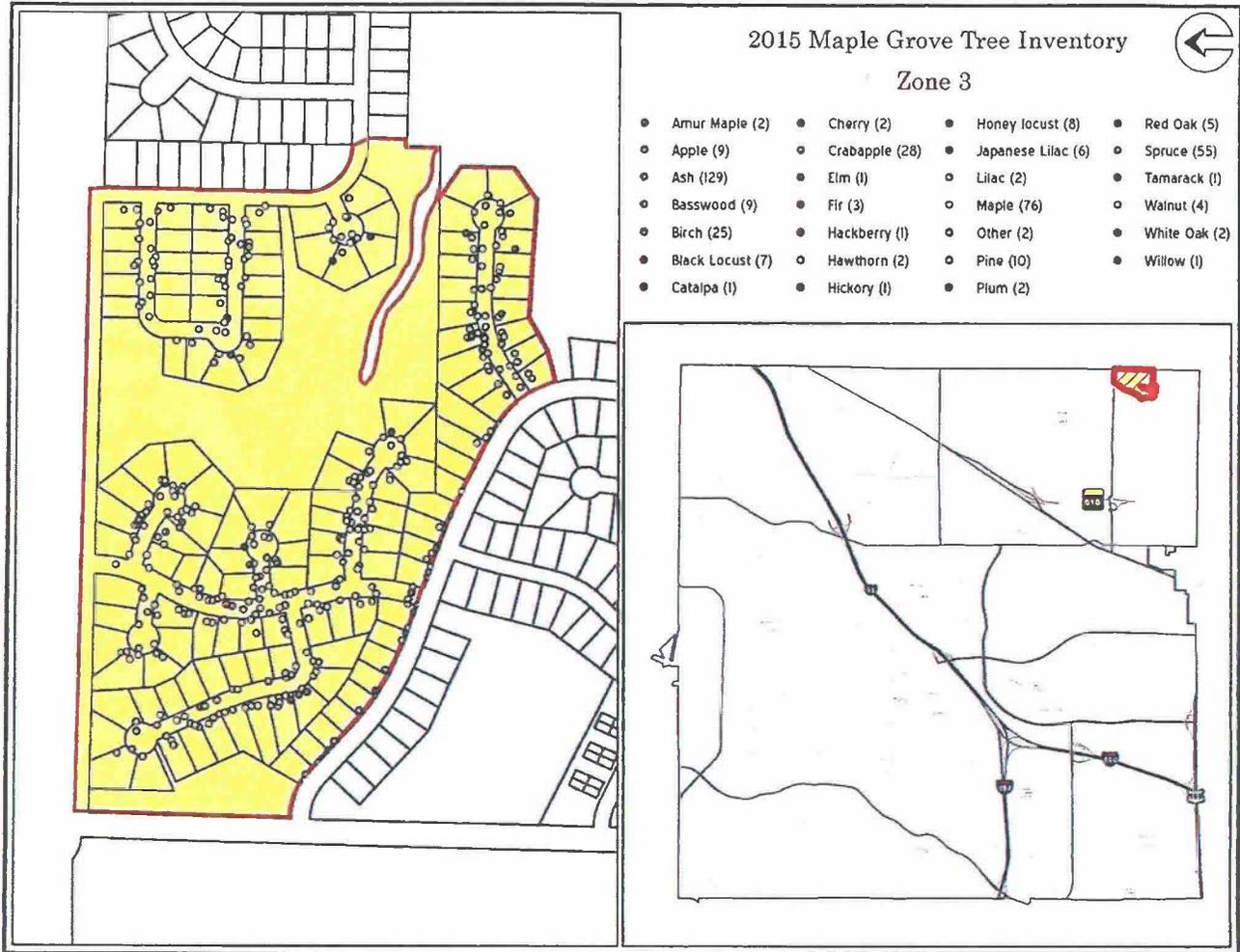
Trees Inventoried in Zone 2



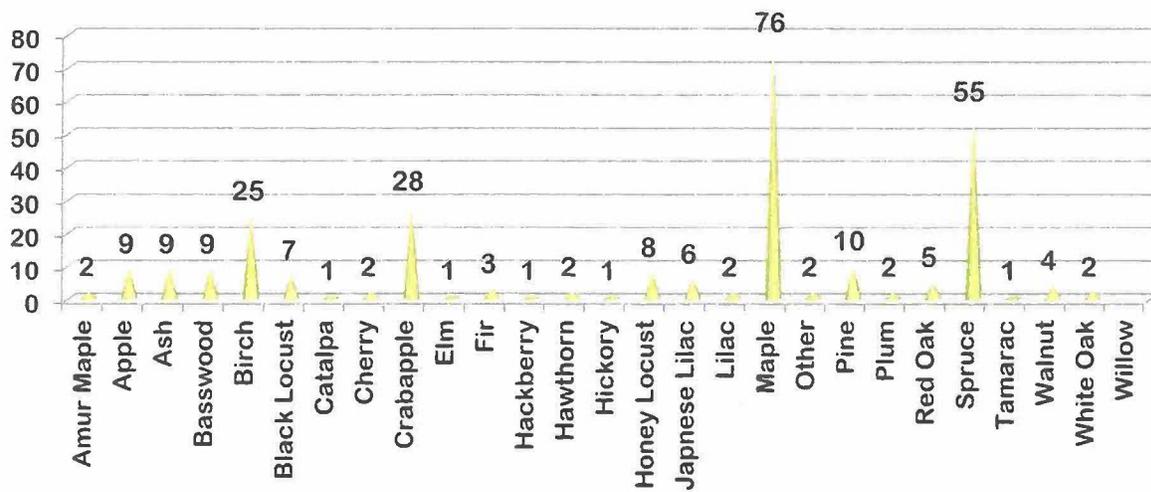
Zone 2 - 89 Trees



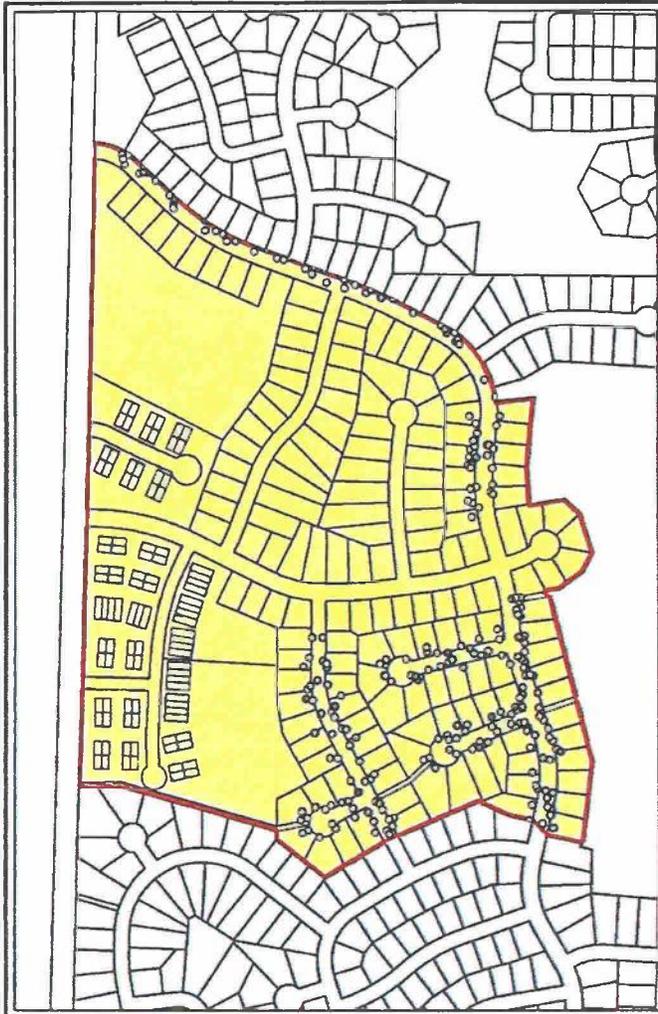
Trees Inventoried in Zone 3



Zone 3 - 394 Trees



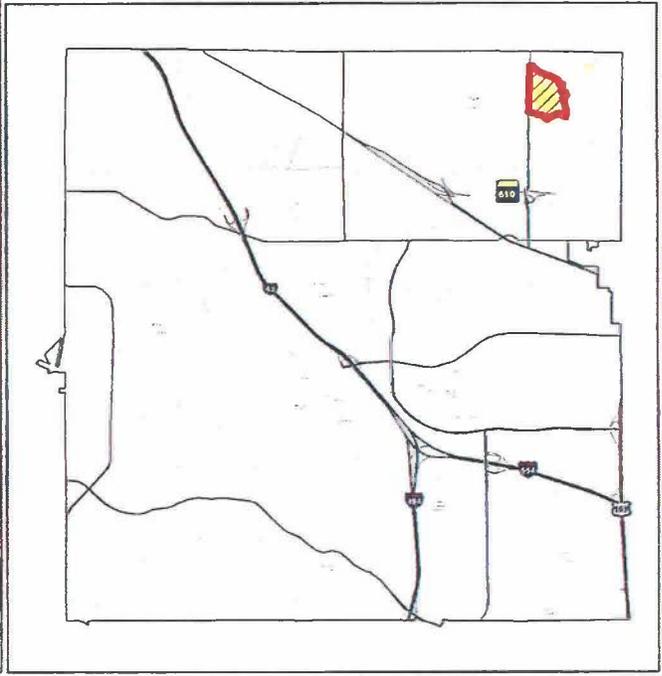
Trees Inventoried in Zone 5



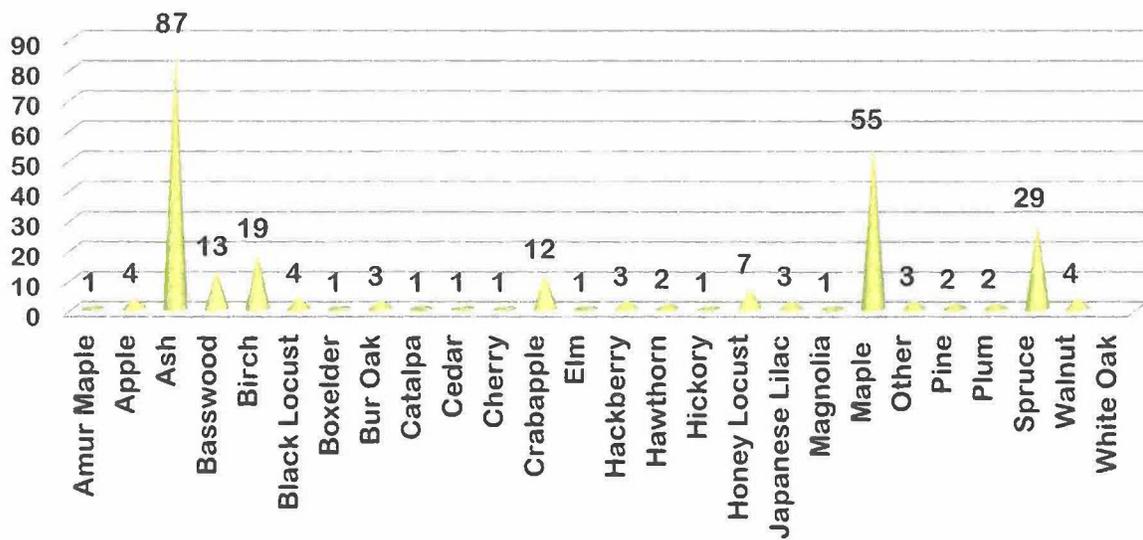
2015 Maple Grove Tree Inventory
Zone 5



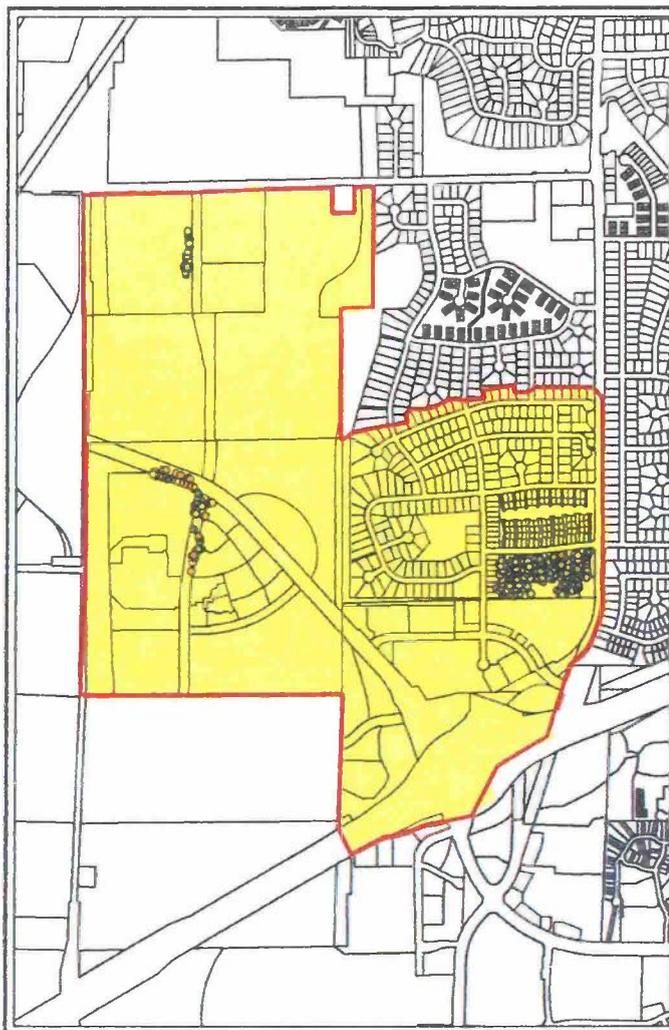
- Amur Maple (1)
- Apple (4)
- Ash (87)
- Basswood (13)
- Birch (19)
- Black Locust (4)
- Boxelder (1)
- Bur Oak (3)
- Catalpa (1)
- Cedar (1)
- Cherry (1)
- Crabapple (12)
- Elm (1)
- Hackberry (3)
- Hawthorn (2)
- Hickory (1)
- Honey locust (7)
- Japanese Lilac (3)
- Magnolia (1)
- Maple (55)
- Other (3)
- Pine (2)
- Plum (2)
- Spruce (29)
- Walnut (4)
- White Oak (2)



Zone 5 - 262 Trees



Trees Inventoried in Zone 13

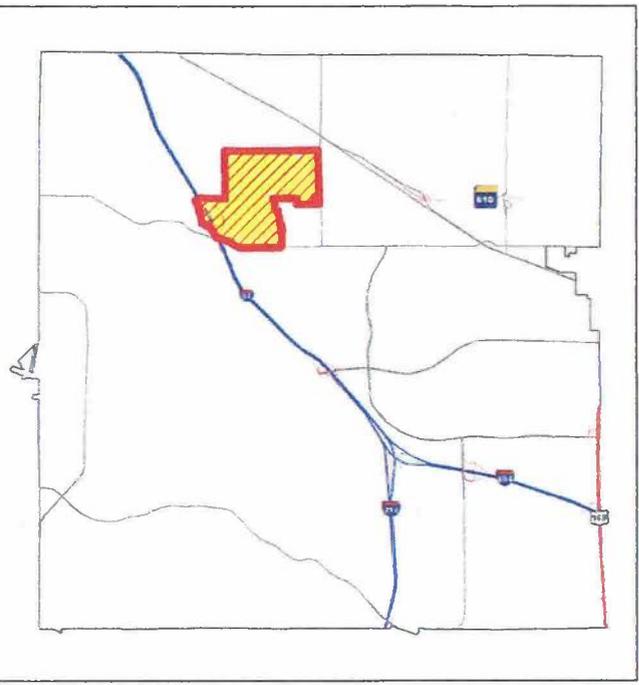


2015 Maple Grove Tree Inventory

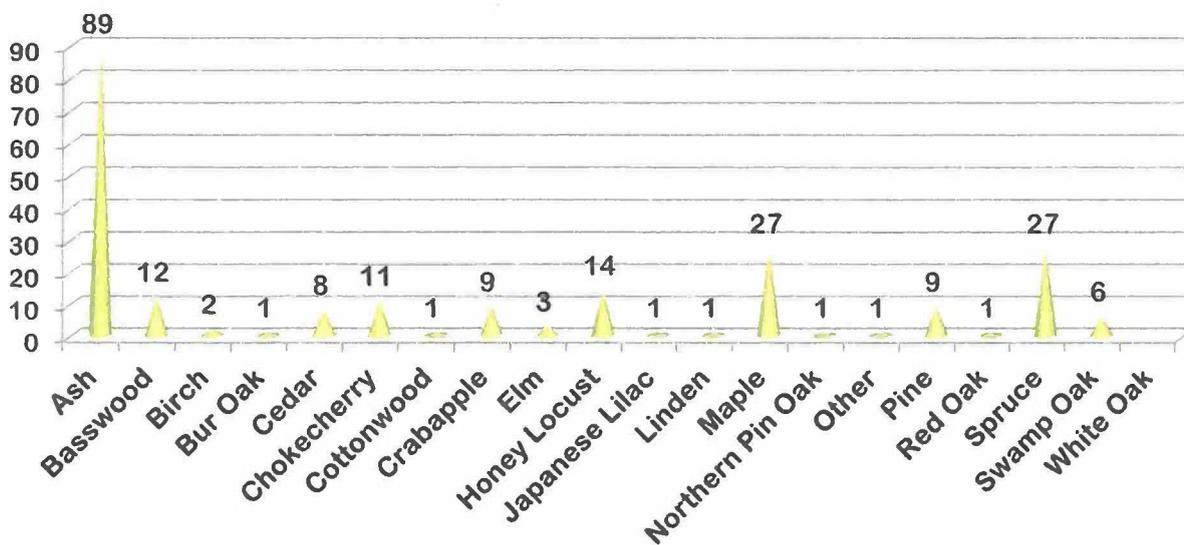


Zone 13

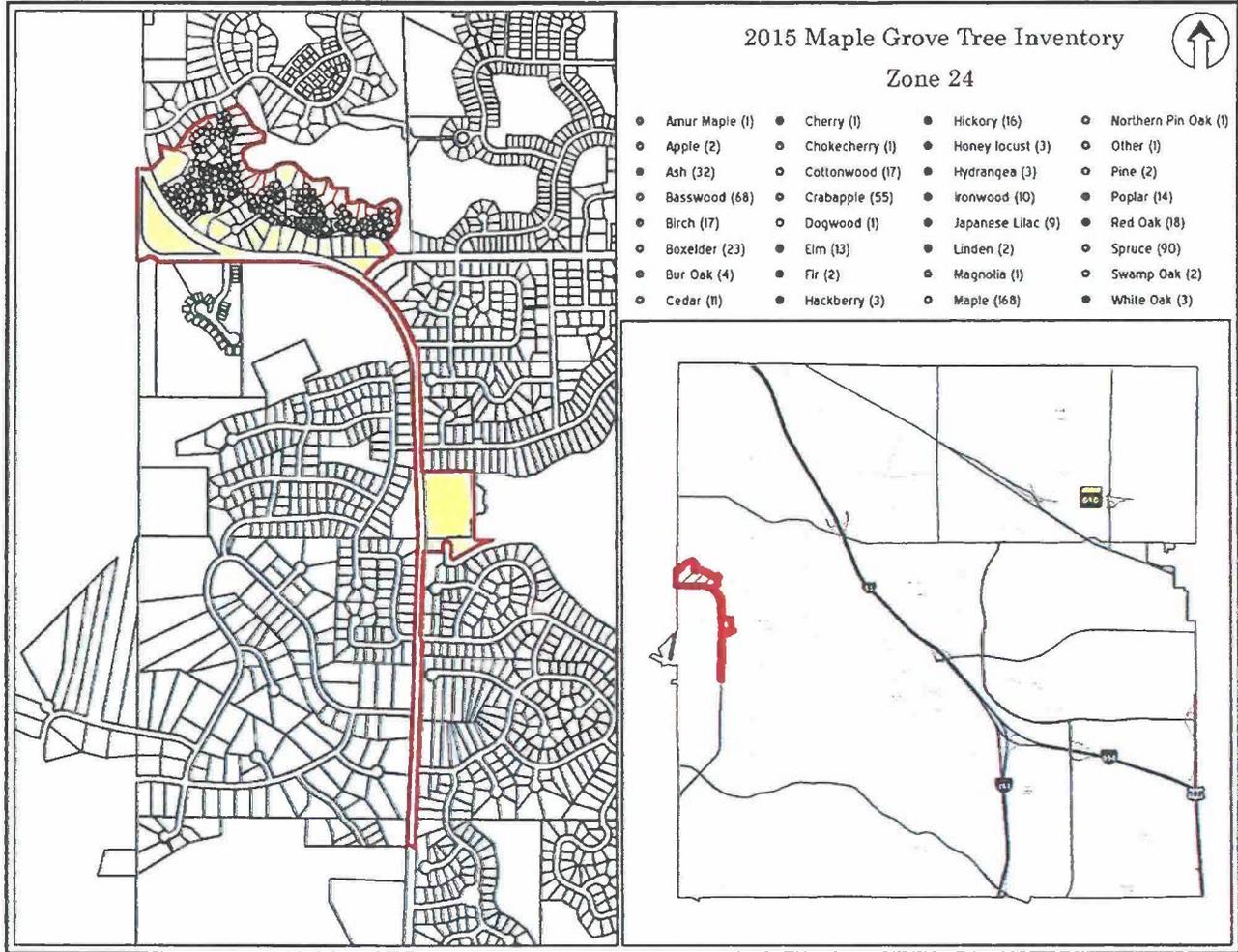
- Ash (89)
- Basswood (12)
- Birch (2)
- Bur Oak (1)
- Cedar (8)
- Chokecherry (11)
- Cottonwood (1)
- Crabapple (9)
- Elm (3)
- Honey locust (14)
- Japanese Lilac (1)
- Linden (1)
- Maple (27)
- Northern Pin Oak (1)
- Other (1)
- Pine (9)
- Red Oak (1)
- Spruce (27)
- Swamp Oak (6)
- White Oak (1)



