

SECTION 13: TREE PLANTING REQUIREMENTS

13.01 GENERAL

Approved trees for use in the City of Woodland rights-of-way, City property and parks. Planting within City right-of-way, City property/easement and parks shall be in accordance with City planting guidelines and subject to approval by the City and shall require a Tree Planting Permit that can be obtained through the Community Services Department.

Note there are no perfect trees and no one tree will meet all the needs of a particular area. It is very important that a tree species or cultivar be selected that will adapt best to the space available both horizontally and vertically while still meeting the aesthetic needs of the area. All trees shall be bare root when plantings occur during a favorable time of the year.

Thirty percent of all trees planted in a project must emit a low rate of Biogenic Volatile Organic Compounds (BVOC) per Resolution 6305 adopted by Woodland City Council on October 18, 2011. Trees that emit a low rate of BVOC are indicated with a “Y” in the BVOC column in the lists below.

13.02 CITY APPROVED TREE LIST (COMPLETE)

The tables below show information on City approved deciduous and evergreen trees giving common name and botanical name. Additional information regarding City approved Street Trees follows this comprehensive list.

DECIDUOUS						
Botanical Name	Common Name	BVOC	City ¹	SL ²	Parks ³	Width of Park strip
Acer buergeranum	Trident Maple	Y		X	X	4'
Acer campestre	Hedge Maple	Y	X			4'
Acer griseum	Paperbark Maple	Y	X			4'
Acer palmatum	Japanese Maple				X	4'
Acer platanoides 'Crimson Sentry'	Columnar Red Norway Maple	Y	X			4'
Acer pseudoplatanus	Sycamore Maple		X		X	4'
Acer rubrum	Red Maple	Y	X			4'
Acer rubrum 'Bowhall'	Bowhall Maple	Y	X			4'
Acer rubrum x freeman 'Armstrong'	Columnar Red Maple	Y			X	4'
Acer tartaricum	Tartarian Maple	Y	X			4'

Engineering Design Standards

DECIDUOUS						
Botanical Name	Common Name	BVOC	City ¹	SL ²	Parks ³	Width of Park strip
Acer truncatum A. t. 'Pacific'	Norwegian, Shantung Pacific Sunset	Y	X			4'
Aesculus californica	California Buckeye	Y			X	4'
Betula nigra	River Birch	Y			X	4'
Carpinus betulus or C. b. 'Fastigiata'	*European Hornbeam Pyramidal E. Hornbeam	Y	X	X		4'
Celtis australis	European Hackberry	Y	X			4'
Cercis candensis	*Eastern Redbud	Y	X		X	3'
Cinnamomum camphora	Camphor	Y			X	Not for Use
Crataegus Laevigate	English Hawthorne		X	X		3'
Fraxinus velutina 'Rio Grande'	Fan-Tex Ash		X			5'
Ginko biloba;	Male Ginko	Y	X		X	4'
Ginko biloba 'Autumn Gold'	Male Ginko	Y	X			4'
Ginko biloba 'Fairmont'	Male Ginko	Y	X			4'
Ginko biloba 'Princeton Sentry'	Male Ginko	Y	X			4'
Ginko biloba 'Saratoga'	Male Ginko		X			4'
Lagerstromia indica'	*Crape Myrtle		X		X	3'
Magnolia soulangiana	Saucer Magnolia	Y			X	Not for Use
Magnolia stellata	Star Magnolia				X	3'
Malus floribunda 'Prarifire'	*Japanese Flowering Crabapple	Y	X	X	X	3'
Malus ioenis 'Plena'	Bechtel Crabapple	Y	X			3'

