SECTION 700

700. LANDSCAPING

710. General

A. The standards contained in this section apply to all landscaping placed within the public ROW. Replacement trees shall also adhere to these standards.

B. The standards contained in this section may be superseded for projects within Plan Districts. For such projects, refer to the relevant Plan District within the Community Development Code. Plan District boundary information is available on the City website.

C. A Public Works Right-of-Way Permit or Public Infrastructure Permit is required prior to planting in the public ROW. Within a development, the property owner or their landscape contractor shall schedule a pre-planting inspection of the holes and trees with the City Inspector. Upon completion of the tree planting, they shall notify the City Inspector in order to schedule a final inspection.

D. No person shall remove or replace a street tree without first obtaining a permit from the City, specifically authorizing the removal or replacement.

E. Any tree that was planted within the ROW prior to December 2011 may remain, unless identified as a hazard tree.

F. Except under overhead utility lines where more extensive pruning may be necessary to protect the utility lines and crews, any pruning of trees growing within the ROW shall adhere to Subsection 760.

G. Unless superseded by a Plan District requirement, tree grates shall not be used unless they are needed to make a narrow sidewalk meet ADA regulations. The installation of tree grates requires City approval. Tree grates shall be “Urban Accessories OT Title-24” or approved equal.

H. Tree species shall be selected in accordance with Tables 710.1 through 710.3. Non-approved trees may be removed and replaced at the owner’s expense.

I. Landscaped areas within the ROW that are not allocated as a stormwater management facility shall be developed with permeable ground cover of grass, plantings, or natural materials approved by the city.

   1. The use of astroturf or similar artificial grass product shall not be allowed within the ROW in lieu of natural landscaping materials.

Table 710.1 – Approved Street Tree Species for Less than 3' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Paperbark Maple	Acer griseum	Upright, rounded	Dark green	Red	25'	20'	20'	Yes	No	PGE recommended for under power lines
Royal White Redbud	Cercis canadensis f. alba var. Royal White	Upright spreading, rounded	Light green	Yellow	25'	25'	20'	Yes	No	Drought tolerant
Black Pearl Redbud	Cercis canadensis var. Black Pearl	Upright spreading, rounded	Maroon	Yellow	20'	25'	10'	Yes	No	
Forest Pansy Redbud	Cercis canadensis var. Forest Pansy	Upright spreading, rounded	Deep purple to bronze-green	Yellow-orange	20'	25'	10'	Yes	No	Drought tolerant
Rising Sun Redbud	Cercis canadensis var. JN2	Rounded crown	Green to blue-green	Yellow to yellow-green	30'	30'	30'	Yes	No	
Claremont Western Redbud	Cercis occidentalis var. Clairmont	Rounded	Blue-green	Yellow	15'	20'	None	Yes	No	Drought tolerant
Oklahoma Redbud	Cercis texensis var. Oklahoma	Upright spreading, rounded	Bright green	Yellow	20'	25'	10'	Yes	No	Drought tolerant
Chinese Fringtree	Chionanthus retusus	Broadly oval	Deep green	Bright yellow	20'	20'	10'	Yes	No	Drought tolerant
Venus Dogwood	Cornus (kousa x nuttallii) x kousa var. KN 30-8	Upright, oval	Deep green	Red to purple-red	25'	20'	20'	Yes	No	Resistant to dogwood anthracnose and powdery mildew
Starlight Dogwood	Cornus kousa x nuttallii var. KN4-43	Upright, oval	Deep green	Red	30'	20'	30'	Yes	No	Resistant to dogwood anthracnose and powdery mildew