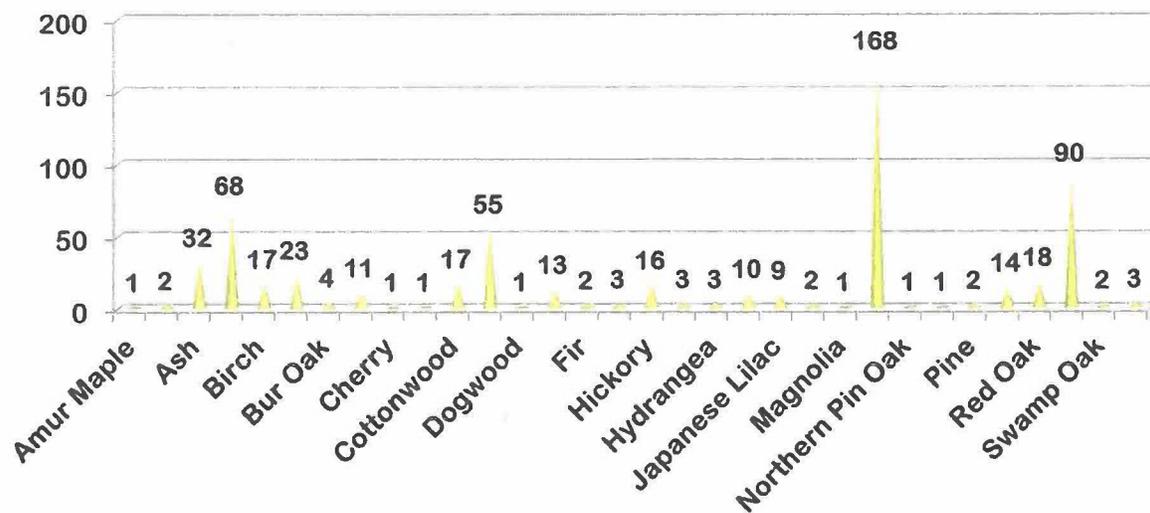
Zone 13 - 225 Trees



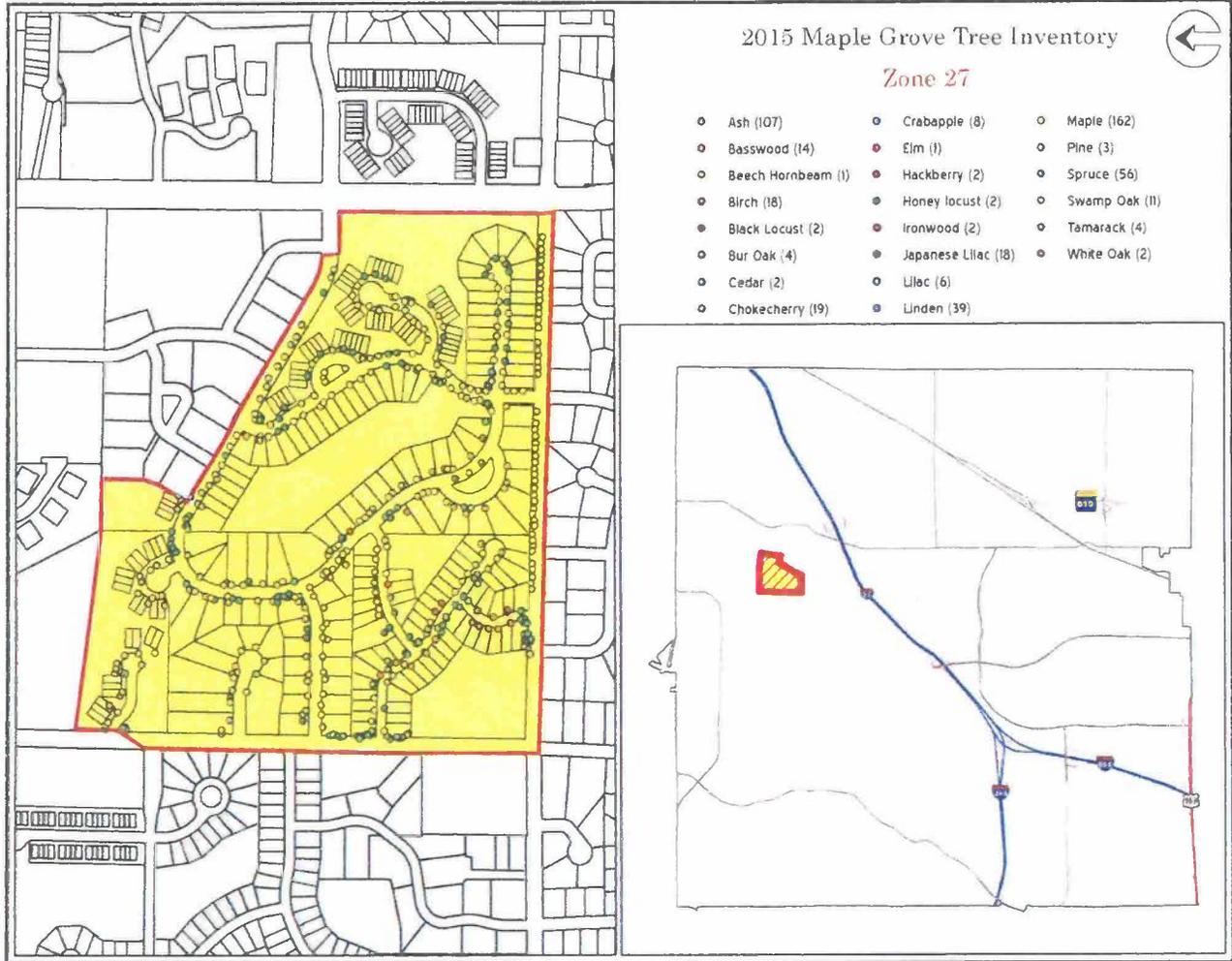
Trees Inventoried in Zone 24



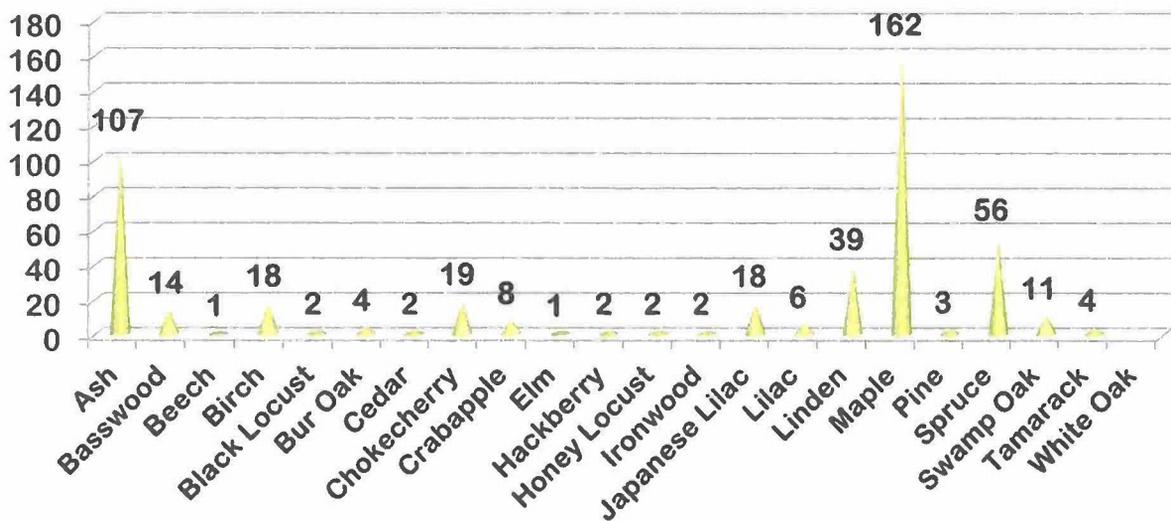
Zone 24 - 594 Trees



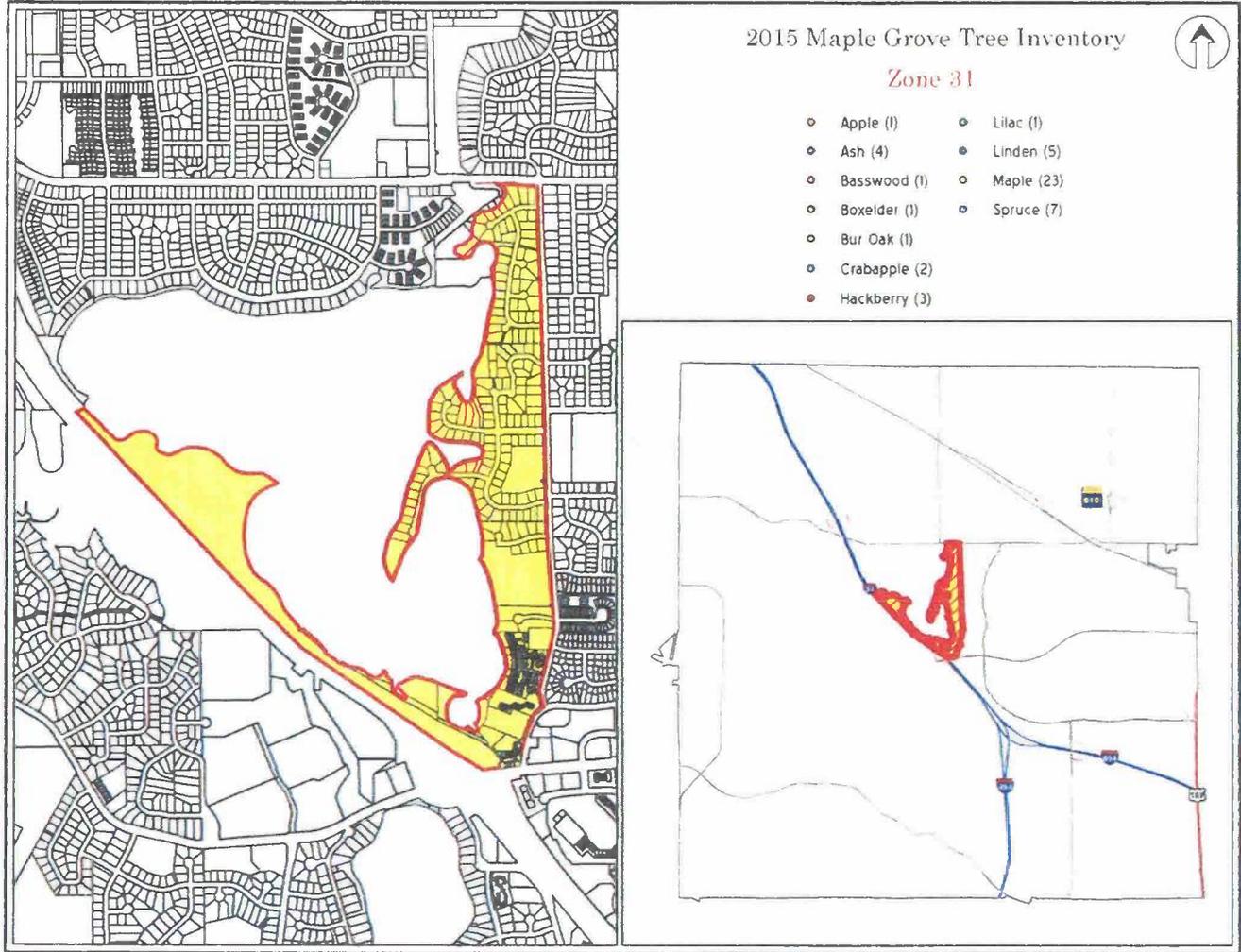
Trees Inventoried in Zone 27



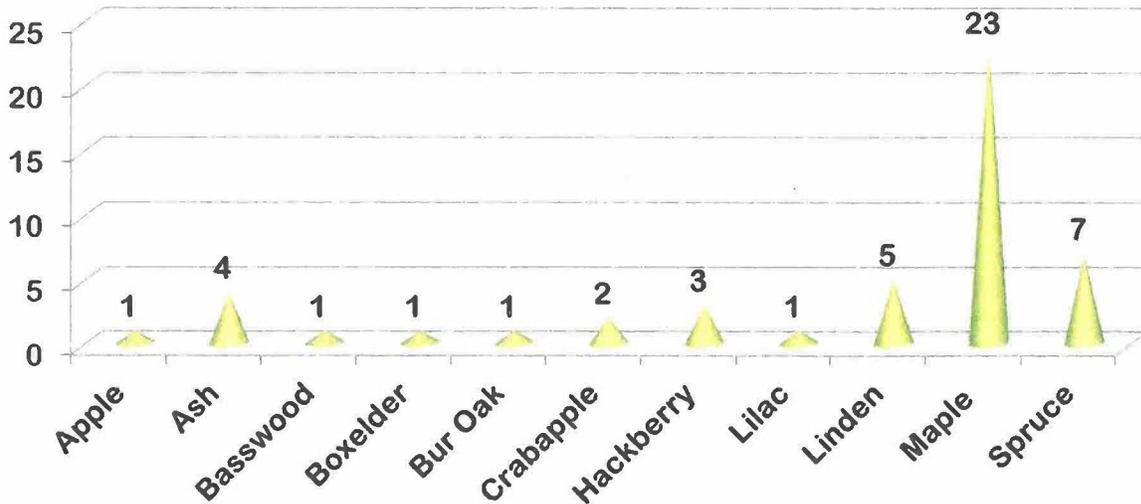
Zone 27 - 483 Trees



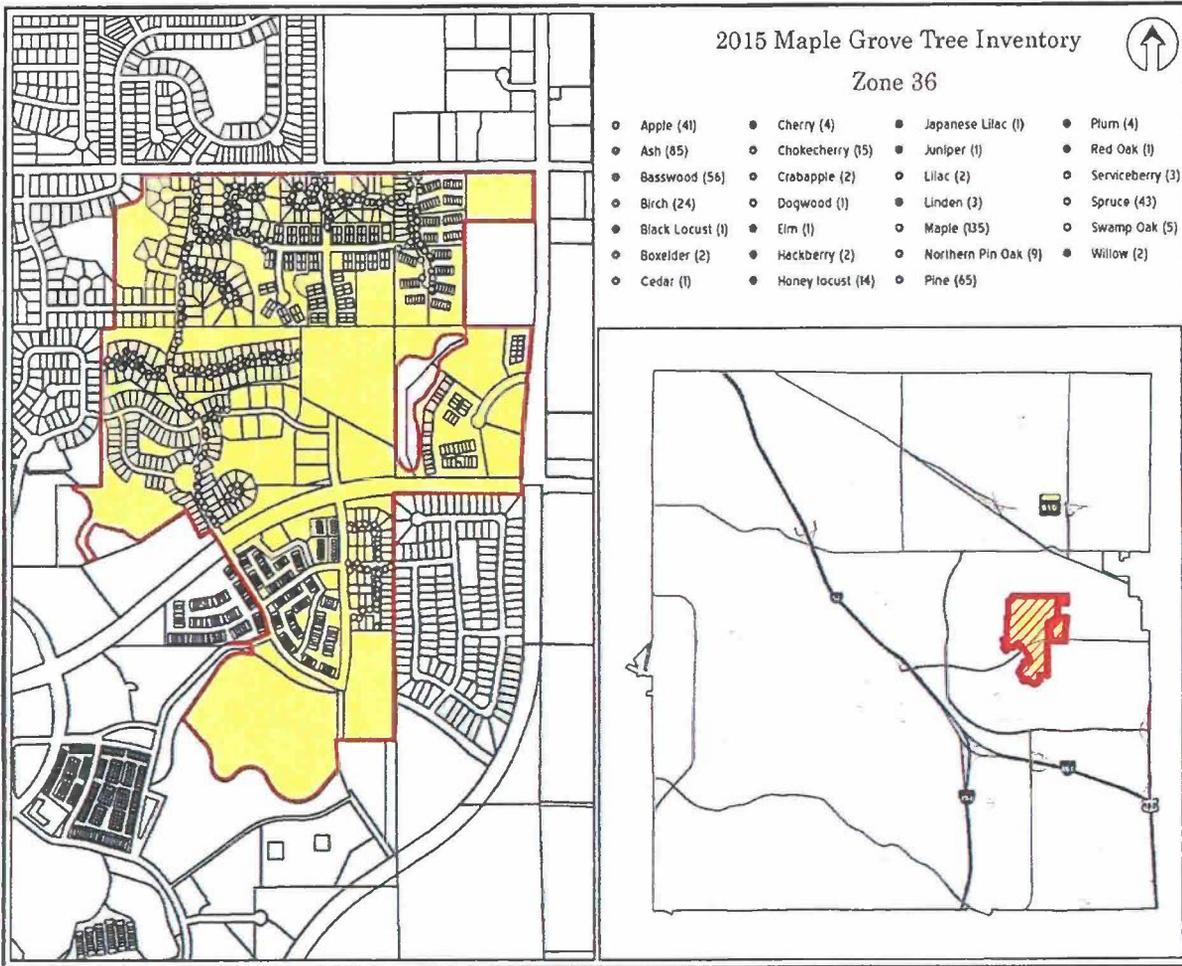
Trees Inventoried in Zone 31



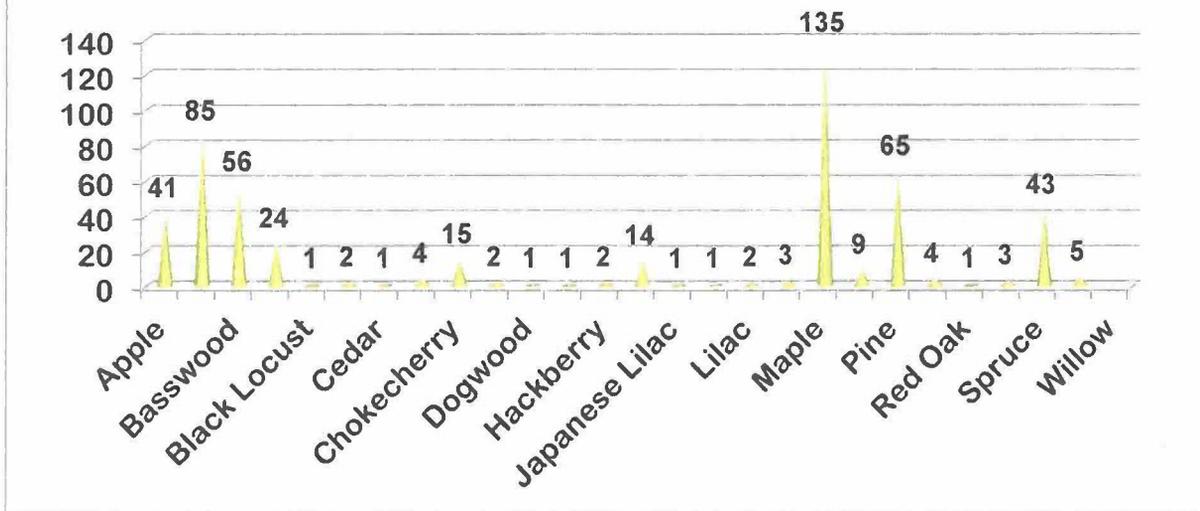
Zone 31 - 49 Trees



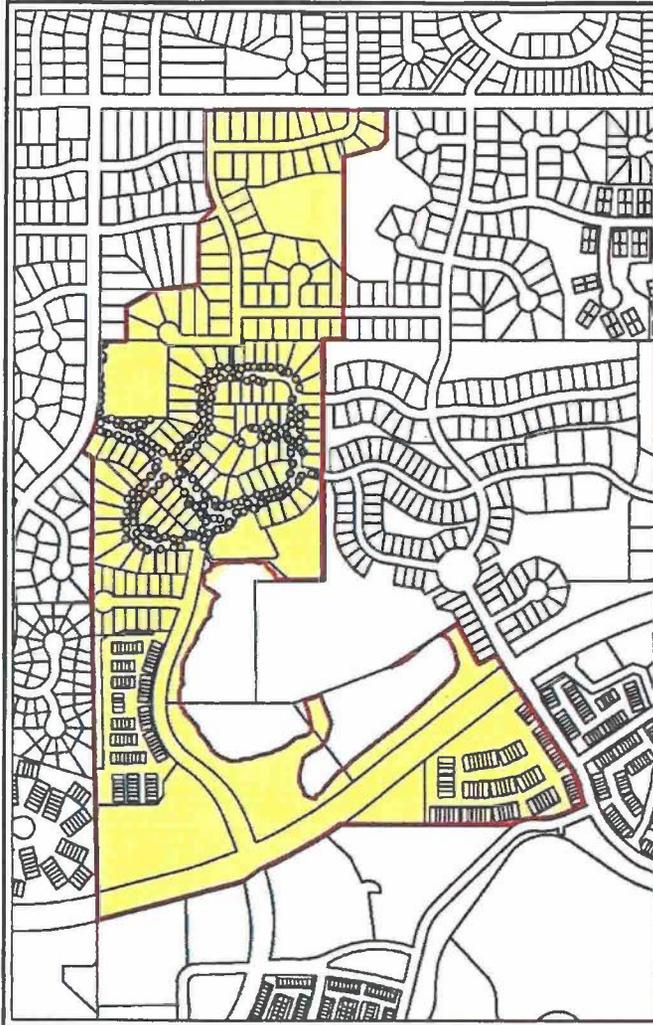
Trees Inventoried in Zone 36



Zone 36 - 524 Trees



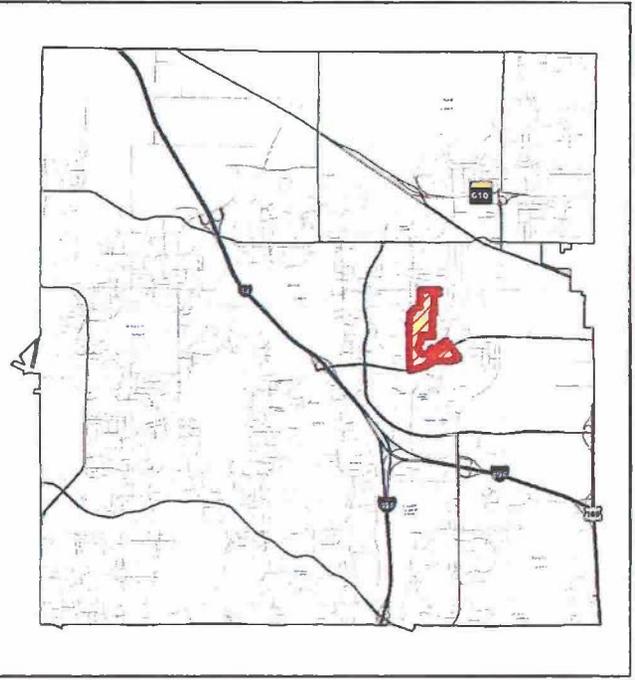
Trees Inventoried in Zone 37



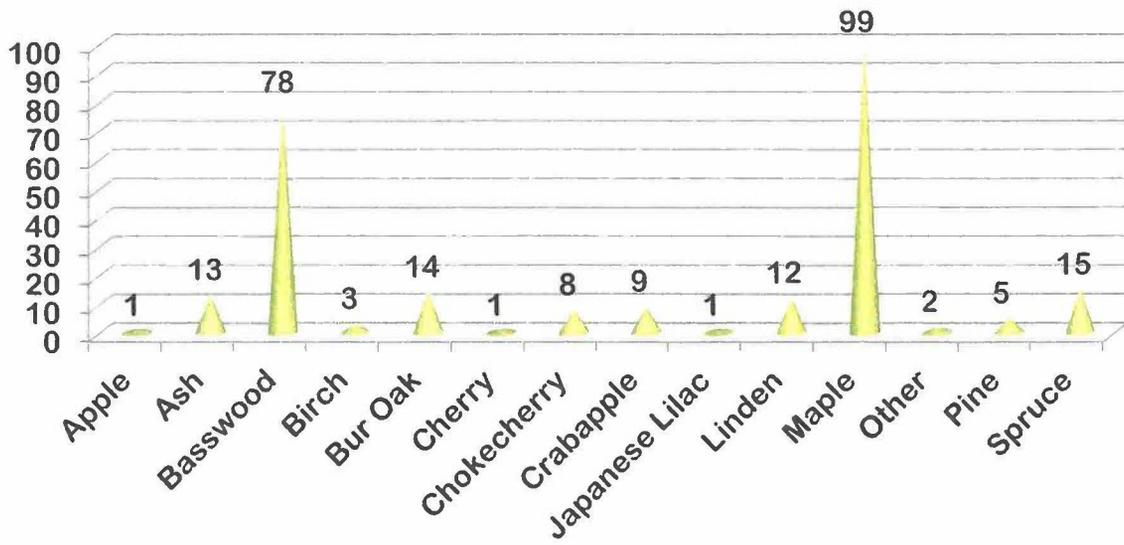
2015 Maple Grove Tree Inventory
Zone 37



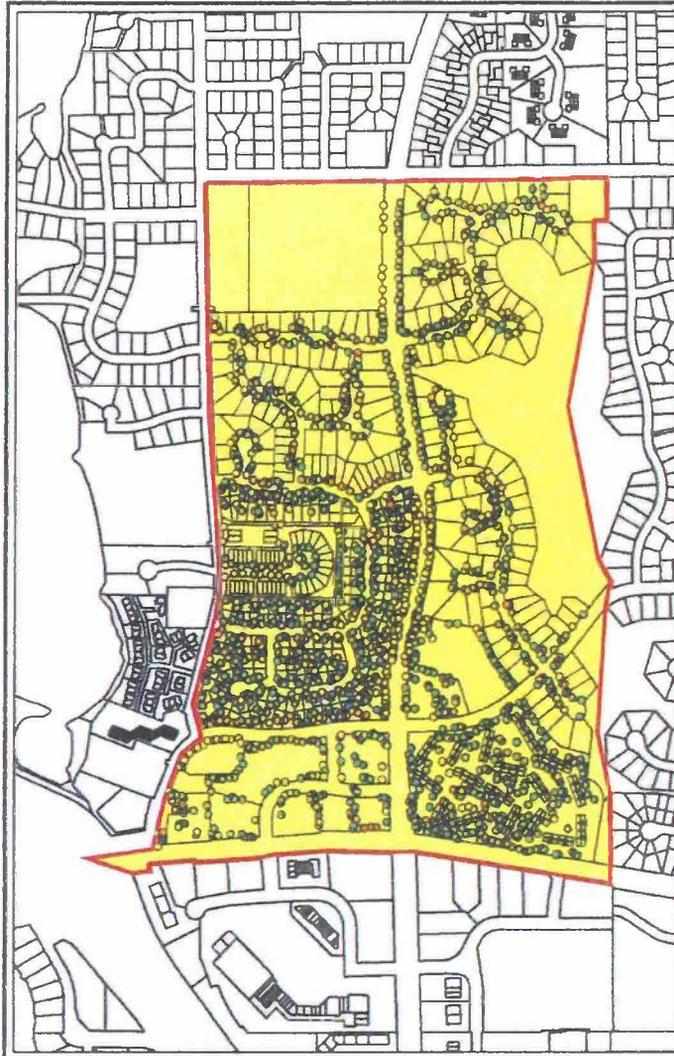
- Apple (1)
- Ash (13)
- Basswood (78)
- Birch (3)
- Bur Oak (14)
- Cherry (1)
- Chokecherry (8)
- Crabapple (9)
- Japanese Lilac (1)
- Linden (12)
- Maple (99)
- Other (2)
- Pine (5)
- Spruce (15)



Zone 37 - 261 Trees



Trees Inventoried in Zone 39



2015 Maple Grove Tree Inventory

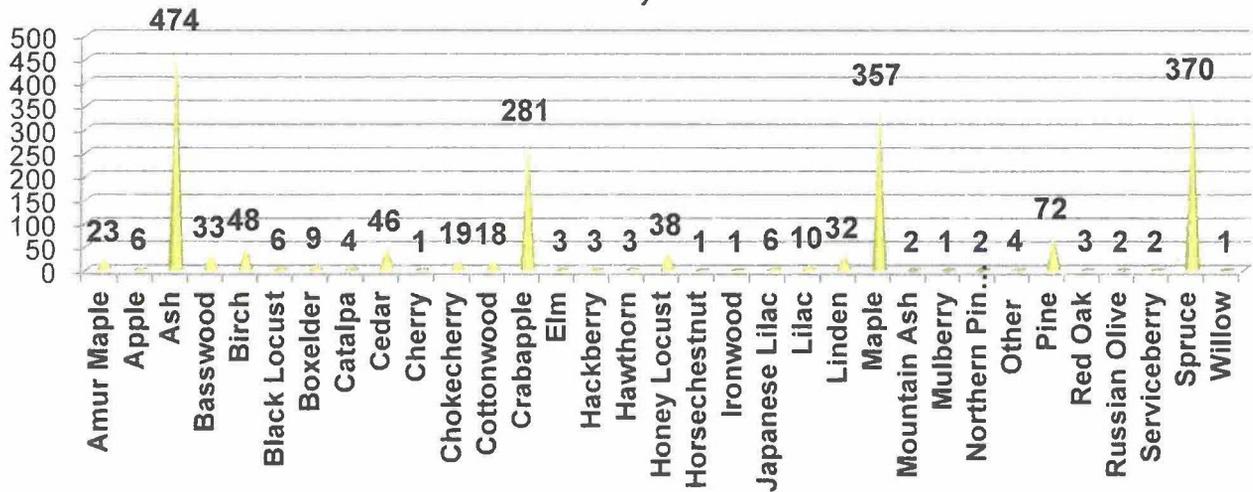


Zone 39

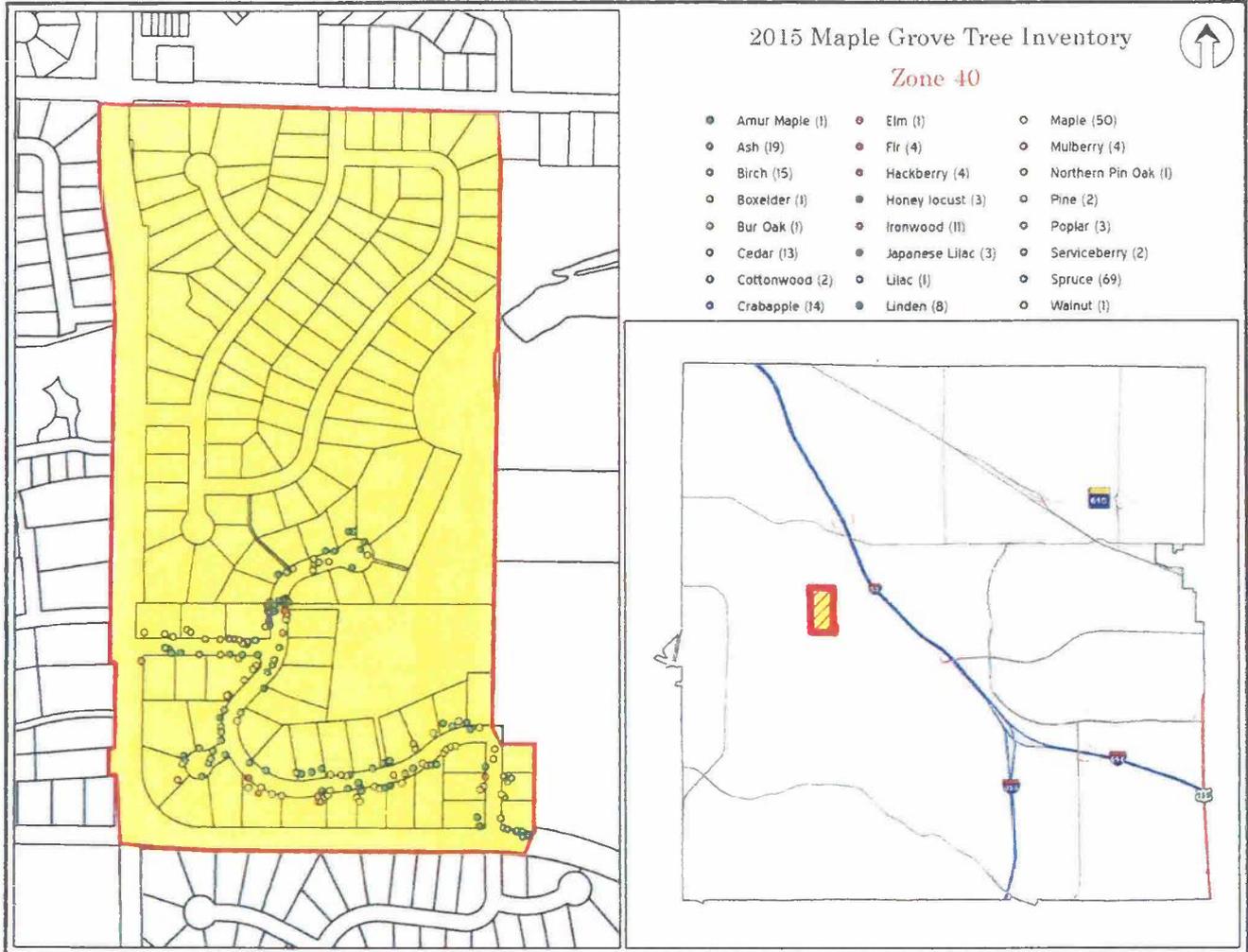
- Amur Maple (23)
- Apple (6)
- Ash (474)
