

## ARTICLE II. TREES

### DIVISION 1. GENERALLY

#### **Sec. 102-31. Administration.**

- a) The City recognizes that trees add value to property. It is an expressed desire of the citizens of Conroe to preserve our heritage as an “urban forest”.
- b) Every commercial and residential tract being developed has tree preservation or replacement requirements.
- c) A tree inventory and analysis must be performed by an arborist, contracted and paid for by the City of Conroe, before any type of under brushing or clearing permit may be applied for.
- d) Following the tree inventory and analysis, each residential and commercial developer will determine whether they want to replace trees, preserve trees, or some combination, on the tract they are developing.
- e) The City recognizes that each tract of land is unique, and that there are many development decisions that impact whether it is practical to attempt to preserve existing trees, or whether it would be more practical to replace them. Location of roadways and utilities, the topography of the land, environmental conditions, and drainage and retention requirements are examples of some of these issues that impact development decisions.
- f) The City encourages attempts to preserve trees, where practical, and to examine the possibilities during the site development process. The use of the City contracted urban forester can greatly facilitate tree preservation and replacement decisions.
- g) In residential subdivision development, the City encourages the development of neighborhood parks, and preservation or planting of trees in common green spaces throughout the development.
- h) For commercial projects, the urban forester will also inventory and inspect trees during the construction process and for a period of one year following construction. Any tree that is determined to be dead or dying must be replaced by the builder/developer with an equal caliper tree recommended by the urban forester.
- i) The City will retain the services of a qualified urban forest professional that will assist the building official and other city officers in the administration of this article.
- j) This article will be administered liberally for the purposes of promoting the preservation of the city's urban forest. The urban forester and building official will cooperate with other city officials to remove and minimize other regulatory barriers to the preservation or replacement of trees.
- k) Properties and projects owned and/or operated by the City of Conroe will not be exempt from the provisions of this article.

### **Sec. 102-32. Application of article; exceptions.**

- (a) Except as provided by this section, this article shall apply to all commercial property within the city, including expansion and/or additions to existing commercial buildings and/or parking lots.
- (b) The provisions of this article shall not apply in connection with any repair of an existing commercial building or parking lot.
- (c) The traditional nine block Downtown District is subject to a downtown beautification plan and is exempt from the provisions of this article. (Map attached.)
- (d) The provisions of this article shall apply to all one and two family dwellings within the city limits only to the extent as outlined in Sec 102-65 (c).
- (e) The provisions of this article shall not apply to existing one and two family dwellings or to additions or alterations to existing one and two family dwellings.

### **Sec. 102-33. Definitions.**

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Buffering* means the use of shrubbery landscaping that at least partially and periodically obstructs an otherwise continuous street view of parking lots and their parked cars.

*Building site* means a tract or parcel of land, together with all contiguous tracts or parcels which are held under common ownership upon which any commercial building or parking lot may be constructed.

*Caliper* means the diameter of a single-trunk tree as measured six inches above the root collar for trees up to and including four inches in diameter and 12 inches above the root collar for trees having a larger diameter. The caliper of acceptable multiple trunk trees is determined by using the sum of the caliper of the three largest trunks.

*Clear or clearing* means the removal or harvesting of trees not falling under the definition of under brushing.

*Commercial building* means a building other than a single-family residence or duplex residence and associated accessory improvements.

*Commercial property* means all real property within the limits of the city that is not legally platted as residential property. The term "commercial property" includes apartment complexes or other high density residential occupancies which are not specifically within the scope of residential property as that term is defined in this article.

*Residential property* means real property which is dedicated or restricted to use for single-family or two-family residential purposes and which is not actually used for another purpose, or real property upon which there exists a single-family residence or two-family residence.

*Specimen tree* means a tree located within a preservation zone which is eight inches in caliper or greater and has scored at least 30 points on the evaluation system established by this article.

*Street yard* means an open area visible from an abutting street and which is located upon the same site as a commercial building. A street yard includes the area of any required building setback and any other open area which may be viewed from the adjacent street. This definition shall not be deemed to prohibit the location of an area containing surface parking within the zone provided that such zone is otherwise maintained in accordance with this article.

*Tree preservation analysis* means the field inspection performed by the city's urban forest professional which determines the number, type and location of specimen trees within tree preservation zones located upon commercial property within the city.

*Tree preservation zone* means the area adjacent to a street, side or rear property line which is designated under Section 102-61 for tree preservation or replacement planning.