Table 710.1 – Approved Street Tree Species for Less than 3' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
American Smoketree	Cotinus obovatus	Irregular, Oval Upright	Bluish green	Yellow, red, orange, reddish purple	30'	30'	30'	Yes	No	
Dawyck Gold Beech	Fagus sylvatica var. Dawyck Gold	Columnar, fastigiate	Bright green	Yellow-oreange	45'	15'	45'	No	No	
Dawyck Purple Beech	Fagus sylvatica var. Dawyck Purple	Columnar, fastigiate	Purple	Coppery-Bronze	50'	10'	50'	No	No	
Pyramidal Beech	Fagus sylvatica var. Fastigiata	Columnar, fastigiate	Dark green	Golden brown	45'	15'	45'	No	No	
Goldenrain Tree	Koelreuteria paniculata	Rounded	Medium green	Yellow	30'	30'	30'	Yes	No	
Arapaho Crape Myrtle	Laderstroemia indica var. Arapaho	Upright spreading	Dark green	Orange, red	20'	20'	10'	Yes	No	Mildew resistant
Dynamite Crape Myrtle	Laderstroemia indica var. Dynamite	Upright spreading	Green	Orange, red	20'	20'	10'	Yes	No	Disease resistant
Muskogee Crape Myrtle	Laderstroemia indica var. Muskogee	Upright spreading	Dark green	Redish-orange	15'	15'	None	Yes	No	Drought tolerant, mildew resistant
Natchez Crape Myrtle	Laderstroemia indica var. Natchez	Upright spreading	Dark green	Orange, red	20'	20'	10'	Yes	No	Mildew resistant
Tuscarora Crape Myrtle	Lagerstroemia indica var. Tuscarora	Upright spreading	Dark green	Redish-orange	15'	15'	None	Yes	No	Disease resistant

Table 710.1 – Approved Street Tree Species for Less than 3' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Amur Maackia	Maackia amurensis	Upright vase with rounded crown	Medium green		25'	20'	20'	Yes	No	
Gum Drop Tupelo	Nyssa sylvatica var. Gum Drop	Upright oval	Dark green	Bright red	30'	20'	30'	Yes	No	Seedless
Vanerwolf's Pyramid Pine	Pinus flexilis var. Vanderwolf's Pyramid	Pyramidal	Blue-green needles		30'	15'	30'	Yes	No	PGE recommended for under power lines
Canada Red Chokechery	Prunus virginiana var. Shubert	Upright spreading, rounded	Green purple	Red to reddish purple	30'	20'	30'	Yes	Yes	
Big Leaf Snowbell	Styraz obassia	Oval	Dark green	Yellowish	25'	20'	20'	Yes	Yes	
Japanese Lilac	Syringa	Upright spreading, rounded	Dark green	Golden yellow	20'	15'	10'	Yes	No	

Table 710.2 – Approved Street Tree Species for Areas 3' to 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Armstrong Maple	Acer freemanii var. Armstrong	Narrow	Light green	Yellow to orange-red	45'	15'	45'	No	Yes	
Amur Maple	Acer ginnala	Dense and rounded	Medium green	Orange to orange-red	20'	20'	10'	Yes	Yes	
Dura Heat River Birch	Betula nigra var. BNMTF	Pyramidal	Green, glossy	Yellow	40'	35'	40'	No	No	Resistant to pests and diseases
Heritage River Birch	Betula nigra var. Cully	Broadly pyramidal	Light green, glossy	Yellow	40'	30'	40'	No	No	Resistant to the bronze birch borer
European Hornbeam	Carpinus betulus	Rounded, or shaped	Green	Yellow	35'	35'	35'	No	No	
Pyramidal European Hornbeam	Carpinus betulus var. Fastigiata	Dense compact, oval	Dark green	Yellow	35'	25'	35'	No	No	Moved from <3'
Frans Fontaine Hornbeam	Carpinus betulus var. Frans Fontain	Narrow, columnar	Dark green	Yellow	35'	15'	35'	No	No	
Venus Dogwood	Cornus (kousa x nuttallii) x kousa var. KN 30-8	Upright, oval	Deep green	Red to purple-red	25'	20'	20'	Yes	No	Resistant to dogwood anthracnose and powdery mildew
Starlight Dogwood	Cornus kousa x nuttallii var. KN4-43	Upright, oval	Deep green	Red	30'	20'	30'	Yes	No	Resistant to dogwood anthracnose and powdery mildew
Rivers Purple Beech	Fagus sylvatica var. Riversii	Broadly oval	Deep purple	Bronze	50'	40'	50'	No	No	
Copper Beech	Fagus sylvatica var. Purpurea	Rounded to pyramidal crown	Green	Copper	80'	60'	80'	No	No	