- Basswood (33)
- Birch (46)
- Black Locust (6)
- Boxelder (9)
- Catalpa (4)
- Cedar (46)
- Cherry (1)
- Chokecherry (19)
- Cottonwood (18)
- Crabapple (281)
- Elm (3)
- Hackberry (3)
- Hawthorn (3)
- Honey locust (38)
- Horsechestnut (1)
- Ironwood (1)
- Japanese Lilac (6)
- Lilac (10)
- Linden (32)
- Maple (357)
- Mountain Ash (2)
- Mulberry (1)
- Northern Pin Oak (2)
- Other (4)
- Pine (72)
- Red Oak (3)
- Russian Olive (2)
- Serviceberry (2)
- Spruce (370)
- Willow (1)



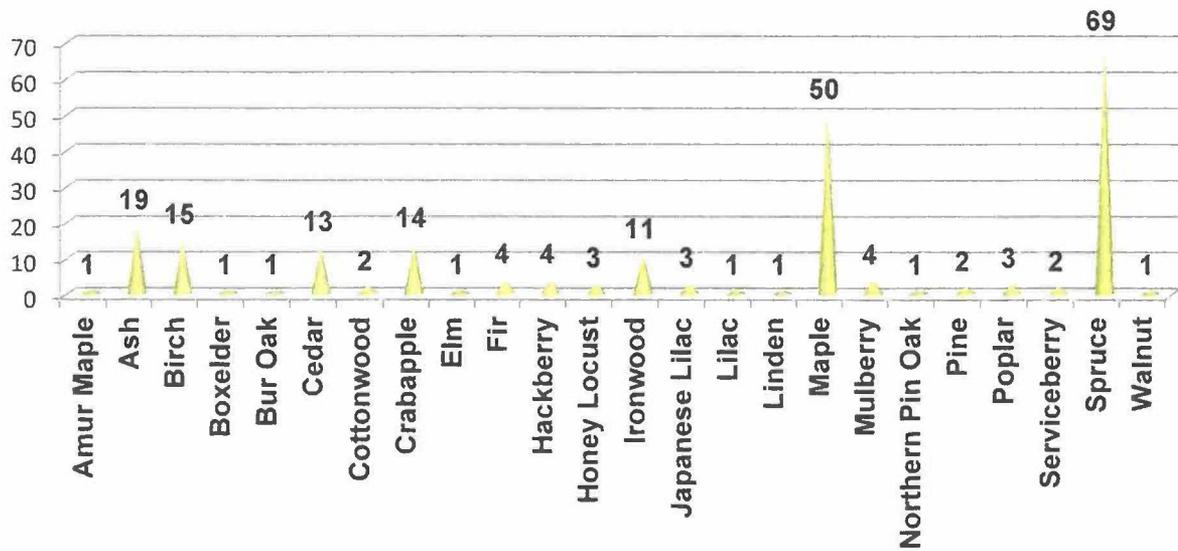
Zone 39 - 1,881 Trees



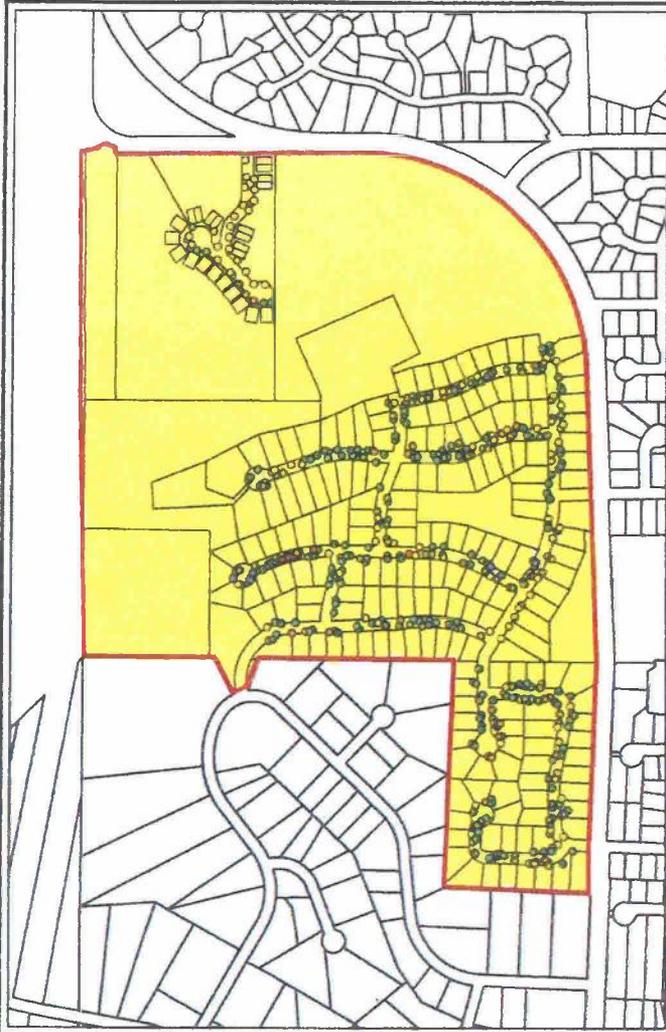
Trees Inventoried in Zone 40



Zone 40 - 233 Trees



Trees Inventoried in Zone 43



2015 Maple Grove Tree Inventory

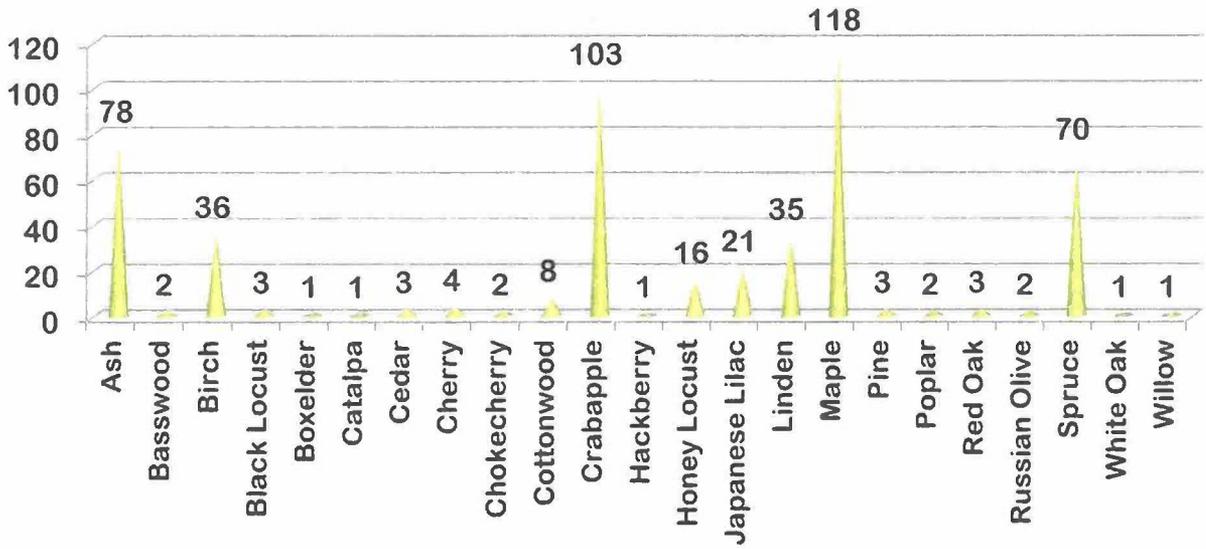


Zone 43

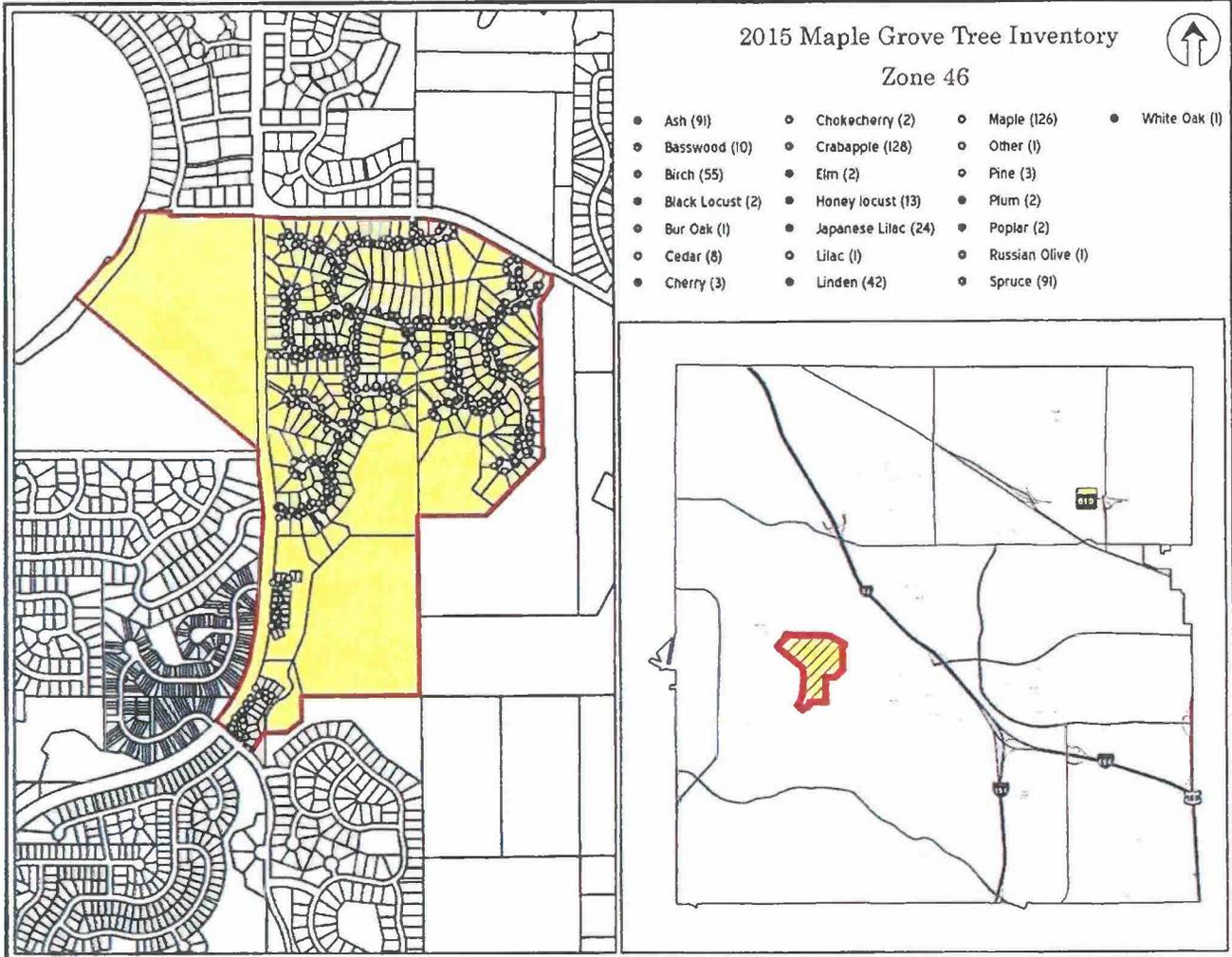
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- Basswood (2)
- Birch (36)
- Black Locust (3)
- Boxelder (1)
- Catalpa (1)
- Cedar (3)
- Cherry (4)
- Chokecherry (2)
- Cottonwood (8)
- Crabapple (103)
- Hackberry (1)
- Honey locust (16)
- Japanese Lilac (21)
- Linden (35)
- Maple (118)
- Pine (3)
- Poplar (2)
- Red Oak (3)
- Russian Olive (2)
- Spruce (70)
- White Oak (1)
- Willow (1)