*Under brushing* means the removal of trees and or brush with a caliper of less than 6 inches where the soil and organic matter on top is left essentially undisturbed. Under brushing can be accomplished by use of hand tools, hydro axe, hydro chipper and brush hog. The use of other equipment will constitute "clearing".

#### **Sec. 102-34. Technical specifications.**

(a) The city council may authorize the development of technical specifications to ensure the proper implementation of this article. Such technical specifications may include the designation of acceptable tree and shrub species, minimum requirements for tree preservation during construction, standards for planting, irrigation and maintenance, standards for the removal of diseased or damaged trees and shrubs and other related matters. When adopted by the city council, such technical specifications shall be deemed incorporated into this article by reference and shall be in addition to the express requirements contained in this article.

(b) No tree, shrub or other landscaping improvement authorized or required under this article may be maintained in violation of Chapter 58, Article II, Division 3, relating to the limitations upon trees, shrubs or other improvements in visibility triangles and parkways.

(c) Only trees listed in the acceptable species lists appearing in Section 102-72 shall be considered as acceptable for designation as specimen trees. Such lists are divided into classes I through IV. Only class I or class II species shall be considered acceptable for purposes of satisfying the tree planting requirements of this article. Credit shall be given for planting class I or class II trees with the "P" designation only where such trees are (i) actually planted under overhead utility lines, or (ii) are planted to satisfy the parking lot tree requirements of section

102-66. Each tree planted to satisfy a requirement of this article must have a minimum caliper of three inches.

(d) The evaluation system set out in Section 102-73 is hereby adopted for use in the evaluation of trees for the purpose of identifying specimen trees.

**Sec. 102-35. Required landscape plan; issuance of building permit, certificate of occupancy.**

(a) Each applicant for a building permit for the construction of a new commercial building or parking lot or addition to existing commercial or parking lot shall submit a landscape plan for the building site in accordance with the provisions of this article.

(b) The landscape plan must be prepared, signed, and sealed by a licensed Landscape Architect. The landscape plan must show the location of existing and proposed utility lines, garbage or refuse storage points, roadways, sidewalks, street lights, buildings and parking lots. In addition, the landscape plan must reflect the location, species and number of trees or shrubs proposed for planting or preservation in accordance with the requirements of this article. Where credit is sought for the preservation of existing trees, the landscape plan shall include information sufficient to demonstrate entitlement to the credit sought.

(c) No permit shall be issued for the construction of a new commercial building or parking lot or addition to existing commercial building or parking lot unless the building official approves the landscape plan verifying that the applicant has provided for the planting of trees and shrubs to the extent provided by this article.

(d) No final certificate of occupancy shall be issued by the building official for any new commercial building or parking lot or addition to existing commercial building or parking lot except upon satisfaction of the requirements of this article. Prior to the issuance of a certificate of occupancy, the building official or his designee shall inspect the building site to verify compliance with the approved landscape plan.

(e) Pending satisfaction of the requirements of this article, a conditional certificate of occupancy may be issued for a period not to exceed six months if the owner shall provide a bond or other undertaking sufficient to provide assurance of compliance with the approved landscape plan.

Secs. 102-36 --102-60. Reserved.

**DIVISION 2. TREE PRESERVATION / REPLACEMENT**

**Sec. 102-61. No removal prior to tree analysis.**

(a) Prior to the tree analysis required by the provisions of this article it shall be unlawful for any person to remove any tree from the property or under brush within the preservation zones.

(b) It shall be an affirmative defense to any prosecution under this section that:

(1) The removal was necessary as a result of damage, injury or disease affecting the tree to the extent that it posed a danger to persons or property;

(2) The removal was necessary to satisfy the requirements of chapter 58, article II, division 3, relating to the limitation upon trees in visibility triangles and parkways; or

(3) The removal was authorized under a clearing permit for the limited purpose of gaining access to the interior of the site in connection with internal clearing operations.

**Sec. 102-62. Clearing permit required.**

(a) It shall be unlawful for any person to clear the trees, or cause the trees to be cleared, from any tract of land without first obtaining a clearing permit.

(b) It shall be unlawful for any person to clear the trees, or cause the trees to be cleared, from any tract of land in violation of the conditions of a clearing permit.

(c) Any person who violates any provision of this article shall, upon conviction, be subject to a fine not to exceed \$500.00. Each day that a violation of this article continues shall constitute a separate offense. Each tree with a caliper of eight inches or greater that is removed in violation of this article shall constitute a separate offense.