Table 710.2 – Approved Street Tree Species for Areas 3' to 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Autumn Gold Ginkgo	Ginkgo biloba var. Autumn Gold	Broad, round	Medium green	Bright yellow	50'	35'	50'	No	No	Seedless
Mayfield Ginkgo	Ginkgo biloba var. Mayfield	Narrow, columnar	Light green	Bright yellow	30'	15'	30'	Yes	Yes	Moved from <3'
Princeton Sentry Ginkgo	Ginkgo biloba var. Princeton Sentry	Narrowly pyramidal	Green	Bright yellow	40'	15'	40'	No	Yes	
Saratoga Ginkgo	Ginkgo biloba var. Saratoga	Dense, pyramidal	Medium green	Bright yellow	45'	35'	45'	No	Yes	Seedless
Presidential Gold Ginkgo	Ginkgo biloba var. The President	Broadly pyramidal to oval	Medium green	Bright yellow	50'	40'	50'	No	No	Seedless
Halka Honeylocust	Gleditsia triacanthos var. Christie	Widely oval to round	Medium green	Yellowish	40'	40'	40'	No	No	
Shademaster Honeylocust	Gleditsia triacanthos var. Shademaster	Vase to rectangular	Medium Green	Yellow	45'	35'	45'	No	No	Seedless, resistant to spider mites
Skyline Honeylocust	Gleditsia triacanthos var. Skycole	Broadly pyramidal	Medium green	Golden	45'	35'	45'	No	No	Seedless
Sunburst Honeylocust	Gleditsia triacanthos var. Suncole	Irregular, somewhat rectangular	Bright yellow tip growth	Yellow-brown	40'	35'	40'	No	Yes	Seedless, moved from <3'
Goldenrain Tree	Koelreuteria paniculata	Rounded	Medium green	Yellow	30'	30'	30'	Yes	No	
Gum Drop Tupelo	Nyssa sylvatica var. Gum Drop	Upright oval	Dark green	Bright red	30'	20'	30'	Yes	No	Seedless
American Hophornbeam	Ostrya virginiana	Upright oval	Dark green	Yellow	40'	25'	40'	No	No	

Table 710.2 – Approved Street Tree Species for Areas 3’ to 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Ruby Vase Parrotia	Parrotia persica var. Inge's Ruby Vase	Upright, oval	Green	Red-orange	30'	20'	30'	Yes	No	
Vanessa Persian Parrotia	Parrotia persica var. Vanessa	Upright, tight vase	Green	Orange-red	30'	15'	30'	Yes	No	
Chinese Pistache	Pistacia chinesis	Rounded	Dark green, pinnately compound	Orange-red	30'	30'	30'	Yes	No	
Sawtooth Oak	Quercus acutissima	Round	Dark green, glossy	Yellow	40'	40'	40'	No	No	
Crimson Spire Oak	Quercus alba x Q. robus var. Crimschmidt	Columnar, tightly fastigiated	Dark green to bluish-green	Rusty red	45'	15'	45'	No	Yes	
Forest Green Oak	Quercus frainetto var. Schmidt	Upright, oval	Deep green, glossy	Yellowish-brown	50'	30'	50'	No	No	
Bamboo Leaf Oak	Quercus myrsinifolia	Rounded	Green		50'	50'	50'	No	No	
Skyrocket English Oak	Quercus robur var. Fastigiata	Narrow, fastigiate	Dark green	Yellow-brown	45'	15'	45'	No	Yes	Moved from <3'
Shawnee Brave Bald Cypress	Taxodium distichum var. Mickelson	Narrowly pyramidal	Green	Rusty orange	55'	20'	55'	No	No	
Emerald Sunshine Elm	Ulmus propinqua	Vase	Green	Yellow	35'	25'	35'	No	Yes	Tolerant of dutch elm disease and phloem necrosis, resistand to japanese and elm leaf beetles
Frontier Elm	Ulmus var. Frontier	Vase to oval	Glossy green	Burgundy	40'	30'	40'	No	No	Tolerant of dutch elm disease and phloem necrosis