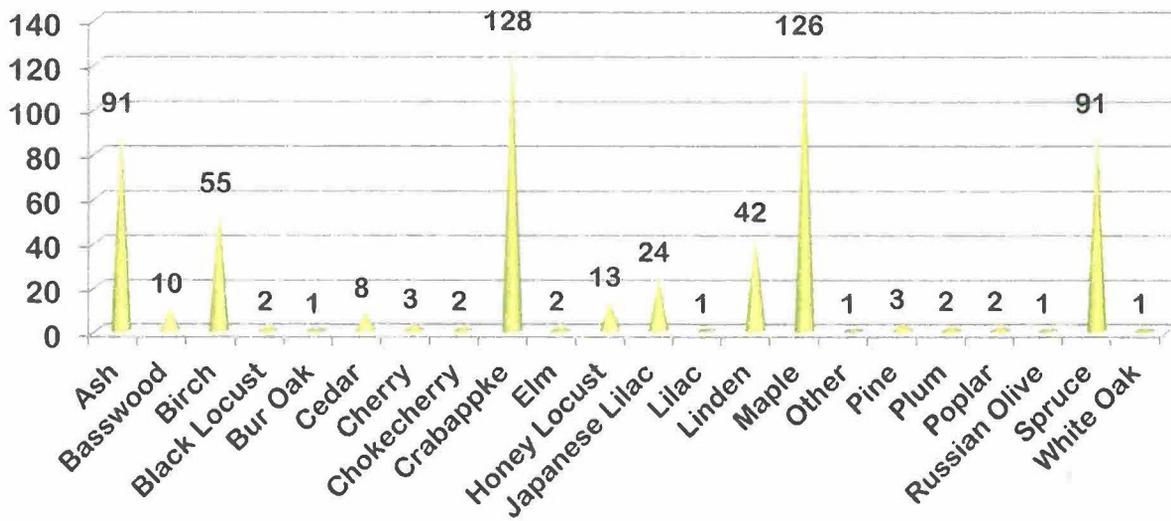
Zone 43 - 514 Trees



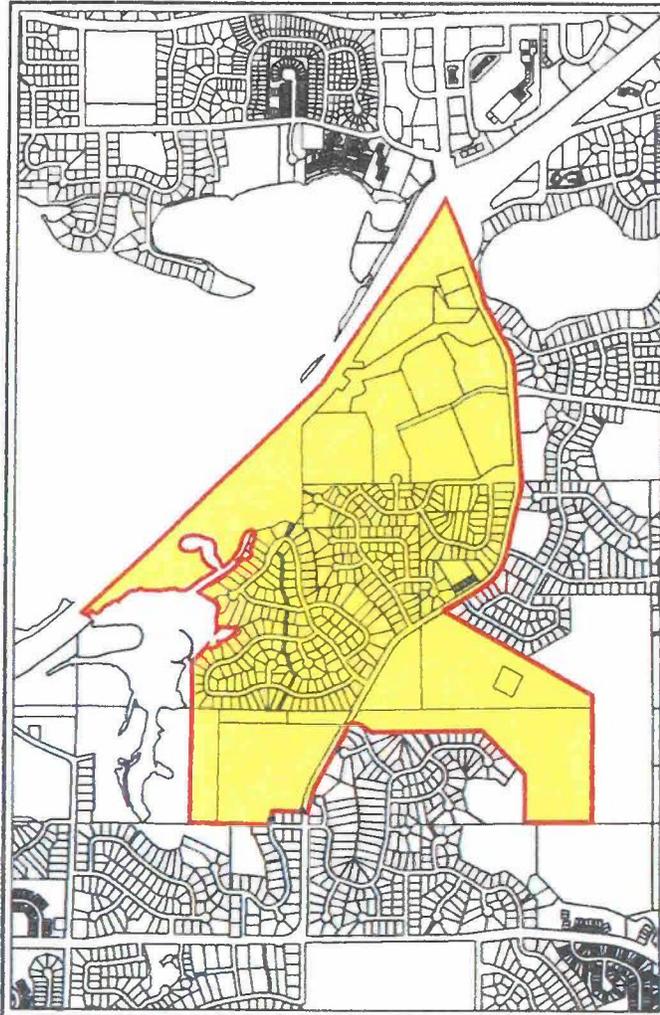
Trees Inventoried in Zone 46



Zone 46 - 609 Trees



Trees Inventoried in Zone 47

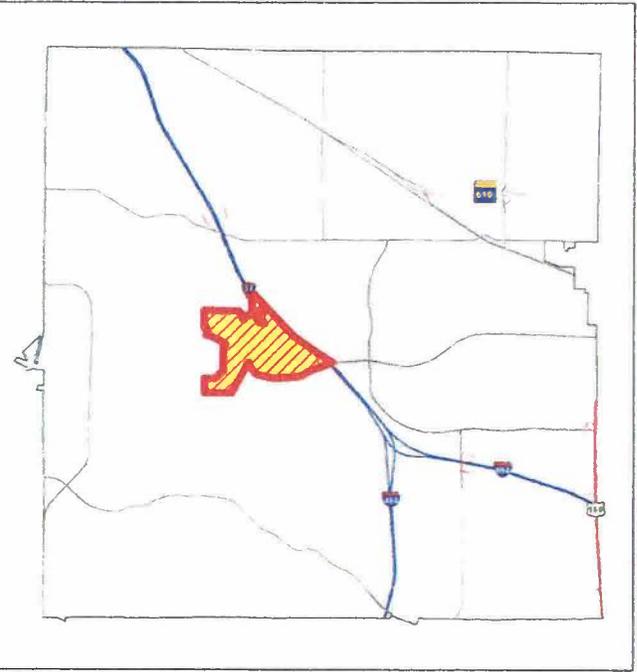


2015 Maple Grove Tree Inventory

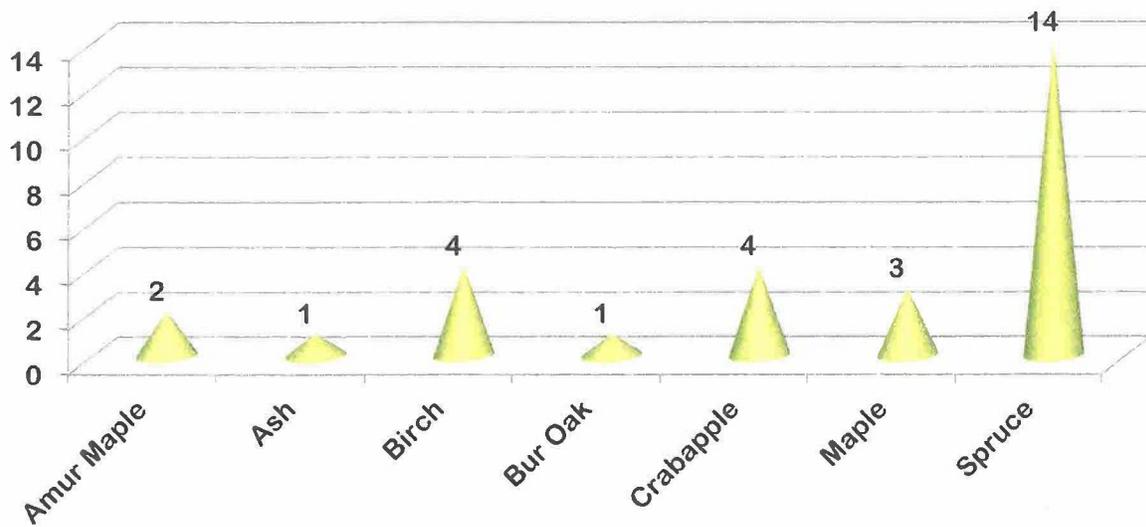


Zone 47

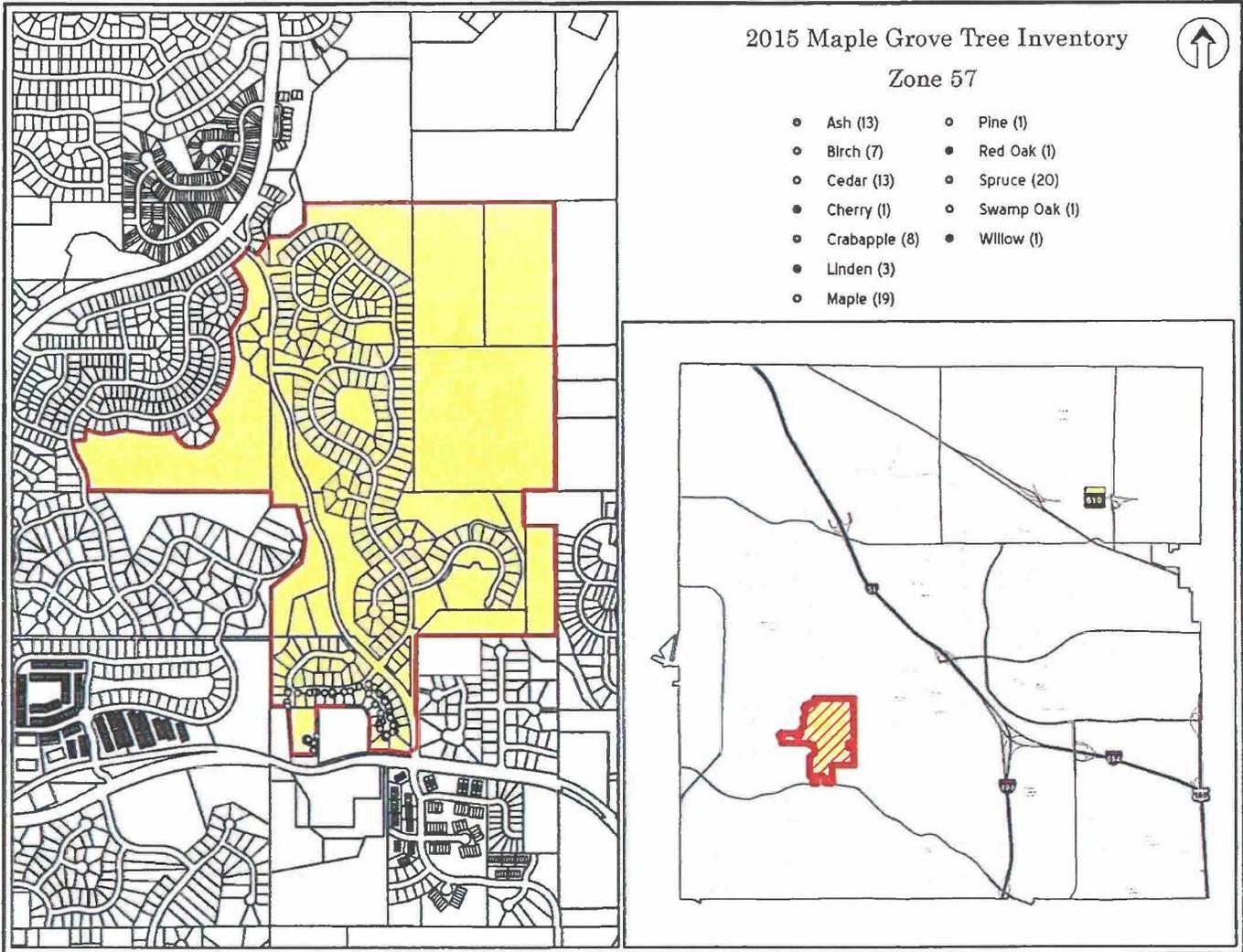
- Amur Maple (2)
- Ash (1)
- Birch (4)
- Bur Oak (1)
- Crabapple (4)
- Maple (3)
- Spruce (14)



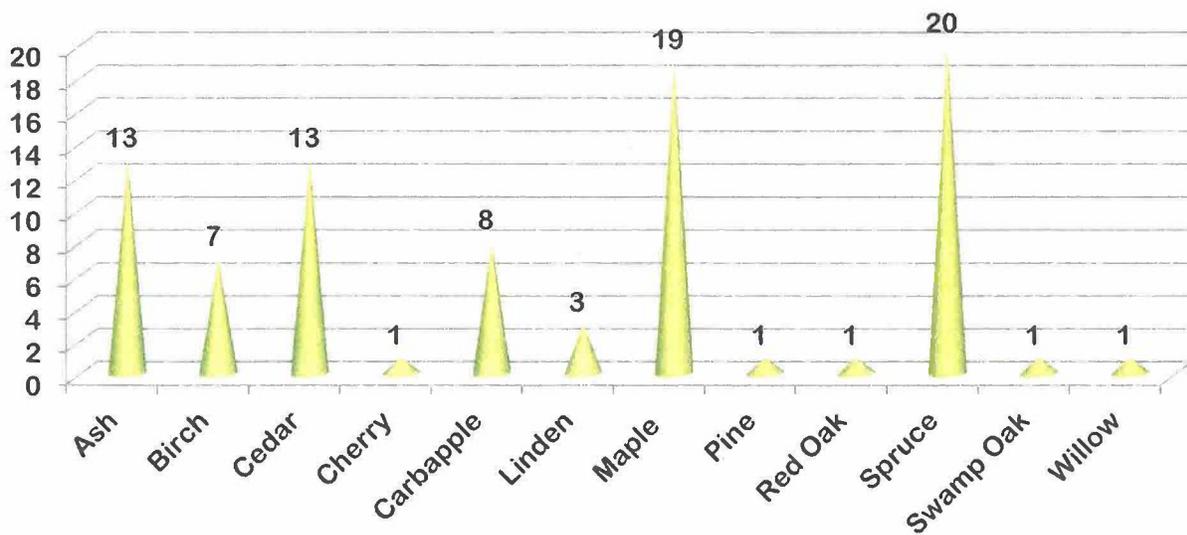
Zone 47 - 29 Trees



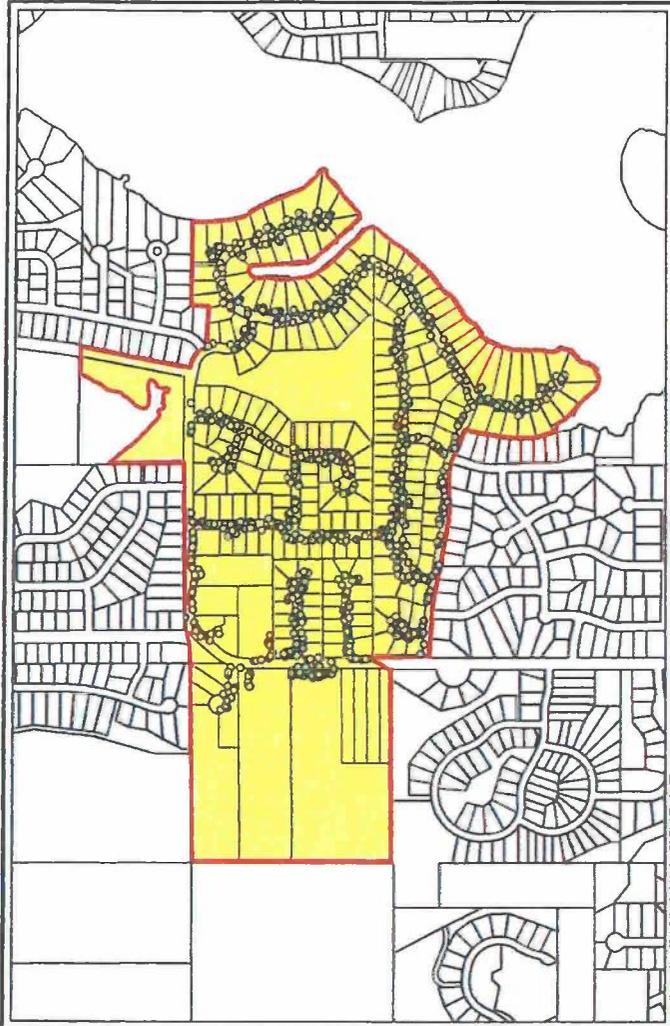
Trees Inventoried in Zone 57



Zone 57 - 88 Trees



Trees Inventoried in Zone 58

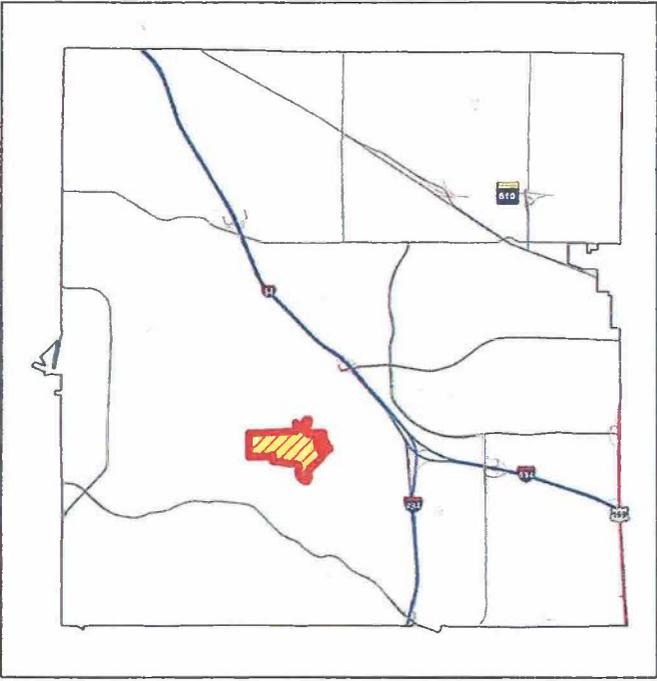


2015 Maple Grove Tree Inventory

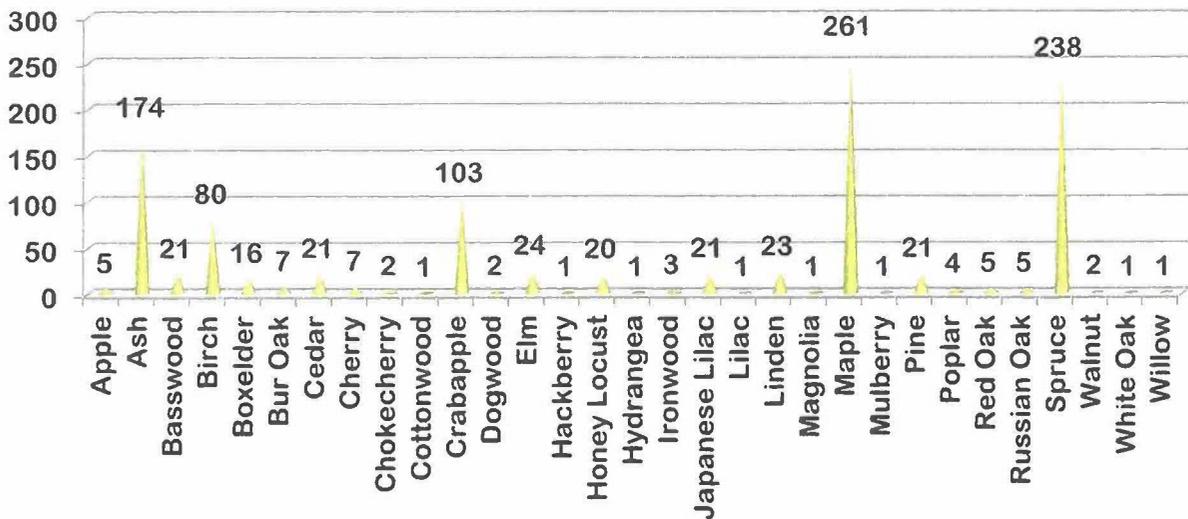


Zone 58

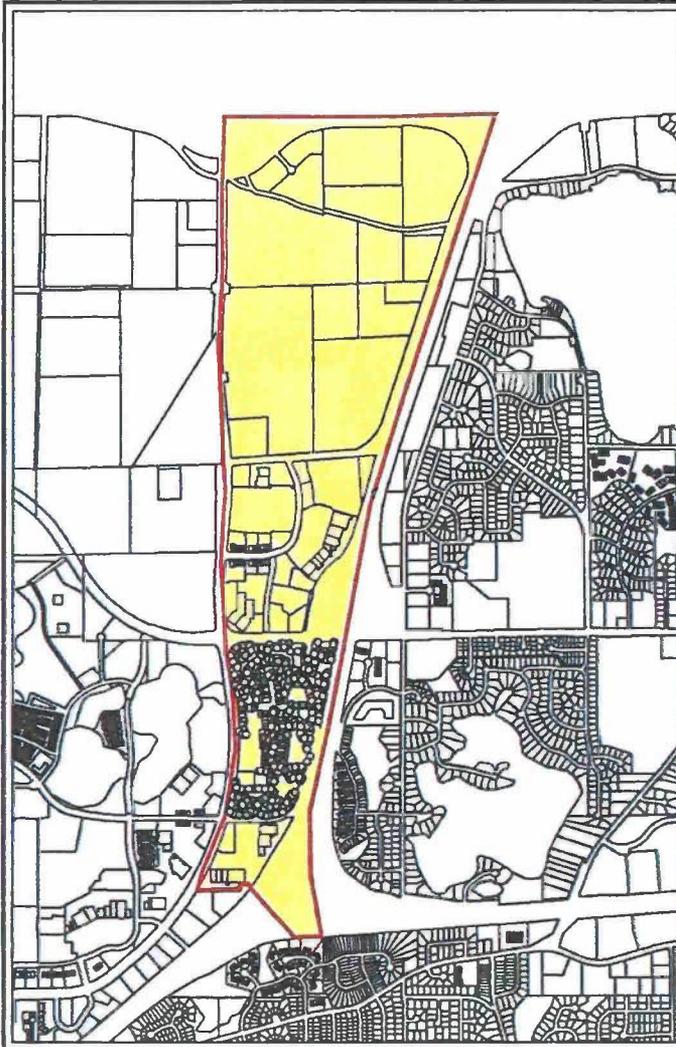
- Apple (5)
- Ash (174)
- Basswood (21)
- Birch (80)
- Boxelder (16)
- Bur Oak (7)
- Cedar (21)
- Cherry (7)
- Chokecherry (2)
- Cottonwood (1)
- Crabapple (103)
- Dogwood (2)
- Elm (24)
- Hackberry (1)
- Honey locust (20)
- Hydrangea (1)
- Ironwood (3)
- Japanese Lilac (21)
- Lilac (1)
- Linden (23)
- Magnolia (1)
- Maple (261)
- Mulberry (1)
- Pine (21)
- Poplar (4)
- Red Oak (5)
- Russian Olive (2)
- Spruce (238)
- Walnut (2)
- White Oak (1)
- Willow (1)