(d) It shall be an affirmative defense to any prosecution under this section that:

(1) The removal was necessary as a result of damage, injury or disease effecting the tree to the extent that it posed a danger to persons or property.

(e) Application for a clearing permit shall be made to the City Engineer's office. Each application must include the following:

1. A Storm Water Pollution Prevention Plan prepared, signed, and sealed by a registered professional engineer.
2. A copy of the contract between the owner and the company who is contracted to install and implement the SWPPP Plan.
3. A one year performance bond in the amount of \$10,000.00, to ensure the provisions of this article are met.
4. The clearing permit fee as set forth in Appendix A.

(f) After a tree analysis has been performed, a clearing permit may be issued as a standalone permit or in conjunction with a site development permit application or building permit application. In addition to the items required in paragraph (d) above, a standalone clearing permit application must also identify a "No Touch" buffer to be maintained around the perimeter of the property. The "No Touch" buffer must at a minimum, encompass the tree preservation zones as outlined in Sec. 102.63.

(g) After a clearing permit has been issued, the property owner or his representative must notify the City Engineer's office two work days prior to the commencement of any work.

(h) The approved Storm Water Pollution Prevention Plan should be fully implemented immediately for any portion that has been cleared and in no case later than five days after clearing has taken place. The Storm Water Pollution Prevention Plan must be maintained throughout the course of the project. It is understood that the engineer of record and the property owner shall bear the liability to ensure that adjacent properties are not negatively impacted. Violation of this paragraph will authorize the City of Conroe to draw on the performance bond and hire an independent contractor to satisfy the provisions of this article.

(i) A clearing permit expires six months following issuance. Should the replacement and/or preservation provisions of this article not be met within the six month period, the City of Conroe shall have the right to draw on the performance bond and hire an independent contractor satisfy the provisions of this article. By accepting a permit under this article the applicant authorizes entry upon the property by City or its contractors for the purposes of performing any work necessary to satisfy the permit requirements.

### **Sec. 102.63: Tree Preservation/Replacement**

(a) The following tree preservation zones are hereby established on all commercial property:

(1) Along the front of the property, as designated by the land owner/developer if there are multiple street frontages, a strip running parallel and adjacent to the abutting street right-of-way which is a minimum of:

a. Thirty-six feet in depth; or

b. Ten feet deeper than the back line of any easement or series of parallel abutting easements which also abut on and lie adjacent to the street right-of-way;

(2) A strip 18 feet deep running parallel and adjacent to the street right-of-way of any side street;

(3) A strip 18 feet deep running parallel and adjacent to each other side property line; and

(4) A strip 18 feet deep running parallel and adjacent to the rear property line.

(b) Except as provided by this article, until a tree analysis has been performed and a clearing permit issued it shall be unlawful for any person to remove or cause the removal of a tree except as provided by definition of under brushing.

(c) After a tree analysis has been performed, a property may be under brushed by means of equipment outlined in the definition of under brushing. Persons wishing to underbrush must submit a letter of intent to the City Engineer's office at least three working days prior to commencement of work. The letter of intent shall include:

1. The property owner's and contractor name, address, and phone number.
2. The date on which under brushing will begin.

(d) After the tree analysis required by this article has been performed and a clearing permit has been issued, any nonspecimen tree may be removed without penalty or replacement and any specimen tree may be removed from any preservation zone if replaced in accordance with the requirements of this article.

(e) After a tree analysis has been performed, specimen trees in a side tree preservation zone may be removed without penalty or replacement if the width of the property, measured along the street right-of-way line at the front of the property, is less than 300 feet and there is no change of use between the subject property and the abutting side property. Specimen trees within these zones may be voluntarily preserved in exchange for the removal of other specimen trees in a required zone and in such case a caliper per caliper credit shall be given.

(f) After a tree analysis has been performed, specimen trees in a rear tree preservation zone may be removed without penalty or replacement if there is no change of use between the subject property and the abutting rear property. Specimen trees within these zones may be voluntarily preserved in exchange for the removal of other specimen trees in a required zone and in such case a caliper per caliper credit shall be given.

(g) In tree zones where preservation or replacement is required, at least 50 percent of the total caliper of all specimen trees must be preserved or replaced within the zone. The remaining 50 percent can be replaced elsewhere on the site.