Table 710.2 – Approved Street Tree Species for Areas 3’ to 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
City Sprite Zelkova	Zelkova serrata var. City Sprite	Compact oval to vase	Bright green	Yellow	25'	20'	20'	Yes	No	
Green Vase Zelkova	Zelkova serrata var. Green Vase	Vase with upright arching branches	Green	Orange	45'	30'	45'	No	Yes	

Table 710.3 – Approved Street Tree Species for Areas Greater than 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Incense Cedar	Calocedrus decurrens	Narrow, conical	Dark green, needles		75'	15'	75'	No	No	
Northern Catalpa	Catalpa speciosa	Pyramidal with rounded top, open structure	Medium green	Yellow-green	50'	35'	50'	No	No	
American Yellowwood	Cladrastis kentukea	Round	Bright green	Brilliant yellow	30'	40'	30'	Yes	No	
Tricolor Beech	Fagus sylvatica var. Purpurea Tricolor	Broadly pyramidal to oval	Dark green, glossy	Bronze	50'	40'	50'	No	Yes	Moved from 3'-6'
Autumn Gold Ginkgo	Ginkgo biloba var. Autumn Gold	Broad, round	Medium green	Bright yellow	50'	35'	50'	No	No	Seedless
Princeton Sentry Ginkgo	Ginkgo biloba var. Princeton Sentry	Narrowly pyramidal	Green	Bright yellow	40'	15'	40'	No	Yes	
Saratoga Ginkgo	Ginkgo biloba var. Saratoga	Dense, pyramidal	Medium green	Bright yellow	45'	35'	45'	No	Yes	Seedless
Presidential Gold Ginkgo	Ginkgo biloba var. The President	Broadly pyramidal to oval	Medium green	Bright yellow	50'	40'	50'	No	No	Seedless
Halka Honeylocust	Gleditsia triacanthos var. Christie	Widely oval to round	Medium green	Yellowish	40'	40'	40'	No	No	
Shademaster Honeylocust	Gleditsia triacanthos var. Shademaster	Vase to rectangular	Medium Green	Yellow	45'	35'	45'	No	No	Seedless, resistant to spider mites
Skyline Honeylocust	Gleditsia triacanthos var. Skycole	Broadly pyramidal	Medium green	Golden	45'	35'	45'	No	No	Seedless

Table 710.3 – Approved Street Tree Species for Areas Greater than 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Sunburst Honeylocust	Gleditsia triacanthos var. Suncole	Irregular, somewhat rectangular	Bright yellow tip growth	Yellow-brown	40'	35'	40'	No	Yes	Seedless, moved from <3'
Dawn Redwood	Metasequoia glyohostroboides	Narrow, conical	Medium green	Rusty orange	70'	25'	70'	No	No	
Afterburner Tupelo	Nyssa sylvatica var. Afterburner	Upright pyramidal to oval	Bright green, glossy	Bright red	35'	20'	35'	No	No	
Gum Drop Tupelo	Nyssa sylvatica var. Gum Drop	Upright oval	Dark green	Bright red	30'	20'	30'	Yes	No	Seedless
Firestarter Tupelo	Nyssa sylvatica var. JFS-red	Narrow oval to upright oval	Dark green	Bright red	35'	20'	35'	No	No	Seedless
Wildfire Tupelo	Nyssa sylvatica var. Wildfire	Broadly pyramidal to oval	Dark green	Yellow-orange to purple	40'	25'	40'	No	No	Seedless
American Hophornbeam	Ostrya virginiana	Upright oval	Dark green	Yellow	40'	25'	40'	Yes	Yes	
Vanessa Persian Parrotia	Parrotia persica var. Vanessa	Upright, tight vase	Green	Orange-red	30'	15'	30'	Yes	No	
Willamette Valley Ponderosa Pine	Pinus ponderosa var. benthamiana	Narrow, conical	Yellow-green to dark green, needles		100'	30'	100'	No	No	
Bloodgood London Plantree	Platanus xacerifolia var. Bloodgood	Broadly pyramidal	Medium to dark green	Yellow	50'	40'	50'	No	No	Resistant to anthracnose
Sawtooth Oak	Quercus acutissima	Round	Dark green, glossy	Yellow	40'	40'	40'	No	No	Insect and disease resistant

