



## ALPINE CITY PLANNING COMMISSION MEETING

**NOTICE** is hereby given that the **PLANNING COMMISSION** of Alpine City, UT will hold a **Regular Meeting** at **Alpine City Hall**, 20 North Main, Alpine, Utah on **Tuesday, November 6, 2018 at 7:00 pm** as follows:

### I. GENERAL BUSINESS

- |                             |               |
|-----------------------------|---------------|
| A. Welcome and Roll Call:   | Bryce Higbee  |
| B. Prayer/Opening Comments: | John Gubler   |
| C. Pledge of Allegiance:    | By Invitation |

### II. PUBLIC COMMENT

Any person wishing to comment on any item not on the agenda may address the Planning Commission at this point by stepping to the microphone and giving his or her name and address for the record.

### III. ACTION ITEMS

- A. Alpine City Tree Selection Guide Book**  
Review proposed Tree Guidelines Book and make recommendation to City Council.
- B. 2019 Planning Commission Meeting Schedule**  
Review and approve and the 2019 Planning Commission Meeting Schedule.

### IV. COMMUNICATIONS

### V. APPROVAL OF PLANNING COMMISSION MINUTES: October 16, 2018

### ADJOURN

Vice-Chair Bryce Higbee  
November 6, 2018

**THE PUBLIC IS INVITED TO ATTEND ALL PLANNING COMMISSION MEETINGS.** If you need a special accommodation to participate in the meeting, please call the City Recorder's Office at 801-756-6347 ext. 5.

**CERTIFICATION OF POSTING.** The undersigned duly appointed recorder does hereby certify that the above agenda notice was posted at Alpine City Hall, 20 North Main, Alpine, UT. It was also sent by e-mail to The Daily Herald located in Provo, UT a local newspaper circulated in Alpine, UT. This agenda is also available on the City's web site at [www.alpinecity.org](http://www.alpinecity.org) and on the Utah Public Meeting Notices website at [www.utah.gov/pmn/index.html](http://www.utah.gov/pmn/index.html).

# PUBLIC MEETING AND PUBLIC HEARING ETIQUETTE

**Please remember all public meetings and public hearings are now recorded.**

- All comments **must** be recognized by the Chairperson and addressed through the microphone.
- When speaking to the Planning Commission, please stand, speak slowly and clearly into the microphone, and state your name and address for the recorded record.
- Be respectful to others and refrain from disruptions during the meeting. Please refrain from conversation with others in the audience as the microphones are very sensitive and can pick up whispers in the back of the room.
- Keep comments constructive and not disruptive.
- Avoid verbal approval or dissatisfaction of the ongoing discussion (i.e., booing or applauding).
- Exhibits (photos, petitions, etc.) given to the City become the property of the City.
- Please silence all cellular phones, beepers, pagers or other noise making devices.
- Be considerate of others who wish to speak by limiting your comments to a reasonable length, and avoiding repetition of what has already been said. Individuals may be limited to two minutes and group representatives may be limited to five minutes.
- Refrain from congregating near the doors or in the lobby area outside the council room to talk as it can be very noisy and disruptive. If you must carry on conversation in this area, please be as quiet as possible. (The doors must remain open during a public meeting/hearing.)

## **Public Hearing vs. Public Meeting**

If the meeting is a **public hearing**, the public may participate during that time and may present opinions and evidence for the issue for which the hearing is being held. In a public hearing there may be some restrictions on participation such as time limits.

Anyone can observe a **public meeting**, but there is no right to speak or be heard there - the public participates in presenting opinions and evidence at the pleasure of the body conducting the meeting.

## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT:** Alpine City Tree Selection Guide Book

**FOR CONSIDERATION ON:** 6 November 2018

**PETITIONER:** Staff

**ACTION REQUESTED BY PETITIONER:** Review and make  
recommendation to City Council.

### **BACKGROUND INFORMATION:**

Jeremy Ainsworth and the PKJ Design Group have prepared a guide book for Alpine City that has been designed to help residents of Alpine City select trees that will comply with City standards. Planning Commission is being asked to review and make a recommendation to the City Council.

### **STAFF RECOMMENDATION:**

Review the proposed Tree Selection Guide Book and make a recommendation to the City Council.



# TREE GUIDE

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# TREE GUIDE



## Why select the right tree?

The purpose of this Street Tree Selection Guide is to provide specialized information about each tree and their specific properties for different areas of use and planting around Alpine, Utah. Trees are a very important component to our city. Trees clean the air and cool the environment around our homes and businesses. Trees increase property values and provide a natural beauty in our city, which harbors a great quality of life for all of Alpine's residents.

## Tips for Producing a Tree Healthy City

This Guide Book will help you answer some of these important questions;

**Q: What is the use for the tree?**

A: Aesthetics, Screening, Shade

**Q: What is the character of the tree at maturity?**

A: Height, Width, Shape

**Q: What are the environmental conditions?**

A: Full Sun, Partial Sun, Type of Soil

**Q: What overhead and underground utilities are near planting location?**

A: Power, Water, Sewer, Gas, Telephone, Fiber

## Learn how to select the correct tree

The trees recommended in this guide are tolerant of local temperatures and have qualities to be a great tree.



"PLAN BEFORE YOU PLANT"

*"Picking the right tree is essential to it's health and longevity. If a tree is not in the right soil, hardiness zone, or proper area for mature growth, the tree suffers. If severe pruning has to take place, stress to the tree happens, which can cause susceptibility to disease and death."*

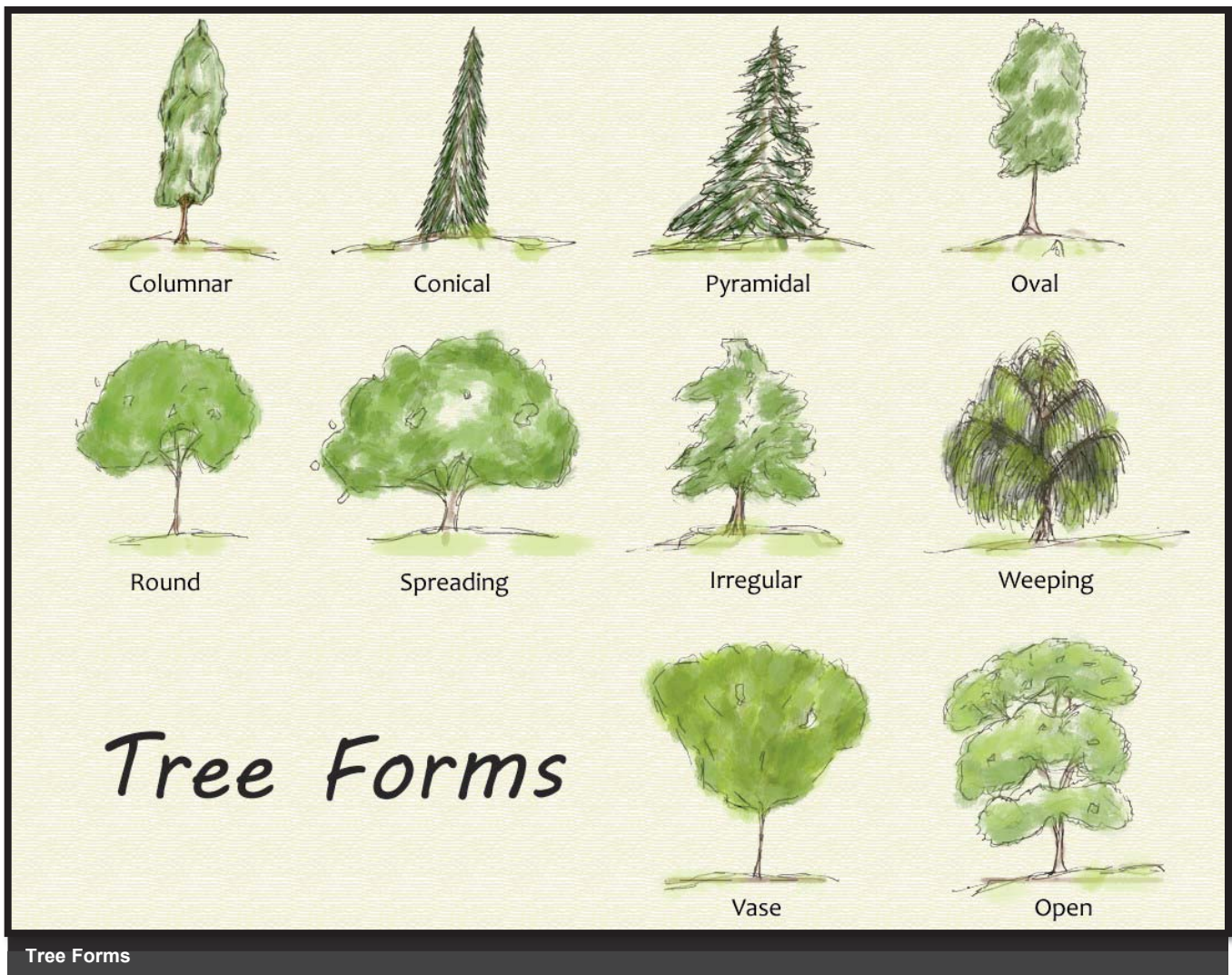
- PKJ Design Group, L.L.C

## IN THIS GUIDE

- . Tree Forms and Class
- . Tree Planting Instructions
- . Tree List and Characteristics

# TREE FORM / CLASS





## Tree Forms

The tree forms pictured here are examples of tree shapes at maturity. It should give you a good idea of how the tree will look and help you plan its place in your landscape. These forms are referred to under the tree characteristics in this guide.

You will find specific heights, crown spreads and other tree characteristics found under the description of each tree.

### How to Select a Tree

Shade trees are very different in growth and characteristics from one to another. Learning about a tree's shape, mature height, and spread will help in selecting the correct tree for the correct location.

## No Cleanup

Most trees produce flowers, seeds and leaves that will drop during part of their natural life cycle. No tree is truly cleanup free, but this guide will help you choose ones that produce less than others.



Round Form



## Conifers

Conifer trees provide year round greenery, screening, and serve as excellent wildlife sanctuaries. They generally should not be pruned and therefore need large growing areas away from buildings, sidewalks, and driveways. Space varies with species.



Pyramidal Form

## Tree Class

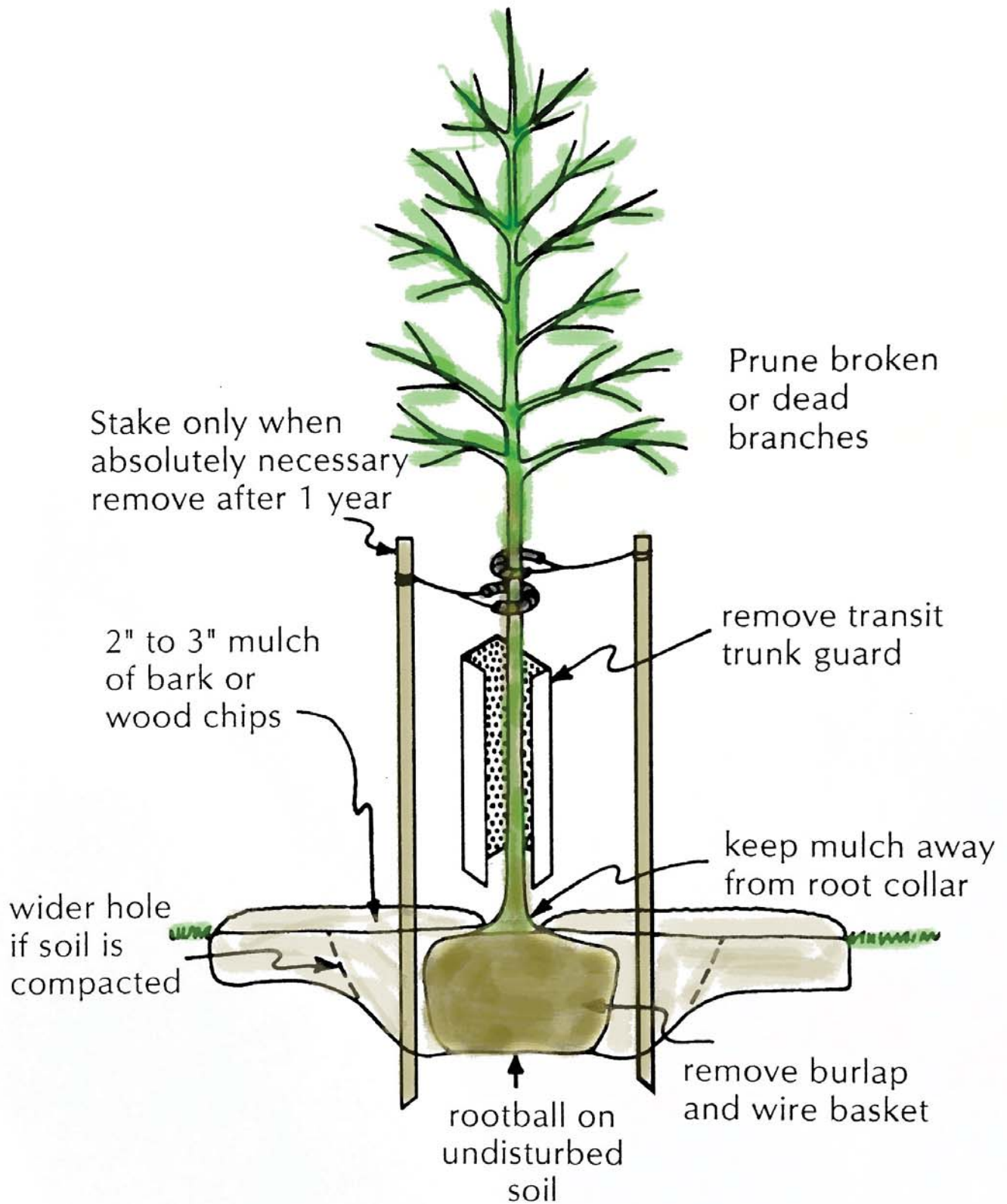
**Class I** - Smaller trees which normally do not reach a large height or trunk diameter. They are ideal for planting beneath or near power lines and in parking strips that are at least 6 feet wide.

**Class II** - Medium sized trees that are valued for their aesthetic and shade contributions. These trees are not for planting under power lines or in parking strips that are less than 6 feet wide.

**Class III** - Large sized trees that are long-lived and have large heights and trunk diameters. These trees are not for planting under or near power lines or in parking strips that are less than 10 feet wide.



# TREE PLANTING / MAINTAINING



# Planting your tree correctly

1. Dig the planting hole at least twice the width of the root ball and only as deep as the root ball. Make sure the tree is planted too high not too low.
2. Remove a tree from a container, gently lay it down. Push on the sides and bottom of the container to break contact between the root ball and container. Hold the trunk near the surface of the soil and push/pull the container away from the root ball. Slide the container off the root ball. Do not pull on the trunk. If the root ball is too large for this process it may be necessary to cut the container off after the tree is placed in the planting site.
3. Prune circling or protruding roots and remove twine from canopy.
4. Handle the root ball with extreme care. Minimize as much as possible any crumbling, cracking, and splitting of the root ball.
5. After gently placing the tree in the hole, remove wire and burlap if the stability of the root ball allows. If not, remove only the top one or two rows of wire and an equal amount of burlap.
6. Use the soil removed from the hole to backfill. Minimize air pockets by removing soil clumps, rocks, sod, and folded burlap.
7. Deeply soak the hole and root ball.
8. Place two to three inches of mulch over the planting area. Avoid direct contact between the mulch and the trunk of the tree.
9. Check moisture content of the backfill and root ball weekly to determine how much and how often to water.