Engineering Design Standards

DECIDUOUS						
Botanical Name	Common Name	BVOC	City ¹	SL ²	Parks ³	Width of Park strip
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	Y			X	5'
<i>Olea europaea</i> 'Wilsonii'	Fruitless Olive Tree					Not for Use
<i>Ostrya virginiana</i>	American hophornbeam	Y	X			4'
<i>Pistacia chinensis</i> 'Keith Davey'	Chinese Pistache "Keith Davey"		X	X	X	4'
<i>Phellodendron amurense</i> 'His Majesty'	His Majesty Amur Cork Tree	Y	X			Not for Use
<i>Quercus acutissima</i>	Sawtooth Oak	Y	X			4'
<i>Quercus agrifolia</i>	Coast Live Oak	Y			X	
<i>Quercus castaneaefolia</i>	Chestnut Leaf Oak	Y			X	5'
<i>Quercus cerris</i>	Turkey Oak	Y	X			4'
<i>Quercus coccinea</i>	+Scarlet Oak	Y	X			4'
<i>Quercus douglasii</i>	+Blue Oak	Y	X		X	4'
<i>Quercus lobata</i>	+Valley Oak	Y	X		X	Not for Use
<i>Quercus phellos</i>	Willow Oak	Y			X	4'
<i>Quercus robur</i> 'Fastigata'	+Columnar English White Oak	Y	X	X		4'
<i>Quercus rubra</i>	Red Oak/Scarlet Oak	Y	X	X	X	4'
<i>Quercus shumardii</i>	Shumard or Texas Red Oak	Y	X			4'
<i>Sapium sebiferum</i>	Chinese Tallow Tree				X	Not for Use
<i>Tilia americana</i>	American Linden	Y	X			4'
<i>Tilia cordata</i> 'June Bride'	Little Leaf Linden	Y		X	X	4'
<i>Tilia tomentosa</i>	Silver Linden	Y		X		4'
<i>Ulmis japonica</i> x <i>wilsoniana</i> 'Triumph'	Triumph Elm	Y	X			4'

Engineering Design Standards

DECIDUOUS

Botanical Name	Common Name	BVOC	City ¹	SL ²	Parks ³	Width of Park strip
Ulmis parvifolia or U. p. 'Frontier'	Chinese Elm Frontier Elm	Y	X		X	5'
Ulmis propinqua 'Emerald Sunshine'	Emerald Sunhine Elm	Y	X			5'
Ulmis wilsoniana 'Prospector'	Prospector Elm	Y	X			5'
Ulmis x 'Frontier'	Frontier Elm		X	X	X	5'
Ulmis x 'Accolade'	Accolade Elm		X	X	X	5'
Zelkova serrata or Z.s. 'Musashino'	Sawleaf Zelkova Narrow Zelkova	Y	X			5'

EVERGREENS

Botanical Name	Common Name	BVOC	City ¹	SL ²	Parks ³	Width of Park strip
Calocedrus decurrens	Incense Cedar				X	Not for Use
Cedrus atlantica	Atlantic Cedar		X		X	5'
Cedrus deodara	Deodar Cedar				X	Not for Use
Cryptomeria japonica	Japanese Cryptomeria		X			Not for Use
Magnolia grandiflora	Southern Magnolia		X		X	6'
Pinus brutia	Calabrian Pine	Y	X	X	X	4'
Pinus canariensis	Canary Island Pine	Y	X	X	X	4'
Pinus eldarica	Afgan Pine	Y		X	X	4'
Pinus halepensis	Aleppo Pine	Y	X		X	5'
Pinus negra	Austrian Black Pine		X	X	X	3'
Pinus patula	Jelecote Pine		X	X	X	4'
Pinus thumbergian	Japanese BlackPine		X	X	X	4'
Quercus ilex	+Holly Oak	Y	X			4'

Engineering Design Standards

EVERGREENS						
Botanical Name	Common Name	BVOC	City¹	SL²	Parks³	Width of Park strip
Quercus suber	+Cork Oak	Y	X			5'
Quercus virginiana	+Southern Live Oak	Y	X		X	4'
Quercus wislizenii	Interior Live Oak	Y			X	Not for Use
Rhus lancea	*African Sumac		X		X	Not for Use
Schinus molle	California Pepper Tree				X	Not for Use
Sequoia sempervirens	Coast Live Redwood				X	Not for Use

*Only trees acceptable for planting strips with overhead wires

+Limited use only due to large space requirements.

- (1) Approved City of Woodland street trees (see additional information below)
- (2) Suggested trees for use in Spring Lake Development or other areas within the City in which soils test reveal high Ph, high boron, high salt content and poor drainage.
- (3) Approved City of Woodland park tree. Additional trees not listed shall require review and approval by the City prior to final plan acceptance.

