

## **ARTICLE 3.1400 TREE PRESERVATION**

### **Sec. 3.1401 Definitions**

As used in this article, the following terms shall have the respective meanings given below:

Caliper. Shall mean the diameter of a tree as measured at a point on the tree which is six inches (6") above the ambient grade.

Circumference. Shall mean the circumference of the trunk of a tree measured at a height of four and one-half feet (4 1/2') above the ground using an ordinary tape measure or diameter tape. Tree diameter in inches x 3.14 equals the circumference of a tree in inches. If the tree has unusual swells in the trunk at measurement height, measurement shall be taken either below or above the swell at the smallest trunk diameter as close to four and one-half (4 1/2') feet as possible.

Critical Root Zone. Means the area within the drip line of a tree. As a practical matter, this is the acute portion of the tree's root system. Approximately ninety percent (90%) of the tree's root mass occurs within the top three feet of the soil and most of the fine feeder roots which collect moisture and nutrients are located in the top six inches (6") of the soil. Typically, a tree's root system extends as much as two to three times the distance from the trunk to the drip line.

Damage or Damaged. Shall mean to take any action which will in reasonable probability result in the death of a tree either immediately or after a reasonable period of time. Some examples of damage include (without limitation): severing a main trunk or large branches or large roots, girdling, poisoning, carving, mutilating, touching with live wires, piercing with nails or spikes, crushing or exposing the roots, digging or drilling any hole or trench larger than three (3) cubic feet within the critical root zone, covering over a substantial portion of the critical root zone with two inches (2") or more of soil or other nonporous material or compacting a substantial part of the soil in the critical root zone (e.g. driving or parking a vehicle in the critical root zone, or otherwise placing heavy objects within the critical root zone).

Development Activity. Means for any subject site, demolition or moving of any structure, site clearing or grubbing, grading and any other activity which disturbs the surface of land and is actually undertaken or customarily undertaken as preparation for development, and also includes the actual development, including the construction, alteration, remodeling or destruction of any structure or any subdivision improvement.

Drip line. Shall mean an imaginary circle drawn around a tree extending to the outer tips of the largest branches.

Impervious Material. Shall mean concrete, tar, asphalt, brick pavers or similar paving materials.

New Tree or Replacement Tree. Shall mean any tree with a caliper of at least one and one-half inches (1-1/2"),

which is listed in the approved tree appendix (Appendix A) and which is planted under the requirements of Section 3.1402(f) hereof

*Person*. Shall mean any individual, entity, corporation, trust, unincorporated organization, partnership or any other form of entity.

*Professional*. Shall mean a person with a professional working knowledge of trees including an architect, engineer, landscape or tree professional, arborist, surveyor or any city official approved by the city council.

*Protective Fence*. Shall have the meaning set forth in Section 3.1402(g)(2)(A) hereof and shall effectively prevent persons, machinery, trash, material and other items from occupying the area within the protective fence.

*Root Pruning*. Shall mean a clean cut between the undisturbed and disturbed root zones within the drip line of a tree, commonly done with a rock saw or similar equipment to minimize root damage.

*Structure*. Shall mean that which is built or constructed, an edifice or building of any kind or any piece of work artificially built up or composed or parts joined together in some definite manner.

*Subject Site*. Shall mean any lot, tract or parcel of land upon which a tree subject to this article is located, or any site for which a construction or building permit has been issued by or requested from the city.

*Tree or Protected Tree*. Shall mean any existing tree or trees on a subject site, which has a circumference of twenty inches (20") or more.

*Tree disposition plan*. Shall mean a written plan prepared by a professional which shall indicate how all trees and critical root zones on a subject site, and all protected trees located elsewhere, which have thirty percent (30%) or more of its critical root zone in a subject site, are to be protected pursuant to Section hereof, and how replacement trees and/or new trees are to be maintained to encourage survival and sustained growth.

*Tree Removal Permit*. Shall mean a permit issued by the city pursuant to the conditions and requirements of this article granting permission and authority to remove trees on a subject site.

*Tree survey*. Shall mean a survey of all trees on a subject site, prepared by a professional, and shall include: (i) the actual trunk location, size, and species of all existing protected trees on the subject site prior to any development activity; (ii) a designation of all protected trees (by species, size and location) proposed to be removed or destroyed as a result of any development activity; (iii) a designation of all proposed new and/or replacement trees (by species, size and location); (iv) outlines of all existing and proposed structures, paved surfaces, swimming pools, fences, sprinkler systems, utilities and other improvements and structural features on the subject site; (v) a scale, north arrow, name, address, phone number, and profession or occupation of the person who prepared the tree survey; and (vi) the name of the owner of the subject site and/or the builder or developer of the subject site.