Zone 58 - 1,070 Trees



Trees Inventoried in Zone 61



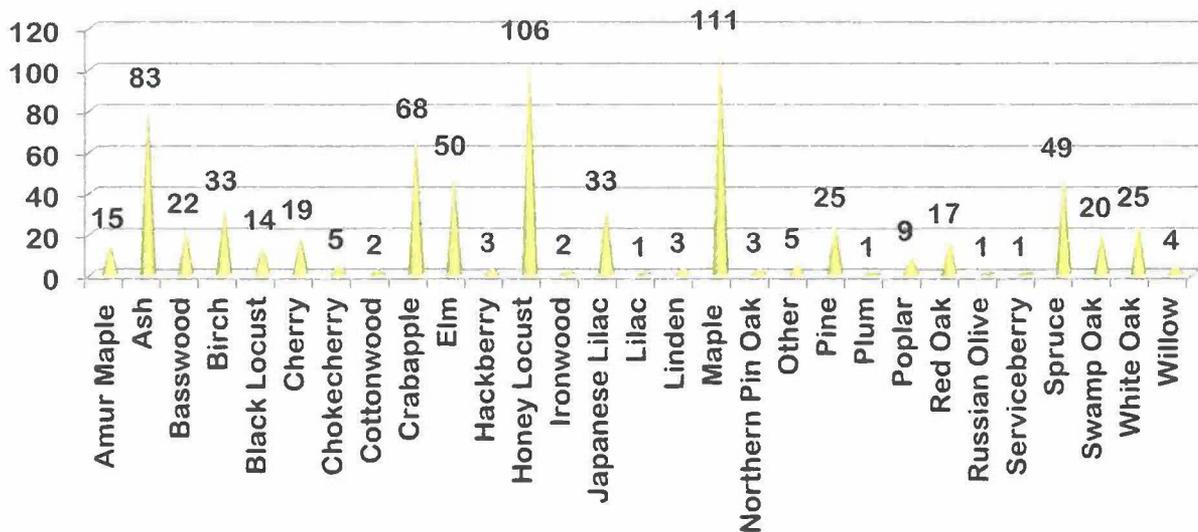
2015 Maple Grove Tree Inventory Zone 61



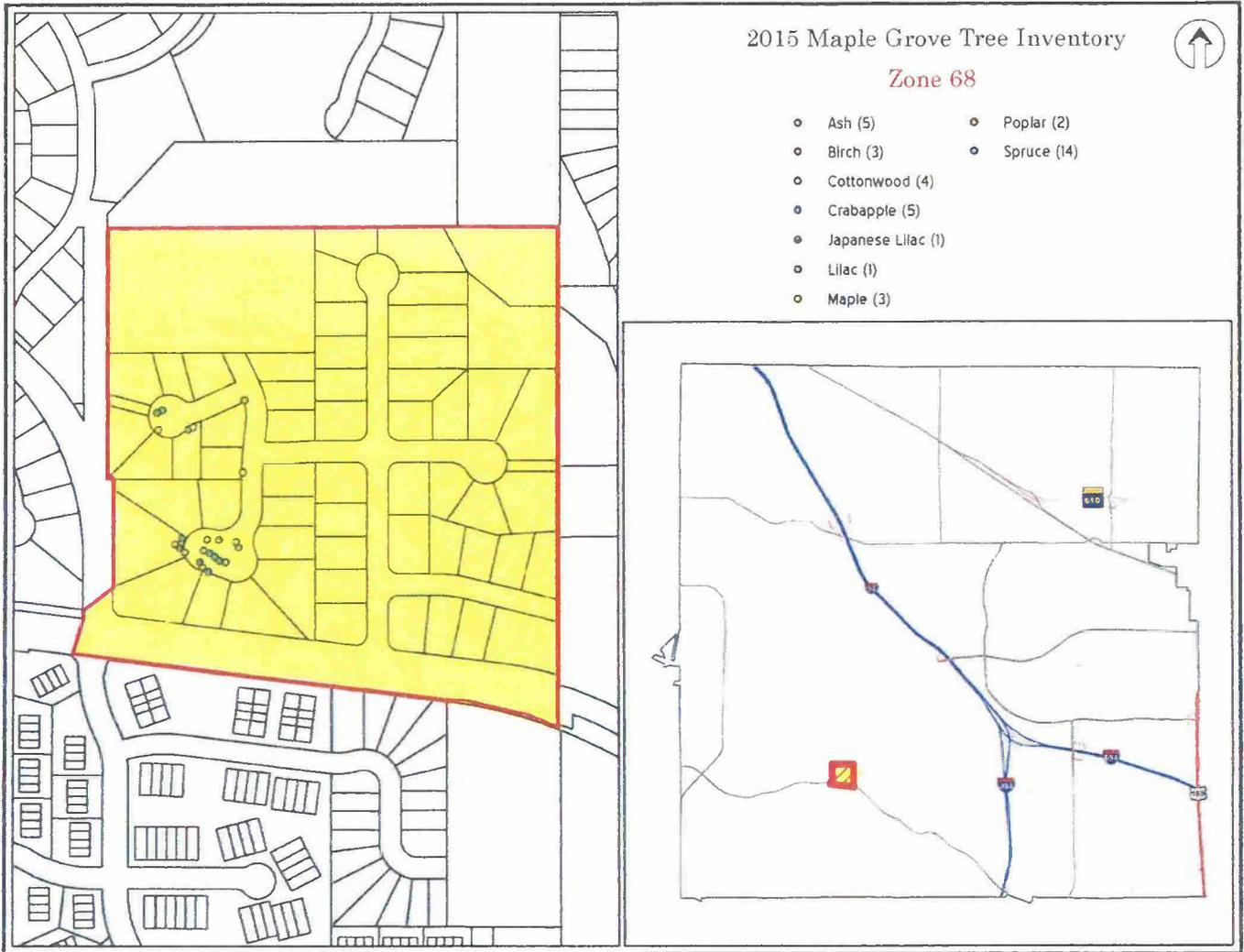
- Amur Maple (15)
- Ash (83)
- Basswood (22)
- Birch (33)
- Black Locust (14)
- Cherry (19)
- Chokecherry (5)
- Cottonwood (2)
- Crabapple (68)
- Elm (50)
- Hackberry (3)
- Honey locust (106)
- Ironwood (2)
- Japanese Lilac (33)
- Lilac (1)
- Linden (3)
- Maple (111)
- Northern Pin Oak (3)
- Other (5)
- Pine (25)
- Plum (1)
- Poplar (9)
- Red Oak (17)
- Russian Olive (1)
- Serviceberry (1)
- Spruce (49)
- Swamp Oak (20)
- White Oak (25)
- Willow (4)



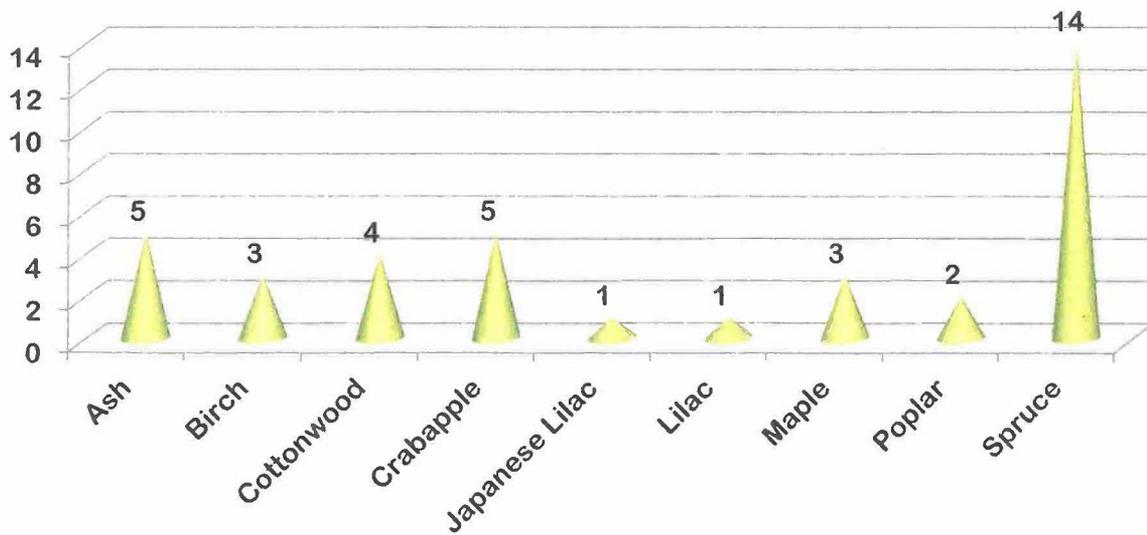
Zone 61 - 730 Trees



Trees Inventoried in Zone 68



Zone 68 - 38 Trees



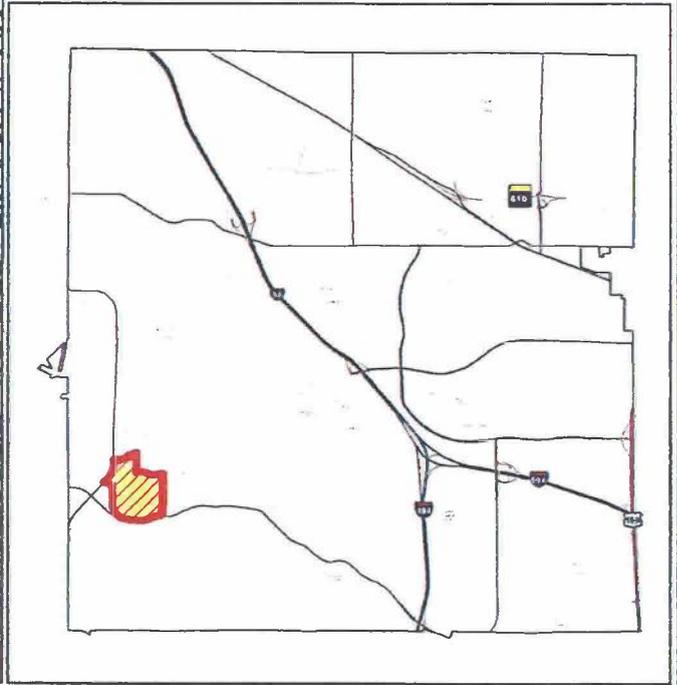
Trees Inventoried in Zone 70



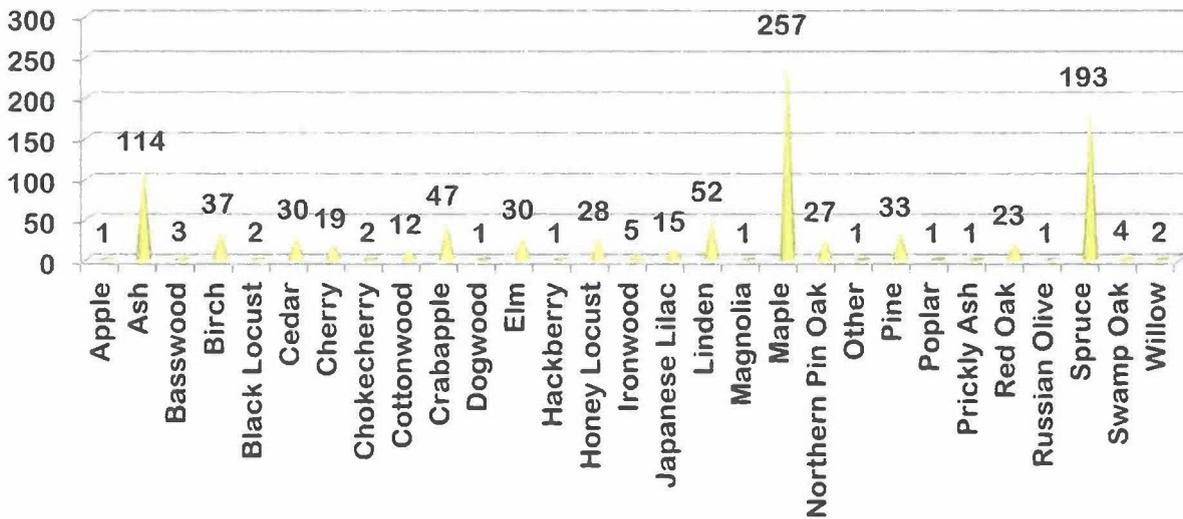
2015 Maple Grove Tree Inventory Zone 70



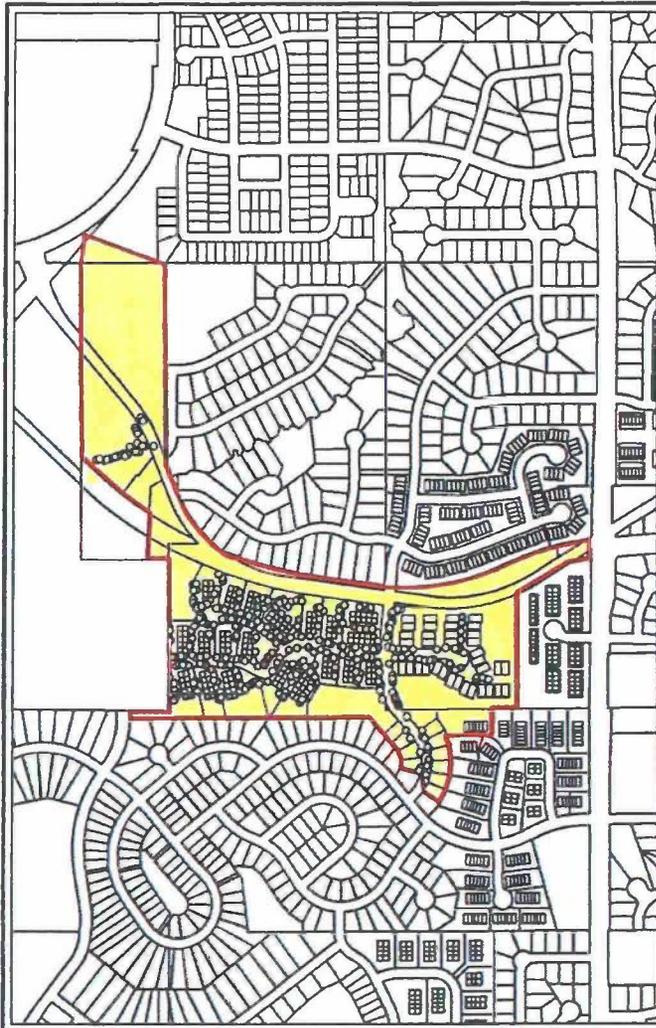
- Apple (1)
- Ash (114)
- Basswood (3)
- Birch (37)
- Black Locust (2)
- Cedar (30)
- Cherry (19)
- Chokecherry (2)
- Cottonwood (12)
- Crabapple (47)
- Dogwood (1)
- Elm (30)
- Hackberry (1)
- Honey locust (28)
- Ironwood (5)
- Japanese Lilac (15)
- Linden (52)
- Magnolia (1)
- Maple (257)
- Northern Pin Oak (27)
- Other (1)
- Pine (33)
- Poplar (1)
- Prickly Ash (1)
- Red Oak (23)
- Russian Olive (1)
- Spruce (193)
- Swamp Oak (4)
- Willow (2)



Zone 70 - 943 Trees



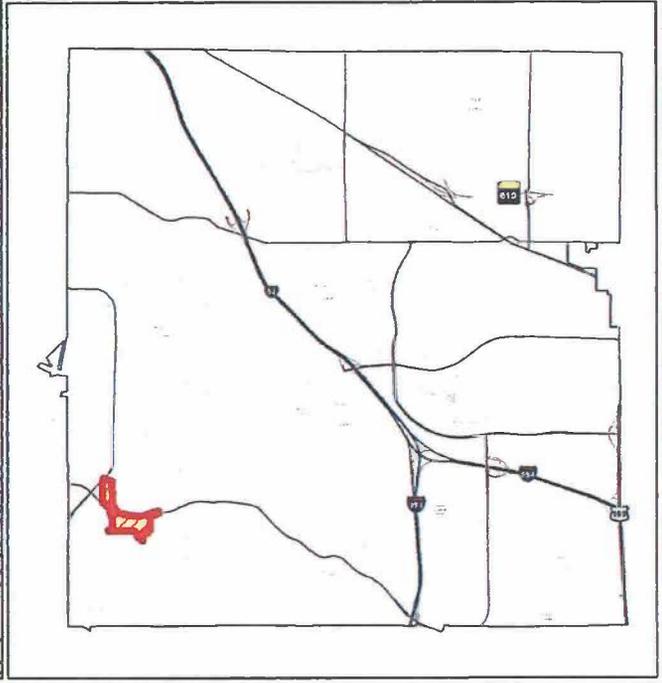
Trees Inventoried in Zone 72



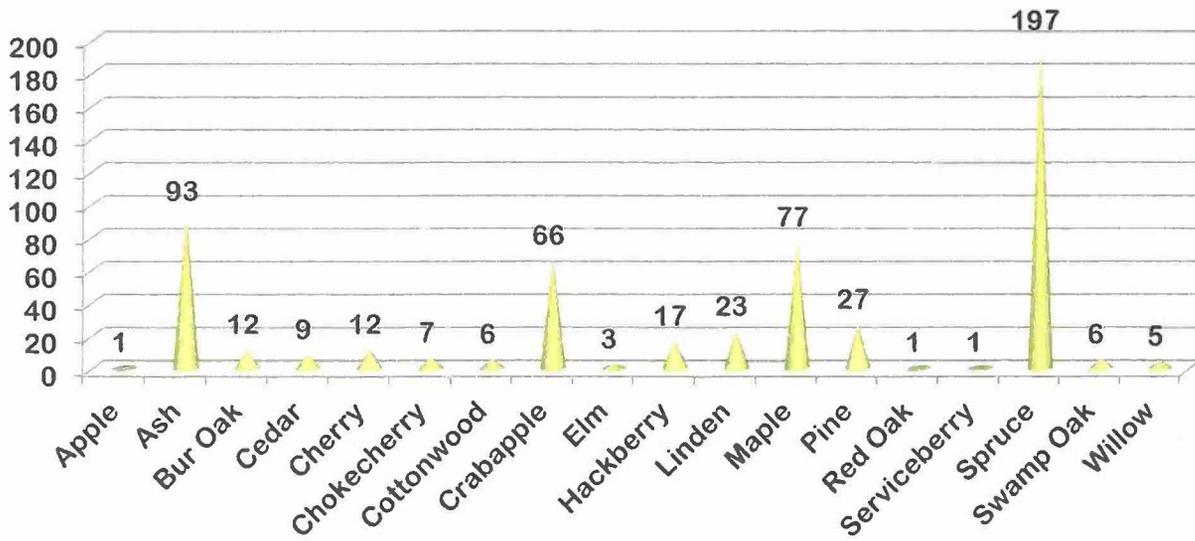
2015 Maple Grove Tree Inventory Zone 72



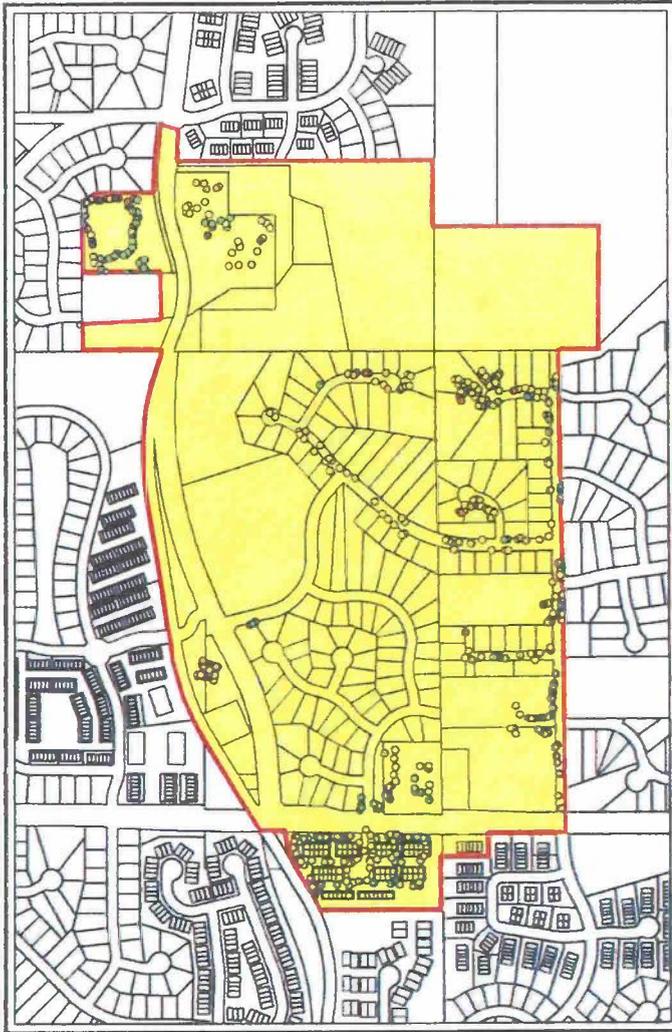
- Apple (1)
- Ash (93)
- Bur Oak (12)
- Cedar (9)
- Cherry (12)
- Chokecherry (7)
- Cottonwood (6)
- Crabapple (66)
- Elm (3)
- Hackberry (17)
- Linden (23)
- Maple (77)
- Pine (27)
- Red Oak (1)
- Serviceberry (1)
- Spruce (197)
- Swamp Oak (6)
- Willow (5)