(h) The use of adjacent properties is established at the time of the tree preservation analysis following an application for approval of a plat or building permit for the subject property. No use change results if the abutting property remains undeveloped. The following use classifications will be employed to determine change of use:

- (1) One-family and two-family residential;
- (2) Multifamily (including apartment complexes and other high density occupancies); and
- (3) All other use types.

**Sec. 102-64. Tree analysis.**

(a) Upon application for approval of a site development permit or building permit a tree analysis shall be conducted. The tree analysis shall be done by the city's urban forest professional without charge to the landowner.

(b) The city's urban forest professional shall visit the site and shall find and inspect each tree which is located within a preservation zone and has a caliper of eight inches or greater. Each such tree shall be evaluated using the scoring system referred to and adopted under section 102-34(c). Trees which score a total of 30 points or higher shall be considered specimen trees.

(c) The city's urban forest professional shall mark each specimen tree and shall prepare a drawing showing the species, approximate location, and replacement diameter of each such specimen tree. A copy of the drawing shall be provided to the landowner/developer for use in development planning. A copy of this article and the city's standards shall be provided to the landowner/developer upon request.

**Sec. 102-65. Additional tree planting requirements.**

(a) In each case of construction of a new commercial building or parking lot, or addition to an existing building and parking lot, trees shall be planted within street side tree preservation zones and shall be maintained and replaced as necessary to ensure compliance with the minimum number of trees applicable to such building site based upon the following formula:

$$\text{Required Trees} = \frac{\text{Street Frontage in Feet}}{30}$$

(b) A one to one credit toward the tree planting requirements of this section shall be given for the preservation of existing specimen trees. Credit trees must be located within the same street side zone to which the new tree requirement is applicable. New trees planted for purposes of a replacement tree may also be counted to satisfy the requirements of this section provided that they are planted within the same street side zone.

(c) Every new one and two family dwelling shall plant a minimum of three trees with a caliper of two inches or greater. At least one of these trees shall be planted in the front yard. A one to one credit shall be given for the preservation of existing trees with a caliper of two inches or greater. To obtain credit for the front yard tree, the preserved tree must also be located in the front yard. A certificate of occupancy will not be issued until this requirement has been satisfied.

**Sec. 102-66. Parking lot trees.**

(a) In the case of new parking lots or addition to existing parking lot one tree of at least six feet in initial height must be preserved or planted for each ten additional parking spaces. All such trees must be located in the interior of the parking lot or in an area immediately adjacent to the parking lot. For parking lots of 250 spaces or more, at least 25 percent of the parking lot trees must be located within the interior of the parking lot.

(b) The tree preservation and planting requirements of this section are in addition to the requirements applicable to street side tree preservation zones.

**Sec. 102-67. Required buffering of parking lots.**

(a) New parking lots shall be effectively buffered from street view. Buffering shall consist of shrubs planted along each perimeter line of a parking lot which faces a public street, exclusive of driveway entrances and pedestrian walkways.

(b) Shrubs shall be planted, maintained and replaced as necessary to ensure compliance with the minimum number applicable to each perimeter line based upon the following formula:

$$\text{Required Shrubs} = \frac{\text{Perimeter in Feet}}{3}$$

(c) Shrubs in the number required by this section should be placed uniformly to provide substantially the same density of ground cover along the entire perimeter line. Shrubs shall be maintained at a height of no more than 36 inches nor less than 12 inches as measured from the surrounding soil line.

(d) Compliance with this section satisfies the requirements of section 86-5(b).

**Sec. 102-68. Alternate landscape screening of commercial development.**

(a) Commercial development occurring adjacent to existing residential development shall be screened along each common property line. In lieu of the requirements of section 14-82 or section 86-5(b), landscape screening may be utilized if approved by the Building Official.

(b) Landscape screening may consist of any combination of trees, shrubs, bushes, berms, walls, or decorative fences which provide a year round obstruction of view which is effectively equivalent to the use of opaque fencing of six feet in height.

**Sec. 102-69. Maintenance requirements/warranty for commercial developments only.**

(a) The owner shall be responsible for the regular maintenance of all required trees and shrubs in a vigorous and healthy condition, free from diseases or pests. This maintenance shall include weeding, watering, fertilizing, pruning or other needed maintenance, in accordance with the technical manual.