*Utah State University Extension Bulletin EC 460,  
Selecting and Planting Landscape Trees is an excellent reference.*

## Planting Location

Before choosing the planting location, contact Blue Stakes (1-800-662-4111) for location of underground utilities.

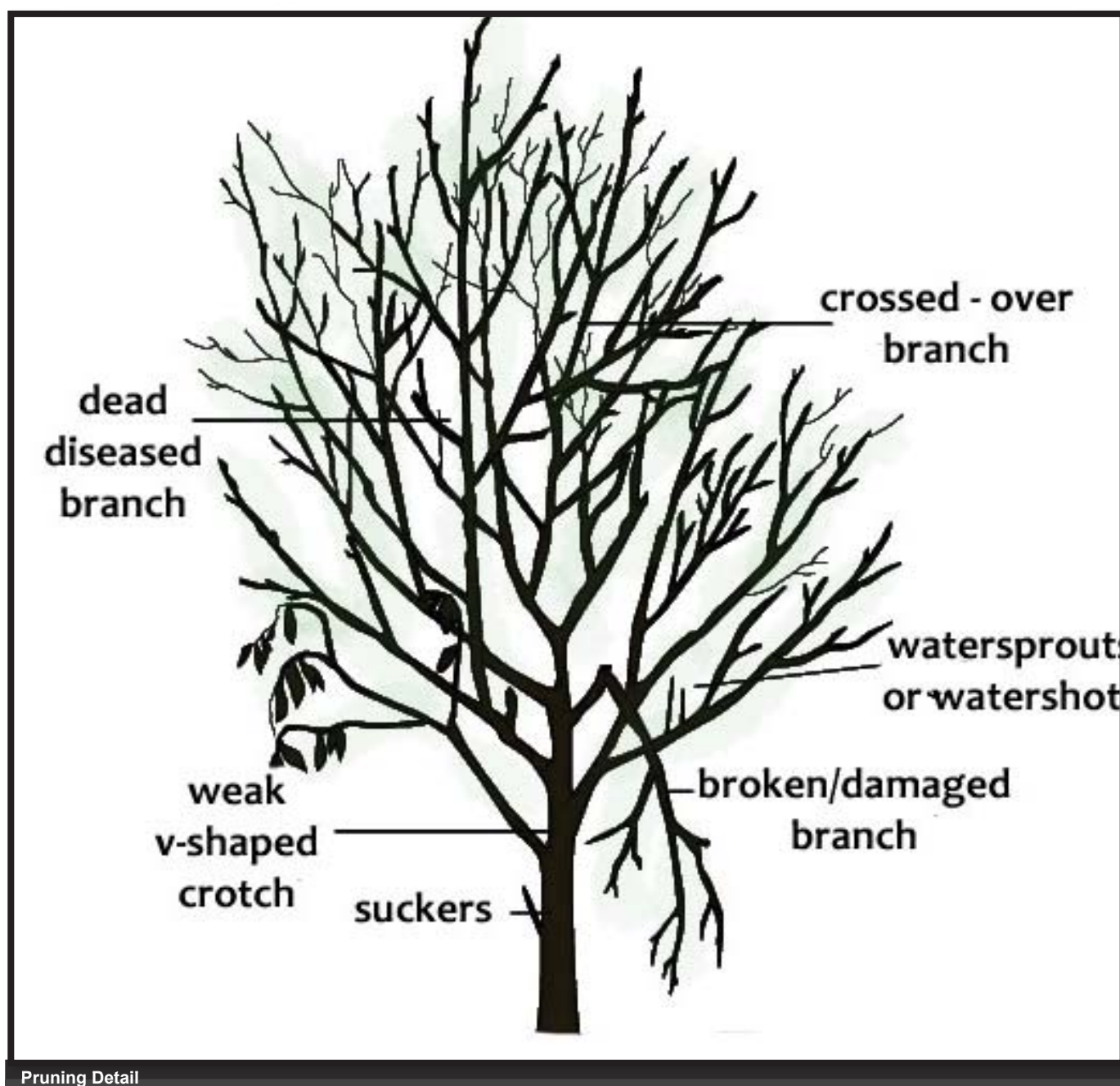
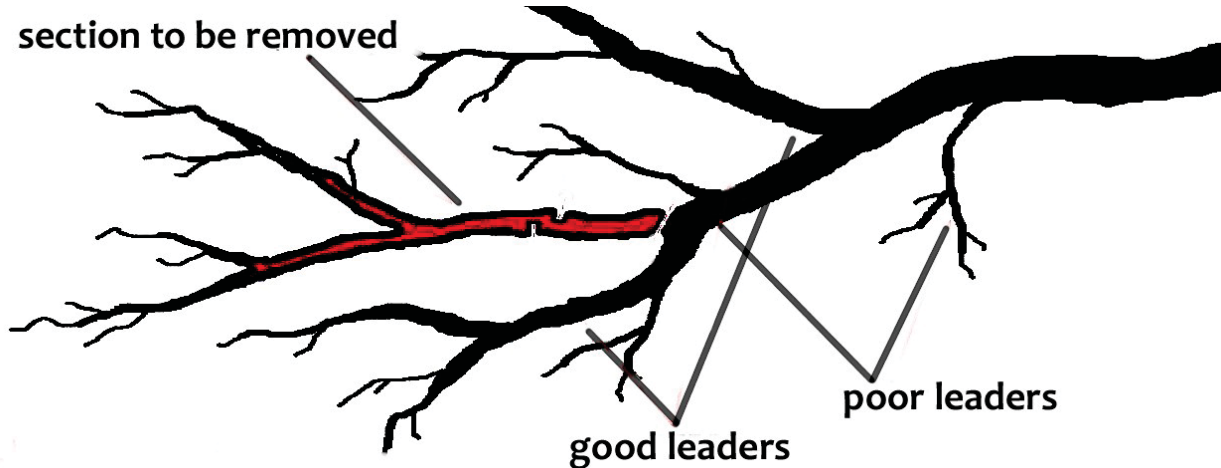


Columnar Form



Spreading Form





Pruning Detail

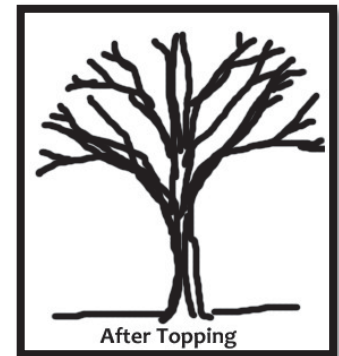


# Maintaining Healthy Trees

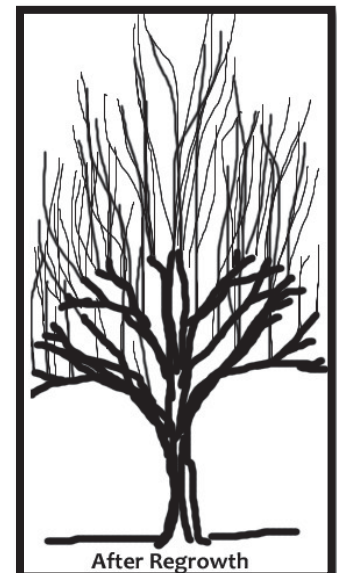
1. **Watering** - Watering the tree regularly during the first year is critical to its establishment. Apply about 1 1/2" of water per week at one time, rather than watering daily. Place a shallow pie pan under the tree canopy and water the area until 1 1/2" accumulates in the pan. Depending on the sprinkler system, it may take 1/2 hour to 3-4 hours. Water from spring to fall and more often during periods of drought.
2. **Mulching** - Mulching is a must! Mulch with wood chips to help retain soil moisture and reduce weeds. It also protects the tree from lawn mowers and weed trimmers. Mulch with 2"-3" of material at a 6' diameter. Keep mulch away from the tree trunk a few inches to avoid trunk rot. As mulch decomposes, it enriches the soil and provides organic matter and beneficial micro-organisms.
3. **Fertilizing** - Fertilizers are naturally or synthetically produced elements applied to the soil or foliage of plants to supply nutrients necessary for normal or accelerated growth. With the exception of nitrogen, fertilizing is usually not required unless a known deficiency exists.
4. **Pests** - Many pest problems occur as a result of improper watering, poor plant stock, or an inferior planting site. Trees that are poorly adapted to a particular site are usually the ones most affected by pests. Choosing the appropriate tree and planting it in an environment capable of sustaining good growth will significantly reduce many pest problems.
5. **Proper Pruning** - Pruning can ensure the tree grows to the size and shape you want. When performed correctly, it can also improve the structure of the tree. Before pruning any tree, make sure you know how to prune it without damaging the tree. Improper pruning can make the tree more susceptible to diseases and insects, weaken the tree, shorten the life of the tree, and take away from the aesthetics of the tree. Pruning near power lines or any other utility lines should be done by a certified professional.

## Never Top Trees

Topping a tree is cutting back large tree limbs to stubs larger than three inches in diameter. It is the most hazardous pruning method available. When a tree is topped, it can lead to weakened limbs and even tree death.



These trees become eyesores in the landscape. It also causes the tree to grow many new limbs around the cuts that are made, these limbs grow rapidly and have weak attachments to the tree. These weak limbs often fall off causing property damage or personal injury or death.



# TREE PLANTING LOCATIONS



# Tree Planting GuideBook - Diagram A

## (Tree Plantings Near Utility Poles)

Class III  
Large Trees  
70'Tall



45' min.

Class II  
Medium Trees  
50'Tall



35' min.

Class I  
Small Trees  
30'Tall



15' min.

Diagram A



# Tree Planting Guide Book - Diagram B (Maintaining Clear Zone)

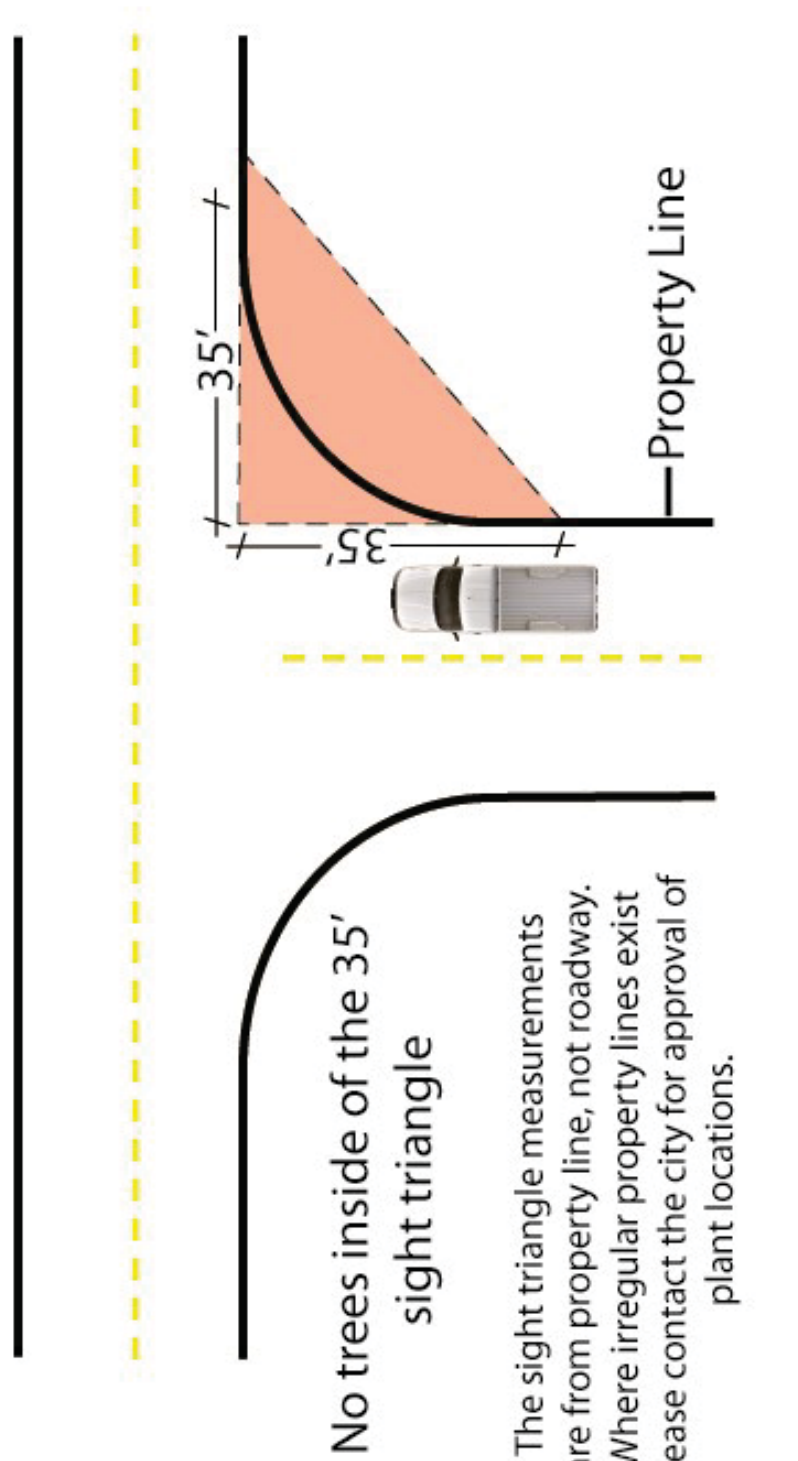


Diagram B



# Tree Planting Guide Book - Diagram C (Maintaining Sight Lines)

Existing trees within the park strips need to be trimmed to maintain a 13.5' minimum clear zone height.



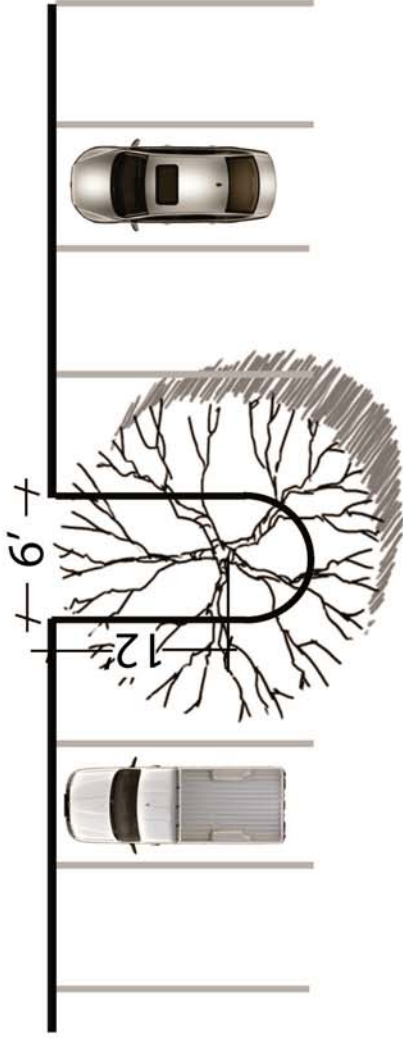
Tree branches shall be trimmed to a minimum height of 13.5' above the curb and gutter and a 8' minimum height above sidewalk.