Urban Forester. Means a professional so designated from time to time by the city council of the city under this article.

### **Sec. 3.1402 Preservation and Protection of Trees**

- (a) Intent. The intent of this section is to encourage site planning which furthers the preservation of trees and natural areas by these methods; to protect trees during construction; to facilitate site design and construction which contribute to the long term viability of existing trees; to control the unnecessary removal of trees; and to require on-site replacement of trees that must be removed during development activities. It is the further intent of this article to achieve the following broader objectives:
- (1) protect healthy trees and preserve the natural ecological environmental and aesthetic qualities of the city;
  - (2) protect and increase the value of properties within the city;
  - (3) prohibit the indiscriminate clearing or clear cutting of property;
  - (4) maintain and enhance a positive image toward the city;
  - (5) prevent removal/damage of protected trees.
- (b) Tree Removal. It is unlawful for any person to remove or to intentionally or with criminal negligence damage any tree within the city without having first obtained from the city a tree removal permit, unless otherwise exempted by the provisions of this Section.
- (c) Application for Tree Removal Permit.
- (1) Except as provided in subsection (2) below, if development activity is planned for a subject site, an application for a tree removal permit must be filed with the city, together with: (A) the tree survey; (B) the tree disposition plan; and (C) an application for building permit.
  - (2) An application for building permit may be processed and approved without a tree removal permit if: (A) the application for building permit involves minor or small scale development activity and the owner of the subject site certifies in writing that no tree will be removed, damaged or destroyed in connection with such development activity; or (B) the owner certified in writing that there are at least five (5) trees on the subject site with at least two (2) trees in the front yard which are unaffected by the proposed development activity.
- (d) Issuance of Tree Removal Permit; Development Activity. A tree removal permit shall be issued by the city under this article in connection with development activity on the subject site if the following conditions have been met:

- (1) the tree survey has been approved in writing by the urban forester;
  - (2) the tree disposition plan has been approved in writing by the urban forester; and
  - (3) the building permit has been issued by the city in connection with the development activity.
- (e) Exceptions. No tree removal permit or replacement tree shall be required in the following circumstances:
- (1) If no development activity on the subject site is planned for the foreseeable future, the owner may remove or cause to be removed a tree or trees on the subject site if:
    - (A) the tree in question is severely damaged, diseased or dead, including a tree diseased under the provisions of subsection (h) below; or
    - (B) the subject tree constitutes an unreasonable impediment to the use and enjoyment of the subject site (which does not amount to lot clearing prior to development activity), for example, the tree blocks sunlight from a yard, home or garden, or is otherwise aesthetically unappealing to the owner; or
    - (C) the removal of the tree is necessary for safety reasons, including but not limited to branches overhanging a structure, severely leaning trees or trees with a seriously damaged root system which pose a reasonable threat of falling.
  - (2) An employee of a public utility or an authorized contractor working in a dedicated public right-of-way, drainage or utility easement may in the course of business prune that portion of a tree which prohibits the safe construction, operation, repair or maintenance of a service line or facility. Trees must be pruned no more than is reasonably necessary for the construction, operation, repair or maintenance of the service line or facility, and shall be in accordance with specifications set forth by the National Association of Arborists.
  - (3) Any person may remove all or a portion of a tree that has disrupted a public utility service due to tornado, storm, flood or other act of God, but only that portion of the tree which is necessary to safely restore normal utility service.
- (f) Tree Replacement; New Trees.
- (1) Subject to subsection (4) below, each tree that is required to be removed in connection with development activity is to be replaced with a replacement tree. The maximum number of protected trees that must be replaced on any subject site under this article is five (5).
  - (2) New Home Construction. The owner and/or builder of any subject site where the development activity consists of constructing a new home shall be required to have a

minimum of five (5) viable trees on the subject site, whether such trees are replacement trees, new trees, or trees already existing on the subject site. At least two (2) of such trees shall be planted or growing in the front yard or in a location which is considered to be the front of the principal residence.