(b) Trees which have been preserved or planted to satisfy the requirements of this article must be maintained in a healthy condition for a minimum period of twelve months following the completion of the associated development project. For projects related to a subdivision development the project is considered complete upon acceptance of required subdivision improvements, which improvements include any trees to be planted in satisfaction of the

requirements of this article. For projects preceding under a building permit the project is considered complete upon issuance of a final unconditional certificate of occupancy. At the end of this 12 month period, the Building official or his designee will conduct a follow-up inspection to ensure the provisions of this article have been satisfied.

(c) Required trees or shrubs, if dead, diseased or severely damaged, shall be removed by the owner and replaced as soon as possible, but in no event later than three months following removal.

**Sec. 102-70. Failure to preserve, replace or maintain required number of trees and shrubs.**

(a) If the building official finds that any building site is maintained in violation of the requirements of this article, he shall notify the owner of such real property in writing and direct the owner to plant, within 30 days, such additional trees or shrubs as necessary to conform to the requirements of this article.

(b) A person commits an offense if, as the owner of real property, he intentionally or knowingly fails to maintain the required number of trees or shrubs applicable under this article to any street side tree preservation zone, street yard, parking lot or parking lot perimeter located upon a building site.

(c) It shall be an affirmative defense to any prosecution under this section that:

(1) The owner failed to receive the written notice required by subsection (a) of this section, or that the owner complied with such notice within the period of time therein provided; or

(2) At the time of the receipt of the written notice required by subsection (a) of this section, the current planting season was then expired or expired prior to 30 days following receipt of the notice and the owner complied with the notice not later than 30 days following the commencement of the next planting season.

**Sec. 102-71. Removal of unsafe trees.**

(a) The city's code enforcement official may require the removal of any tree which is unsafe by reason of disease or other matters and poses a hazard to the public health, safety and welfare.

(b) Any unsafe tree deemed a public nuisance shall be subject to abatement in the manner provided by chapter 26, article II, of this Code.

**Sec. 102-72. Classes of trees.**

Classes of trees shall be as follows:

CLASS I

Botanical Name	Common Name	Origin	Site	Light	Size	D/E	Util.
<i>Carya illinoensis</i>	Pecan	N	2	1	1	D	
<i>Carya ovata</i>	Shagbark Hickory	N	2	1	1	D	
<i>Carya texanus</i>	Black Hickory	N	2	1	1	D	
<i>Diospyros texana</i>	Texas Persimmon	N	1	1	3	D	P
<i>Ilex opaca</i>	American Holly	N	2	2	2	E	P
<i>Ilex vomitoria</i>	Yaupon Holly	N	2	2	2	E	P
<i>Juglans nigra</i>	Black Walnut	N	2	1	1	D	
<i>Liquidamber styraciflua</i>	Sweet Gum	N	2	1	1	D	
<i>Magnolia grandiflora</i>	Southern Magnolia	N	2	1	2	E	
<i>Magnolia virginiana</i>	Sweet Bay	N	2	2	2	E	
<i>Nyssa sylvatica</i>	Tupelo	N	2	2	2	D	
<i>Pistacia chinensis</i>	Chinese Pistache	I	2	1	1	D	
<i>Quercus alba</i>	White Oak	N	2	1	1	D	
<i>Quercus falcata</i>	Southern Red Oak	N	2	1	1	D	
<i>Quercus lyrata</i>	Overcup Oak	N	2	1	1	D	
<i>Quercus macrocarpa</i>	Bur Oak	N	2	1	1	D	
<i>Quercus muehlenbergii</i>	Chinkapin Oak	N	2	1	1	D	
<i>Quercus nigra</i>	Water Oak	N	2	1	1	D	
<i>Quercus nuttallii</i>	Nuttall Oak	N	2	1	1	D	
<i>Quercus shumardii</i>	Shumard Oak	N	2	1	1	D	
<i>Quercus stellata</i>	Post Oak	N	2	1	1	D	
<i>Quercus texana</i>	Texas Red Oak	N	2	1	1	D	
<i>Quercus virginiana</i>	Live Oak	N	2	1	1	E	
<i>Taxodium distichum</i>	Bald Cypress	N	3	2	1	D	

Taxodium mucronatum	Montezuma Cypress	I	3	1	1	D
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Ulmus crassifolia	Cedar Elm	N	2	1	1	D
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ALL OTHER TREES OR AS DIRECTED BY THE CITY URBAN FORESTER

- ORIGIN N - native  
I - introduced
- SITE 1 - Xerophytic (Requires little water)  
2 - Mesic (Required moderate water with good drainage)  
3 - Aquatic (Requires significant water, or tolerates poor drainage)
- LIGHT 1 - Full Sun  
2 - Moderate Sun  
3 - Shade
- SIZE 1 - 80 to 100 feet  
2 - 30 to 80 feet  
3 - 10 to 30 feet
- D/E D - Deciduous  
E - Evergreen
- UTIL P - Trees with this designation are the only trees allowed to be planted under utility lines.