13.03 APPROVED STREET TREE LIST

Recommended street trees for the Woodland area and a general description of their characteristics.

All of the trees on this list have characteristics that make them desirable street trees. Some also have characteristics that may make them undesirable in certain locations. All of the trees listed have been selected for their resistance to injurious insects and diseases. The list of trees and the accompanying information about each tree is meant to be used as a guide. Landscaping plans for City right-of-way are subject to City approval.

DECIDUOUS	
Common Name	Botanical Name
*European Hornbeam	Carpinus betulus
Fan-Tex Ash	Fraxinus velutina 'Rio Grande'

DECIDUOUS

Common Name	Botanical Name
Maidenhair Tree or Male Ginko	Ginko biloba; G.b. "Autumn Gold"; G.b. 'Saratoga'
Sawleaf Zelkova	Zelkova serrata
Sycamore Maple	Acer pseudoplatanus

*Only trees available for planting strips with overhead wires

ORNAMENTALS

Common Name	Botanical Name
*Crape Myrtle	Lagerstromia indica
*Eastern Redbud	Cercis canadensis
*Flowering Crabapple	Malus floribunda 'Prairiefire'

*Only trees available for planting strips with overhead wires

CONIFEROUS EVERGREENS

Common Name	Botanical Name
Atlantic Cedar	Cedrus atlantica
Calabrian Pine	Pinus brutia
Canary Island Pine	Pinus canariensis
+Coast Redwood	Sequoia sempervirens
Deodar Cedar	Cedrus deodara
Incense Cedar	Calocedrus decurrens
Japanese Cryptomeria	Cryptomeria japonica

BROADLEAF EVERGREEN - SOUNDWALLS ONLY

Common Name	Botanical Name
*African Sumac	Rhus lancea

*Only trees available for planting strips with overhead wires

THE OAKS	
Common Name	Botanical Name
+Blue Oak	Quercus douglasii
+Burr Oak	Quercus macrocarpa
+Cork Oak	Quercus suber
+English Oak	Querus robur
+Holly Oak	Quercus ilex
+Scarlet Oak	Quercus coccinea
+Southern Live Oak	Quercus virginiana
+Valley Oak	Quercus lobata

+Limited use only due to large space requirements.

13.04 TREE PLANTING GUIDELINES

A. To make the best use of the space available, apply the following guidelines:

- 25' min. - 40' maximum between street trees
- 5' from electric/water/sewer/gas lines, house drains, typically marked by valve or cleanout
- Trees are not allowed in areas with less than 5' of cover over utility lines
- 12' from light poles
- 30' from intersections
- 15' from alleys
- 5' from driveways
- 7.5' from back of sidewalk (does not apply to trees in the park strip)
- 6' from sound walls
- Avoid planting between driveways or on property lines.

B. Traffic sight distance restrictions shall be as follows:

1. Two-Way Stop Controlled Intersections

Landscape planted within the landscape or tree restriction areas as shown in Figure 13A, shall have a maximum untrimmed height at maturity of 20 inches.

Trees may not be planted within the tree restriction area unless all branches will exceed a clear height of 7 feet at maturity without excessive pruning. Only non-coniferous trees may be planted in the tree restriction area.

2. Roundabouts

Landscape and tree restrictions at roundabout intersections shall follow the standards set forth in Figure 13A for the appropriate street class using the values

for areas where parking is not allowed. For all roundabout intersections, the value of 'y' shall be increased to 25 feet.

Landscape planted on roundabout splitter islands shall have a maximum untrimmed height at maturity of 12 inches. Trees shall not be planted on splitter islands.

It is acceptable and necessary to plant sight restricting objects in the center island of a roundabout to make drivers aware that the intersection is not a through intersection.

3. Medians

Landscape planted on medians must be restricted at intersections for a distance as shown below, based upon the speed of the roadway. Distances are measured from the nose of the median.

Landscape planted in this restricted area shall have a maximum untrimmed height at maturity of 12 inches.