Zone 72 - 563 Trees



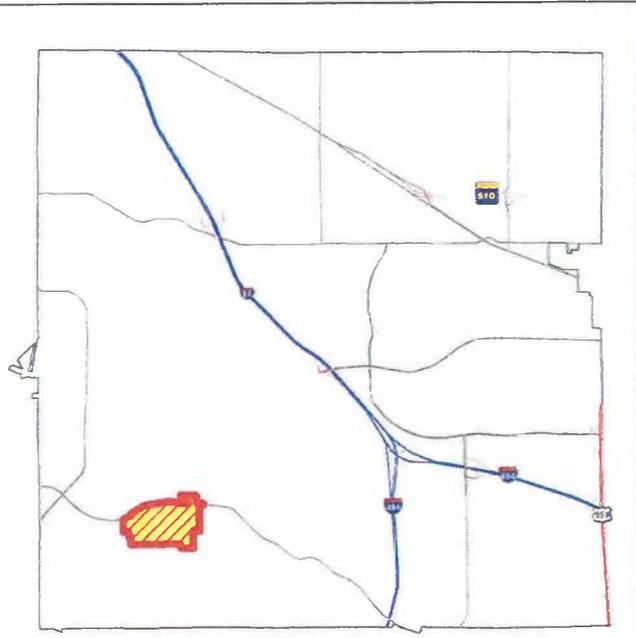
Trees Inventoried in Zone 74



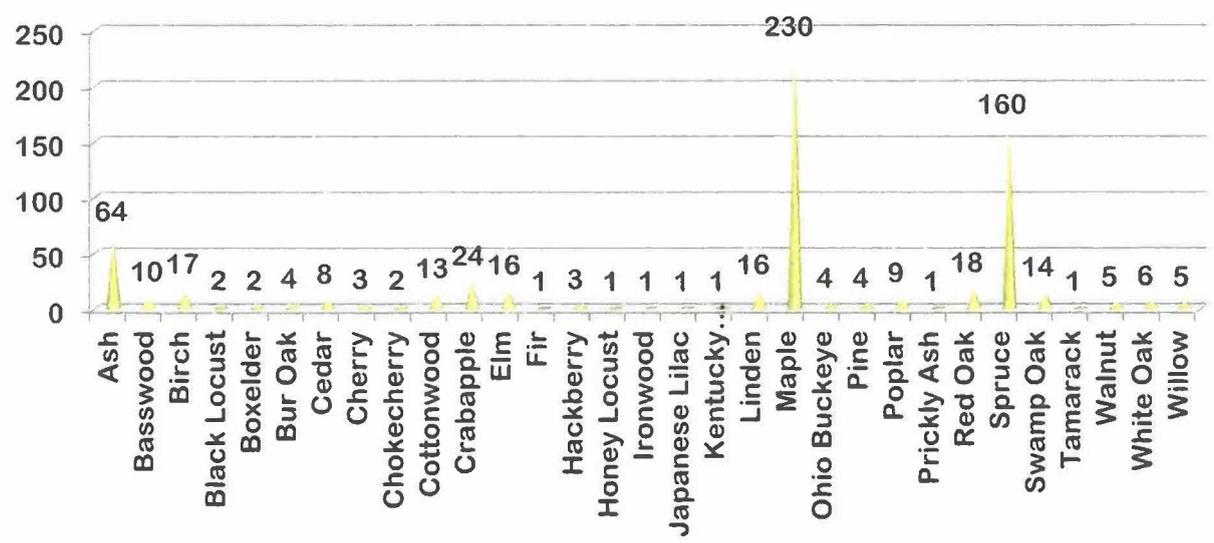
2015 Maple Grove Tree Inventory Zone 74



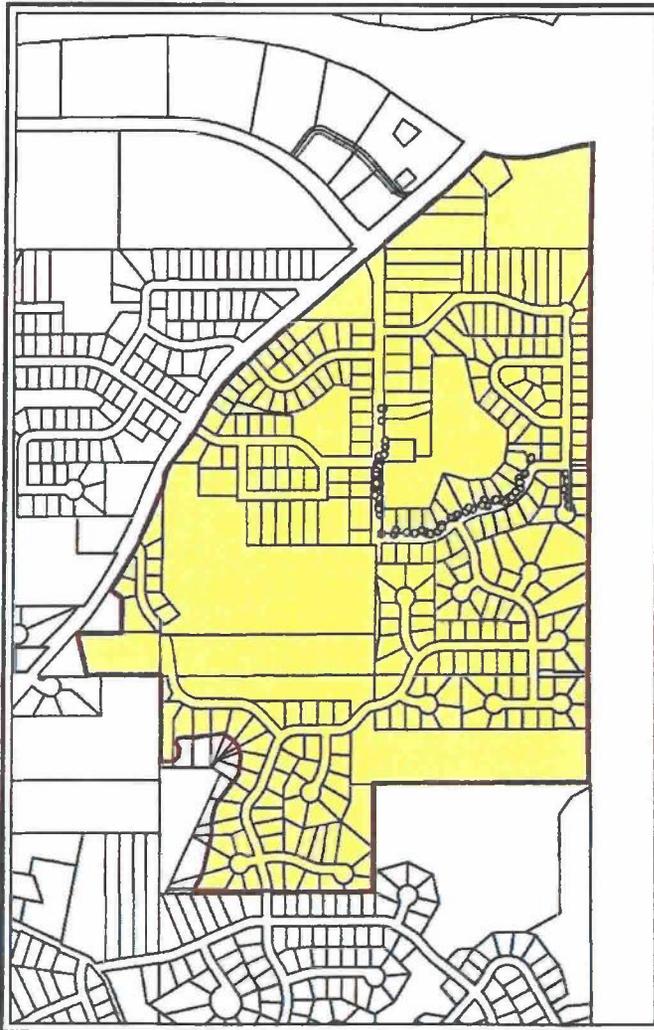
- Ash (64)
- Basswood (10)
- Birch (17)
- Black Locust (2)
- Boxelder (2)
- Bur Oak (4)
- Cedar (8)
- Cherry (3)
- Chokecherry (2)
- Cottonwood (13)
- Crabapple (24)
- Elm (16)
- Fir (1)
- Hackberry (3)
- Honey locust (1)
- Ironwood (1)
- Japanese Lilac (1)
- Kentucky Coffeetree (1)
- Linden (16)
- Maple (230)
- Ohio Buckeye (4)
- Pine (41)
- Poplar (9)
- Prickly Ash (1)
- Red Oak (18)
- Spruce (160)
- Swamp Oak (14)
- Tamarack (1)
- Walnut (5)
- White Oak (6)
- Willow (5)



Zone 74 - 683 Trees



Trees Inventoried in Zone 88



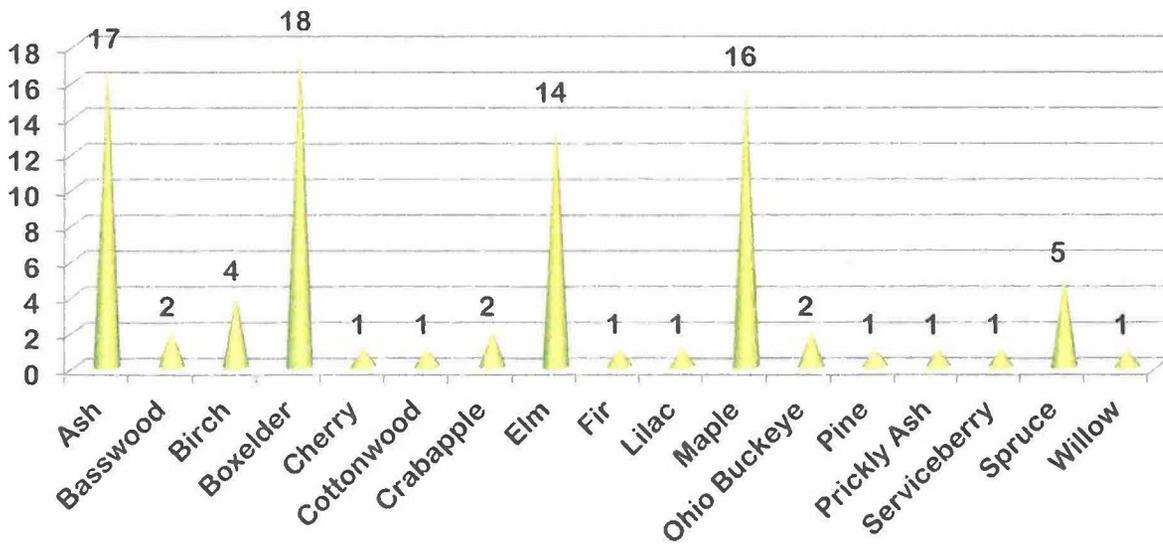
2015 Maple Grove Tree Inventory Zone 88



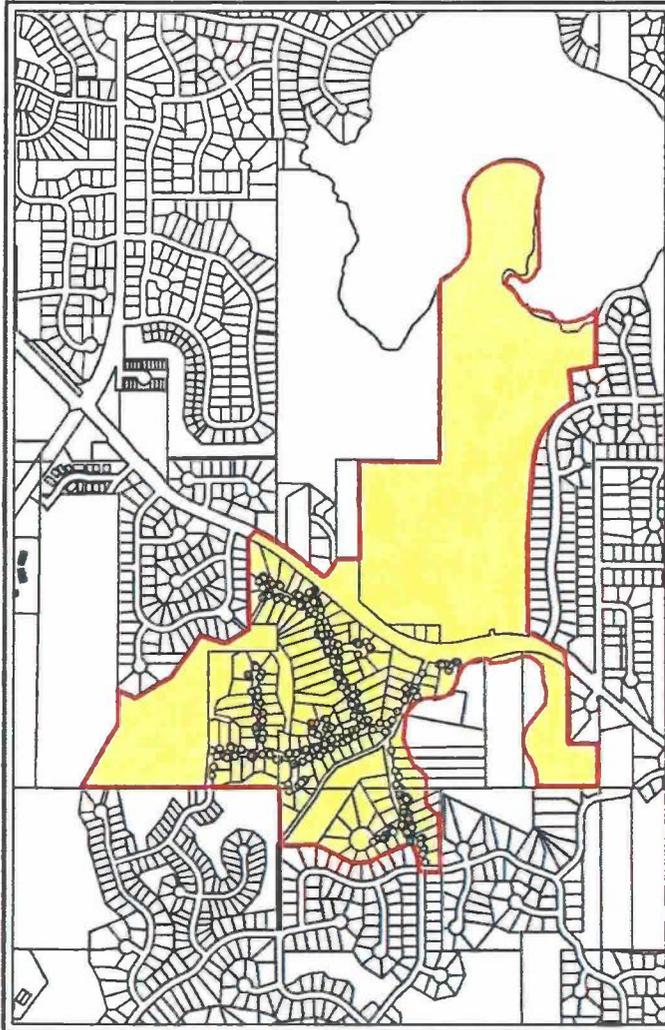
- Ash (17)
- Elm (14)
- Serviceberry (1)
- Basswood (2)
- Fir (1)
- Spruce (5)
- Birch (4)
- Lilac (1)
- Willow (1)
- Boxelder (18)
- Maple (16)
- Cherry (1)
- Ohio Buckeye (2)
- Cottonwood (1)
- Pine (1)
- Crabapple (2)
- Prickly Ash (1)



Zone 88 - 88 Trees



Trees Inventoried in Zone 89

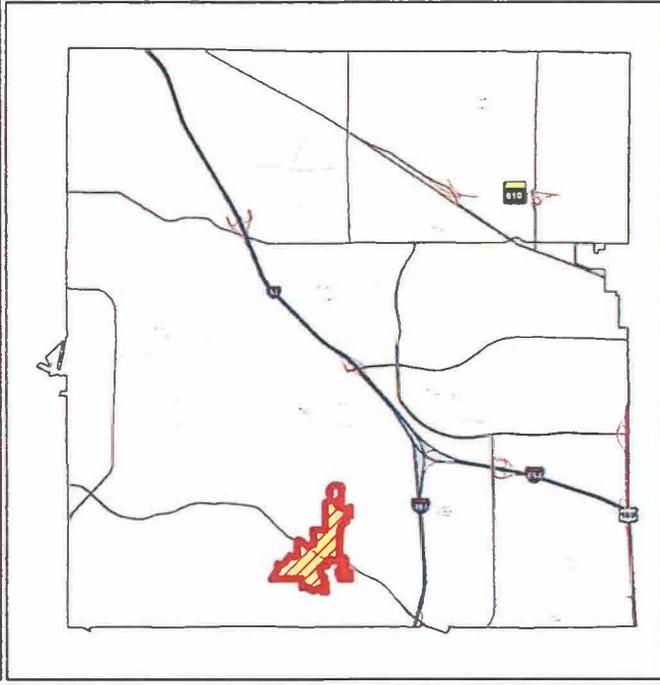


2015 Maple Grove Tree Inventory

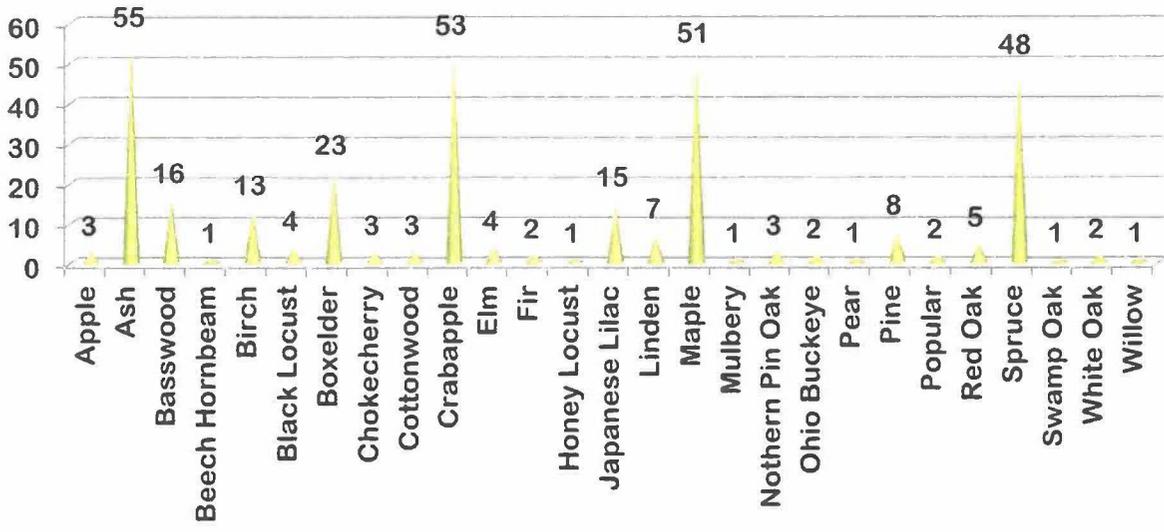


Zone 89

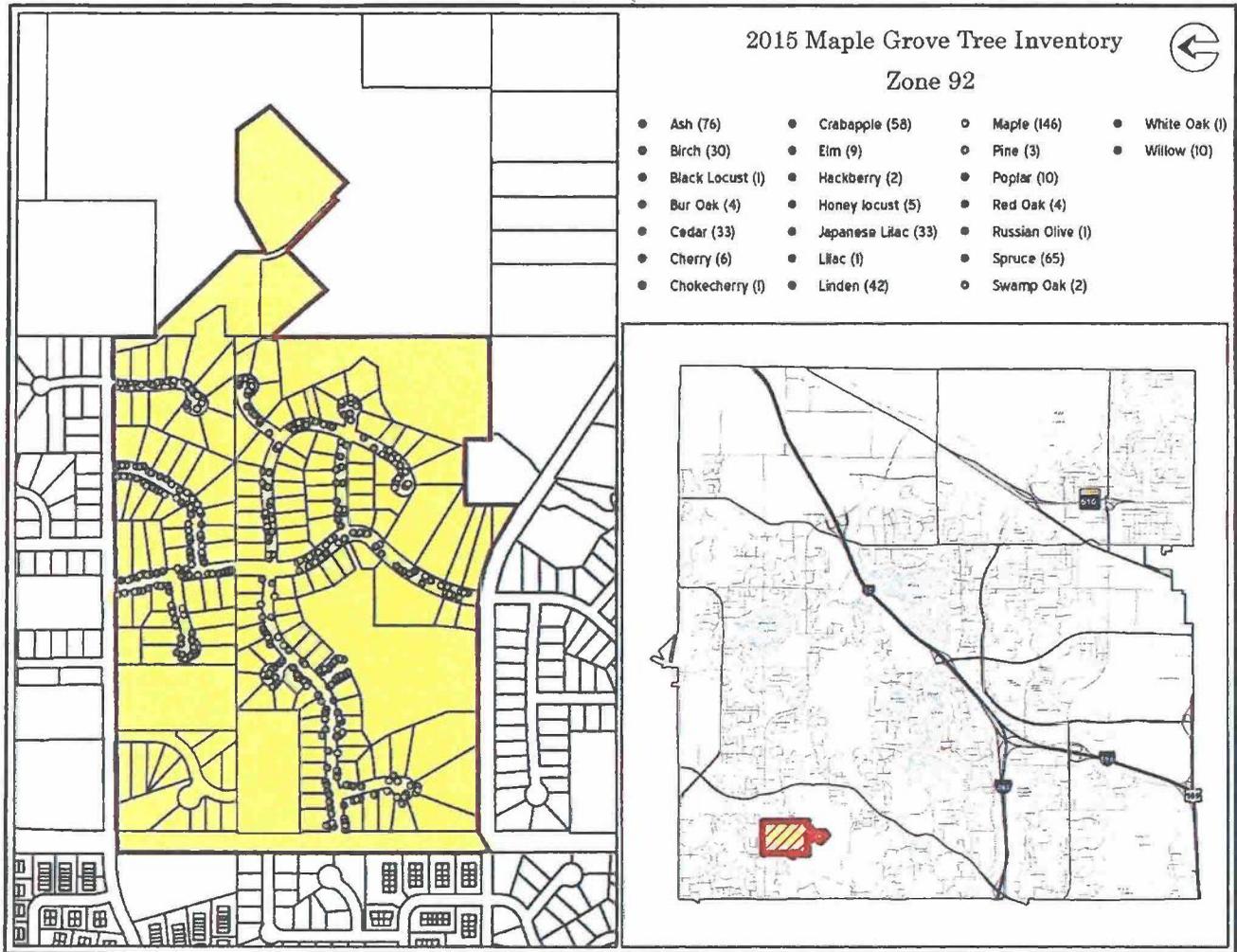
- Apple (3)
- Ash (55)
- Basswood (16)
- Beech Hornbeam (1)
- Birch (13)
- Black Locust (4)
- Boxelder (23)
- Chokecherry (3)
- Cottonwood (3)
- Crabapple (53)
- Elm (4)
- Fir (2)
- Honey locust (1)
- Japanese Lilac (15)
- Linden (7)
- Maple (51)
- Mulberry (1)
- Northern Pin Oak (3)
- Ohio Buckeye (2)
- Pear (1)
- Pine (8)
- Poplar (2)
- Red Oak (5)
- Spruce (48)
- Swamp Oak (1)
- White Oak (2)
- Willow (1)



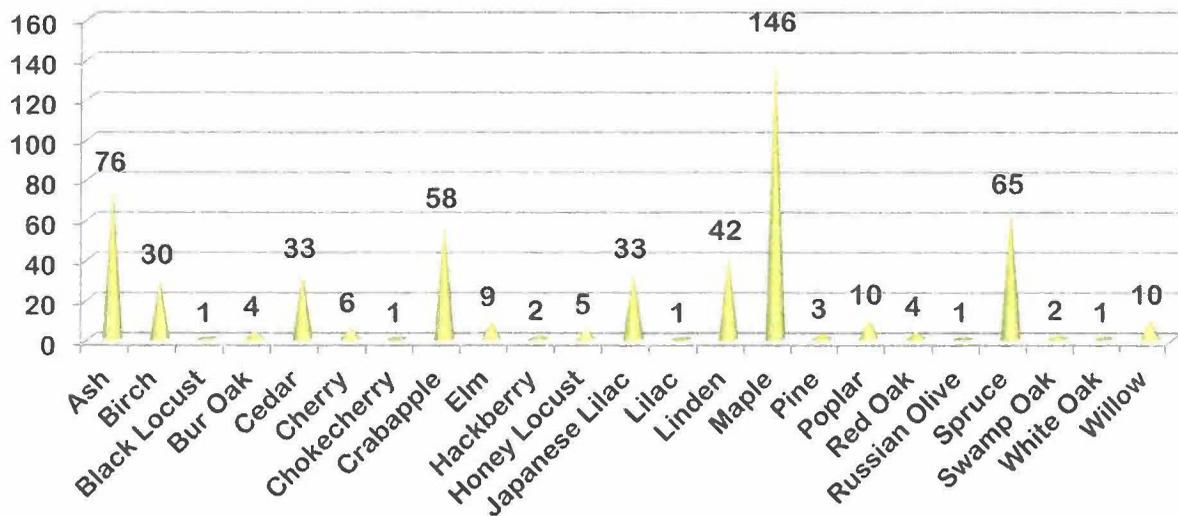
Zone 89 - 328 Trees



Trees Inventoried in Zone 92



Zone 92 - 543 Trees



How Does Maple Grove Compare To Minnesota Statistics?

THREE GENERA = 53.5% OF ALL TREES



Maple 20.2%



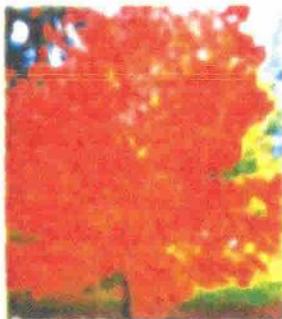
Ash 15.2%



Spruce 18.1%

Minnesota

THREE GENERA = 54.3% OF ALL TREES



Maple 21%



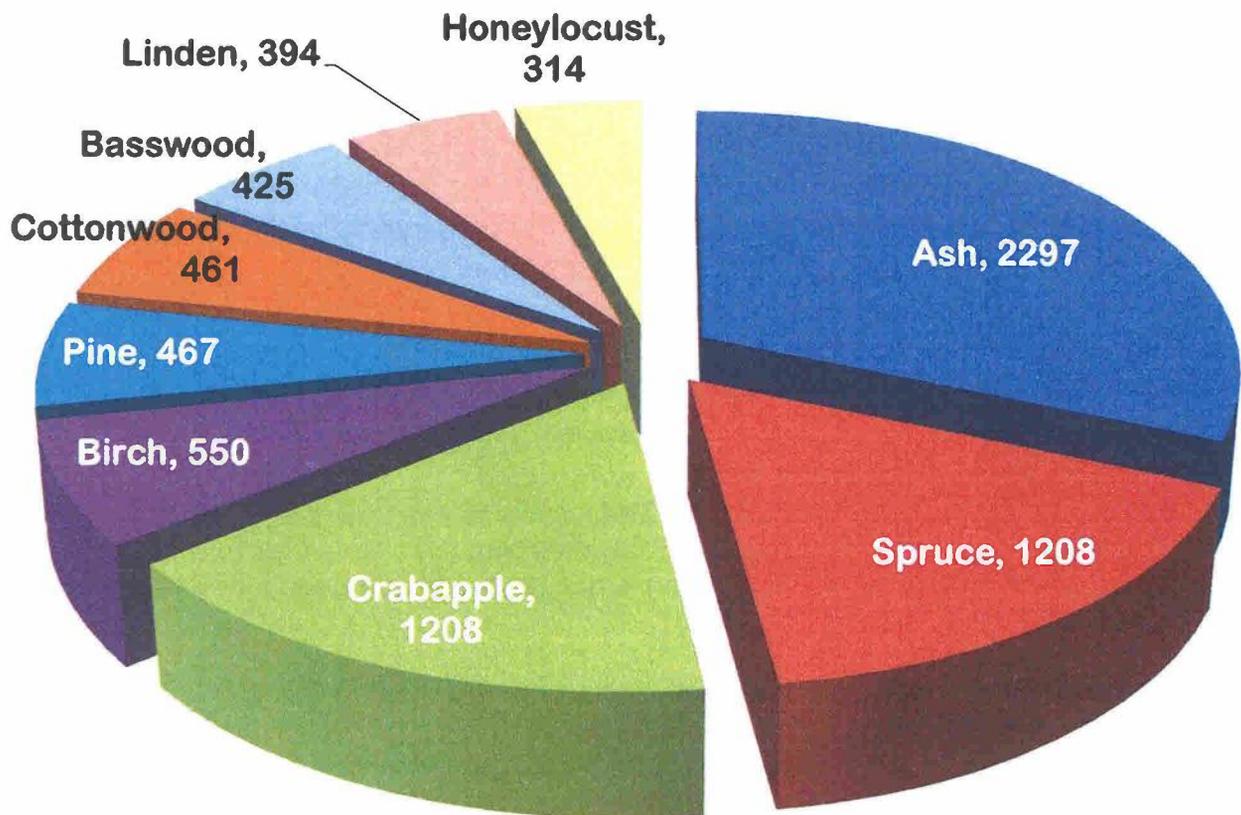
Ash 17.3%



Spruce 16%

Maple Grove 2013 - 2015

Top Ten Genera in Maple Grove



Maple	2776	19.88%
Ash	2565	18.37%
Spruce	2297	16.45%
Crabapple	1208	8.65%
Birch	550	3.94%
Pine	467	3.34%
Cottonwood	461	3.30%
Basswood	425	3.04%
Linden	394	2.82%
Honeylocust	314	2.25%

Kiss Your ASH Goodbye!???

By, Marilyn Arnlund, MN Tree Care Advisor



Do you have an ash tree on your property? How do you know if your tree is an ash tree? Why should I kiss my ash tree goodbye? These are all important questions since the Emerald Ash Borer (EAB) is right at Maple Grove's border in Plymouth, MN.