- (3) Timing of Planting. Each tree planted under this subsection shall be completed within thirty (30) days of the issuance by the city of the Certificate of Occupancy (if weather and time appropriate), or no later than the following January after completion of the structure, as reflected in the application for building permit. In the instance of postponed planting, a refundable deposit of \$200.00 per tree shall be paid to the city in order to ensure performance of such planting.
  - (4) Notwithstanding the provisions of subsection (1) above hereof, no replacement tree shall be required to be planted:
    - (A) nearer than thirty feet (30') from the trunk of another tree on the subject site; or
    - (B) within the critical root zone of another tree on the subject site; or
    - (C) within areas covered by structures or swimming pools.
  - (5) If there is no area on the subject site outside of the areas described in subsections (4)(A), (B), or (C) above, no replacement tree shall be required.
- (g) Tree Protection: Unique Circumstances. A major purpose of this subsection is to protect all trees which are not required to be removed and to allow approved construction to occur. The following procedures shall apply to all development activity which involves development around a tree(s) within a subject site, and until a Certificate of Occupancy has been issued by the city. However, the urban forester may allow modification of the provisions of this subsection upon a determination that unique circumstances exist and that strict application of the provisions of this subsection would result in undue hardship to the owner of the subject site.
- (1) Prohibited Activities. The following activities shall be prohibited within the limits of the drip line of any protected tree:
    - (A) Material Storage. No materials intended for use in construction or waste materials accumulated due to excavation or demolition shall be placed within the limits of the drip line of any protected tree;
    - (B) Equipment Cleaning/Liquid Disposal. No equipment shall be cleaned or other liquids deposited within the limits of the drip line of any protected tree. This includes but is not limited to paint, oil, solvents, asphalt, concrete, mortar or other materials;

- (C) Tree Attachments. No signs, wires or other attachments other than those of a protective nature, which have been approved in the tree disposition plan shall be attached to any protected tree;
  - (D) Vehicular Traffic. No vehicle, construction equipment or parking is allowed within the limits of the drip line of any protected tree; and
  - (E) Trash. Trespassing or throwing trash into a protective fence area is prohibited.
- (2) Required Activities. The following procedures shall be followed prior to and during any development activity until a Certificate of Occupancy has been issued by the city.
- (A) Protective Fencing; Root Protection. Unless otherwise approved in the tree disposition plan, each tree or group of trees to be preserved must be enclosed by a protective fence during all development activity and until a Certificate of Occupancy has been issued by the city. The protective fence shall be made of chain link or equivalent, and completely enclose the critical root zone of a tree or group of trees. The protective fence shall be at least four feet (4') high with lateral metal supports spaced no wider than eight feet (8') apart ("protective fence"). Each protective fence shall be marked with signs stating "OFF LIMITS" and "NO TRASH" (or equivalent) in both English and Spanish.
  - (B) Mulch. If development activity is to take place within the critical root zone of any tree, the protective fence described above shall cover the area on which no development activity is to take place, and the balance of the critical root zone for such tree or group of trees must be covered with at least six inches (6") of organic or wood chip mulch and covered with three-fourths inch (3/4") plywood or road boards in order to protect the roots from soil compaction.
  - (C) Removal. It shall be unlawful for any person to remove any portion of any protective fence or mulch and road boards for any period of time during any development activity, unless otherwise specified in the tree disposition plan.
  - (D) Tree Flagging. All trees to be removed from the subject site shall be flagged with orange vinyl tape (flagging) wrapped around the main trunk at a height of four feet (4') or more. After receipt of the tree removal permit, the owner of the subject site or his agent shall paint with orange paint an "X" on the tree(s) approved for removal, at a height of four feet (4') or more so that the paint is visible to workers on foot or operating heavy equipment.
  - (E) Trunk Protection. In situations where a tree remains in the immediate area of intended development activity, the tree shall be protected by enclosing the entire circumference of the tree's trunk with lumber at least eight feet (8') high banded by wire or other means that does not damage the tree.

- (F) Construction Pruning. If a tree has a low canopy or limbs that may be broken during the course of construction, and if specified and approved by the urban forester in the tree disposition plan, the obtrusive limb(s) may be cut. Pruning should be done according to the National Association of Arborists Standards.
  - (G) Watering During and After Construction. Protected trees should receive supplemental water during times of drought or low rainfall. Plans for feeding and watering must be prepared by a professional, who is retained by the owner or his agent and must be included in the tree disposition plan.
- (3) Design Constraints. Design constraints dictate that in certain circumstances some protected trees will have some encroachment of their critical root zone. The following is the minimum design criteria which is allowed within the critical root zone of a protected tree:
- (A) Change of Grade. In the event that grade changes must be made around a protected tree(s), the following procedures shall be followed unless otherwise approved in the tree disposition plan:
    - (i) No cut or fill of the ambient grade greater than two inches (2") shall be located close to the trunk of a protected tree if the cut or fill covers more than one-half of the radius of the critical root zone. If this provisions cannot be complied with, the following provisions shall apply:
      - (a) Increase in Grade. The owner shall construct tree wells around the drip line of a tree(s), which shall be of a design that provides for proper aeration and drainage of the critical root zone; or
      - (bb) Decrease in Grade. The owner shall construct retaining walls around the drip line of a tree(s) to mitigate cuts.
    - (ii) If development activity causes standing water or wet soil conditions which are detrimental to a species of tree(s) on a subject site or adjacent property, adequate drainage shall be provided in the tree disposition plan in order to prevent suffocation and/or root rot of affected tree(s).
  - (B) Underground Utilities. Boring for the installation of underground utilities is permitted under protected trees in certain circumstances. The minimum depth of the bore shall be thirty inches (30"). In special circumstances approved by the urban forester, trenching for underground utilities may be permitted with respect to all such protected trees. If utility trenching is approved, the following procedures must be adhered to:
    - (i) Root pruning shall take place at lease two (2) weeks prior to any trenching;

- (ii) Root pruning shall be supervised by a professional;
  - (iii) The utility trench must be back filled less than twenty-four (24) hours after it is dug; and
  - (iv) A root remediation schedule must be addressed in the tree disposition plan.
- (C) Irrigation systems shall be designed to avoid trenching across the critical root zone of any protected tree.
- (D) Paving and Impervious Material. A maximum of twenty-five percent (25%) of the critical root zone of a protected tree may be covered with impenetrable material, such as concrete, tar or asphalt.

If the design plan of subject site calls for any impervious material over any part of the critical root zone with respect to all such protected trees, then the following procedures shall be adhered to:

- (i) With respect to all such protected trees, root pruning shall be done six inches (6") to one foot (1) behind the proposed curb line and shall take place at least two (2) weeks prior to any fill or cut;
  - (ii) Root pruning and necessary limb pruning shall be supervised by a professional;
  - (iii) A plastic vapor barrier of construction grade shall be installed between the roots of a protected tree and the impervious material so as to inhibit leaching of lime into the soil; and
  - (iv) A root remediation schedule must be addressed in the tree disposition plan.
- (h) Removal of Diseased Trees.
- (1) Any pine tree within the city limits of the city which is infested with the insect known as the Southern Pine Beetle as determined by a representative of the city, a representative of the Texas Forest Service or an entomologist, is declared to be a public nuisance.
  - (2) It shall be unlawful for the owner of any lot or parcel of land within the city to permit or maintain on any such lot or parcel of land any pine tree infested with Southern Pine Beetles; and it shall be the duty of the owner of any such lot or parcel of land upon which is situated a pine tree infested with Southern Pine Beetles to abate such infestation and public nuisance either by chemical treatment of the bark of such tree

or by the felling of such tree and subsequent chemical treatment of its bark, whichever shall be required.

- (3) If from an examination of a pine tree or a bark sample the city building official or any other person with entomological competence designated by the city council, determines that the tree is infested with Southern Pine Beetles, the city building official shall serve or cause to be served upon the owner of record of the lot or parcel of land upon which such tree is situated, a written notice requiring such owner to comply with the provisions of this subsection. Such notice may be served in person or by certified mail, return receipt requested. Such owner must comply with the provisions of this subsection, including but not limited to subsection (2) hereof, within ten (10) days after receipt of such notice.

### **Sec. 3.1403 Urban Forester**

- (a) Appointment. The city council of the city has the authority to hire a professional as the urban forester for the city. The professional designated as the urban forester must hold at least a bachelor's degree from an accredited college or university in urban forestry or horticulture or must have equivalent arboricultural skills and experience.
- (b) Duties. The permit secretary or the building official of the city shall deliver to the urban forester all tree disposition plans, tree surveys, applications for tree removal permits and other documents reasonably requested in connection with any or all of the requirements of this article. The urban forester shall work with each owner and/or builder on the subject site, and appropriate officials of the city in order to administer and enforce the provisions of this article, as the same may be amended from time to time. The urban forester shall establish categories of simple and routine or low-risk development activity, the applications for which may be handled summarily without submission to the urban forester.

### **Sec. 3.1404 Violations**

It shall be unlawful for any person to fail or refuse to comply with the requirements of this article or any permit issued pursuant hereto.

The city's building official or urban forester may withhold or withdraw (red flag) any permit issued or to be issued pursuant to this article if any condition or requirement of this article or such permit is not fulfilled.

### **Sec. 3.1405 Penal**

Any person who violates any provision of this article shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in accordance with the general penalty provision found in Section 1.109 of this code. Each day such violation exists shall constitute a separate offense. The owner(s) of a subject site where any violation of

this article shall occur, and any agent, contractor, builder, architect or other person who shall assist in the commission of such offense, shall be guilty of a separate offense and upon conviction thereof shall be fined in accordance with the general penalty provision found in Section 1.109 of this code.

**Sec. 3.1406 Affirmative Defenses**

It shall be an affirmative defense to prosecution under this article that immediate action to remove, damage or kill the tree in question was necessary to prevent harm to persons or property.

**SUGGESTED TREE LIST FOR HUNTERS CREEK VILLAGE**

**ALPHA ORDER BY FAMILY + GENUS + SPECIES**

19 OCTOBER 1999

<b>COMMON NAME</b>	<b>SPECIES</b>	<b>FAMILY NAME</b>
CHALK MAPLE	<i>Acer leucoderme</i>	ACERACEAE
DRUMMOND RED MAPLE	<i>Acer rubrum</i> var. <i>drummondii</i>	ACERACEAE
AMERICAN HORNBEAM	<i>Carpinus caroliniana</i>	BETULACEAE
AMERICAN BEECH	<i>Fagus grandifolia</i>	FAGACEAE
WHITE OAK	<i>Quercus alba</i>	FAGACEAE
SWAMP WHITE OAK	<i>Quercus bicolor</i>	FAGACEAE
SOUTHERN RED OAK	<i>Quercus falcate</i>	FAGACEAE
SAND LIVE OAK	<i>Quercus geminata</i>	FAGACEAE

LAUREL OAK	<i>Quercus hemisphaerica</i>	FAGACEAE
SWAMP LAUREL OAK	<i>Quercus laurifolia</i>	FAGACEAE
OVERCUP OAK	<i>Quercus lyrata</i>	FAGACEAE
BUR OAK	<i>Quercus macrocarpa</i>	FAGACEAE
SAND POST OAK	<i>Quercus margaretta</i>	FAGACEAE
SWAMP CHESTNUT OAK	<i>Quercus michauxii</i>	FAGACEAE
CHINKAPIN OAK	<i>Quercus muchlenbergii</i>	FAGACEAE
WATER OAK	<i>Quercus nigra</i>	FAGACEAE
NUTALL OAK	<i>Quercus nuttallii</i>	FAGACEAE
WILLOW OAK	<i>Quercus phellos</i>	FAGACEAE
SHUMARD OAK	<i>Quercus shumardii</i>	FAGACEAE
POST OAK	<i>Quercus stellata</i>	FAGACEAE
BLACK OAK	<i>Quercus velutina</i>	FAGACEAE

LIVE OAK	<i>Quercus virginiana</i>	FAGACEAE
SWEETGUM	<i>Liquidambar styraciflua</i>	HAMAMELIDACEAE
PECAN	<i>Carya illino</i>	JUGLANDACEAE
BLACK HICKORY	<i>Carya texana</i>	JUGLANDACEAE
SASSAFRAS	<i>Sassafras albidum</i>	LAURACEAE
SOUTHERN MAGNOLIA	<i>Magnolia grandiflora</i>	MAGNOLIACEAE
SWEET BAY MAGNOLIA	<i>Magnolia ludiviciiana</i>	MAGNOLIACEAE
BLACK GUM	<i>Nyssa sylvatica</i>	NYSSACEAE
SHORTLEAF PINE	<i>Pinus echinata</i>	PINACEAE
LONGLEAF PINE	<i>Pinus palustris</i>	PINACEAE
LOBLOLLY PINE	<i>Pinus taeda</i>	PINACEAE
WEeping WILLOW	<i>Salix babylonica</i>	SALICACEAE
BALD-CYPRESS	<i>Taxodium distichum</i>	TAXODIACEAE
MONTEZUMA CYPRESS	<i>Taxodium mucronatum</i>	TAXODIACEAE

WINGED ELM	Ulmus alata	ULMACEAE
SCAN ELM	Ulmus Americana	ULMACEAE
CEDAR ELM	Ulmus crassifolia	ULMACEAE

ALL OTHER TREES AS DIRECTED OR APPROVED BY THE CITY URBAN FORESTER

(Ordinance 562 adopted 11/16/99)