CRITERIA MANUAL DRAFT (08-18-1997)-22

CLASS II

Botanical Name	Common Name	Origin	Site Light	Size	D/E	Util.
Acer rubrum	Red Maple	N	2 1	1	D	
Bumelia lanuginosa	Gum Bumelia	N	2 2	2	E	
Cercis canadensis	Red Bud	N	2 2	2	D	P
Crataegus spp.	Hawthorns	N	2 2	3	D	P
Diospyros virginiana	Eastern Persimmon	N	2 1	2	D	
Ehretia anacua	Anaqua	N	2 1	3	D	P
Fraxinus pennsylvanica	Green Ash	N	3 2	1	D	
Ginkgo biloba	Ginkgo	I	2 1	1	D	
Juniperus spp.	Juniper spp.	I	2 2	2	E	

Juniperus virginiana	Red Cedar	N	1	1	2	E	
Liriodendron tulipifera	Tulip Poplar	N	2	2	2	D	
Ostrya virginiana	Eastern Hophornbeam	N	2	2	2	D	
Pinus echinata	Shortleaf Pine	N	2	1	1	E	
Pinus elliottii	Slash Pine	N	1	1	1	E	
Pinus taeda	Loblolly Pine	N	2	1	1	E	
Pinus thunbergii	Japanese Black Pine	I	2	1	2	E	
Prunus caroliniana	Carolina Cherry- Lau	N	2	2	3	E	
Prunus cerasifera	Purple Leaf Plum	I	2	1	3	D	P
Prunus mexicana	Mexican Plum	N	1	1	3	D	P
Pyrus calleryana	Callery Pear	I	2	1	2	D	
Pyrus calleryana "Bradfordii"	Bradford Pear	I	2	1	2	D	
Quercus phellos	Willow Oak	N	2	1	1	D	
Quercus polymorpha	Monterey Oak	I	2	1	1	E	
Ulmus alata	Winged Elm	N	2	1	1	E	
Ulmus americana	American Elm	N	2	1	1	D	
Ulmus parvifolia "Drake"	Drake Elm	I	2	1	1	D	

ALL OTHER TREES OR AS DIRECTED BY THE CITY URBAN FORESTER

ORIGIN	N - native I - introduced
SITE	1 - Xerophytic (Requires little water) 2 - Mesic (Required moderate water with good drainage) 3 - Aquatic (Requires significant water, or tolerates poor drainage)
LIGHT	1 - Full Sun 2 - Moderate Sun 3 - Shade
SIZE	1 - 80 to 100 feet 2 - 30 to 80 feet 3 - 10 to 30 feet

D/E  
D - Deciduous  
E - Evergreen

UTIL  
P - Trees with this designation are the only trees allowed to be planted under utility lines.

CRITERIA MANUAL DRAFT (08-18-1997)-23

CLASS III

Botanical Name	Common Name	Origin	Site Light		Size	D/E	Util.
Betula nigra	River Birch	N	3	2	2	D	
Cedrus dedora	Deodar Cedar	I	2	1	1	E	
Celtis occidentalis	Hackberry	N	2	1	1	D	
Celtis reticulata	Netleaf Hackberry	N	2	1	1	D	
Cornus florida	Flowering Dogwood	N	2	3	3	D	P
Eriobotrya japonica	Loquat	I	2	2	3	D	P
Fraxinus berlandieri	Berlandier Ash	N	2	1	1	D	
Gleditsia triacanthos	Honey Locust	N	2	1	2	D	
Koelreuteria panicuiculata	Panicled Gld Raintre	I	2	1	1	D	
Malus baccata	Crabapple	I	2	1	2	D	
Morus alba	Fruitless Mulberry	N	2	1	1	D	
Parkinsonia aculeata	Retama	N	1	1	2	D	
Platanus occidentalis	Sycamore	N	2	1	1	D	
Prosopis glandulosa	Mesquite	N	1	2	2	D	
Sapindus drummondii	Western Soapberry	N	2	1	2	D	
Ulmus parvifolia	Lacebark Elm	I	2	1	1	D	

ALL OTHER TREES OR AS DIRECTED BY THE CITY URBAN FORESTER

ORIGIN  
N - native  
I - introduced

SITE  
1 - Xerophytic (Requires little water)  
2 - Mesic (Required moderate water with good drainage)  
3 - Aquatic (Requires significant water, or tolerates poor drainage)

LIGHT      1 - Full Sun  
               2 - Moderate Sun  
               3 - Shade  
  
 SIZE        1 - 80 to 100 feet  
               2 - 30 to 80 feet  
               3 - 10 to 30 feet  
  
 D/E         D - Deciduous  
               E - Evergreen  
  
 UTIL        P - Trees with this designation are the only trees allowed to be planted under utility lines.