Table 710.3 – Approved Street Tree Species for Areas Greater than 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Swamp White Oak	Quercus bicolor	Round, open	Green	Yellow-brown to reddish	45'	45'	45'	No	No	
Scarlet Oak	Quercus coccinea	Upright spreading, open, broadly oval	Dark green, glossy	Red	50'	40'	50'	No	Yes	
Forest Green Oak	Quercus frainetto var. Schmidt	Upright, oval	Deep green, glossy	Yellowish-brown	50'	30'	50'	No	No	
Valley Oak	Quercus lobata	Round, open	Dark green		80'	50'	80'	No	No	
Bamboo Leaf Oak	Quercus myrsinifolia	Rounded	Green		50'	50'	50'	No	No	Drought tolerant
Willow Oak	Quercus phellos	Pyramidal when young, becoming rounded	Medium green	Yellow to yellow-brown	50'	35'	50'	No	No	
Northern Red Oak	Quercus rubra	Rounded	Dark green	Red	50'	45'	50'	No	Yes	
Southern Live Oak	Quercus virginiana	Open growth, spreading	Dark green, glossy		65'	90'	65'	No	No	
Interior Live Oak	Quercus wislizenii	Open growth, spreading	Dark green, glossy		50'	50'	50'	No	No	
Canyon Live Oak	Quersus chrysolepis	Broad, open	Green, glossy		60'	50'	60'	No	No	
California Black Oak	Quersus kelloggii	Round, open	Green, glossy	Yellow to yellow-orange	50'	30'	50'	No	No	

Table 710.3 – Approved Street Tree Species for Areas Greater than 6' Wide

Common Name	Scientific Name	Shape	Color	Fall Color	Height	Spread	Min. Power Offset (Overhead)	High Voltage Compliant	DCS 2018	Note
Shawnee Brave Bald Cypress	Taxodium distichum var. Mickelson	Narrowly pyramidal	Green	Rusty orange	55'	20'	55'	No	No	

720. Street Tree Quality and Condition Standards

A. A street tree shall have a straight and upright trunk perpendicular to the ground with the lowest scaffold branches a minimum height of 5 feet above the ground. (Scaffold branches are the primary limbs radiating from the trunk of a tree from which all subordinate branches grow.) Any structural pruning of the scaffold branches to obtain the above clearance or required appearance must have been performed the year prior to digging the tree.

B. Street trees shall be grown to the standards and specifications of the American Standard for Nursery Stock (ANSI Z-60.1-1996), published by the American Association of Nurserymen.

C. Street trees shall be provided reasonably free from insects and disease, decay, major structural defects, and damage to the bark, the trunk, all branches, and the root system. The term “reasonably free” is as defined by nursery industry standards for street trees.

D. Street tree scaffold branches shall be well proportioned and pointing upward where they attach to the main trunk, with an average spacing of at least six inches. Trees with a main trunk branch “Y” are not acceptable.

E. Street trees shall be a minimum of 2.0 inches in caliper and shall be a minimum of 10 feet tall at the time the trees are dug.

F. Trees shall be transported and provided in the following condition at time of planting.

    1. Balled and burlapped or in wire baskets, providing:

        a) The trees have a tight, sound root ball with firm attachment of the trunk. Trees with trunks loosely attached to the root ball will not be accepted.

        b) The root ball size and condition conform to the standards and specifications of the American Standard for Nursery Stock (ANSI Z-60.1-1996), published by the American Association of Nurserymen.

        c) The root balls have not been allowed to dry out at any time. Any trees stressed from lack of sufficient water will not be accepted.

        d) The trees have a well-developed root system and are not root-bound or have circling/girdling roots.