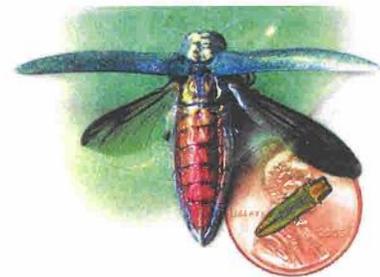
That infestation is approximately 8 miles from Maple Grove. The distance was determined by measuring from the Maple Grove Government Center to the infestation at approximately East Medicine Lake Blvd and 24th Avenue North in Plymouth. Source: <http://gis.mda.state.mn.us/eab/> Distance to the nearest known infestation is an important aspect in determining the risk EAB poses to your trees. Keep in mind that EAB tends to spread in jumps and symptoms do not appear until EAB has been present in an area for 2 years or more.



Larval feeding in the tissue between the bark and sapwood disrupts transport of nutrients and water in an ash tree, eventually causing branches and the entire tree to die. Tens of millions of ash trees in forest, rural, and urban areas have already been killed or are heavily infested by this pest.

If you would like to figure out if your tree is an ash tree a great resource can be found at: <https://www.mda.state.mn.us/news/publications/ext/ashtreeid.pdf>. If you do have ash trees on your property be sure to start watching for signs and symptoms of EAB:

- One of the first signs is thinning of the top one-third of the canopy. This progresses until the tree is bare.
- It is common to see woodpecker damage. Woodpeckers like EAB larvae and the woodpecker holes may indicate the presence of EAB.
- Bark cracks may be seen. The EAB larvae tunneling beneath the bark can cause the bark to split open, revealing the larval galleries beneath.
- The distinct S-shaped (serpentine) galleries under the bark are diagnostic of EAB.
- The EAB creates a D-shaped exit hole (about 1/8 inch wide) when the adult beetle emerges through the bark. However these are often found higher up in the canopy. If you have binoculars you might be able to spot them on the trunk of a tree which is infected.
- Suckers, also called epicormic sprouts grow on the trunk and branches below EAB activity. These are a symptom of stress in a tree. Trees with severe die-back due to an insect infestation such as EAB often produce many such sprouts as a means of compensating for the loss of leaf surface due to the stress or injury.



A good time to check your ash tree for signs and symptoms of EAB infestation is to look at your tree when it is dormant before the leaves appear. Look high at the midsection of your ash tree with binoculars for bark splits, woodpecker damage and D-shaped exit hole.

For additional information or if you have questions, please contact Kelly Matzke at 763.494-6365 or by email at kmatzke@maplegrovern.gov

With the data accumulated so far, three species account for ~55% of all trees inventoried. Those species are maple, ash and spruce. With the emerald ash borer, an invasive pest that attacks ash trees, within eight miles of Maple Grove, our ash trees are at high risk.

According to the Minnesota Department of Agriculture (MDA), resistance against emerald ash borer has not been found in any native North American ash populations, and in areas where emerald ash borer has become established, ash tree mortality rates approach 100 percent. That could make maple and spruce trees as the dominant species in Maple Grove.

There is a new pest on the horizon called the Asian longhorned beetle (ALB). The (ALB) is a destructive wood-boring pest of maple, birch, willow, elm and other hardwoods. ALB was first discovered on several hardwood trees in the United States in Brooklyn, New York, in August 1996. ALB is believed to have been introduced into the United States from wood pallets and other wood packing material accompanying cargo shipments from Asia. ALB was later detected in Chicago, Illinois, in July 1998.

After three years of inventory data, maple trees are the most planted trees in our neighborhoods, boulevards and businesses. Imagine what our urban forest in Maple Grove would look like without maple trees?

Healthy and resilient urban forests are accomplished with diversity and a high percentage of native trees. Native species are well adapted to the local climate and soils and require minimal water, fertilizer or mulching. They also help by offering habitat for migratory birds and other wildlife.

Bringing a variety of tree species to our streets, parking lots and residential landscapes creates a diverse urban forest that can withstand pressures when disease, insect pests or extreme weather comes to town. Dutch elm disease and now EAB have proved that diversity is essential!

Some native trees residents can look for to plant: Hackberry, Downy Hawthorn, Bitternut Hickory, 'Shademaster' or 'Skyline' thornless Honeylocust, Hophornbeam (Ironwood), American Linden, White Oak, Bur Oak, Bicolor Oak, Allegheny Serviceberry, American Larch, Paper Birch, River Birch, Black Cherry, Kentucky Coffeetree, Hackberry. Other

recommended trees: Autumn Gold Ginkgo, Accolade Elm, Ohio Buckeye, Northern Catalpa, White Fir, Amur Corktree.

If you are interested in volunteering in the tree inventory project contact Marilyn Arnlund at 763-494-6094 or email her at marnlund@maplegrovern.gov. Volunteers will need to attend a training session and commit to inventory trees in a particular area a few hours a week. All equipment and supplies will be provided. Volunteers are required to complete an application and agree to a background check.

Chronology of EAB infestations in Minnesota

- April 6, 2009: Emerald Ash Borer (EAB) was discovered in Victory, WI, approximately one mile from Minnesota and Iowa
- May 13, 2009: EAB discovered in St. Paul, MN (Ramsey County)
- February 28, 2010: Tower Hill Park in Minneapolis (Hennepin County)
- April 28, 2010: Houston County on the Upper Mississippi Fish and Wildlife Refuge.
- July 21, 2011: City of Shoreview in Ramsey County
- September 14, 2011: I90 / CR12 interchange on DOT Right of Way and at Great River Bluffs State Park (Winona County)
- September 20, 2011: Dale/Portland intersection near Summit Avenue in St Paul
- August 13, 2012: Fort Snelling Golf Course in Hennepin County near MSP airport.
- November 16, 2012: 2nd Street east of Nicollet Island in Minneapolis
- December 4, 2012: Houston County along Hwy 26.
- December 13, 2012: City of La Crescent.
- January 28, 2013: Lakewood Cemetery near the intersection of King's Highway and 38th Street in Minneapolis
- January 29, 2013: Como Park near the intersection of Lexington and Jessamine
- January 30, 2013: Pig's Eye Lake Road near the wood disposal site
- March 19, 2013: Hwy 36 and Snelling Avenue in Roseville.
- August, 2013: Superior, Wisconsin
- August 20, 2014: I90 and Hwy 63 in Olmsted County near Rochester
- December 23, 2014: Lebanon Hills Regional Park in Dakota County.
- March 25, 2015: City of Ham Lake in Anoka County
- April 24, 2015: City of Rushford in Fillmore County
- August 5, 2015: Chisago County adjacent to Washington County border near Manning Trail
- August 25, 2015: City of Prior Lake in Scott County
- September 15, 2015: City of Plymouth in Hennepin County
- October 8, 2015: Rural Washington County at St Croix River Crossing Rest Area
- October 20, 2015: Park Point in Duluth



Emerald Ash Borer Flight Season Begins May 1st

Minnesota Department of Agriculture considers May 1 – September 30 to be the flight season for emerald ash borer (EAB). This means that EAB adult beetles are emerging from infested wood or trees and flying in search of new hosts during this time. EAB larvae complete their development by pupating into adult beetles in the spring and early summer. However, this process only occurs when temperatures are sufficiently warm and the whole process requires a certain amount of accumulated heat – i.e., development time. Accumulated heat can be measured and tracked by using degree days which are a measure of time spent above a threshold temperature.

For EAB a base temperature of 50° F is used and the following are estimated thresholds for EAB activity:

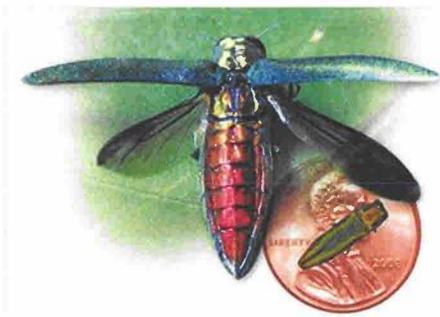
450 degree days – first EAB adults may begin emerging

900-1100 degree days – peak EAB adult activity

This report was completed by Marilyn Arnlund, Minnesota Tree Care Advisor, Hennepin County Master Gardener, and Maple Grove Arbor Committee Member with assistance from Doug Gawtry, GIS Analyst.

Watch Your ASH!

Residents are being asked to watch their ash trees for possible infestation of the emerald ash borer (EAB).



EAB is an insect that attacks and kills ash trees. It is often spread through transported firewood. The adults are small, iridescent green beetles that live outside of trees during the summer months. The larvae are grub or worm-like and live underneath the bark of ash trees. Larvae feeding in the tissue between the bark and sapwood disrupts transport of nutrients and water in an ash tree, eventually causing branches and the entire tree to die.

EAB kills ash trees. All ash trees are susceptible to EAB and millions of ash trees have been killed in infested areas already. Minnesota has the highest volume of ash trees in the U.S. with almost a billion forestland and urban wood ash trees. The cost of removing and replacing a single tree can range from hundreds to thousands of dollars – how many ash trees are in your yard?

Mature ash trees are easy to identify by their bark. The bark has diamond-shaped ridges that also look like canoes. The leaves have five 5 to 11 leaflets. Watch for these symptoms and signs of EAB:

- The most visible sign is the branches in the canopy decline and die. Begins in top one-third of canopy.
- Vertical splits or cracks in the bark over larval galleries.
 - Larval feeding galleries are typically serpentine/S-shaped; weave back and forth across the woodgrain.
- Suckers grow on the trunk and branches below EAB activity.
- Leaves often larger than normal.
- Woodpeckers eat emerald ash borer larvae that are under the bark. Woodpecker activity on the trunk and branches feeding on larvae/pupae can make it look like strips of bark have been pulled off of the tree. This is called "flecking."
 - Woodpeckers can create large holes when extracting insects.
- Adult EAB form 1/8 inch D-shaped exit holes in the bark upon emergence in the spring.

A major culprit in spreading EAB and other insect pests is firewood. Larvae and pupae can hide beneath the bark and then escape as adult beetles after being transported many miles. Don't carry wood from your home to a cabin or campsite. Don't carry wood back home again, either, or leave it for another camper—burn it all.



If you have questions please contact Kelly Matzke at 763.494.6365 or at kmatzke@maplegrovern.gov

REQUEST FOR COMMITTEE ACTION

Item Number: 3A



Meeting Date: May 12, 2016
Agenda Heading: Old Business
Agenda Item: Review of 2016 Arbor Day Event

Recommended Committee Action:

Review and comment on the 2016 Arbor Day Event.

Discussion:

The 2016 Arbor Day Event took place on Saturday, April 30, 2016 at the Maple Grove Community Center. Thanks to all Committee Members for contributing to the event. This discussion presents an opportunity for Committee Members to give feedback on the event. Comments are helpful to make this event a continued success. Below is a list of activities that were part of this year's event:

- Display of unusual and desirable trees
- Tree planting video
- Distribution of tote bags
- Master Gardeners/Tree Care Advisors display
- DNR invasive species
- Flower pots and seeds (zoo provided)
- Raffle drawing for trees
- Reptile and Discovery Zoo
- U of MN Raptor Center
- Tree mulch display
- Refreshments/Cookies
- Free tree seedlings
- Audubon Society
- Home Depot toolbox building
- Tree medallions
- Paper tree making
- Smokey the Bear costume
- EAB costume
- Maple Grove Wood Carvers
- Hennepin County Recycling
- EAB information
- EAB Nerf Gun Game

Committee Comments:

REQUEST FOR COMMITTEE ACTION

Item Number: 3B



Meeting Date: May 12, 2016
Agenda Heading: Old Business
Agenda Item: Revised EAB Management Plan

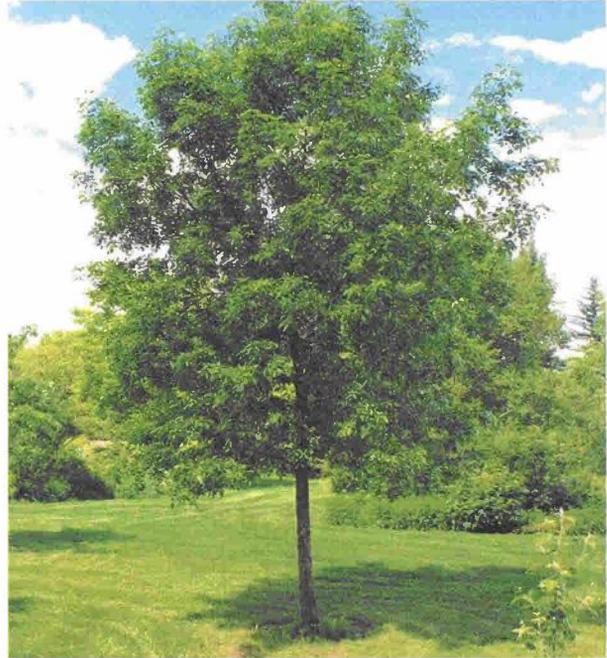
Recommended Committee Action:

Motion to recommend City Council adopt EAB Management Plan.

Discussion:

The EAB Management Plan, put together by City Staff, was introduced at the April Arbor Committee meeting. Recommendations were made to the EAB Management Plan by the Arbor Committee. Staff reviewed recommendations and made revisions to the EAB plan. It is expected that this plan will go to the Park Board meeting in May with anticipated Council adoption in June.

Committee Comments:



EMERALD ASH BORER MANAGEMENT PLAN

Maple Grove, Minnesota

Draft: 5/3/16

Arbor Committee Approval:

Park and Recreation Board Approval:

City Council Approval

Purpose

The purpose of this document is to establish guidelines for the City of Maple Grove in its management of Emerald Ash Borer. The goal of this plan is to minimize the effects of EAB by removing trees infested with EAB, and implementing the management plan so the impact on residents is kept to a minimum.

Introduction

Emerald Ash Borer (EAB) is a beetle native to eastern Asia that feeds on ash species. It was discovered in southeastern Michigan in 2002, and has continued to move around the country. In September of 2015, EAB was discovered in Plymouth, MN. EAB has killed hundreds of millions of ash trees in North America, and has the potential to decimate large areas as the insect continues to move throughout the region.

Determining when the exotic beetle will be discovered in Maple Grove is unknown. Some professionals say that it is already in Maple Grove, but yet to be found. Ash trees typically do not show signs of EAB until 3-5 years after they have been infested. Studies show that once found in your area, it takes approximately 5-10 years to infest and kill the majority of the ash trees in the infected area.

The City of Maple Grove has an evolving tree inventory that when complete, and amended over time, monitors the number of trees and their condition. As of this writing, it is estimated that there are approximately 12,000 ash trees of various species within the City of Maple Grove. Of those, approximately 5,000 are within public right of way. Additionally, there are approximately 600-700 ash trees within the maintained areas of the City park system (2009). No count was taken in the unmaintained "natural" areas.

This plan is subject to change should state or federal policies dictate. It is recommended that the current EAB management plan be reviewed annually by staff and the Arbor Committee, and changes that are necessary be made as more information and research about EAB becomes available.

Administration

The Street Department Supervisor, and the Superintendent of Parks and Planning will be responsible for implementing the management plan for each of their respective departments. The Right of Way Technician, assisted by a consulted forester, will be available for resident response and communication. Focus will be on stressed, poor structured, diseased, dying, or dead ash trees on public land throughout the city. The Street Department and Park Department staff will monitor ash trees located along streets within the City right of way. Private trees will be identified by complaints only, and will be handled on an individual basis.

Boulevard Trees

The following basic guidelines will govern the City's ongoing efforts to manage its boulevard trees:

- The Street Department will work with the Minnesota Department of Agriculture and the Department of Natural Resources to develop detection and control measures to be implemented within the Maple Gove park system.
- Street Department staff will be trained to identify symptoms of EAB.
- The City will remove ash trees that are considered to be stressed, poor structured, dead, dying, or diseased.
- The City will not remove healthy ash trees, and has no intentions of removing mass amounts of ash trees that are not diseased within neighborhoods heavily populated with ash trees.
- The City will not replace boulevard trees that are removed along residential streets.
- The City will make discretionary decisions for the replacement of boulevard trees along street corridors of major collectors and arterials.
- Trees partially in City right of way are considered a City tree.

Tree Preservation Area

It is the intent of this management plan to manage diseased trees within the tree preservation areas. The City's efforts will be directed at control of trees that are diseased and clearly cause a safety concern for its residents using the tree preservation area.

Park Trees

With the implementation of this management plan, the Parks and Recreation Department will take a "detect and respond" approach applying these guidelines:

- The Park Department will work with the Minnesota Department of Agriculture and the Department of Natural Resources to develop detection and control measures to be implemented within the Maple Gove park system.
- Park Maintenance staff will be trained to identify symptoms of EAB.
- Ash trees within the maintained areas of the parks showing symptoms of EAB will be removed promptly to slow the spread of the disease to the community.
- Ash trees outside the maintained areas of the parks, showing symptoms of EAB will be dealt with on a case-by-case basis. Those that are considered a hazard or public safety concern will be removed promptly.
- It is not the intent of the Park Board to remove healthy ash trees to manage the spread of Emerald Ash Borer, without special circumstance.
- Trees removed from the park system as a result of EAB will be considered for replacement as part of the annual tree replacement and reforestation programs.
- Some ash trees may be removed and replaced at the Community Center each year as a proactive measure.
- The Superintendent of Parks and Planning will be responsible for implementation of this plan.
- The Parks and Recreation Board and Director will receive regular updates.
- The following elements of the Park Department's EAB Management Plan are subject to change or revision as new information about EAB becomes available.

Trees on Private Property

Article III of the City code entitled; Shade Tree Diseases and Pests has been updated to include Emerald Ash Borer. That code will govern enforcement actions of the City, as to:

- Ordinance complaints for diseased trees on private property will be handled on an individual basis.
- Special Assessments when City removes or contracts removal of tree on private property
- It would be sensible for residents to establish a relationship with an International Society of Arboriculture (ISA) Certified Arborist now in the event that removal is requested by city staff per City Ordinance.
- The City encourages residents to replace trees lost with species appropriate for the site. Planting new trees in advance of the discovery of EAB is a way to lessen the economic hardship and environmental impact of Emerald Ash Borer. The City conducts a spring tree sale in an effort to make tree replacement an affordable option for Maple Grove residents.

Communication

The City Administrator, City Council, Park and Recreation Board, Parks and Recreation Director, Arbor Committee, and Director of Public Works will receive periodic updates through normal channels. All media relations will follow normal city protocol.

Education

The City will educate and provide information about EAB through City newsletters, flyers, brochures, door hangers, social media, and the City website.

Disposal

Wood will be disposed of at sites certified to accept wood that is infested with EAB. The City will look into the cost savings of companies willing to take wood for their own recycling purposes.

Budget

Annually, the Maple Grove Park Board will evaluate budgets related to park expenditures devoted to EAB control and make recommendations to the City Council. The City Council will annually evaluate anticipated budgets related to EAB control and authorize expenditures by budget approvals.

REQUEST FOR COMMITTEE ACTION

Item Number: 4A



Meeting Date: May 12, 2016
Agenda Heading: New Business
Agenda Item: Prestige School Landscape Plan

Recommended Committee Action:

Review and comment on the Landscape Plan for Prestige School.

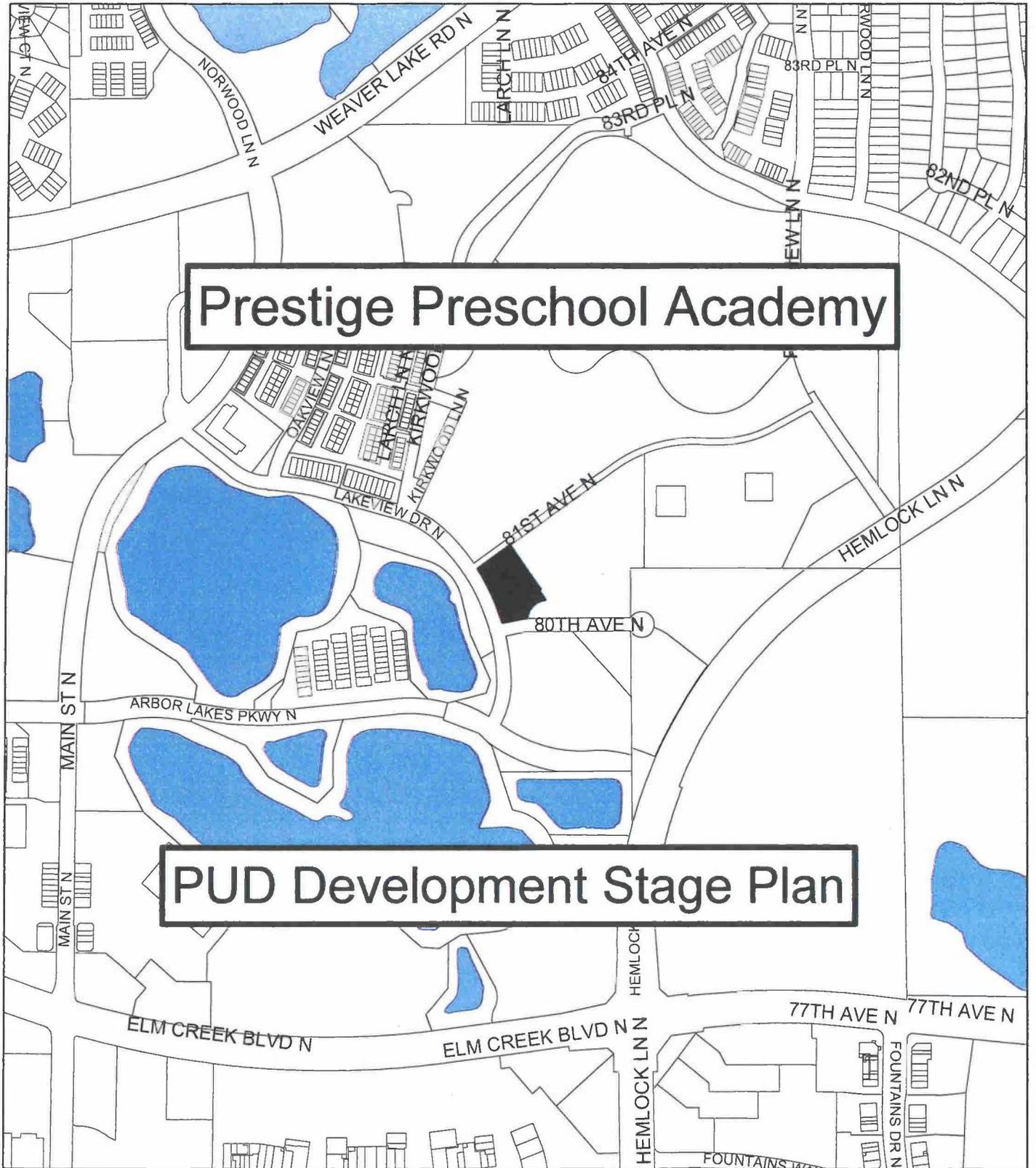
Discussion:

Prestige School Academy has submitted a plan for the purpose of developing property into a Children's Education Academy. The plan is located at Lakeview Drive and 80th Avenue (map attached).