CRITERIA MANUAL DRAFT (08-18-1997)-24

CLASS IV

Botanical Name	Common Name	Origin	Site Light		Size	D/E	Util.
<i>Acer negundo</i>	Box Elder Maple	N	2	2	2	D	
<i>Acer saccharinum</i>	Silver Maple	N	2	1	2	D	
<i>Ailanthus altissima</i>	Tree or Heaven		2	1	2	D	
<i>Albizia julibrissin</i>	Mimosa	I	2	2	2	D	
<i>Catalpa speciosa</i>	Catalpa	N	2	1	1	D	
<i>Celtis laevigata</i>	Sugar Hackberry	N	2	1	1	D	
<i>Chilopsis linearis</i>	Desert Willow	N	2	1	2	D	
<i>Cupressus arizonica</i>	Arizona Cypress	I	2	1	1	D	
<i>Eleagnus angustifol</i>	Russian Olive	I	1	1	2	D	
<i>Firmiana simplex</i>	Chinese Paraslo Tree						
<i>Fraxinus veluntina</i>	Arizona Ash	I	2	1	1	D	
<i>Fraxinus veluntina</i> "Glabra"	Modesto Ash	I	2	1	1	D	
<i>Koelreuteria formosiana</i>	Golden Rain Tree	I	2	1	2	D	
<i>Melia azedarach</i>	Chinaberry	I	2	1	2	D	
<i>Morus rubra</i>	Red Mulberry		2	2	2	D	
<i>Pinus edulis</i>	Pinion Pine	I	2	2	2	E	
<i>Pinus ponderosa</i>	Ponderosa Pine	I	2	1	2	E	
<i>Populus deltoides</i>	Cottonwood	N	2	1	1	D	

Prunus blireiana	Ornamental Plum	I	2	2	3	D	P
Salix babylonica	Weeping Willow	I	3	1	2	D	
Salix nigra	Black Willow	N	3	2	1	D	
Sapium sebiferum	Chinese Tallow	I	2	1	2	D	
Tamarix spp.	Tamarisk	I					
Thuja spp.	Arborvitae	I	2	1	1	E	
Ulmus pumila	Siberian Elm	I	2	1	1	D	
Zanthoxylum clava-herculis	Hercules' Club	N	2	2	1	D	P
Ziyphus jujube	Jujube						

ALL OTHER TREES OR AS DIRECTED BY THE CITY URBAN FORESTER

- ORIGIN N - native  
I - introduced
- SITE 1 - Xerophytic (Requires little water)  
2 - Mesic (Required moderate water with good drainage)  
3 - Aquatic (Requires significant water, or tolerates poor drainage)
- LIGHT 1 - Full Sun  
2 - Moderate Sun  
3 - Shade
- SIZE 1 - 80 to 100 feet  
2 - 30 to 80 feet  
3 - 10 to 30 feet
- D/E D - Deciduous  
E - Evergreen
- UTIL P - Trees with this designation are the only trees allowed to be planted under utility lines.

CRITERIA MANUAL DRAFT (08-18-1997)-25

**Sec. 102-73. Tree analysis/grading.**

(a) *Field activity.* The city will conduct a rough analysis of the tree situation and specimen tree grading on potential commercial sites when a tree clearing permit is granted, a preliminary land plan is submitted for development, or at the earliest possible date when the city is made aware of a planned commercial development. The city will prepare a specimen tree survey for all sides (preservation zones and potential preservation areas) of the property.

(b) *Tree grading.*

(1) The city's ordinances encourages the preservation of trees. Not all large trees have the same value, due to such factors as type (species) or conditions. Some smaller trees may have greater value due to their rarity, screening potential, specimen, key, historic, or other factors.

(2) The following factors in subsection (c) of this section will all be considered in determining the value of any tree. Weighing factors are included to aid in this determination.