    2. In a container, providing:

        a) The trees are free of circling, girdling roots, i.e. root-bound.

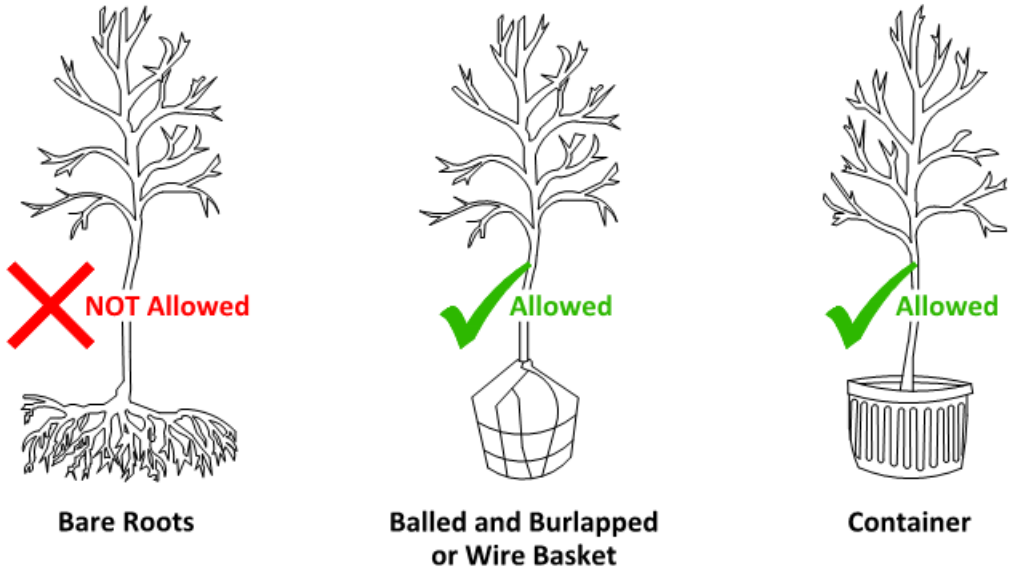
        b) The trees have roots extending to the inside edges of the container.

        c) The trees have been grown in the container for a maximum of one year.

G. Bare root trees are not allowed.

H. Trees that need pruning of dead, broken, or split branches to meet the requirements in this standard shall not be planted.

Figure 720.1 – Street Tree Condition



730. Planting Location, Spacing, and Clearances

730.1. Location

A. On streets without sidewalks, tree locations shall accommodate future sidewalks.

B. Tree locations shall accommodate current and future utility line corridors.

C. No tree shall be planted within a landscape strip or median planter less than 2.5 feet wide.

D. Trees shall be centered in landscape strips between the sidewalk and the street curb.

E. Trees shall not be planted over existing or future underground utility lines.

730.2. Spacing

A. Tree spacing shall equal the *Spread* dimension shown in Tables 710.1 through 710.3.

730.3. Clearances

A. All landscaping (trees and shrubs) shall be maintained to meet the requirements for vision clear zones at intersections and along streets and sidewalks. See Subsection 230.5.1 and the *Roadside Vegetation Management Program* page on the City website.