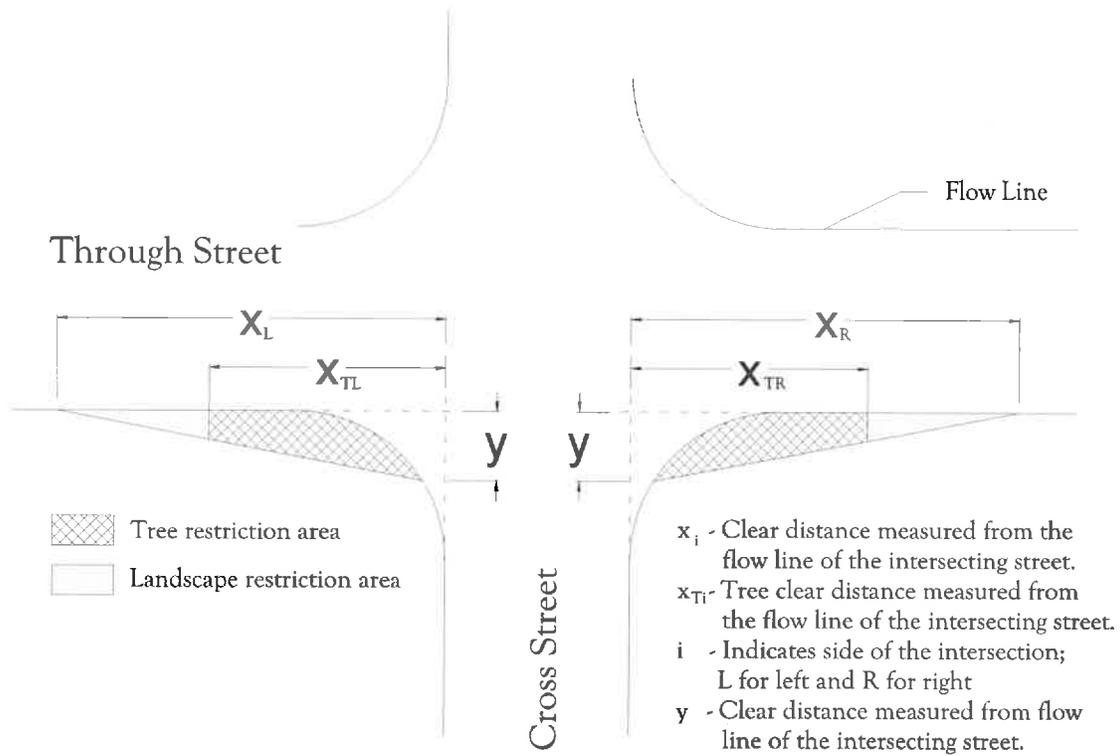
Trees may not be planted within the tree restriction area unless all branches will exceed a clear height of 7 feet at maturity without excessive pruning. Only non-coniferous trees may be planted in the tree restriction area.

Speed	Length of Restriction
30 mph	235 ft
35 mph	280 ft
40 mph	325 ft
45 mph	370 ft
50 mph	415 ft
55 mph	550 ft

4. Islands

Landscape planted on right turn, roundabout splitter and other traffic islands shall have a maximum untrimmed height at maturity of 12 inches. Trees shall not be planted on islands.

13.05 FIGURE 13A - REQUIRED INTERSECTION SIGHT DISTANCE



Through Street ¹ :	Design Speed (mph)	Parking Allowed	x_L (ft)	x_{TL} (ft)	x_R (ft)	x_{TR} (ft)	Y^2 (ft)
Collector	30	Yes	115	55	70	35	8
		No	150	100	100	70	13
2 Lane Arterial	35	Yes	110	35	75	25	8
		No	150	90	110	65	13
4 Lane Arterial	35	Yes	205	80	75	25	8
		No	250	150	100	60	13
	40	Yes	125	100	65	55	8
		No	170	115	95	65	13
4 Lane Arterial with Median	45	Yes	190	0	30	0	8
		No	340	200	100	60	13
Industrial	45	Yes	170	107	115	70	8
		No	225	170	160	120	13

¹Local-local intersections are normally uncontrolled and have been omitted from this standard.

²At roundabout intersections the value of 'y' shall be 25 feet.

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