(3) Using these criteria, a designer can walk the project area and perform a rough analysis of the tree situation before starting the design of the project. The city forester shall use these same factors in his tree survey.

(4) The ten factors are included: condition, type, size, aesthetics, energy conservation and heat abatement, safety, adjacent trees, water quality protection and soil conservation, wildlife habitat, and historic significance.

(c) *Grading factors.*

(1) *Condition.* In assessing a tree's condition, the city forester considers trunk condition, growth rate, tree structure, insect and disease problems, crown development, crown to trunk ratio, and life expectancy. A score is assigned as follows:

1	= Poor	3	= Good
2	= Fair	4	= Excellent

(2) *Type.* The species of trees found in the city have been divided into four classes based on overall quality. The classes indicates how each species fits in this general classification. A score is assigned as follows:

1	= Class IV	3	= Class II
2	= Class III	4	= Class I

(3) *Size.* Tree sizes are divided into four categories. A score is assigned for each size category as follows:

1	= Less eight inches diameter
2	= Between eight and 16 inches diameter
3	= Between 16 and 25 inches diameter
4	= More than 25 inches in diameter

(4) *Screening and aesthetics.* Trees may score high in this area if they provide screening and privacy to the property or if they are in good condition and have exemplary form. A score is assigned as follows:

1	= Poor	3	= Good
2	= Fair	4	= Excellent

(5) *Energy conservation and heat abatement.* If a tree is shading a building or pedestrian use area in its existing situation, it receives a high score under this category. The energy conservation and heat abatement potential is also considered even if there are no obvious benefits, since trees in general cool the air. For example, large trees west of a buildable area will score high. A high score is assigned as follows:

1	= Poor	3	= Good
2	= Fair	4	= Excellent

(6) *Safety:* If a tree produces a hazardous situation due to external factors relating to manmade features (not inherent in the condition of the tree), for example, its location relative to a road intersection, it will receive a low score. Scores reflect the feasibility of mitigating the safety problems and are assigned as follows:

1	= Hazardous; low mitigation potential
2	= Hazardous; medium mitigation potential
3	= Hazardous; high mitigation potential
4	= Not hazardous

Any tree identified as a hazardous tree should be identified for removal at the discretion of the city forester.

(7) *Adjacent trees.* The proximity of other trees has a bearing on a tree's value. Everything else being equal, a lone tree has greater value than one tree of many. The fate of other trees in the vicinity also affects this rating factor. A score is assigned as follows:

1	= Many trees; high retention potential of adjacent trees
2	= Many trees; low retention of adjacent trees
3	= Few adjacent trees
4	= Lone tree

(8) *Water quality protection and soil conservation.* Trees help reduce stormwater runoff and enhance ground water recharge by breaking the impact of raindrops and improving soil structure. A tree's effectiveness in this capacity is correlated with the size of the crown and root area. Large trees with full crowns and unrestricted root areas score highest in this category. A score is assigned as follows:

1	= Poor	3	= Good
2	= Fair	4	= Excellent

(9) *Wildlife habitat.* This factor is rated on the basis of the intrinsic value of the type of tree as a provider for food and forage and general wildlife cover characteristics, or on the basis of field observations of a particular tree. Regarding field observations, as an individual tree may rate higher than the assigned intrinsic value of the genus due to such things as the presence of food-bearing parasites or epiphytes (e.g. mistletoe or grapes) or due to the potential for or actual presence of wildlife nesting cavities. A score is assigned as follows:

1	= Poor	3	= Good
2	= Fair	4	= Excellent

(10) *Historical significance.* The highest rating in this category is reserved for trees that fit one of the following criteria:

- The tree is on a registry of historic or especially important trees.
- The tree has been documented as historically significant.
- The tree is rare in the Conroe area.
- Due to its location and size, the tree serves a significant landmark on the landscape.

Since historical significance is largely a function of age, the city forester's estimate of the age of the tree also has a bearing on this value. A score is assigned as follows:

1	= Less than 20 years old.
2	= Between 20 and 40 years old.
3	= Greater than 40 years old.
4	= Registered, rare or landmark tree.

(d) *Specimen tree.* The sum of scores for all ten factors determines the relative value of a tree. Any tree with a rating of 30 or more is a specimen tree. Specimen trees should be preserved if possible. If a specimen tree is removed from an applicable preservation zone, it must be replaced with trees equaling the total caliper of the specimen tree.