B. Street trees shall meet the clearance requirements shown in Table 730.1.

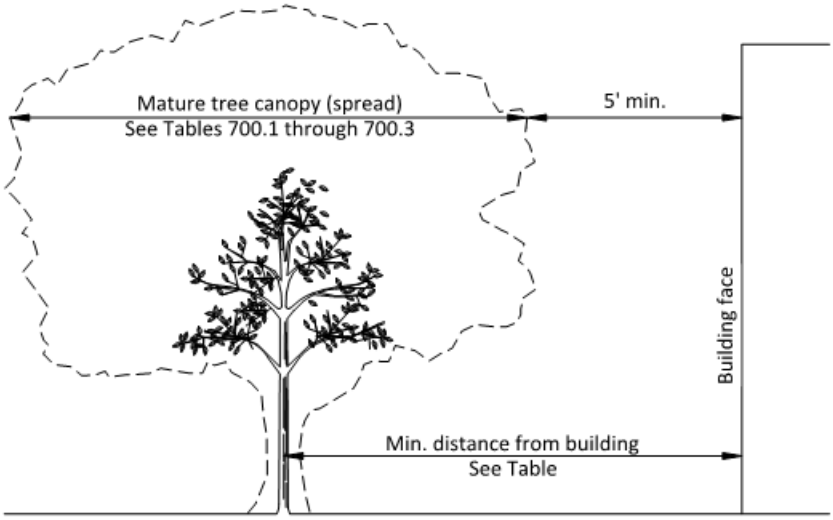
C. Trees and shrubs shall meet the minimum clearances from buildings shown in Figure 730.1.

D. Where public streets serve to meet the fire access requirements of the Oregon Fire Code, the street trees also require the approval of the fire code official.

Table 730.1 - Minimum Street Tree Planting Clearances

Feature	Minimum Distance from Feature		
	Small tree (up to 35' ht.)	Medium tree (up to 60' ht.)	Large tree (over 60' ht.)
Public intersections	35 feet		
Alley and Private intersections	15 feet		
Curb Ramps	15 feet		
Driveways	5 feet	5 feet	10 feet
Fire hydrants	5 feet		
Manholes and catch basins	5 feet	10 feet	10 feet
Water meters	5 feet		
Utility boxes	5 feet		
Utility poles	5 feet	10 feet	10 feet
Street lights	15 feet	20 feet	25 feet
Stop signs	At least 35 feet. Shall not visually block sign		
Regulatory signs	Shall not visually block sign.		

Figure 730.1 - Minimum Building Clearances



Tree Size	Minimum Distance from Building*
Small trees (potential growth of up to 35’ ht.)	5 feet
Medium trees (potential growth of up to 60’ ht.)	10 feet
Large trees (potential growth of over 60’ ht.)	15 feet
Shrubs	3 feet

*Trees planted 10 feet or closer to a building shall have an impenetrable root barrier installed near the building. The root barrier shall run the length of the planting area or the structure and reach a depth of at least twenty-four (24) inches.

740. Planting Requirements

A. Trees shall be planted in accordance with Std. Drg. No. 730-1.

B. Trees shall include tree tags, identifying tree common name and scientific name. Tags shall be maintained until tree type is identifiable by foliage.

750. Establishment Period Maintenance and Care Requirements

A. The Establishment Period is the period of time a developer, contractor, builder, and or property owner is obligated to provide:

1. maintenance meeting the requirements of this subsection and,

2. maintenance assurance by means of a maintenance bond. The abutting property owner is responsible for street tree maintenance after the Establishment Period. The Establishment Period shall begin on the date of final acceptance of the trees by the City and shall extend for two years from that date.

B. Each tree shall receive regular weekly watering as needed to ensure the trees are not stressed during the hotter portions of the growing season (from April 15th through October 15th). Water shall be provided in a manner that allows penetration into the soil around the tree.

C. Stakes and ties shall be maintained and repaired as needed. Stakes and ties shall be removed at the end of the Establishment Period if the trees are well rooted into the native soil and are able to withstand local wind conditions.

D. A minimum 3 foot diameter planting area around each tree shall be maintained with a layer of medium or medium-fine bark mulch 2-4 inches deep. The bark mulch shall be kept at least 2 inches away from the trunk of the tree and be kept free of weeds.

E. Additional structural pruning shall be performed at the end of the Establishment Period. A strong scaffold branch structure shall be developed by pruning to select the primary scaffold branches. In addition to the requirements of Section 760, the structural pruning shall also adhere to the following:

1. Trees shall be pruned to remove subordinate branches that are crossing, damaged, diseased, broken, or have included bark.

2. Trees shall not be topped or reduced in height.

3. Trees shall be pruned to meet all the clearance requirements of Subsection 730.3.

4. Plant pruning plans shall be determined based on species, age, and size using the following standards:

a) ANSI A-300 standards and specifications established for trees at time of planting (5.4.1),

b) Trees shall be pruned so at least 2/3 of the tree's height is foliage and canopy with the remaining 1/3 being the trunk maintaining ANSI A-300 standards (5.4.2) for trees after the third year of planting.

F. Any tree falling into one of the following conditions shall be replaced. The new tree shall have a new establishment period of two years starting on the date it is accepted by the City.

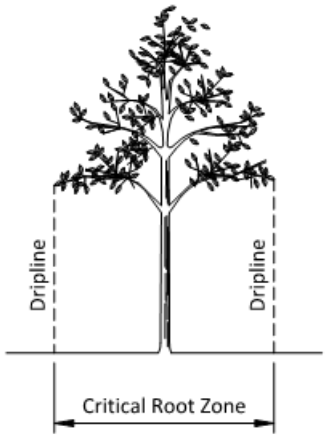
1. Dead Tree. Any tree that has no live growth originating in all or a portion of the scaffolding branches.

2. Stressed Tree. Any tree that has lost 50 percent or more of its total foliage or has a reduction of 50 percent of normal leaf size for that species.

3. Non-Approved Trees. Any tree variety not listed in Table 710.1 through 710.3.

G. No activity detrimental to the tree's roots is allowed within the tree's Critical Root Zone, as defined in Figure 750.1.

Figure 750.1 – Critical Root Zone



760. Tree Pruning Standards

A. Tree pruning shall meet the ANSI A-300 pruning standards.

B. All work shall be performed following Oregon Safety and Health Administration (OSHA) regulations and following the ANSI Z-133.1 and the ANSI A-300.

C. Pruning shall be deemed necessary when such action is to:

1. Correct structural problems, remove deadwood, and decayed parts.

2. Comply with the City of Hillsboro *Municipal Code*.

3. Correct a safety or health problem.

4. Maintain required clearances.

D. All tree work performed near electrical lines shall conform to the National Electrical Safety Code, ANSI Z-133.1, and OAR 437-002-0301 through 0311.

E. Trees shall be pruned in a manner that retains well-spaced, inner lateral branches so as to allow the trunk taper to be developed as needed for the strength of the branch attachment.

F. No tree shall have more than 20 percent of its canopy removed in any one pruning or in any one year.

G. No hooks, spikes, or climbing gear, which pierces the trunk of a tree, shall be used.

770. Private Irrigation System Crossings

A. This Subsection applies to all private irrigation systems crossing the public ROW. Such crossings shall be avoided wherever possible.

B. Crossings shall be show in the permit review plans submitted to the City.

C. The crossing shall be included in the project's record drawings (see Section 120.5). If the crossing is relocated after acceptance of the record drawings, the Developer/Owner shall

obtain a ROW permit prior to commencing work. Prior to final inspection of the ROW permit, the Developer/Owner shall update the record drawings at their own expense.

D. The Owner/Developer (or Homeowner's Association if applicable) shall be responsible for repairing, at their own expense, any damage to the public infrastructure that is associated with the repair, replacement, or maintenance of the private irrigation crossing.

E. All irrigation piping, and associated communication wire, shall be placed in a pipe sleeve. Sleeves shall be minimum of 4 inch ductile iron or C900 PVC.

F. A gate valve, enclosed by a box marked "Irrigation" and having a green lid, shall be provided at both ends of the crossing.

G. Minimum depth of cover to the top of the pipe shall be 36 inches.

H. Backfill the pipe zone with imported riverbank sand and the rest of the trench with crushed ¾-inch minus rock, compacted in 6-inch lifts.

I. The letters "IR" shall be stamped into the top surface of the curbs on each side of the roadway where the crossing is installed. See Subsection 230.9.C.

J. Place a 14 gauge blue trace wire above the entire length of the sleeve.