The minimum number of overstory trees required for this site is 25. The Landscape Plan calls for 28. City Ordinance requires not more than 20 percent of the required number of overstory trees shall be composed of one species. City Ordinance also requires any species of the genus *ulmus* be provided with proof that the trees are resistant to Dutch Elm Disease.

Arbor Committee review and comment on the attached plan is requested.

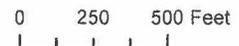
Committee Comments:



Prestige Preschool Academy

PUD Development Stage Plan

NEIGHBORHOOD LOCATION MAP



REQUEST FOR COMMITTEE ACTION

Item Number: 4B



Meeting Date: May 12, 2016
Agenda Heading: New Business
Agenda Item: Bottineau Ridge 2nd Addition
Landscape Plan

Recommended Committee Action:

Review and comment on the Landscape Plan for Bottineau Ridge Apartments – Phase II.

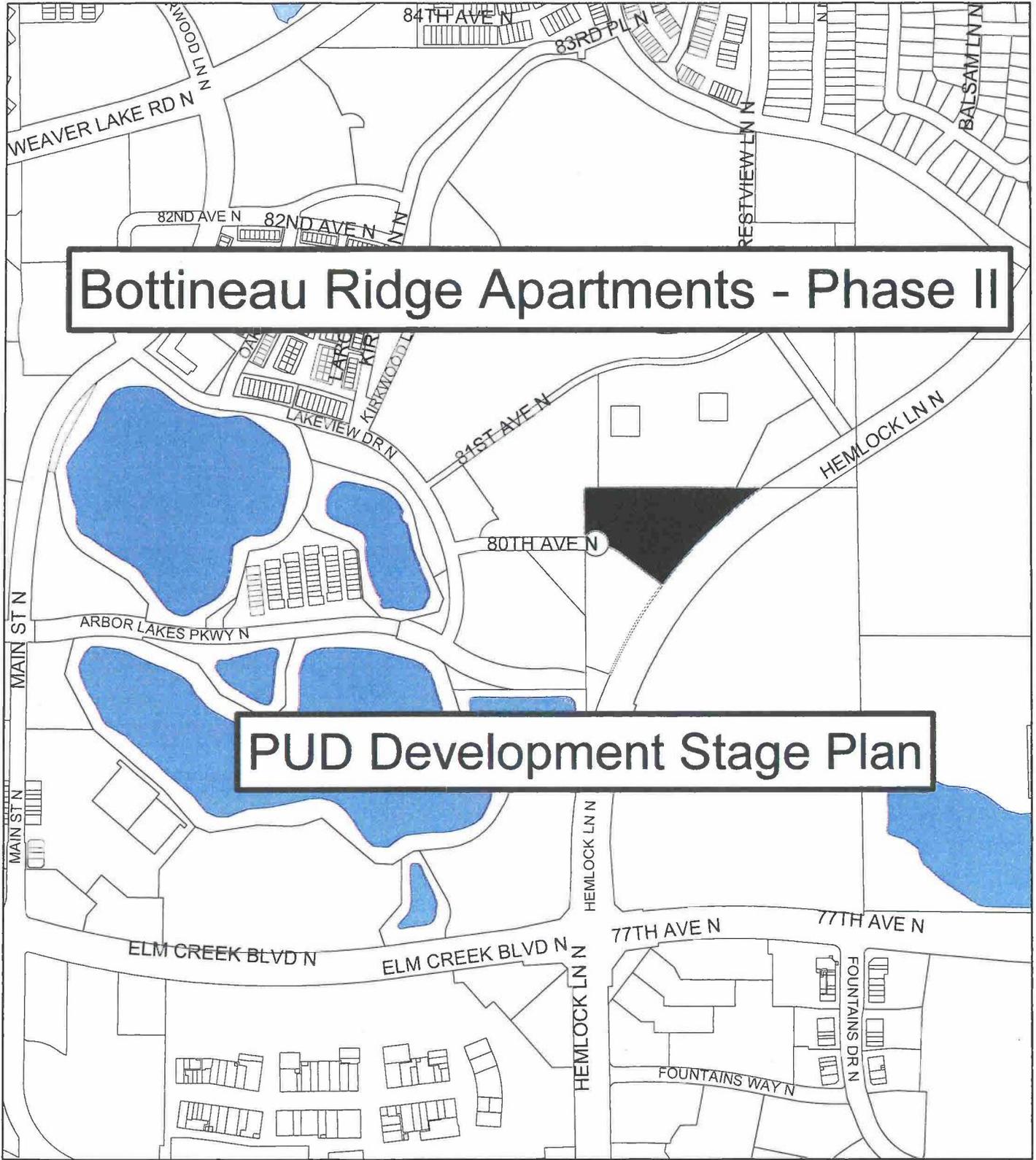
Discussion:

The applicant seeks approval for a PUD Development Stage Plan for the purpose of constructing a 100 unit, 4-story apartment building. The plan is located at 11800 80th Avenue.

The number of feet on the perimeter of the site is 2,532, which means the minimum requirement for overstory trees is 63. The Landscape Plan includes 63 trees of various species. The City Code requires no more than 20 percent of the required number of overstory trees shall be composed of one species.

Arbor Committee review and comment on the attached plan is requested.

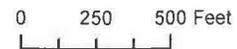
Committee Comments:



Bottineau Ridge Apartments - Phase II

PUD Development Stage Plan

NEIGHBORHOOD LOCATION MAP





LOUCKS

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

7200 Hamlet Lane, Suite 200
Maple Grove, MN 55349
763.424.5505
www.loucksinc.com

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.

Douglas D. Liska, L.A.
Date: _____

SUBMITTAL REQUIREMENTS

04/08/16 CITY SUBMITTAL

QUALIFICATION

LOUCKS has prepared this Contract for the purpose of providing a professional service to the Client. The Client is responsible for providing all necessary information and data to the Contractor. The Contractor is not responsible for any errors or omissions in the Client's information or data. The Contractor is not responsible for any errors or omissions in the Client's information or data. The Contractor is not responsible for any errors or omissions in the Client's information or data.

QUALITY CONTROL

Loucks Project No.: 12023C
Project Lead: PAK
Drawn By: DDL
Checked By: PAK
Review Date: 04/08/16

**LANDSCAPE
NOTES &
DETAILS**

L-2

LANDSCAPE INSTALLATION:

COORDINATE THE PHASES OF CONSTRUCTION AND PLANTING INSTALLATION WITH OTHER CONTRACTORS WORKING ON SITE.

NO PLANTING WILL BE INSTALLED UNTIL COMPLETE GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

WHERE SOODSEED ABUTS PAVED SURFACES, FINISHED GRADE OF SOODSEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.

SEED ALL AREAS DISTURBED DUE TO GRADING OTHER THAN THOSE AREAS NOTED TO RECEIVE SOOD. SEED SHALL BE INSTALLED AND MULCHED AS PER MNDOT SPECS.

SOOD ALL DESIGNATED AREAS DISTURBED DUE TO GRADING. SOOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, THE SOOD SHALL BE STAKED TO THE GROUND.

ALL PLANT MATERIAL SHALL CONFORM WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, AMERICAN ASSOCIATION OF NURSERYMEN, UNLESS NOTED OTHERWISE. ALL SHRUBS SHALL HAVE AT LEAST 5 CANES AT THE SPECIFIED MINIMUM SHRUB HEIGHT OR WIDTH. ORNAMENTAL TREES SHALL HAVE NO V-CROTCHES AND SHALL BEGIN BRANCHING NO LOWER THAN 3' ABOVE ROOT BALL. STREET AND BOULEVARD TREES SHALL BEGIN BRANCHING NO LOWER THAN 7' ABOVE FINISHED GRADE.

ANY CONTIGUOUS TREE PREVIOUSLY PRUNED FOR CHRISTMAS TREE SALES SHALL NOT BE USED. ALL CONIFEROUS TREES SHALL BE FULL FORM, NATURAL TO THE SPECIES, WITHOUT PRUNING.

PLANT TAKES PRECEDENCE OVER PLANT SCHEDULE IF DISCREPANCIES IN QUANTITIES EXIST. SPECIFICATIONS TAKE PRECEDENCE OVER NOTES.

NO PLANT MATERIAL SUBSTITUTIONS WILL BE ACCEPTED UNLESS APPROVAL IS REQUESTED OF THE LANDSCAPE ARCHITECT BY THE LANDSCAPE CONTRACTOR PRIOR TO THE SUBMISSION OF A BID AND/OR QUOTATION.

ALL PROPOSED PLANTS SHALL BE LOCATED AND STAKED AS SHOWN ON PLAN. ADJUSTMENTS IN LOCATION OF PROPOSED PLANT MATERIALS MAY BE NEEDED IN FIELD. SHOULD AN ADJUSTMENT BE ADVISED, THE LANDSCAPE ARCHITECT MUST BE NOTIFIED.

ALL PLANT MATERIALS SHALL BE FERTILIZED UPON INSTALLATION WITH A 12-3-3 SLOW RELEASE FERTILIZER MIXED IN WITH THE PLANTING SOIL PER THE MANUFACTURER'S INSTRUCTIONS. PLANTS MAY BE TREATED FOR SUMMER AND FALL INSTALLATION WITH AN APPLICATION OF GRANULAR 27-3-3 AT 6 OZ PER 2" CALIBER PER TREE AND 3 OZ PER SHRUB WITH AN ADDITIONAL APPLICATION OF 27-3-3 THE FOLLOWING SPRING IN THE TREE SAUCER.

ALL PLANTING AREAS RECEIVING GROUND COVER, PERENNIALS, ANNUALS, AND/OR VINES SHALL RECEIVE A MINIMUM OF 1" DEPTH OF PLANTING SOIL, CONSISTING OF AT LEAST 45 PARTS TOPSOIL, 45 PARTS PEAT OR MANURE AND 10 PARTS SAND.

ALL PLANTS TO BE INSTALLED AS PER PLANTING DETAILS. REMOVE ALL FLAGGING AND LABELS FROM PLANTS.

WRAPPING MATERIAL SHALL BE CORRUGATED PVC PIPING 1" GREATER IN CALIBER THAN THE TREE BEING PROTECTED OR QUALITY HEAVY WATERPROOF CREPE PAPER MANUFACTURED FOR THIS PURPOSE. WRAP ALL DECIDUOUS TREES PLANTED IN THE FALL PRIOR TO T2-1 AND REMOVE ALL WRAPPING AFTER 5-1.

BLACK POLY EDGER TO BE USED TO CONTAIN SHRUBS, PERENNIALS, AND ANNUALS WHERE BED MEETS SOODSEED UNLESS NOTED OTHERWISE.

ALL ANNUAL AND PERENNIAL PLANTING BEDS TO RECEIVE 3" DEEP SHROUDED HARDWOOD MULCH WITH NO WEED BARRIER.

ALL SHRUB BED MASSINGS TO RECEIVE 3" DEEP SHROUDED HARDWOOD MULCH AND FREE-PAVED BARRIER.

ALL TREES TO RECEIVE 4" DEEP SHROUDED HARDWOOD MULCH WITH NO MULCH IN DIRECT CONTACT WITH TREE TRUNK.

SPREAD GRANULAR PRE-EMERGENT HERBICIDE (GREEN OR EQUAL) PER MANUFACTURER'S RECOMMENDATIONS UNDER ALL MULCHED AREAS.

MAINTENANCE STRIPS TO HAVE EDGER AND MULCH AS SPECIFIED INDICATED ON DRAWING OR IN SPECIFICATION.

IF THE LANDSCAPE CONTRACTOR IS CONCERNED OR PERCEIVES ANY DEFICIENCIES IN THE PLANT SELECTIONS, SOIL CONDITIONS OR ANY OTHER SITE CONDITION WHICH MIGHT NEGATIVELY AFFECT PLANT ESTABLISHMENT, SURVIVAL OR GUARANTEE, HE MUST BRING THESE DEFICIENCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO PROCEEDMENT AND/OR INSTALLATION.

CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR THE OWNER ACCEPTANCE INSPECTION OF ALL LANDSCAPE AND SITE IMPROVEMENTS.

CONTRACTOR IS RESPONSIBLE FOR ON-GOING MAINTENANCE OF ALL NEWLY INSTALLED MATERIALS UNTIL TIME OF OWNER ACCEPTANCE. ANY ACTS OF VANDALISM OR DAMAGE WHICH MAY OCCUR PRIOR TO OWNER ACCEPTANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE THE OWNER WITH A MAINTENANCE PROGRAM INCLUDING, BUT NOT NECESSARILY LIMITED TO, PRUNING, FERTILIZATION AND DISEASE/FEST CONTROL.

CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM THE DATE OF OWNER ACCEPTANCE.

WARRANTY (ONE FULL GROWING SEASON) FOR LANDSCAPE MATERIALS SHALL BEGIN ON THE DATE OF ACCEPTANCE BY THE LANDSCAPE ARCHITECT AFTER THE COMPLETION OF PLANTING OF ALL LANDSCAPE MATERIALS. NO PARTIAL ACCEPTANCE WILL BE CONSIDERED.

UNLESS NOTED OTHERWISE, THE APPROPRIATE DATES FOR SPRING PLANT MATERIAL INSTALLATION AND SEEDSOOD PLACEMENT IS FROM THE TIME GROUND HAS THAWED TO JUNE 15.

FALL SODDING IS GENERALLY ACCEPTABLE FROM AUGUST 15 - NOVEMBER 1. FALL SEEDING FROM AUGUST 15 - SEPTEMBER 15. DORMANT SEEDING IN THE FALL SHALL NOT OCCUR PRIOR TO NOVEMBER 1. FALL CONIFEROUS PLANTING MAY OCCUR FROM AUGUST 15 - OCTOBER 1 AND DECIDUOUS PLANTING FROM THE FIRST FROST UNTIL NOVEMBER 15. PLANTING OUTSIDE THESE DATES IS NOT RECOMMENDED. ANY ADJUSTMENT MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

LANDSCAPE CONTRACTOR SHALL ESTABLISH TO HIS SATISFACTION THAT SOIL AND COMPACTON CONDITIONS ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AT AND AROUND THE BUILDING SITE.

IRRIGATION NOTES:

VERIFY EXISTING PROPOSED IRRIGATION SYSTEM LAYOUT AND CONFIRM COMPLETE LIMITS OF IRRIGATION PRIOR TO SUPPLYING SHOP DRAWINGS.

LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN IRRIGATION LAYOUT PLAN AND SPECIFICATION AS A PART OF THE SCOPE OF WORK WHEN BIDDING. THESE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDER AND/OR INSTALLATION. IT SHALL BE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL SOODSEED AND PLANTED AREAS ARE IRRIGATED PROPERLY, INCLUDING THOSE AREAS DIRECTLY AROUND AND ABUTTING BUILDING FOUNDATION.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN IRRIGATION SCHEDULE APPROPRIATE TO THE PROJECT SITE CONDITIONS AND TO PLANT MATERIAL GROWTH REQUIREMENTS.

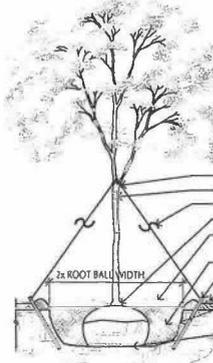
IRRIGATION SYSTEM IS NOT TO SPRINKLE ACROSS PAVEMENT. THE SYSTEM SHALL INCORPORATE A RAIN SENSOR INTO IRRIGATION SYSTEM.

PLANTINGS OUTSIDE THE LIMITS OF IRRIGATION ARE TO BE WATERED REGULARLY UNTIL PLANTING SOODSEED HAS BEEN ESTABLISHED.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.S.A. GUIDELINES FOR STANDARD PRACTICES. PRUNE ANY DAMAGED OR CROSSING BRANCHES AFTER PLANTING IS COMPLETE.

CUT BACK WIRE BASKET

WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.



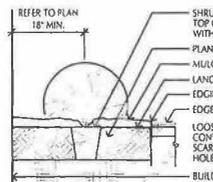
1
L-2
DECIDUOUS TREE PLANTING DETAIL
SCALE: 1/2" = 1'-0"

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TREES IN A PLUMB POSITION THROUGH THE WARRANTY PERIOD. STAKING IS SUGGESTED, BUT NOT REQUIRED. ANY STAKING MUST CONFORM WITH PRACTICES AS DEFINED IN A.S.A. GUIDELINES FOR STANDARD PRACTICES. PRUNE ANY DAMAGED OR CROSSING BRANCHES AFTER PLANTING IS COMPLETE.

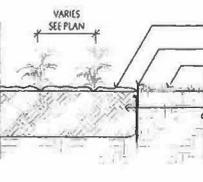
WATER TREE THOROUGHLY DURING PLANTING OPERATIONS. PLACE BACKFILL IN 8-12" LIFTS AND SATURATE SOIL WITH WATER. DO NOT COMPACT MORE THAN NECESSARY TO MAINTAIN PLUMB.



2
L-2
CONIFEROUS TREE PLANTING DETAIL
SCALE: 1/2" = 1'-0"



3
L-2
SHRUB PLANTING DETAIL
SCALE: 3/4" = 1'-0"



4
L-2
PERENNIAL PLANTING
SCALE: 3/4" = 1'-0"

REQUEST FOR COMMITTEE ACTION

Item Number: 4C



Meeting Date: May 12, 2016
Agenda Heading: New Business
Agenda Item: Auto Zone Landscape Plan

Recommended Committee Action:

Review and comment on the Landscape Plan for Auto Zone.

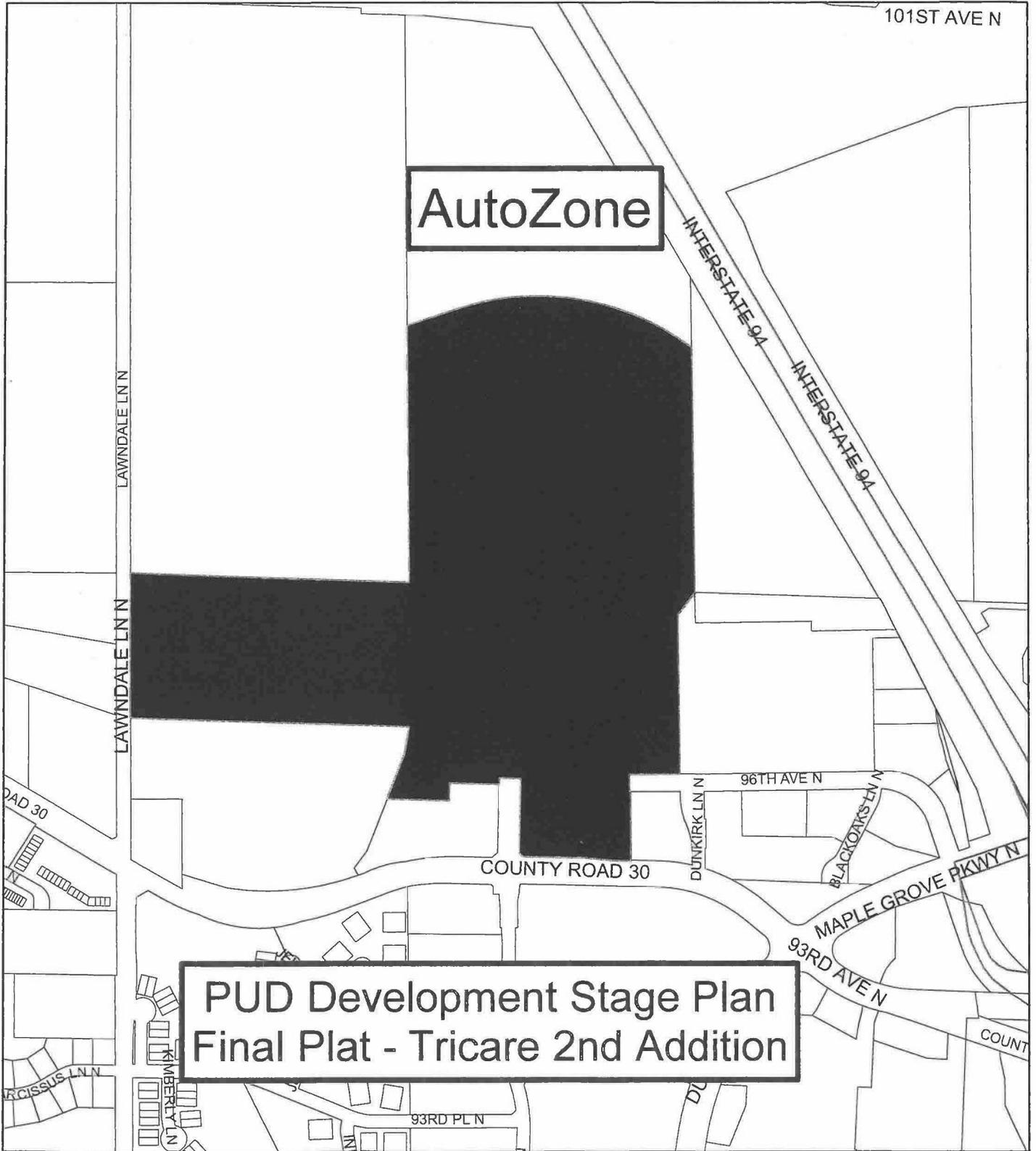
Discussion:

The applicant submitted a plan to construct an Auto Zone retail store located at the Northwest corner of 95th Avenue and Garland Lane.

The maximum number of overstory trees is 25. The Plan exhibits a number of different species. City Ordinance requires no more than 20 percent of trees be composed of one species.

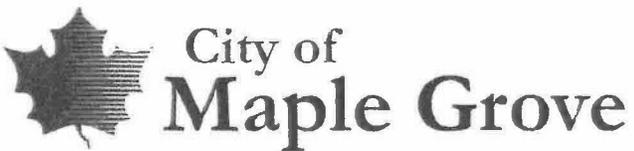
Review and comment on the proposed plan is requested.

Committee Comments:



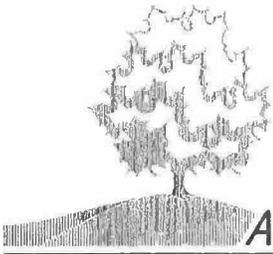
**PUD Development Stage Plan
Final Plat - Tricare 2nd Addition**

NEIGHBORHOOD LOCATION MAP



REQUEST FOR COMMITTEE ACTION

Item Number: 5



MAPLE GROVE
ARBOR COMMITTEE

Meeting Date: May 12, 2016
Agenda Heading: Area Reports
Agenda Item: Area Reports

Recommended Committee Action:

None.

Discussion:

The Area Reports section of the agenda provides an opportunity for any Committee member to report any item in the City that needs staff attention. The issue will be forwarded to the appropriate staff member with a response provided at the next meeting.

Committee Comments: