



AGENDA

TOWN OF FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION REGULAR MEETING

APRIL 5, 2016

**FLOWER MOUND TOWN HALL
2121 CROSS TIMBERS ROAD
FLOWER MOUND, TEXAS**

6:30 P.M.

AN AGENDA INFORMATION PACKET IS AVAILABLE ONLINE AT
[HTTPS://TX-FLOWER MOUND.CIVICPLUS.COM/AGENDACENTER](https://tx-flowermound.civicplus.com/agendacenter)

A. CALL REGULAR MEETING TO ORDER – 6:30 PM

B. CITIZENS/VISITORS COMMENTS

1. Please fill out an "Appearance Before Environmental Conservation Commission" form in order to address the Environmental Conservation Commission, and turn the form in prior to Citizens and Visitors Comments, or by 6:40 p.m. to the Town staff. Speakers are normally limited to three minutes. Time limits can be adjusted by the Chair as to accommodate more or fewer speakers.

C. INVOCATION AND PLEDGE OF ALLEGIANCE

D. STAFF REPORT

1. Update and status report related to environmental issues and events, regulatory activities, and projects.

E. CONSENT AGENDA - CONSENT ITEMS

This agenda consists of non-controversial or "housekeeping" items and may be approved with a single motion. A member of the Environmental Conservation Commission may request an item(s) be withdrawn from the consent agenda and moved to regular agenda for discussion by making such request prior to a motion and vote on the Consent Agenda.

1. Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on March 1, 2016.

F. CALL WORK SESSION TO ORDER

G. WORK SESSION ITEMS

2. Continue an evaluation and discussion of the Town's tree preservation regulations.
3. Discuss the sustainability initiatives for 2016.

Environmental Conservation Commission Meeting Agenda

April 5, 2016

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H. COORDINATION OF FUTURE AGENDAS/MEETINGS

I. ADJOURNMENT – WORK SESSION



Matthew Woods
Director of Environmental Services

I do hereby certify that the Notice of Meeting was posted on the bulletin board in Town Hall of the Town of Flower Mound, Texas, a place convenient and readily accessible to the general public at all times and said Notice was posted on the following date and time: April 1, 2016, by 5:00 p.m., at least 72 hours prior to the schedule time of said meeting.



Emily Chapman
Administrative Assistant



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 1

CONSENT ITEM

DATE: April 5, 2016

FROM: Emily Chapman, Administrative Assistant

ITEM: Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on March 1, 2016.

BACKGROUND INFORMATION: This agenda item is to consider approval of the minutes from the March 1, 2016, regular meeting of the Environmental Conservation Commission.

CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. A copy of the draft minutes from the March 1, 2016, regular meeting of the Environmental Conservation Commission.

RECOMMENDATION: Move to approve the minutes from the March 1, 2016, regular meeting of the Environmental Conservation Commission.

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF MARCH 1, 2016

THE FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING HELD ON THE 1ST DAY OF MARCH 2016, IN THE FLOWER MOUND TOWN HALL, LOCATED AT 2121 CROSS TIMBERS ROAD IN THE TOWN OF FLOWER MOUND, COUNTY OF DENTON, TEXAS, AT 6:30 P.M.

The Environmental Conservation Commission met in regular session, with the following members present constituting a quorum:

Craig Bromley	Chair
Russ McNamer	Vice Chair
Ellen Stallcup	Commission Member, Place 2
Marilyn Lawson	Commission Member, Place 4
Elaine Takacs	Commission Member, Place 6
Alton Bowman	Commission Member, Place 5
James Gerber	Commission Member, Place 7
Karen Kroesen	Commission Member, Place 9
Jim Cumbest	Commission Member, Place 10

Constituting a quorum with the following members absent:

Vacant	Commission Member, Place 8
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Places 8, 9, and 10 of the Commission do not vote on items unless they sit in place of one of the regular members, Places 1-7.)

And the following members of Town staff present:

Matthew Woods	Director of Environmental Services
Emily Chapman	Administrative Assistant
James Hoefert	Environmental Review Analyst
Quintin Carey	Environmental Review Analyst

A. CALL TO ORDER - REGULAR SESSION: 6:30 P.M.

B. CITIZENS/VISITORS COMMENTS

C. INVOCATION AND PLEDGE OF ALLEGIANCE

D. STAFF REPORT

1. Update and status report related to environmental issues and events, regulatory activities, and projects.

E. CONSENT AGENDA

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF MARCH 1, 2016

- 1. Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on February 2, 2016.**

Commission Deliberation

Vice Chair McNamer made a motion to approve the February 2, 2016, minutes as presented. Commission Member Gerber seconded the motion.

VOTE ON THE MOTION

AYES: Gerber, Bowman, Lawson, McNamer, Stallcup, Takacs
NAYS: None
ABSTAIN: None

The motion passed with a vote of 6-0-0

F. REGULAR ITEMS

- 2. Consider an application for a tree removal permit for one (1) specimen tree on property proposed for development as Hawks Hill QT. The property is generally located west of Long Prairie Road and south of Waketon Road.**

Staff Presenter

James Hoefert, Environmental Review Analyst, gave a presentation with the following items included:

- Site Location
- Project Information Overview
- Lot Layout
- Tree Survey
- Photo of Tree Proposed for Removal

Applicant Presentation

Ron Stewart- Eviron's Group (111 Hillside Drive, Lewisville, TX 75057), gave a presentation with the following items included:

- Letter of Intent
- Landscape Plan
- Drainage Area Map
- Utility Plan
- Tree Survey

Bobby Dollak - G&A Consultants, LLC (111 Hillside Drive, Lewisville, TX 75057), answered questions and provided information on the item.

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF MARCH 1, 2016

The following individuals either spoke in support or opposition, or had questions / comments related to the item: *All addresses are located in Flower Mound unless otherwise indicated.*

Support: Comments/Questions	Opposition: Comments/Questions	Question(s)/Comments Only
None	Josh Wynne, 4847 Rippy Road	None
	Eddie Wynne, 4847 Rippy Road	
	Shyron Shenko, 5001 Rippy Road	
	Jim Engel, 5710 Bayberry Street	
	Cindy Spillberg, 5204 Bayberry Street	

Commission Deliberation

Vice Chair McNamer made a motion to approve the application for a tree removal permit for one (1) specimen tree on property proposed for development as Hawks Hill QT. The property is generally located west of Long Prairie Road and south of Waketon Road. Commission Member Lawson seconded the motion.

VOTE ON THE MOTION

AYES: Gerber, Lawson, McNamer, Stallcup,
NAYS: Bowman, Takacs
ABSTAIN: None

The motion passed with a vote of 4-2-0

3. Consider an application for a tree removal permit for two (2) specimen trees on property proposed for development as Parkside at Woodlake, Ph. 2. The property is generally located south of Rembert Drive and west of Long Prairie Road.

Staff Presenter

James Hoefert, Environmental Review Analyst, gave a presentation with the following items included:

- Site Location
- Project Information Overview
- Lot Layout
- Tree Survey
- Photos of Trees Proposed for Removal

Applicant Presentation

Reginald Rembert- Rembert Builders, Inc. (3625 Bonanza Drive, Flower Mound, TX 75022), answered questions and provided information on the item.

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF MARCH 1, 2016

The following individuals either spoke in support or opposition, or had questions / comments related to the item: *All addresses are located in Flower Mound unless otherwise indicated.*

Support: Comments/Questions	Opposition: Comments/Questions	Question(s)/Comments Only
None	Sharon Gentry, 2750 Bob White Lane	None

Commission Deliberation

Vice Chair McNamer made a motion to approve the application for a tree removal permit for two (2) specimen trees on property proposed for development as Parkside at Woodlake, Ph. 2. The property is generally located south of Rembert Drive and west of Long Prairie Road. Commission Member Bowman seconded the motion.