Diagram C





# Tree Planting Guide Book - Diagram D (Parking Island Tree Placement)



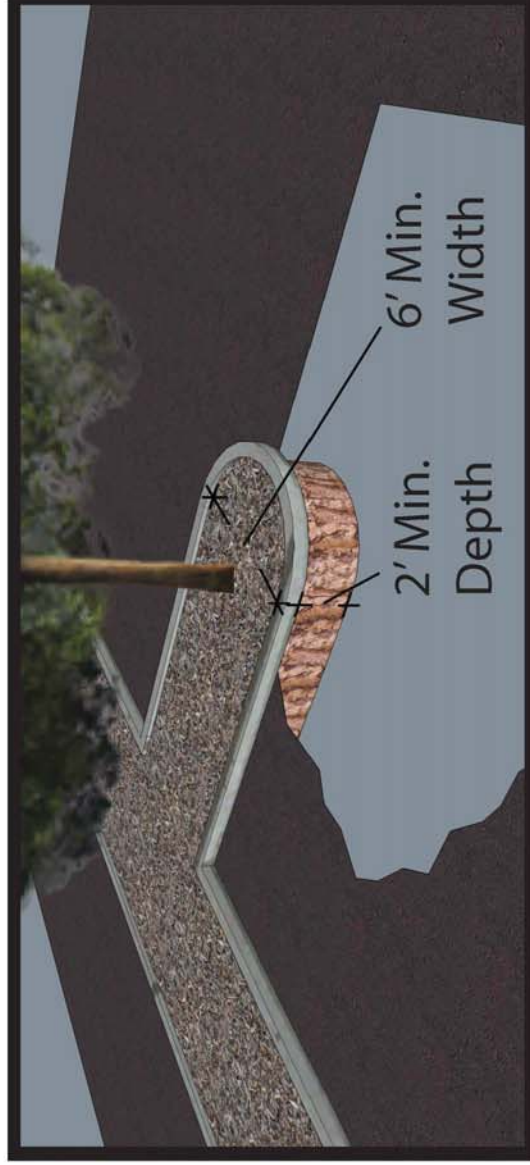
Place tree in parking islands as shown above

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Diagram D

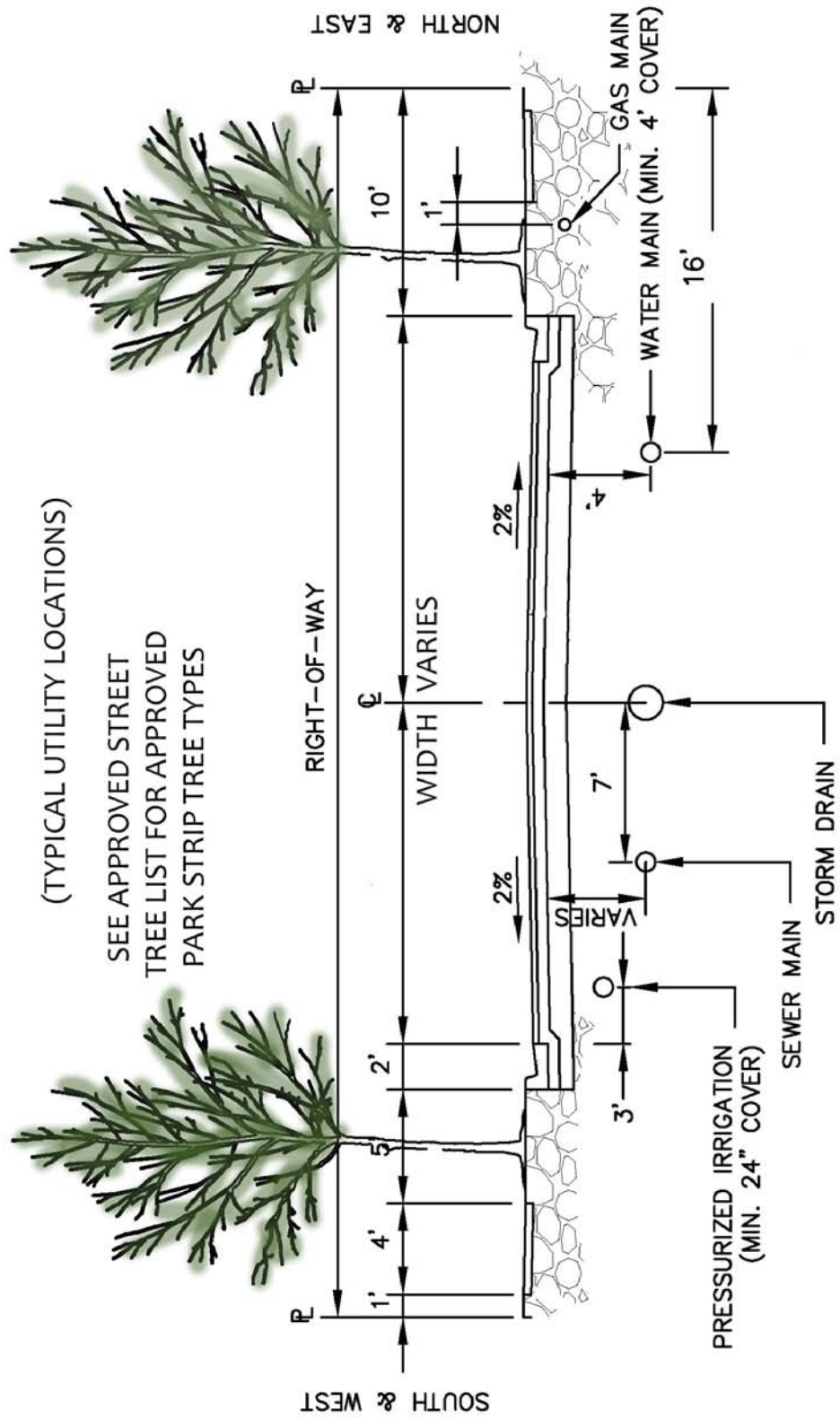


## Tree Planting Guide Book - Diagram E (Minimum Parking Island Area)

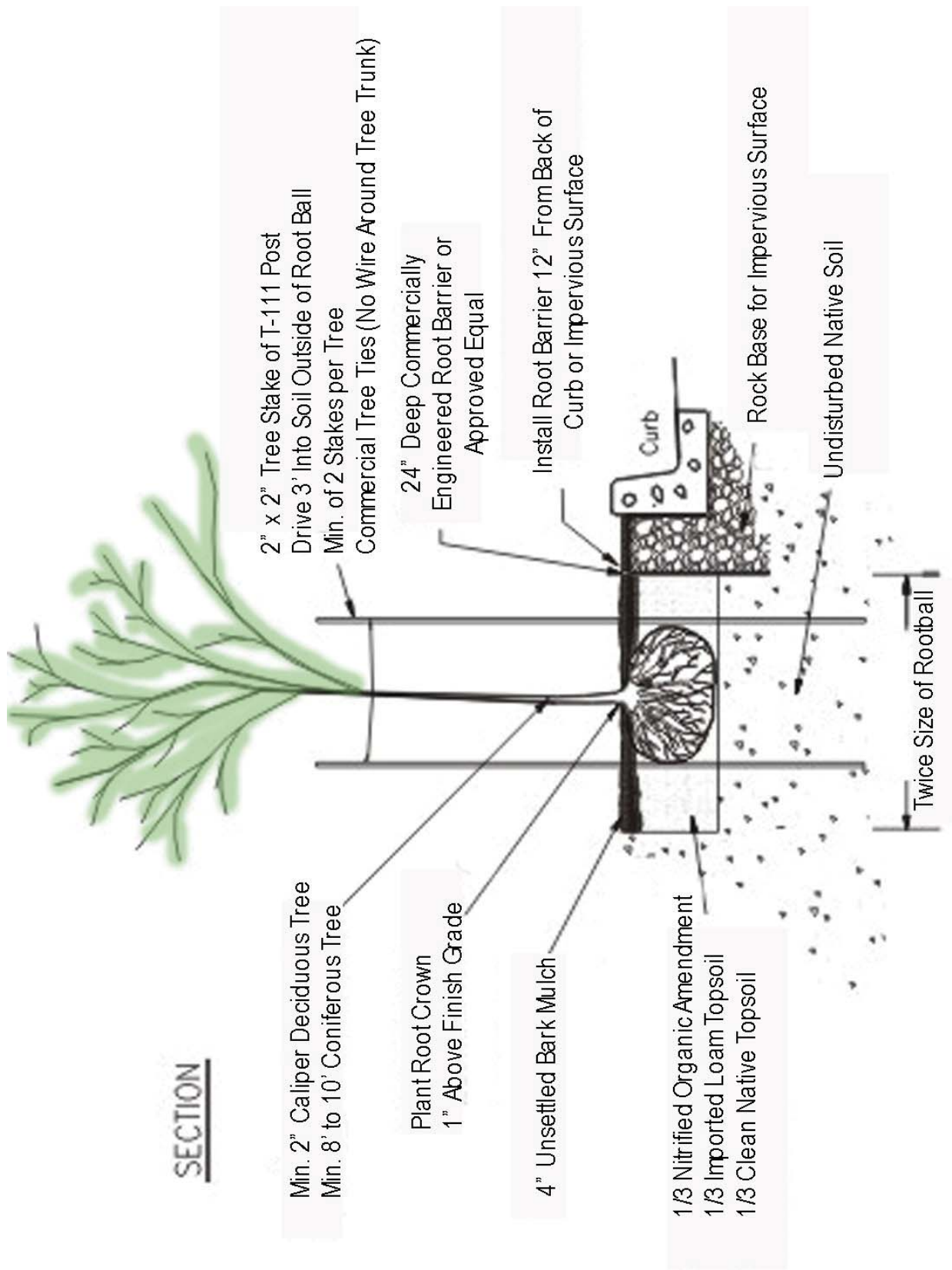


- 2' Minimum depth of soil
- 6' Minimum width of parking island

To ensure tree health within a parking island, a minimum amount of 120 sq. ft. surface area must be installed with each tree. Class I or Class II



## SECTION



# TREE CHARACTERISTICS



# Symbol Legend



Solar Friendly

Trees that maximize the sun's rays year-round. Solar friendly trees provide shade during the summer and a large percentage of sunlight penetration during the winter.



Drought Tolerance

No tree can survive in permanently dry soil. Some tree species, however, are more tolerant of dry soil conditions than others.



Low Water



Moderate Water



Higher Water



Wildlife Friendly

Trees that attract wildlife.



Deer Resistant

Trees that tend to repel deer from eating them.



Street Tree

Trees that are appropriate to plant in the right-of-way along streets due to growth habit.



Utility Friendly

Trees that are appropriate due to growth habit and lower height to plant under utility lines.



Windbreaks

Trees that help screen and deflect winds

## Symbol Legend

## Tree Characteristics

Located at the side of each illustrated tree page there are boxes and symbols denoting additional information about that particular tree. These symbols are explained above.

## Submittal Process

If you would like to discuss planting and placement of a tree that is not recommended in this guide book, please submit to the Planning Department the full name of the proposed tree with placement location on your property. It will then be under review on a case by case basis.

## Drought Tolerance

Lower water demand does not mean a tree can survive in permanently dry soil. All trees prefer a somewhat moist soil for optimum health and maximum growth. To protect your investment, be sure to water trees regularly in hot, dry periods.














Irregular Form








# CLASS I






These trees are smaller trees which normally do not reach a large height or trunk diameter. They are ideal for planting beneath or near power lines and in parking strips that are at least five feet wide. Typical spacing between Class I trees is 30 to 40 feet .


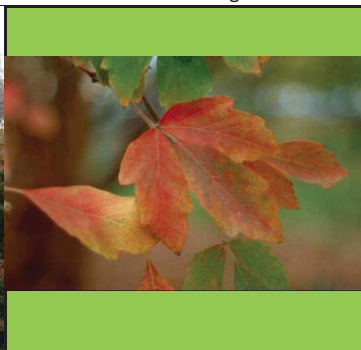



Class I	Hedge Maple				
Acer Campestre					
 		Family	Aceraceae		
		Form	Broad, rounded		
		Size	35' Spread 35' Height		
		Fall Color	yellow		
		Seed	wings very wide spread		
		Flower	Insignificant		
Characteristics	deciduous,very round crown and densely branched				
Growing Conditions	Zone: 5 to 8, medium moisture, well-drained soils in full sun to part shade.				
Growth Rate	Medium				
Disease and Pests	No serious insect or disease problems.				
Common Varieties	Carnival', 'Elegant', 'Elsrijk', 'Evenly Red', 'Field Maple', 'Jade Patina', 'Louisa Red Shine', 'Metro Gold', 'Nanum', 'Postelense', 'Pulverentum', 'Queen Elizabeth', 'Royal Ruby', 'Schichtel's Upright', 'St. Gregory', 'William Caldwell'.				
Where to See	Native to Europe, Africa, and western Asia				






Class I		Trident Maple					
Acer buergeranum							
			Family	Aceraceae			
			Form	oval to rounded			
			Size	35' Spread 35' Height			
			Fall Color	yellow, orange, red			
			Seed	wings parallel; fall maturing.			
			Flower	Insignificant			
Characteristics		deciduous, oval to rounded small tree					
Growing Conditions		Zones 5-9, Fairly drought resistant. Shade intolerant.					
Growth Rate		Low					
Disease and Pests		No serious insect or disease problems.					
Common Varieties							
Where to See		Native to China					







Class I		Amur Maple				
Acer ginnala						
			Family	Aceraceae		
			Form	rounded		
			Size	20' Spread 20' Height		
			Fall Color	yellow to red		
			Seed	2 parallel wings, 3/4" to 1" long		
			Flower	yellow-white and fairly inconspicuous		
Characteristics		deciduous,broad, rounded outline, typically multistemmed				
Growing Conditions		Zones 2-8, Moderately shade tolerant.				
Growth Rate		Medium				
Disease and Pests						
Common Varieties		'Compactum', Durand Dwarf', 'Embers', 'Emerald Elf', 'Flame', 'Mandy', 'Red Fruit', 'Summer Splendor', var. semenovii.				
Where to See		Native to central and northern China, Manchuria, and Japan				

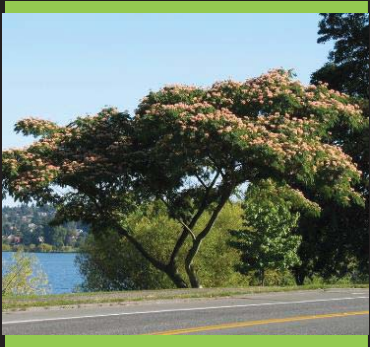



Class I		Bigtooth Maple				
Acer grandidentatum						
			Family	Aceraceae		
			Form	shrubby or tree-like		
			Size	25' Spread 15' Height		
			Fall Color	bright orange-red to red		
			Seed	U-shaped, double-winged, wings spread slightly		
			Flower	yellow, no petals, small, inconspicuous		
Characteristics		This is the common maple that gives Logan Canyon and other Utah foothill and mountain locations their outstanding fall color.				
Growing Conditions		Zones 4(3?)-7, Withstands high soil pH				
Growth Rate		Medium				
Disease and Pests						
Common Varieties		Rocky Mountain Glow'				
Where to See		Native from southern Idaho south to Mexico and east to Texas, including much of Utah in mountainous locations.				






Class I		Paperbark Maple			
Acer griseum					
			Family	Aceraceae	
			Form	oval to oval-rounded	
			Size	25' Spread 30' Height	
			Fall Color	red	
			Seed	1" to 1-1/2" long; pubescent; wings at 60 to	
			Flower	Insignificant	
Characteristics		is a small, deciduous tree with slender upright branching. It is particularly noted for its exfoliating copper orange to cinnamon reddish/brown bark			
Growing Conditions		Zone 4 to 8, Easily grown in average, slightly acidic, medium moisture, well-drained soil			
Growth Rate		Low			
Disease and Pests		No serious insect or disease problems.			
Common Varieties		Cinnamon Flake', 'Gingerbread', 'Molly Fordham'			
Where to See		Native to China.			








Class I		Maple Tatarian			
Acer tataricum					
 		Family	Aceraceae		
		Form	shrubby or tree-like		
		Size	20' Spread 20' Height		
		Fall Color	yellow or red		
		Seed	3/4" to 1" long; wings parallel;		
		Flower	yellow-white or creamy		
Characteristics		typically grows as a small, upright spreading tree. a substitute for Amur maple.			
Growing Conditions		Zone: 3 to 8, Drought resistant and fairly adaptable. Shade intolerant.			
Growth Rate					
Disease and Pests		Verticillium wilt, stem canker, leaf spots, tar spot and anthracnose may appear. Watch for aphids, borers, scale, leafhoppers, caterpillars and mites. Plants have escaped cultivation and naturalized by self-seeding in certain parts of the eastern U.S.			
Common Varieties		Rubrum'.			
Where to See		Native to southeastern Europe and western Asia			
















Class I		Red Buckeye			
Aesculus Pavia					
			Family	Sapindaceae	
			Form	rounded	
			Size	15' Spread 15' Height	
			Fall Color	loses leaves early (late September)	
			Seed	Smooth, light brown, globular seed capsules	
			Flower	Showy narrow-tubular	
Characteristics		deciduous clump-forming shrub or small tree with an irregular rounded crown.			
Growing Conditions		Zone: 4 to 8, well-drained soil in full sun to part shade			
Growth Rate		Average			
Disease and Pests		Leaf blotch can be a significant problem			
Common Varieties					
Where to See		North America			

Class I		Silk Tree				
Albizia julibrissin						
			Family	Fabaceae		
			Form	vase shape		
			Size	50' Spread 40' Height		
			Fall Color	no notable fall color		
			Seed	flat bean-like		
			Flower	pink		
Characteristics	small to medium sized, deciduous tree with a spreading, often umbrella-like crown					
Growing Conditions	Zone: 6 to 9, Tolerant of heat, dryness, high soil pH and salinity. Shade intolerant.					
Growth Rate	High					
Disease and Pests	Wilt is a serious problem in many areas. Also susceptible to mimosa web worm.					
Common Varieties	Charlotte', 'Durazz', 'E.H Wilson', 'Flame', 'Ishii Weeping', 'Merlot Majik', 'Summer Chocolate', 'Tryon', 'Union'.					
Where to See	Native from China to Iran, but heavily planted and naturalized in the southeastern U.S.					

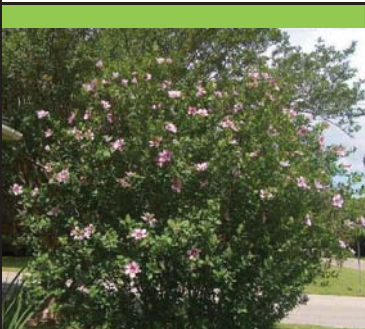






Class I		Eastern Redbud				
Cersis canadensis						
			Family	Fabaceae		
			Form	rounded		
			Size	30' Spread 35' Height		
			Fall Color	yellow		
			Seed	brown, hard		
			Flower	purple-pink, pea-like		
Characteristics		is a deciduous, often multi-trunked understory tree. t is particularly noted for its stunning pea-like rose-purple flowers				
Growing Conditions		Zone: 4 to 8, medium moisture, well-drained soils in full sun to part shade.				
Growth Rate		Medium				
Disease and Pests		Canker can be a significant disease problem. Verticillium wilt, dieback, leaf spots, mildew and blights may also occur. Insect pests include Japanese beetles, tree hoppers, leaf hoppers, caterpillars, borers, webworms and scale.				
Common Varieties		'Alba', 'Appalachian Red', 'Covery', 'Dwarf White', 'Flame', 'Forest Pansy', 'Northland Strain', 'Pinkbud', 'Royal White', 'Rubye Atkinson', 'Silver Cloud', 'Tennessee Pink', 'Traveller', 'Withers Pink Charm'.				
Where to See		Native to most of the eastern U.S. (not Utah)				

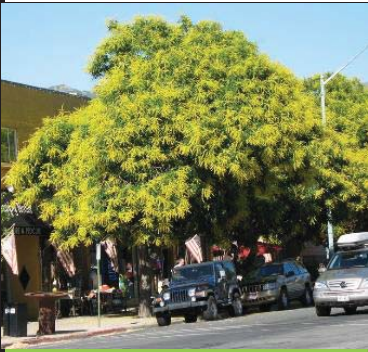





Class I		English Hawthorn				
Crataegus Laevigata						
			Family	Rosaceae		
			Form	rounded		
			Size	20' Spread 20' Height		
			Fall Color	yellow-orange to brown		
			Seed			
			Flower	sometimes white, but often pink, or red		
Characteristics	It is a small, low-branching, deciduous tree that is noted for its profuse spring bloom.					
Growing Conditions	Zone: 4 to 7, Best grown in moist but well-drained soils in full sun.					
Growth Rate	Medium					
Disease and Pests	susceptible to a large number of insect and disease problems					
Common Varieties	Autumn Glory', 'Crimson Cloud', 'Paul's Scarlet', 'Plena', 'Rosea', 'Rosea Flore Plena', var rubra.					
Where to See	Native to Europe and northern Africa					








Class I		Hawthorne Lavalle				
Crataegus LaVallei						
			Family	Rosaceae		
			Form	small oval to rounded tree		
			Size	25' Spread 18' Height		
			Fall Color	dark purple or brown		
			Seed			
			Flower	white		
Characteristics		erect & less densely branched than other hawthorns. Flower has unpleasant smell				
Growing Conditions		Zones 4-8, well-drained soils in full sun				
Growth Rate		Medium				
Disease and Pests		susceptible to cedar hawthorn rust and fireblight				
Common Varieties		'Lavalle'.				
Where to See						








Class I		Washington Hawthorn				
Crataegus phaenopyrum						
			Family	Rosaceae		
			Form	rounded		
			Size	30' Spread 30' Height		
			Fall Color	orange to red		
			Seed			
			Flower	white & bright orange-red when mature		
Characteristics		It is a small, low-branching, deciduous tree. Noted for its attractive flowers and foliage				
Growing Conditions		Zones 3-8, Best grown in moist but well-drained soils in full sun.				
Growth Rate		Medium				
Disease and Pests		good resistance to cedar-apple rust. Fire blight, fungal leaf spots, powdery mildew, cankers and apple scab are occasional problems				
Common Varieties		Clark', 'Fastigiata', 'Manbeck Select', Princeton Sentry™, 'Vaughn'.				
Where to See		Native to much of the eastern U.S.				









Class I		Rose of Sharon Tree			
Hibiscus syriacus					
			Family	Malvaceae	
			Form	Vase	
			Size	15' Spread 15' Height	
			Fall Color	Green	
			Seed	Inconspicuous	
			Flower	Trumpet shaped	
Characteristics		Deciduous clump-forming shrub or small tree, tubular flowers appear in spring.			
Growing Conditions		Zone 5-9, Full Sun / Partial Shade, Moist and Well-drained soils.			
Growth Rate		Medium; a 13"-24" or less per year.			
Disease and Pests		Aphids, Japanese Beetle, Leaf Spots			
Common Varieties		Helene, Diana			
Where to See					





Class I		Goldenrain Tree				
Koelreuteria paniculata						
			Family	Sapindaceae		
			Form	rounded		
			Size	40' Spread 40' Height		
			Fall Color	yellow to orange		
			Seed	black, hard, pea-like		
			Flower	bright yellow		
Characteristics		small, open-branching, irregularly-shaped, deciduous tree				
Growing Conditions		Zones 5-9, Easily grown in average, dry to medium, well-drained soil in full sun.				
Growth Rate		Medium				
Disease and Pests		root rot, leaf spot and canker.				
Common Varieties		Fastigiata', 'September', Stadher's Hill'.				
Where to See		Native to China, Japan, and Korea				








Class I		Goldenchain Tree			
Laburnum x watereri					
 		Family	Fabaceae		
		Form	rounded		
		Size	30' Spread 30' Height		
		Fall Color	unremarkable fall color		
		Seed	poisonous		
		Flower	bright yellow		
Characteristics		is noted for its pendulous axillary racemes of yellow, wisteria-like flowers .			
Growing Conditions		Zones 5-7, grown in rich, medium moisture, well-drained soils in full sun to part shade.			
Growth Rate		Medium			
Disease and Pests		Twig blight is an infrequent but potentially serious disease. Canker and leaf spot are lesser disease problems. Watch for aphids and mealybugs.			
Common Varieties		Alford's Weeping', 'Aureum', 'Pendulum', Vossii'.			
Where to See		central, southern, and eastern Europe			







Class I		Flowering Crabapple				
Malus						
			Family	Rosaceae		
			Form	rounded		
			Size	20' Spread 20' Height		
			Fall Color			
			Seed			
			Flower	white, pink, red, or purplish		
Characteristics	is a genus of about 35 species of deciduous trees					
Growing Conditions	Zone 4 to 8, grown in medium moisture, well-drained, acidic loams in full sun					
Growth Rate	Medium					
Disease and Pests	scab, fire blight, rusts, leaf spot and powdery mildew. pests are of lesser concern and include tent caterpillars, aphids, Japanese beetles, borers and scale.					
Common Varieties	Numerous varieties.					
Where to See						









Class I		Flowering Plum				
Prunus cerasifera						
			Family	Rosaceae		
			Form	rounded		
			Size	25' Spread 30' Height		
			Fall Color	No fall color		
			Seed	round		
			Flower	pink or white		
Characteristics		it only exists in cultivation except for the situations where it has escaped gardens				
Growing Conditions		Zones 5-8, medium moisture, well-drained loams in full sun to part shade.				
Growth Rate		Medium				
Disease and Pests		Susceptible to a large number of insect and disease pests				
Common Varieties		'Alfred', 'Atropurpurea', 'Clark Hill Redleaf', 'Festeri', 'Hessei', 'Hollywood', 'Krauter Vesuvius', 'Mt. St. Helens', 'Newport', 'Nigra', 'Purple Pony', 'Purpusii', 'Thundercloud', 'Vesuvius'.				
Where to See						

Class I		Flowering Cherry			
Prunus serrulata					
			Family	Rosaceae	
			Form	vase-shaped to rounded	
			Size	25' Spread 25' Height	
			Fall Color	bronze and red to undistinguished drab	
			Seed		
			Flower	White to pink	
Characteristics	a medium sized tree, It features non-fragrant white flowers in spring				
Growing Conditions	Zones 5- 9, grown in moist, fertile, well-drained loams in full sun to part shade				
Growth Rate	Medium				
Disease and Pests	Susceptible to a large number of insect and disease pests				
Common Varieties	'Amanogawa', 'Autumnalis', 'Beni-Hoshi', 'Fugenzo', 'Kwanzan', 'Mt. Fuji', 'New Red', 'Ojochin', 'Okame', 'Prentice Dancer', 'Royal Burgundy', 'Shirofugen', 'Shogetsu', 'Ukon'.				
Where to See	Native to China, Japan, and Korea				

Class I		Chokecherry				
Prunus virginiana						
			Family	Rosaceae		
			Form	irregular, oval-rounded		
			Size	20' Spread 30' Height		
			Fall Color	golden yellow to orange		
			Seed			
			Flower	small, white		
Characteristics	a small deciduous tree most frequently occurs on wooded slopes, bluffs and ravines					
Growing Conditions	Zones 2-6, Grow in average, dry to medium, well-drained loams in full sun to part shade.					
Growth Rate	Medium					
Disease and Pests	Susceptible to a large number of insect and disease pests.					
Common Varieties	Bailey Select', 'Boughen's Chokeless', 'Canada Red', "Copper Schubert", 'Mini Schubert', 'Purple Jewel', 'Robert', 'Schubert'.					
Where to See	Native to most of the continental U.S., including Utah, and to much of Canada.					







Class I		Callery Pear				
Pyrus calleryana						
			Family	Rosaceae		
			Form	pyramidal to columnar		
			Size	25' Spread 30' Height		
			Fall Color	orange, yellow, red, or purple		
			Seed			
			Flower	showy, white; 1/2" to 1" in diameter		
Characteristics		is an upright-branched ornamental tree. It is noted for its early profuse spring bloom				
Growing Conditions		Zones 5-9. Grown in humusy, well-drained loam with consistent moisture in full sun				
Growth Rate		Medium				
Disease and Pests		susceptible to limb breakage or splitting from strong winds, snow or ice				
Common Varieties		Bradford'				
Where to See		throughout the U.S.				







Class I	<div>Japanese Lilac Tree</div> <div>Syringa reticulata</div>				
				Family	Oleaceae
				Form	oval-rounded
				Size	20' Spread 30' Height
				Fall Color	yellow to brown
				Seed	
				Flower	white; held in 6" to 12" long heads
Characteristics	grows as a small tree or large shrub. It has showy, fragrant, creamy white flowers				
Growing Conditions	Zones 3-8 medium moisture, well-drained soil in full sun				
Growth Rate	Medium				
Disease and Pests	No serious insect or disease problems.				
Common Varieties	Chantilly Lace', 'China Gold', 'Ivory Silk', 'Regent', 'Summer Snow', var. mandschurica.				
Where to See	Northern China				


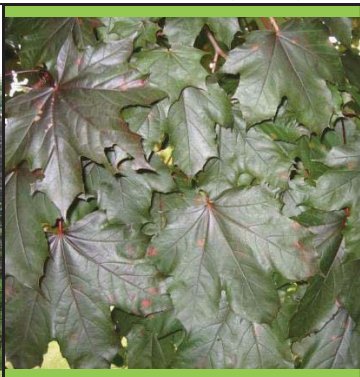




# CLASS II







These trees are medium sized trees that are valued for their aesthetic and shade contributions. These trees are not for planting under power lines or in parking strips that are less than five feet wide. Typical spacing between Class II trees is 40 to 50 feet .










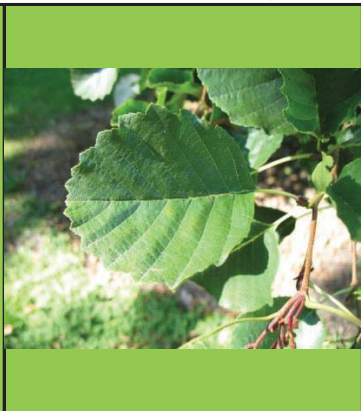




Class II	Bigtooth Maple				
Acer grandidentatum					
			Family	Aceraceae	
			Form	Broad	
			Size	30' Spread 30' height	
			Fall Color	bright orange-red to red	
			Seed		
			Flower	yellow, no petals, small, inconspicuous	
Characteristics	It is tolerant of our soil and climatic conditions, and even appears to withstand some drought when planted in the valleys				
Growing Conditions	Zones 4(3?)-7, Tolerant of our soil and climatic conditions, and even appears to withstand some drought when plan				
Growth Rate	Medium				
Disease and Pests					
Common Varieties	Rocky Mountain Glow				
Where to See	Native from southern Idaho south to Mexico and east to Texas, including much of Utah in mountainous locations.				

Class II	Norway Maple				
Acer Platanoides					
 		Family	Sapindaceae		
		Form	Broad		
		Size	50' Spread 50' Height		
		Fall Color	uniform yellow		
		Seed	paired seeds with horizontally spreading wings		
		Flower	monoecious		
Characteristics	deciduous, rounded crown, densely branched, often wider than tall when open grown				
Growing Conditions	Zone: 3 to 7				
Growth Rate	Medium				
Disease and Pests	No serious insect or disease problems. Susceptible to verticillium wilt which is usually fatal. Susceptible to verticillium wilt which is usually fatal.				
Common Varieties	Crimson King', 'Crimson Sentry', 'Drummondii' Globosum', 'Emerald Queen', 'Erectum', 'Princeton Gold', 'Schwedleri'				
Where to See	Northeastern Europe to Caucauses				







Class II		Sycamore Maple			
Acer pseudoplatanus					
			Family	Aceraceae	
			Form	Broad	
			Size	60' Spread 60' Height	
			Fall Color	greenish yellow to vibrant scarlet to burgundy	
			Seed	pairs of samaras (to 2" long) with the wings typically forming a 60 degree angle	
			Flower	Monoecious	
Characteristics		deciduous,pyramidal or elliptical when young, becomes more spreading with age, eventually developing a more or less rounded or oval outline			
Growing Conditions		Zone: 4 to 7			
Growth Rate		Medium 			
Disease and Pests		No serious insect or disease problems. Canker is the most significant potential disease problem.			
Common Varieties		'Atropurpureum', 'Brilliantissimum', 'Erectum', 'Erythrocarpum', 'Leopoldii', 'Prinz Handjery', f. variegatum, 'Worley'			
Where to See		Northwest/central Europe and western Asia			







Class II		Red Maple			
Acer rubrum					
			Family	Aceraceae	
			Form	Broad	
			Size	50' Spread 70' Height	
			Fall Color	orange-red foliage color	
			Seed		
			Flower	Showy	
Characteristics		deciduous,pyramidal or elliptical when young, becomes more spreading with age, eventually developing a more or less rounded or oval outline			
Growing Conditions		Zones 3-9			
Growth Rate		Medium			
Disease and Pests		No serious insect or disease problems. Watch for aphids, leafhoppers, borers, scale and caterpillars. Verticillium wilt attacks the vascular system and can be fatal.			
Common Varieties		'Armstrong', 'Armstrong Gold', 'Autumn Flame', 'Bowhall', 'Brandywine', 'Karpick', 'Northwood', 'October Glory', 'Red Skin', 'Red Sunset', 'Redpointe', 'Scarlet Sentinel'			
Where to See		Eastern North America from Quebec to Minnesota south to Florida and eastern Texas			

Class II	Autumn Blaze Maple					
Acer x freemanii						
 		Family	Aceraceae			
		Form	Broad			
		Size	40' Spread 55' Height			
		Fall Color	Greenish-yellow to red			
		Seed				
		Flower	inflorescences in ball-like clusters			
Characteristics	A hybrid of red maple (A. rubrum) and silver maple (A. saccharinum). It is sometimes difficult to identify a Freeman hybrid because of the complexity of crosses and backcrosses that may occur.					
Growing Conditions	Zone: 3 to 8					
Growth Rate	High					
Disease and Pests	No serious insect or disease problems. Young plants susceptible to leafhoppers and scale. Borers.					
Common Varieties	Armstrong', 'Autumn Blaze', 'Autumn Fantasy', 'Celebration', 'Firefall', 'Marmo', 'Morgan', 'Scarlet Sentinel', 'Sienna Glen'					
Where to See						









Class II		European Alder			
Alnus glutinosa					
			Family	Betulaceae	
			Form	Broad	
			Size	40' Spread 60' Height	
			Fall Color	Reddish-brown (male), purple (female)	
			Seed		
			Flower	monoecious; small male flowers, reddish-brown, in 2" to 4" long catkins; purplish female flowers inside an egg-shaped cone	
Characteristics		small to medium-sized deciduous tree that is distinguished by its gummy young twigs and leaves and its obovate to rounded, glossy dark green leaves (to 4" long) with doubly toothed margins and blunt to sometimes notched apices			
Growing Conditions		Zones 3-7			
Growth Rate		High			
Disease and Pests		Canker is the most severe disease problem. Watch for aphids, leaf miner, tent caterpillars lace bugs and flea beetles.			
Common Varieties		'Aurea', 'Charles Howlett', 'Imperialis', 'Laciniata', 'Pyramidalis			
Where to See		Europe, Northern Africa, western Asia			















Class II		European Hornbeam			
		Carpinus betulus			
			Family	Betulaceae	
			Form	Broad	
			Size	40' Spread 60' Height	
			Fall Color	yellow to yellow-green	
			Seed		
			Flower	Insignificant	
Characteristics		a deciduous, medium sized tree, somewhat pyramidal or oval when young, mature plants are broad and rounded			
Growing Conditions		Zones 4-8			
Growth Rate		Low			
Disease and Pests		No serious insect or disease problems.			
Common Varieties		'Asplenifolia', 'Brownstone', 'Columnaris', 'Columnaris Nana', 'Cornerstone', 'Emerald Avenue', 'Fastigiata', 'Franz F'			
Where to See		Europe, Asia			

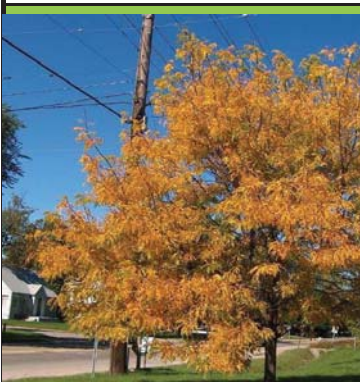






Class II		European Beech			
Fagus sylvatica					
			Family	Fagaceae	
			Form	Broad	
			Size	40' Spread 50' Height	
			Fall Color	golden-yellow to reddish-orange	
			Seed		
			Flower	Monoecious. Flowers inconspicuous, in small groups	
Characteristics		large deciduous tree,broad pyramidal shape, trunk is short and branches generally touch ground, slow growth rate			
Growing Conditions		Zone: 4 to 7			
Growth Rate		Low			
Disease and Pests		and caterpillars. Distressed trees may be attacked by borers. Beech bark disease, canker and powdery mildew may occur.			
Common Varieties		'Ansorgei', 'Asplenifolia', 'Atropunicea', 'Aurea Pendula', 'Black Swan', 'Cockleshell', 'Dawyck Gold', 'Dawyck Purple', 'Fastigiata', 'Franken', 'Mercedes', 'Pendula', 'Purple Fountain', 'Red Obelisk', 'Riversii', 'Rotundifolia', 'Tricolor'			
Where to See		Central Europe to Caucasus			









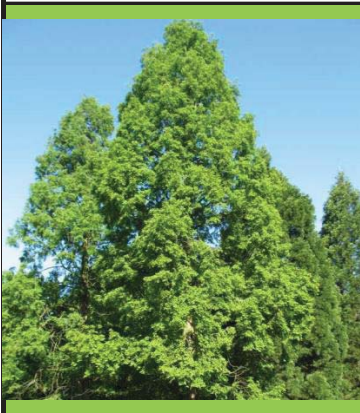





Class II		Tricolor Beech			
Fagus sylvatica					
 		Family	Fagaceae		
		Form	Round		
		Size	20' Spread 30' Height		
		Fall Color	bronze-gold		
		Seed			
		Flower	Monoecious yellowish green flowers bloom in April-May, the		
Characteristics		A large deciduous tree typically growing to 50-60' (less frequently to 100') tall with a dense, upright-oval to rounded-spreading crown.			
Growing Conditions		Zone: 4 to 7			
Growth Rate					
Disease and Pests		No serious insect or disease problems. Beech scale is an occasional problem. Watch for aphids, Japanese beetles and caterpillars. Distressed trees may be attacked by borers. Beech bark disease, canker and powdery mildew may occur.			
Common Varieties					
Where to See		Woodlands in central and southern Europe			

Class II	Autumn Purple Ash				
Fraxinus americana 'Autumn Purple'					
			Family	Oleaceae	
			Form	Oval	
			Size	50' Spread 60' Height	
			Fall Color	purple to yellow-purple	
			Seed		
			Flower	dioecious; small and inconspicuous, arranged in conical clusters; appear in spring before the leaves expand.	
Characteristics		a large deciduous tree, shape is oval in youth, becoming more rounded with age, branches are distributed evenly in the crown			
Growing Conditions		Zones 3-9			
Growth Rate		Medium			
Disease and Pests		Emerald ash borer will typically kill an ash tree within 3-5 years after infestation. Once infestation occurs, it is very difficult to eradicate this pest which feeds under the bark and bores into wood. Potential disease problems include fungal leaf spots, powdery mildew, rust, anthracnose, cankers and ash yellows. General ash decline is also a concern. Brittle branches are susceptible to damage from high winds and snow/ice.			
Common Varieties		'Autumn Applause', 'Autumn Blaze', 'Champaign County', 'Chicago Regal', 'Elk Grove', 'Empire', 'Greenspire', 'Junginger', 'Manitou', 'Rosehill', 'Royal Purple', 'Skycolor', 'Tures'			
Where to See		Eastern U.S			







Class II		Princeton Sentry' Ginkgo			
Ginkgo biloba					
			Family	Ginkgoaceae	
			Form	Broad	
			Size	30' Spread 50' Height	
			Fall Color	bright yellow	
			Seed		
			Flower	Dioecious. Green male flowers borne in 1" long catkins in spring; female flowers inconspicuous.	
Characteristics		deciduous, a large tree, medium texture, rather coarse in , conical form when young, spreading lateral branches with agewinter			
Growing Conditions		Zone: 3 to 9			
Growth Rate		Medium			
Disease and Pests		No serious insect or disease problems. Usually slow growing, with initial growth being somewhat sparse.			
Common Varieties		'Autumn Gold', 'Golden Colonnade', 'Halka', 'Jade Butterfly', 'Lakeview', 'Magyar', 'Pendula', 'Presidential Gold', 'Princeton Sentry', 'Saratoga', 'Troll', 'Tubifolia', 'Variegata'			
Where to See		China and Japan			

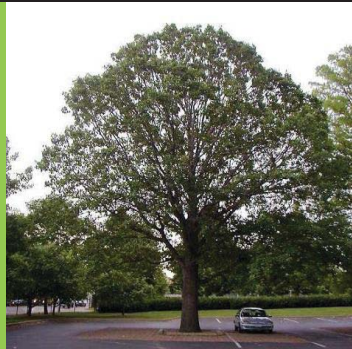




Class II		Honey Locust			
Gleditsia triacanthos var. inermis					
 		Family	Fabaceae		
		Form	Round		
		Size	80' Spread 80' Height		
		Fall Color	Greenish-yellow		
		Seed	followed by long, twisted and flattened, dark purplish-brown seedpods		
		Flower	Showy		
Characteristics		a medium to large deciduous tree, spread is usually equal to height, branching is upright-spreading to arching or more or less horizontal, some trees become nearly flat-topped			
Growing Conditions		Zone: 3 to 8			
Growth Rate					
Disease and Pests		Susceptible to a large number of potential disease problems, including leaf spot, canker, witches' broom, powdery mildew and rust. Borers and webworms are common insect problems in some areas. Leaflets are too small to rake which is good, but seed pods are unattractive on the tree and messy when they fall. Thorns on species plants can be just plain nasty.			
Common Varieties					
Where to See		Pennsylvania to Iowa south to Georgia and Texas			

Class II		Sweetgum			
Liquidamber styraciflua					
			Family	Altingiaceae	
			Form	Oval- Rounded	
			Size	65' Spread 75' Height	
			Fall Color	yellows, oranges, purples and reds	
			Seed		
			Flower	Non-showy, monoecious, yellow-green	
Characteristics		Deciduous shade tree, Pyramidal when young, oblong to rounded when mature, usually maintains a single leader			
Growing Conditions		Zone: 5 to 9			
Growth Rate		Medium			
Disease and Pests		No serious insect or disease problems. Webworms, caterpillars, borers and scale may cause problems in some areas. Leaf spots, wood rot and bleeding necrosis may occur. Iron chlorosis may occur in alkaline soils.			
Common Varieties					
Where to See		Eastern United States, Mexico			






Class II		Dawn Redwood			
Metasequia glyptostroboides					
 		Family	Cupressaceae		
		Form	Conical Shape		
		Size	25' Spread 100' Height		
		Fall Color	unique pinkish tan to reddish bronze before dropping in the fall		
		Seed			
		Flower	monoecious, producing oval, light brown female cones (3/4" long) and pendant globose male cones (1/2" long)		
Characteristics		a deciduous, coniferous , large tree, uniform conical habit, horizontal branching, growth rate is fast			
Growing Conditions		Zone: 4 to 8			
Growth Rate		High			
Disease and Pests		No serious insect or disease problems.			
Common Varieties					
Where to See		Central and western China			








Class II		White Mulberry			
Morus alba					
			Family	Moraceae	
			Form	Broad	
			Size	50' Spread 50' Height	
			Fall Color	unattractive yellow (sometimes green, yellow and brown)	
			Seed		
			Flower	Insignificant	
Characteristics	a deciduous, medium to large tree, dense, rounded tree, fast growing				
Growing Conditions	Zone: 4 to 8				
Growth Rate	High				
Disease and Pests	No serious insect or disease problems. Borers may be a problem particular in the South. Whiteflies mass on some trees. Bacterial blight may kill foliage/branches. Coral spot cankers may cause twig dieback. Bacterial leaf scorch, powdery mildew and root rot may also occur. Watch for scale, mites and mealybugs. Messy fruit may be a concern.				
Common Varieties	'Bellaire', 'Chaparral', 'Contorta', 'Fan-San', 'Fegyvernekiana', 'Fruitless', 'Hampton', 'Illinois Everbearing', 'Itoguwa', 'Lingan', 'Laciniata', 'Mapleleaf', 'Nuclear Blast', 'Pendula', 'Pyramidalis', 'Silk Hope', 'Stribling', var. tatarica, 'Urbana', 'Widman Mitchell'				
Where to See	China				







Class II	White Swamp Oak				
Quercus bicolor					
			Family	Fagaceae	
			Form	Round	
			Size	60' Spread 60' Height	
			Fall Color	yellow, but sometimes reddish purple	
			Seed		
			Flower	Insignificant	
Characteristics	a medium-sized, deciduous tree, upright oval crown, open, moderate growth rate				
Growing Conditions	Zone: 3 to 8				
Growth Rate	Medium				
Disease and Pests	Generally a durable and long-lived tree, but is susceptible to a large number of potential diseases and insect pests, including anthracnose, canker, leaf spot, rust, blight, galls, caterpillars, borers, leaf miners, oak lace bug and oak mite. Chlorosis (yellowing of the leaves while the veins remain green) often occurs when soils are not properly acidic. Can be difficult to transplant and establish.				
Common Varieties					
Where to See	Northeastern North America				















Class II	Bur Oak				
Quercus macrocarpa					
 		Family	Fagaceae		
		Form	Round		
		Size	80' Spread 80' Height		
		Fall Color	yellowish-brown		
		Seed			
		Flower	Insignificant		
Characteristics		a large, deciduous tree, somewhat columnar in youth, broad crown with age, equal of greater spread at maturity, equal of greater spread at maturity			
Growing Conditions		Zone: 3 to 8			
Growth Rate					
Disease and Pests		susceptible to a large number of diseases, including oak wilt, chestnut blight, shoestring root rot, anthracnose, oak leaf blister, cankers, leaf spots and powdery mildew. Potential insect pests include scale, oak skeletonizer, leaf miner, galls, oak lace bugs, borers, caterpillars and nut weevils. Notwithstanding the aforementioned, bur oak is generally considered to be a low-maintenance, long-lived tree.			
Common Varieties					
Where to See		Northern and central United States, southeastern Canada			







Class II		English Oak			
Quercus robur Fastigiata					
			Family	Fagaceae	
			Form	Round	
			Size	70' Spread 70' Height	
			Fall Color	Yellowish-green	
			Seed		
			Flower	Insignificant	
Characteristics		a large, deciduous tree, somewhat columnar in youth, broad crown with age, equal of greater spread at maturity, equal of greater spread at maturity			
Growing Conditions		Zone: 5 to 8			
Growth Rate		Average			
Disease and Pests		Powdery mildew can be significant, however, particularly in humid climates such as the St. Louis area. Oaks in general are susceptible to a large number of diseases, including oak wilt, chestnut blight, shoestring root rot, anthracnose, oak leaf blister, cankers, leaf spots and powdery mildew. Potential insect pests include scale, oak skeletonizer, leaf miner, galls, oak lace bugs, borers, caterpillars and nut weevils.			
Common Varieties					

Where to See	Europe, southwestern Asia
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Class II		Black Locust			
Robinia pseudoacacia					
 		Family	Fabaceae		
		Form	narrow oblong		
		Size	35' Spread 50' Height		
		Fall Color	leaves drop a yellowish-green		
		Seed			
		Flower	Showy, Fragrant		
Characteristics		a medium-sized deciduous tree, an upright tree with a somewhat narrow crown that is widest near the top, branching is upright to irregular, many consider the branching to be unique and picturesque			
Growing Conditions		Zone: 3 to 8			
Growth Rate		Average			
Disease and Pests		a very easy-to-grow tree. It thrives in many difficult growing conditions. It is also sometimes considered to be somewhat weedy. Trees send out long underground root suckers that not only become a maintenance problem but also can disrupt nearby gardening areas. It is susceptible to locust borer (often fatal) and locust leaf miner (browns foliage). Other insect problems include caterpillars, weevils, scale and whiteflies. Possible disease problems include canker, powdery mildew, leaf spots, wood rots and verticillium wilt.			
Common Varieties					
Where to See		Eastern and central United States			






Class II		Idaho Locust			
Robinia xambigua 'idahoensis'					
 		Family	Fabaceae		
		Form	Round		
		Size	30' Spread 40' Height		
		Fall Color	Yellow, Green		
		Seed			
		Flower	Showy, red		
Characteristics		a graceful deciduous tree prized its gorgeous, pendulous, clusters of pink flowers and rugged constitution.			
Growing Conditions		Zone: 4 to 8			
Growth Rate		Fast			
Disease and Pests					
Common Varieties					
Where to See		North America and Mexico			

Class II		Japanese Pagoda Tree			
Sophora japonica					
		Family	Fabaceae		
		Form	Round		
		Size	75' Spread 75' Height		
		Fall Color	greenish yellow		
		Seed			
		Flower	Showy		
Characteristics		a deciduous medium to large tree, spread equals height, rounded shape, branching is upright and spreading and eventually nearly arching over			
Growing Conditions		Zone: 4 to 8			
Growth Rate		Medium			
Disease and Pests		No serious insect or disease problems. Twig blight, verticillium wilt, canker, powdery mildew and rust may occur. Watch for leaf hoppers.			
Common Varieties					
Where to See		China and Korea			

Class II	Mountain Ash				
Sorbus americana					
		Family	Rosaceae		
		Form	Round		
		Size	25' Spread 30' Height		
		Fall Color	yellow		
		Seed			
		Flower	Showy		
Characteristics	a small, deciduous, with an open rounded crown. It is noted for its attractive form, white spring flowers, serrate compound-pinnate leaves and bright orange-red fall fruit.				
Growing Conditions	Zone: 3 to 6				
Growth Rate					
Disease and Pests	Bacterial fireblight can be a severe problem, causing scorched leaves at the branch ends. Scab can cause significant defoliation. Cankers, crown gall, powdery mildew and rust may also occur. Insect visitors include borers, aphids, sawfly and scale. Stressed trees are generally more susceptible to attack from canker and borers.				
Common Varieties					
Where to See	Eastern North America				









Class II		Bald Cypress			
Taxodium distichum					
		Family	Cupressaceae		
		Form			
		Size	8' Spread 20' Height		
		Fall Color	russet orange-red		
		Seed			
		Flower	non-flowering		
Characteristics		a deciduous conifer, pyramidal to conical, especially when young, some older trees develop spreading, irregular, or almost flat-topped forms, some older trees develop spreading, irregular, or almost flat-topped forms			
Growing Conditions		Zone: 4 to 9			
Growth Rate		Medium			
Disease and Pests		Interesting landscape specimen or accent. Foundations, near patios or in small garden areas. Tolerates placement in moist soils or low spots.			
Common Varieties		Twig blight and rots may occur. Watch for spider mites.			
Where to See		Albany, Auckland, New Zealand			

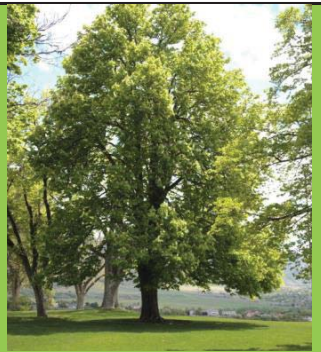






Class II		American Elm			
Ulmus Americana					
		Family	Ulmaceae		
		Form	Broad-Rounded		
		Size	70' Spread 80' Height		
		Fall Color	Reddish-green		
		Seed			
		Flower	Insignificant		
Characteristics		large, deciduous tree, narrow with numerous branches covering trunk, columnar, medium growth rate			
Growing Conditions		Zone: 2 to 9			
Growth Rate		Average			
Disease and Pests		a fatal fungal disease spread by airborne bark beetles, attacks the water-conducting tissue of the tree, resulting in wilting, defoliation and death. Phloem necrosis is a disease caused by a phytoplasma that attacks the food-conducting tissue of the tree, usually resulting in a loosening of the bark, wilting, defoliation and death. Wetwood is a bacterial disease that results in wilting and dieback. Various wilts, rots, cankers and leaf spots may also occur. Insect visitors include borers, leaf miner, beetles, mealy bugs, caterpillars and scale.			
Common Varieties					
Where to See		Eastern North America			








# CLASS III







These trees are large sized trees that are long-lived and have large heights and trunk diameters. These trees are not for planting under or near power lines or in parking strips that are less than 10 feet wide. Typical spacing between Class III trees is 50 feet or more.

















Class III		Black Maple			
Acer nigrum					
 		Family	Aceraceae		
		Form	round, pyramidal		
		Size	45' Spread 60' Height		
		Fall Color	yellow to brownish yellow		
		Seed			
		Flower	light yellow to white		
Characteristics		is very similar in appearance to sugar maple. It is a large, deciduous tree with ascending branching			
Growing Conditions		Zones 4-8 Withstands high soil pH			
Growth Rate		Medium			
Disease and Pests					
Common Varieties		Commemoration', 'Legacy'.			
Where to See		north central and northeastern North American			

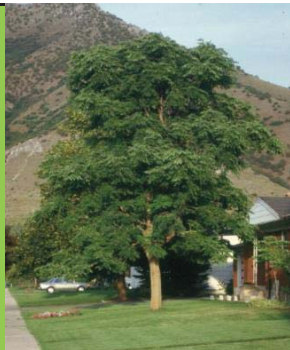






Class III		Common Horsechestnut			
Aesculus hippocasatanum					
 		Family	Hippocastanaceae		
		Form	upright oval-rounded		
		Size	65' Spread 75' Height		
		Fall Color	yellow-brown		
		Seed	shiny, brown		
		Flower	white to light yellow		
Characteristics		a medium to large deciduous tree			
Growing Conditions		Zones 3-7, grown in average, medium, well-drained soils in full sun to part shade.			
Growth Rate		Medium			
Disease and Pests		Leaf blotch,Powdery mildew, anthracnose, bagworms, Japanese beetles and borers			
Common Varieties		Baumanii'.			
Where to See					









Class III		Avalanche Birch			
		Betula x 'Avalzam'			
			Family	Betulaceae	
			Form	oval	
			Size	30' Spread 50' Height	
			Fall Color	yellow	
			Seed		
			Flower	insignificant	
Characteristics		It has a low canopy with a typical clearance of 3 feet from the ground, and should not be planted underneath power lines. It grows at a fast rate			
Growing Conditions		Zones 2-8, This tree does best in full sun to partial shade.			
Growth Rate		fast growing			
Disease and Pests		has higher than average resistance to bronze birch borer			
Common Varieties					
Where to See					

Class III		Northern Catalpa			
Catalpa speciosa					
			Family	Bignoniaceae	
			Form	open-rounded to narrow-oval	
			Size	50' Spread 70' Height	
			Fall Color	yellow-brown	
			Seed	winged	
			Flower	trumpet-like; white with yellow and purple spots	
Characteristics		A large, but fairly narrow-crowned tree with beautiful white flowers and an interesting, though messy, fruit.			
Growing Conditions		Zones 4-9 tolerant of wet or dry and high pH soils			
Growth Rate		High			
Disease and Pests		Susceptible to verticillium wilt, leaf spots, mildew and twig blight			
Common Varieties		'Aurea', 'Koehnei', 'Nana', 'Pulverulenta', 'Purpurea', 'Variegata'.			
Where to See					








Class III		Hackberry				
Celtis occidentalis						
			Family	Cannabaceae		
			Form	rounded		
			Size	60' Spread 60' Height		
			Fall Color	yellow		
			Seed	round, brown		
			Flower	monoecious, greenish		
Characteristics		a medium to large sized deciduous tree. it typically occurs statewide in low woods along streams and in drier upland slopes				
Growing Conditions		Zones 2-9, Best grown in moist, organically rich, well-drained soils in full sun.				
Growth Rate		High				
Disease and Pests		Powdery mildew, leaf spot and root rot may occur. Watch for lacebugs and scale.				
Common Varieties		Chicagoland', 'Delta', 'Prairie Pride', 'Windy City'.				
Where to See		Central and northeastern North America				







Class III		American Beech				
Fagus grandifolia						
			Family	Fagaceae		
			Form	upright-oval to rounded-spreading		
			Size	80' Spread 80' Height		
			Fall Color	golden bronze		
			Seed	triangular nuts enclosed by spiny bracts		
			Flower	Monoecious yellowish green		
Characteristics		It is a large deciduous tree, is a low-branched.				
Growing Conditions		Zones 3-9. Best grown in deep, rich, moist but well-drained soils in full sun to part shade.				
Growth Rate		Low				
Disease and Pests		No serious insect or disease problems. Beech scale is an occasional problem.				
Common Varieties		Cameron', 'Diamond Bark'.				
Where to See		Eastern North America				







Class III		Kentucky Coffee Tree				
Gymnocladus dioicus						
			Family	Fagaceae		
			Form	oval		
			Size	55' Spread 80' Height		
			Fall Color	yellow		
			Seed	flattened reddish brown pods		
			Flower	Greenish white		
Characteristics		is a tall deciduous tree with rough, scaly gray-brown bark and large bipinnate compound leaves. Native Americans roasted the seeds for food.				
Growing Conditions		Zones 3-8. Best grown in moist, organically rich, well-drained soils in full sun.				
Growth Rate		Medium				
Disease and Pests		No serious insect or disease problems.				
Common Varieties		Espresso', 'Prairie Titan', 'Stately Manor'.				
Where to See		Central and eastern North America				








Class III		Butternut					
Juglans cinerea							
			Family	Juglandaceae			
			Form	oval			
			Size	60' Spread 60' Height			
			Fall Color	undistinguished yellow			
			Seed	edible oval nuts encased in hairy indehiscent husks			
			Flower	Yellowish green monoecious			
Characteristics		is not commonly grown as an ornamental but it is a valued native American tree that is unfortunately becoming increasingly rare in the wild					
Growing Conditions		Zones 3-7. Prefers moist, organically rich, well-drained soils in full sun. Intolerant of shade.					
Growth Rate		Medium					
Disease and Pests		Susceptible to butternut dieback or butternut canker (Sirococcus clavigignenti-juglandacearum), a fatal fungal disease that is devastating butternut trees in the wild.					
Common Varieties							
Where to See		Northeastern United States					

















Class III		Tulip Tree				
Liriodendron tulipifera						
			Family	Magnoliaceae		
			Form	pyramidal to broad conical		
			Size	50' Spread 90' Height		
			Fall Color	nice yellow		
			Seed	winged		
			Flower	large, green-yellow		
Characteristics		is a large, stately, deciduous tree, Wood is used inter alia for furniture, plywood, boatbuilding, paper pulp and general lumber				
Growing Conditions		Zones 4-9 Best grown in moist, organically rich, well-drained loams in full sun.				
Growth Rate		High				
Disease and Pests		aphids and scale. Potential diseases include verticillium wilt, mold, mildew and canker.				
Common Varieties		Ardis', 'Arnold', 'Aureomarginatum', 'Compactum', 'Emerald City', 'Fastigiatum', 'Integrifolium', 'Mediopictum'.				
Where to See		Eastern North America				









Class III		Sycamore				
Platanus occidentalis						
			Family	Platanaceae		
			Form	pyramidal to broad conical		
			Size	100' Spread 100' Height		
			Fall Color	undistinguished yellow-brown		
			Seed			
			Flower	yellowish and reddish.		
Characteristics		regarded to be the most massive tree indigenous to eastern North America. It is a deciduous, usually single-trunk tree				
Growing Conditions		Zones 4-9, Easily grown in average, medium to wet, well-drained soils in full sun				
Growth Rate		High				
Disease and Pests		Sycamore anthracnose, Canker, leaf spot, powdery mildew, borers, scale, Japanese beetles, caterpillars and mites.				
Common Varieties		Howard'.				
Where to See		Southeastern United States				








Class III		London Planetree			
Platanus x acerfolia					
			Family	Platanaceae	
			Form	pyramidal to broad conical	
			Size	75' Spread 100' Height	
			Fall Color	yellow-brown	
			Seed		
			Flower	yellowish and reddish.	
Characteristics		London planetree is a hybrid cross between American sycamore (P. occidentalis) and Oriental planetree (P. orientalis).			
Growing Conditions		Zones 4-9, Easily grown in average, medium to wet, well-drained soils in full sun			
Growth Rate		High			
Disease and Pests		Canker, leaf spot, powdery mildew, borers, scale, Japanese beetles, caterpillars and mites.			
Common Varieties		Bloodgood', 'Columbia', 'Liberty', 'Mirkovec', 'Yarwood'.			
Where to See					

Class III		Chinkapin Oak			
Quercus muhlenbergii					
 		Family	Fagaceae		
		Form	oval		
		Size	70' Spread 60' Height		
		Fall Color	undistinguished shades of yellow and brown		
		Seed	acorn		
		Flower	yellowish-green		
Characteristics		medium sized deciduous oak of the white oak group			
Growing Conditions		Zones 4-7, Easily grown in average, medium, well-drained soils in full sun.			
Growth Rate		Medium			
Disease and Pests		oak wilt, chestnut blight, shoestring root rot, anthracnose, oak leaf blister, cankers, leaf spots, powdery mildew scale, oak skeletonizer, leaf miner, galls, oak lace bugs, borers, caterpillars and nut weevils			
Common Varieties					
Where to See		Eastern United States			







Class III	Northern Red Oak				
Quercus rubra					
 		Family	Fagaceae		
		Form	irregular		
		Size	75' Spread 75' Height		
		Fall Color	brownish-red		
		Seed	acorn		
		Flower	Monoecious		
Characteristics	A medium sized, deciduous tree				
Growing Conditions	Zone 4 to 8 Easily grown in average, dry to medium moisture, acidic soil in full sun. Prefers fertile, sandy, finely-textured soils with good drainage.				
Growth Rate	moderate-to-fast				
Disease and Pests	oak wilt which is a systemic fungal disease that has no cure. Chlorosis				
Common Varieties	Aurea', 'Splendens'.				
Where to See	Eastern North America				








Class III		Shumard Oak			
Quercus shumardii					
			Family	Fagaceae	
			Form	Pyramidal to broad	
			Size	40' Spread 60' Height	
			Fall Color	deep red	
			Seed	acorn	
			Flower	Insignificant	
Characteristics		medium sized, deciduous tree of the red oak group			
Growing Conditions		Zone 5 to 9, grown in average, dry to medium moisture, acidic, well-drained soils in full sun			
Growth Rate		moderately fast			
Disease and Pests		anthracnose, canker, leaf spot, rust, blight, galls, caterpillars, borers, leaf miners, oak lace bug and oak mite			
Common Varieties					
Where to See		Southeastern United States			






Class III		American Linden				
Tilia americana						
			Family	Tiliaceae		
			Form	conical		
			Size	55' Spread 35' Height		
			Fall Color	green or yellowish		
			Seed			
			Flower	light yellow		
Characteristics		Large shade tree, with nice, fragrant flowers and pleasing foliage.				
Growing Conditions		Zones 2-9 does well on soils with fairly high pH				
Growth Rate		Medium				
Disease and Pests		Free of most serious pests, though aphids can be a nuisance in some years.				
Common Varieties		Bailyard', 'Boulevard', 'Dakota' 'Douglas', 'Fastigiata', 'Lincoln', 'Redmond', 'Rosehill', 'Sentry', 'Wandell'.				
Where to See		northern and eastern U.S.				

Class III		Silver Lndon				
Tilia tomentosa						
			Family	Tiliaceae		
			Form	conical		
			Size	50' Spread 70' Height		
			Fall Color	yellow		
			Seed			
			Flower	Pale yello		
Characteristics		This is a medium to large deciduous tree. When a tree is in full bloom, bees often visit in such abundant numbers that humming can be heard many feet from the tree				
Growing Conditions		Zone 4 to 7 Easily grown in average, dry to medium, well-drained soils in full sun to part shade.				
Growth Rate		Medium				
Disease and Pests		No serious insect or disease problems				
Common Varieties		Brabant', 'Erecta', Green Mountain®, 'Satin Shadow', 'Sterling'.				
Where to See		Southeast Europe to Asia Minor				




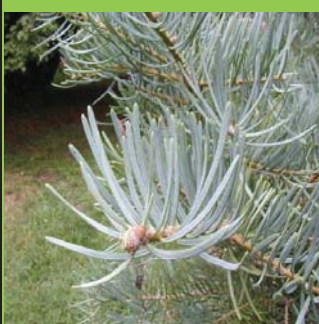



Class III		Lacebark Elm				
Ulmus parvifolia						
 		Family	Ulmaceae			
		Form	rounded			
		Size	40' Spread 50' Height			
		Fall Color	yellows or reddish-purples			
		Seed				
		Flower	Reddish-green			
Characteristics		a medium-sized deciduous tree, It is noted for its excellent foliage, multi-colored bark				
Growing Conditions		Zone 4 to 9 Grow in average, medium moisture, well-drained soils in full sun				
Growth Rate		rapid				
Disease and Pests		wilts, rots, cankers and leaf spots				
Common Varieties		'Burgundy', 'Caitlin', 'Central Park Splendor', 'Drake', 'Dynasty', 'Emerald Isle', 'Emerald Vase', 'Golden Ray', 'King's Choice', 'Ohio', 'Prairie Shade'.				
Where to See		China, Korea, Japan				






Class III		Japanese Zelkova				
Zelkova serrata						
 		Family	Ulmaceae			
		Form	vase-shaped			
		Size	80' Spread 80' Height			
		Fall Color	yellow-orange to red-brown			
		Seed				
		Flower	Green			
Characteristics		a medium to large deciduous tree				
Growing Conditions		Zone 5 to 8 Easily grown in average, medium wet, well-drained soils in full sun				
Growth Rate		rapid				
Disease and Pests		No serious insect or disease problems				
Common Varieties		'City Sprite', 'Goshiki', 'Green Vase', 'Halka', 'Musashino', 'Schmidtlow', 'Spring Grove', 'Variegata', 'Village C				
Where to See		China, Japan, Korea, Russia, Taiwan				

Class III	Green Ash			
Fraxinus pennsylvanica				
			Family	Oleaceae
			Form	rounded but usually irregular crown
			Size	50' Spread 70' Height
			Fall Color	yellow
			Seed	
			Flower	dioecious; small and inconspicuous, arranged in clusters; appear in spring as leaves expand.
Characteristics		a medium to large, deciduous tree, oval, upright crown, fast growth rate		
Growing Conditions		Zone: 3 to 9		
Growth Rate		High		
Disease and Pests		Green ash trees are generally susceptible to a number of additional insect problems including ash borer, lilac borer, carpenter worm, oyster shell scale, leaf miners, fall webworms, ash sawflies and ash leaf curl aphid. Potential disease problems include fungal leaf spots, powdery mildew, rust, anthracnose, cankers and ash yellows. General ash decline is also a concern. Brittle branches are susceptible to damage from		
Common Varieties		'Jewell', 'Johnson', 'Kankakee', 'Kindred', 'King Richard', 'Lednaw', 'Leeds', 'Marshall's Seedless', 'Patmore', 'Rugby', 'Robinhood', Sherwood Glen™, 'Summit', Urbanite®, 'Wahpeton', 'Wandell'		
Where to See		Great Plains east, including southern Canada		






# EVERGREEN







These trees are evergreen and hold their needles through the winter providing color through the cold months. These trees also provide wind breaks and great habitats for animals. Evergreen trees range in spread and height. Evergreen trees should not be planted in park strips or parking island areas.






Evergreen		White Fir			
Abies concolor					
			Family	Pinaceae	
			Form	Spire-like	
			Size	30' Spread 70' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics		evergreen tree, pyramidal in shape, holding a dense, formal shape well, even with age, slow to medium growth rate, easily transplanted, tolerant of most climates and city conditions			
Growing Conditions		Zone: 3 to 7			
Growth Rate		Medium			
Disease and Pests		No serious insect or disease problems. Insect pests include balsam woolly adelgid, bark beetles, spruce budworms, aphids, bagworms and scale. Spider mites may occur in hot conditions. Disease problems include root rot, needle rust and twig blight. Trees are generally intolerant of urban pollution. Broken branches often become sites for fungal infections. Strong winds may damage taller trees.			
Common Varieties					
Where to See		United States, Mexico			








Evergreen	California Incense cedar				
Calocedrus decurrens					
 		Family	Cupressaceae		
		Form	Round		
		Size	10' Spread 50' Height		
		Fall Color	no fall color (evergreen)		
		Seed			
		Flower	Non-flowering		
Characteristics	is an aromatic evergreen conifer with upright branching that is narrow-columnar in youth but may broaden with age to conical sometimes with a rounded crown.				
Growing Conditions	Zone: 5 to 8				
Growth Rate	Low				
Disease and Pests	No serious insect or disease problems. Heart rot and rust may occur in some areas.				
Common Varieties					
Where to See	Western United States, Mexico				

















Evergreen	Blue Atlas Cedar				
Cedrus atlantica glauca					
			Family	Pinaceae	
			Form	Conical	
			Size	40' Spread 60' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics		evergreen needle conifer, pyramidal when young, flat-topped and spreading when mature, has stiff, horizontal main branching; branching somewhat sparse, especially when young, very interesting and picturesque habit as a mature tree			
Growing Conditions		Zone: 6 to 9			
Growth Rate		Low			
Disease and Pests		No serious insect or disease problems. Tip blight may occur. Heavy snow in winter can break branches.			
Common Varieties		'Argentea', 'Aurea', 'Compacta', 'Fastigiata', 'Glaucua', 'Glaucua Pendula', 'Horstmann', 'Horstmann Silberspitz', 'Pendula'			
Where to See		Atlas Mountains in Morocco and Algeria			

Evergreen	Chinese Juniper				
Juniperus chinensis					
			Family	Cupressaceae	
			Form	Round	
			Size	20' Spread 50' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics	tree, shrub or groundcover, dependent on cultivar, species an erect, narrow, conical tree, 50' to 60' tall, varying in width, slow to medium growth				
Growing Conditions	Zone: 4 to 9				
Growth Rate	Medium				
Disease and Pests	No serious insect or disease problems. Junipers are generally susceptible to tip and needle blights. Cedar-apple rust and related rust diseases spend part of their life cycle on junipers. Root rot may occur, particularly in wet, poorly drained soils. Canker may attack bark or main stems. Occasional insect pests include aphids, bagworms, webworms and scale.				
Common Varieties	'Blue Point', 'Glaucua', 'Gold Coast', 'Gold Star', 'Hetzii', 'Hetzii Columnaris', 'Hetzii Glaucua', 'Iowa', 'Keteleen', 'Maney', 'Mint Julep', 'Mountbatten', 'Old Gold', 'Pfitzeriana', 'Pfitzeriana Aurea', 'Pfitzeriana Compacta', 'Pfitzeriana Glaucua', 'Prostrata Variegata', 'Ramlosa', 'Robusta Green', 'San Jose', 'Saybrook Gold', 'Sea Green', 'Sea Spray', 'Spartan', 'Spearmint', 'Torulosa', var. sargentii, 'Variegata'				
Where to See	China, Japan, Mongolia and the Himalayas				









Evergreen	Rocky Mountain Juniper				
Juniperus osteosperma					
		Family	Cupressaceae		
		Form	Conical		
		Size	6' Spread 15' Height		
		Fall Color	no fall color (evergreen)		
		Seed			
		Flower	Non-flowering		
Characteristics	narrow, conical shape, opening when mature, branches are somewhat vertical growing, slow to moderate growth rate, tolerant of most conditions , except wet soils				
Growing Conditions	Zone: 3 to 7				
Growth Rate	Medium				
Disease and Pests	No serious insect or disease problems. Junipers are generally susceptible to blights (dieback of stem tips), particularly in unusually rainy/wet springs. Phomopsis twig blight is of particular concern. Cedar-apple and related rust diseases spend part of their life cycle on junipers. Root rot may occur, particularly in wet, poorly drained soils. Occasional insect pests include aphids, bagworms, twig borers, webworms and scale. Watch for spider mites.				
Common Varieties	Blue Creeper', 'Blue Heaven', 'Blue Trail', 'Cologreen', 'Gray Gleam', 'Medora', 'Moonglow', 'Pathfinder', 'Skyrocket', 'Sutherland', 'Tolleson', 'Tolleson's Blue Weeping', 'Tolleson's Green Weeping', 'Welchii', 'Wichita Blue'				
Where to See	Western Great Plains throughout the Rocky Mountains and southwestern Canada, including Utah				






Evergreen		Eastern Red Cedar			
Juniperus virginiana					
		Family	Cupressaceae		
		Form	Conical		
		Size	25' Spread 65' Height		
		Fall Color	no fall color (evergreen)		
		Seed			
		Flower	Non-flowering		
Characteristics		conical shape in youth, opening with age, moderate growth rate, susceptible to bagworm and cedar-apple rust			
Growing Conditions		Zone: 2 to 9			
Growth Rate		Medium			
Disease and Pests		a common problem for many different junipers, but this cultivar has good resistance. Susceptible to twig blight and scale. Watch for bagworms. Mites may occur.			
Common Varieties					
Where to See		Eastern North America			

Evergreen	European Larch				
Larix decidua					
			Family	Pinaceae	
			Form	Broad	
			Size	30' Spread 100' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics		deciduous conifer, pyramidal in habit with horizontal branches and weeping branchlets, becomes more irregular with age			
Growing Conditions		Zone: 2 to 6			
Growth Rate		High			
Disease and Pests		Potential insect pests include larch case-bearer, aphids, larch sawfly, tussock moth and Japanese beetle. Potential disease problems include needle cast, needle rust and canker.			
Common Varieties		Fastigiata', 'Pendula', 'Varied Directions'			
Where to See		Central and Southern Europe			









Evergreen	Colorado Spruce				
Picea pungens					
			Family	Pinaceae	
			Form	Broad	
			Size	20' Spread 60' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics		evergreen tree with horizontal, stiff branches, narrow, dense, conical shape, branches tend to go to the ground			
Growing Conditions		Zone: 2 to 7			
Growth Rate		Medium			
Disease and Pests		Susceptible to needle cast, canker and rust. Watch for aphids (particularly spruce gall aphids), scale, budworms and bagworms. Spider mite invasions can cause significant problems with new growth and overall tree health.			
Common Varieties					
Where to See		Southern Rocky Mountains			


















Evergreen		Bristlecone Pine			
Pinus aristata					
			Family	Pinaceae	
			Form	Conical	
			Size	20' Spread 20' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics		evergreen small tree,dwarf and irregular growth habit, dwarf and irregular growth habit, very slow growth rate, making mature height irrelevant			
Growing Conditions		Zone: 5-7			
Growth Rate		Low			
Disease and Pests					
Common Varieties		'Sherwood Compact'			
Where to See		mountainous areas in the interior West, including Utah			






Evergreen	Limber Pine				
Pinus flexilis					
			Family	Pinaceae	
			Form	Conical	
			Size	40' Spread 60' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics		evergreen needle conifer, about half as wide as tall, dense, pyramidal when young, when mature, develops as flat-topped broad crown ascending			
Growing Conditions		Zone: 4 to 7			
Growth Rate		Low			
Disease and Pests		an adaptable, low-maintenance tree with few problems. It is susceptible to certain rots and blights, but its most dangerous enemy is white pine blister rust which is a bark disease that is usually fatal. Species of Ribes (e.g., currants and gooseberries) are the alternate host for white pine blister rust and should not be planted in areas where limber pines or white pines are under attack. White pine blister rust is not considered to be a problem in Missouri, however. Aphids, weevils, spider mites and scale are not uncommon insect visitors.			
Common Varieties		'Columnaris', 'Extra Blue', 'Glauca', 'Glauca Pendula', 'Glenmore Dwarf', 'Millcreek', 'Nana', 'Pendula', 'Vanderwolf's Pyramid'			
Where to See		Southwestern Canada to western United States			








Evergreen	Austrian Pine				
Pinus nigra					
 		Family	Pinaceae		
		Form	Round		
		Size	40' Spread 60' Height		
		Fall Color	no fall color (evergreen)		
		Seed			
		Flower	Non-flowering		
Characteristics		evergreen needle conifer tree, medium to large size, pyramidal and dense when young, with age becoming flat-topped, with spreading branches and umbrella shape			
Growing Conditions		Zone: 4 to 7			
Growth Rate		Medium			
Disease and Pests		its susceptibility to Sphaeropsis (Diplodia) tip blight, particularly in the midwest, is of such significance that planting it in the St. Louis area is not now recommended. Also susceptible to Dothistroma needle blight. Pine moth and pine wilt nematode may appear.			
Common Varieties		Arnold Sentinel', 'ENCI', 'Hornibrookiana', 'Pyramidalis'			
Where to See		Central and southern Europe			

Evergreen	Ponderosa Pine				
Pinus ponderosa					
 		Family	Pinaceae		
		Form	Conical		
		Size	30' Spread 125' Height		
		Fall Color	no fall color (evergreen)		
		Seed			
		Flower	Non-flowering		
Characteristics	an evergreen tree, narrow, upright, oval form in youth opens up into an irregular crown, fine to medium texture				
Growing Conditions	Zone: 3 to 7				
Growth Rate	Medium				
Disease and Pests	These trees may struggle in the St. Louis area where hot summer, soils and general environmental conditions do not favor most pines. Root rots, needle blight and blister rust may occur. Bark beetle can cause significant damage.				
Common Varieties	'Canyon Ferry', 'Gumdrop', 'Hiwan', 'Little Joe', 'Marquerite', 'Mary Ann Heacock', 'Pendula', 'Tortuosa'				
Where to See	Western North America				

Evergreen		Scotch Pine			
Pinus sylvestris					
			Family	Pinaceae	
			Form	Conical	
				40' Spread 60' Height	
			Fall Color	no fall color (evergreen)	
			Seed		
			Flower	Non-flowering	
Characteristics		evergreen tree, in youth has a conical shape, becoming a flat-topped, spreading tree with age, can be very attractive when mature, horizontal branching habit			
Growing Conditions		Zone: 2 to 7			
Growth Rate		Medium			
Disease and Pests		Sphaeropsis (Diplodia) tip blight can be a significant problem in some areas. Watch for pine wilt nematode. Sawflies, moths and scale may also appear.			
Common Varieties		'Aurea', 'Beuvronensis', 'Fastigiata', 'Watereri'			
Where to See		Siberia to eastern Asia, Europe			

Evergreen		Douglas Fir			
Pseudotsuga mensiesii					
 		Family	Pinaceae		
		Form	Conical		
		Size	20' Spread 80' Height		
		Fall Color	no fall color (evergreen)		
		Seed			
		Flower	Non-flowering		
Characteristics		a large evergreen tree,in its native haunts it grows to 150' tall or more, horizontal branches with pendulous branchlets			
Growing Conditions		Zone: 4 to 6			
Growth Rate		Medium			
Disease and Pests		No serious insect or disease problems when grown in the proper environment.			
Common Varieties		'Aurea', 'Blue', 'Carnefix Weeping', 'Compact', 'Cross Selection', 'De Bunn', 'Emerald Twist', 'Fastigiata', 'Fletcheri', 'Graceful Grace', 'Hale', 'Hillside Gold', 'Hillside Pride', 'Jackson's Witch's Broom', 'Little Jon', 'Loggerhead', 'Pendula', 'Seattle Mountain', 'Shorty's Blue', 'Skyline', 'var. glauca', 'Waggin' Tails'			
Where to See		Southwestern British Columbia to western central California			

Evergreen	Giant Sequoia					
Sequoiadendron giganteum						
			Family	Cupressaceae		
			Form	Conical		
			Size	60' Spread 275' Height		
			Fall Color	no fall color (evergreen)		
			Seed			
			Flower	Non-flowering		
Characteristics		most massive size of any tree in the world. It is an erect, single-trunk (often buttressed at the base), needled evergreen conifer				
Growing Conditions		Zone: 6 to 8				
Growth Rate		Medium				
Disease and Pests		No serious insect or disease problems. Dieback, blight and butt rot may occur.				
Common Varieties		Argentea', 'Aurea', 'Barabit's Requiem', 'Blauer Eichzwerg', 'Bultinck Yellow', 'Compacta', 'Glauca', 'Greenpeace', 'Hazel Smith', 'Little Stan', 'Moonie's Mini', 'Pendulum', 'Power Blue', 'Pygmaea', 'Von Martin'				
Where to See		Californina				

# PARK STRIP TREES

## Park Strip and Parking Lot Approved Trees:

Common Name \_\_\_\_\_

Japanese Zelkova 'Musashino'

Chanticleer Pear

Crimson Sunset Maple

Columnar Washington Hawthorn

Crimson Point Flower plum

Columnar English Oak

Columnar Sweetgum

Autumn Purple Ash

Washington Hawthorn

Tatarian Maple

Trident Maple

Hedge Maple

Golden Raintree

Paperbark Maple

Eastern Redbud

Bigtooth Maple

Norway Maple

Autumn Blaze Maple

Littleleaf Lindon

Common Hackberry

Autumn Purple Ash



# COLUMNAR TREES

## Columnar Trees:

### Common Name

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Japanese Zelkova 'Musashino'

Chanticleer Pear

Crimson Sunset Maple

Columnar Washington Hawthorn

Crimson Point Flower Plum

Columnar English Oak

Columnar Sweetgum

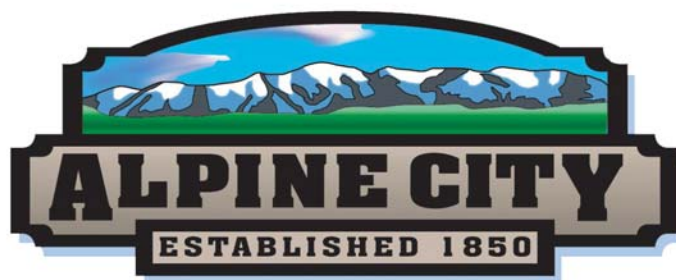
Columnar Colorado Blue Spruce

Columnar Norway Spruce

Weeping White Spruce

Skyrocket Juniper

Common Hackberry 'Delta'



**Alpine Planning & Zoning**

**(801) 756-6347**

**20 North Main**

**Alpine, Utah 84004**

## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT: 2019 Planning Commission Meeting Schedule**

**FOR CONSIDERATION ON: 6 November 2018**

**PETITIONER: Staff**

**ACTION REQUESTED BY PETITIONER: Review and approve schedule.**

### **BACKGROUND INFORMATION:**

Staff have prepared a proposed meeting schedule for Planning Commission meetings in 2019. Dates that seemed to conflict with holidays and/or other events have been omitted. Planning Commission should review the proposed schedule, amend as necessary, and approve a meeting schedule for 2019.

### **STAFF RECOMMENDATION:**

Review and approve the 2019 Planning Commission meeting schedule.



**2019 ANNUAL MEETING SCHEDULE  
FOR  
ALPINE CITY, UTAH**

**PLANNING COMMISSION MEETINGS** for the 2019 calendar year are scheduled on the 1<sup>st</sup> and 3<sup>rd</sup> Tuesday of each month as follows unless otherwise indicated:

January 15	May 7	August 20
February 5	May 21	September 3
February 19	June 4	September 17
March 5	June 18	October 1
March 19	July 2	October 15
April 2	July 16	November 19
April 16	August 6	December 3

**CITY COUNCIL MEETINGS** for the 2019 calendar year are scheduled on the 2<sup>nd</sup> and 4<sup>th</sup> Tuesday of each month as follows unless otherwise indicated:

January 8	May 14	September 10
January 22	May 28	September 24
February 12	June 11	October 8
February 26	June 25	October 22
March 12	July 9	November 12
March 26	July 23	November 26
April 9	August 13	December 10
April 23	August 27	

**All Planning Commission and City Council meetings will begin at 7:00 pm unless otherwise posted. Meetings are held at Alpine City Hall, 20 North Main, Alpine, Utah 84004.**

Charmayne G. Warnock  
City Recorder

**THE PUBLIC IS INVITED TO ATTEND ALL PUBLIC CITY MEETINGS.** If you need a special accommodation to participate in the meeting, please call the City Recorder's Office at 801-756-6347 ext. 4.

**CERTIFICATION OF POSTING.** The undersigned duly appointed recorder does hereby certify that the above agenda notice was posted in three public places within Alpine City limits. These public places being a bulletin board located inside City Hall at 20 North Main and located in the lobby of the Bank of American Fork, Alpine Branch, 133 S. Main, Alpine, UT; and the bulletin board located at The Junction, 400 S. Main, Alpine, UT. The above agenda notice was sent by e-mail to The Daily Herald located in Orem, UT and local newspapers circulated in Alpine, UT. This agenda is also available on the City's web site at [www.alpinecity.org](http://www.alpinecity.org) and on the Utah Public Meeting Notices website at [www.utah.gov/pmn/index.html](http://www.utah.gov/pmn/index.html).



## **ALPINE PLANNING COMMISSION AGENDA**

**SUBJECT:** Planning Commission Minutes October 16, 2018

**FOR CONSIDERATION ON:** 6 November 2018

**PETITIONER:** Staff

**ACTION REQUESTED BY PETITIONER:** Approve Minutes.

### **BACKGROUND INFORMATION:**

Minutes from the October 16, 2018 Planning Commission Meeting.

### **STAFF RECOMMENDATION:**

Review and approve the Planning Commission Minutes.

**ALPINE CITY PLANNING COMMISSION MEETING**  
**Alpine City Hall, 20 North Main, Alpine, UT**  
**October 16, 2018**

**I. GENERAL BUSINESS**

**A. Welcome and Roll Call:** The meeting was called to order at 7:00 pm by Chairman David Fotheringham. The following were present and constituted a quorum:

Chairman: Dave Fotheringham

Commission Members: Alan MacDonald, John MacKay, David Fotheringham, Jane Griener, John Gubler

Excused: Sylvia Christiansen, Bryce Higbee

Staff: Austin Roy, Marla Fox, Jed Muhlestein

Others: Gail Rudolph

**B. Prayer/Opening Comments:** Alan MacDonald

**C. Pledge of Allegiance:** David Fotheringham

**II. PUBLIC COMMENT**

There were no public comments.

**III. ACTION ITEMS**

**A. Trail Master Plan – Proposed Update – October 2018**

*Note: Item B was discussed before Item A.*

Jed Muhlestein said the Alpine City Trail Committee reviewed and made recommendations for updates to the proposed Trail Master Plan. He said the last trail plan was adopted in 2004, and since that time there had been annexations to the City that were added to the map. Some trails were not working and had been abandoned. Several additions had also been added to the map including recent developments, all of which made it necessary to update the plan.

Breezy Anson stated that a trail through the Mendenhall ranch area would be very beneficial. He also suggested adding a trail from 800 South through the Bangerter property and connecting to the Corridor. He then presented a map depicting a proposed trail through his parents' property off of Westfield Road heading north. The map also showed several proposed trails going through the Ridge at Alpine development. He said he believed there could be a better plan for a trail that looped around the property.

Jed Muhlestein said the Planning Commission could approve the plan as presented and then let the City Council make changes as they saw fit. Breezy Anson subsequently discussed the trail going through Schoolhouse Springs.

The Planning Commission had a discussion about a trail that the City currently did not have permission to use because it went through private property. Will Jones said he was working with the owner and trying to give concessions so the trail could be opened to the public.

Jed Muhlestein said in 2004 the City had trails on private property and the owners asked that they be removed from off of the map. Gail Rudolph said there was an existing trail to the left of the Young property in Fort Canyon, and she wanted to know if these trails were marked or recorded somewhere.

Will Jones showed on the Master Plan where a trail was located on Draper City property. Alan Macdonald stated that the City should revisit the Trail Master Plan every year. The Planning Commission then had a discussion about e-bikes.

**MOTION:** Bryce Higbee moved to recommend approval of the proposed Master Trail Plan as proposed with the changes made to the trails and the dates changed to 2018. John Mackay seconded the motion. There were 5 Ayes and 0 Nays (recorded below). The motion passed.

**Ayes:**

Alan MacDonald  
John MacKay  
John Gubler  
David Fotheringham  
Jane Griener

**Nays:**

None

**B. Public Hearing – Amendment to Ordinance – Major Subdivision Option – Article 4.6**

*Note: Item B was discussed before Item A.*

Jed Muhlestein said that Staff reviewed the Development Code and recommended changes for Article 4.6: Major Subdivision Option. He explained that Article 4.6 covered the subdivision submission process. The first couple of updates pertained to the number of copies submitted to City Hall, which was changed to two. Jed Muhlestein added a 10-day timeline for resubmissions and said first-time submissions were required to be turned in two weeks before the next meeting.

Regarding buildable areas, Jed Muhlestein said they had 20% or less slope and no faults. Staff wanted to make it clear to developers that if there were hilly areas in a standard subdivision, they would want the buildable areas recorded on the plat. He explained that he was trying to clean up the buildable area paragraphs and combine them together so they made sense. The following changes were then noted:

- Builders needed to put the address block on the plat.
- Geotechnical was moved into the supporting document section.
- The “sensitive lands overlay” line was removed. Developers needed to label the sensitive land areas as depicted on the geological hazard maps.

- Geotechnical reports would be required for every subdivision and would include common items related to these reports.
- There were several numbering changes under the section labeled “Impact on Environment.”
- The line about soil classifications was deleted.
- The Erosion Plan was changed to Storm Water Prevention Plan.
- The sentence stating “Planning Commission will notify developer in writing” was removed.
- Final plats were required to be turned in on Mylar.
- The TR-10,000 zone was not included in the buildable areas
- Lots had to meet the current building code.
- No backing on to arterial streets was allowed and notes should be included on the plat stating that circular driveways were needed.
- Item #4 under surveys was deleted.
- Utilities may send letters stating they would Serve the developer.
- The City Planner would send notification to the City Council after the final review of the Final Plat from the Planning Commission.

David Fotheringham opened the Public Hearing.

Gail Rudolph, a resident, asked what a derelict parcel was. Jed Muhlestein said this was a parcel that was not buildable. Ms. Rudolf also asked about traffic studies and wanted to know who conducted these assessments. She was informed by staff that these were conducted by independent traffic engineers.

David Fotheringham closed the Public Hearing.

**MOTION:** John Mackay moved to recommend approval of the Amendments to Ordinance – Major Subdivision Option – Article 4.6. Alan MacDonald seconded the motion. There were 5 Ayes and 0 Nays (recorded below). The motion passed.

**Ayes:**

Alan MacDonald  
John MacKay  
David Fotheringham  
John Gubler  
Jane Griener

**Nays:**

None

**C. Public Hearing – Amendment to Ordinance – Design Standards – Article 4.7**

Jed Muhlestein said Staff reviewed the Development Code and recommended additional language to outline minimum curb radii under Article 4.7.4.11. He said the minimum radius of curb, or the outside edge of pavement, needed to be added. He explained that it should be twenty-five feet at intersections.



David Fotheringham opened the Public Hearing. There were no comments and the hearing was closed.

**MOTION:** Alan Macdonald moved to recommend approval of Amendment to Ordinance – Design Standards – Article 4.7.

Jane Griener seconded the motion. There were 5 Ayes and 0 Nays (recorded below). The motion passed.

**Ayes:**

Alan MacDonald  
John MacKay  
John Gubler  
David Fotheringham  
Jane Griener

**Nays:**

None

**IV. Communications**

The Christmas Party was scheduled for Tuesday, December 11, 2018. The remaining Planning Commission meetings for this year were scheduled for November 6, 2018, and December 4, 2018.

**V. APPROVAL OF PLANNING COMMISSION MINUTES: September 18, 2018**

**MOTION:** Jane Griener moved to approve the minutes for September 18, 2018, as written. Alan MacDonald seconded the motion. There were 5 Ayes and 0 Nays (recorded below). The motion passed.

**Ayes:**

Alan MacDonald  
John MacKay  
David Fotheringham  
Jane Griener  
John Gubler

**Nays:**

None

The meeting was adjourned at 8:15 pm.