VOTE ON THE MOTION

AYES: Bowman, McNamer,
NAYS: Gerber, Lawson, Stallcup, Takacs
ABSTAIN: None

The motion was denied with a vote of 2-4-0

G. ADJOURNMENT – REGULAR SESSION – 8:12 P.M.

H. CALL WORK SESSION TO ORDER 8:12 P.M.

I. WORK SESSION ITEMS

4. Discuss the sustainability initiatives and priorities for 2016.

J. COORDINATION OF FUTURE AGENDAS/MEETINGS

K. ADJOURNMENT –WORK SESSION 9:07 P.M.

TOWN OF FLOWER MOUND, TEXAS



MATTHEW WOODS
DIRECTOR OF ENVIRONMENTAL SERVICES

ATTEST:



EMILY CHAPMAN
ADMINISTRATIVE ASSISTANT



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 2

WORK SESSION ITEM

DATE: April 5, 2016

FROM: James Hoefert, Environmental Review Analyst

ITEM: Continue an evaluation and discussion of the Town's tree preservation regulations.

BACKGROUND INFORMATION: This item provides the Environmental Conservation Commission (ECC) the opportunity to continue the evaluation of the Town's tree preservation regulations.

ECC received feedback at the joint work session with Town Council on February 18, 2016, to continue evaluating the size criteria and classification for post oak trees for new development. At the work session, staff provided information that showed a list of recently approved residential and non-residential development projects around the Town to evaluate how reducing the specimen threshold size of post oaks from a diameter breast height (DBH) of 25" to 22" could increase the number of post oak trees classified as specimen and subsequent mitigation amounts. Town Council recommended that staff and the ECC evaluate the potential impacts of reducing the specimen threshold size of post oaks from 25" to 22", 19" or 18". This evaluation will be provided as part of the work session discussion.

To help offset the increased mitigation for specimen post oaks, additional tree credits or incentives would be available for post oak trees that are preserved within the Buildable Area, based on the DBH of the protected post oak(s), starting at a protected DBH size of 6". Staff also included the post oak preservation incentive as part of the specimen size reduction evaluation.

Staff also discussed other potential ordinance changes at the work session, which included amending the Buildable Area definition to provide an additional tree preservation incentive, updating the Tree Planting Lists, and evaluating other general landscaping/planting requirements set forth within the ordinance.

Town Council also requested that staff receive feedback from members of the development community as part of the ordinance review. Following the work session, staff, along with the ECC Chair and Vice-chair, held a meeting with multiple developers, engineers, and landscape architects on March 18, 2016, to go over the proposed Tree Ordinance amendments. Staff will provide ECC with the feedback received from the developers, engineers, and landscape architects.

The ECC may also discuss any additional recommended updates to Chapter 94 "Trees".

ATTACHMENTS:

1. Chapter 94 "Trees"

RECOMMENDATION: This item is for discussion purposes only; therefore, no formal action is required.

Chapter 94 - TREES

ARTICLE I. - GENERALLY

Sec. 94-1. - Purpose.

The terms and provisions of this chapter are intended to accomplish the following public purposes:

- (1) Establish rules and regulations for the protection and preservation of native and/or established trees within the town.
- (2) Encourage the preservation and replacement of the town's tree canopy by establishing a 35 percent canopy goal for the town as outlined in guidelines established by "American Forests," the nation's oldest nonprofit citizens' conservation organization.
- (3) Encourage the protection of healthy trees and provide for the replacement and/or replanting of trees that are necessarily removed during construction, development or redevelopment.
- (4) Provide for the preservation and protection of larger native and/or established trees, which provide a valuable amenity to the urban environment and which, once destroyed, can only be replaced after generations, if at all.
- (5) Provide for shade, windbreaks and the cooling of air; thereby, reducing the requirements for air conditioning and heating and the utilization of scarce energy sources.
- (6) Provide for open space and more efficient drainage of land; thereby, reducing the effects of soil erosion and the need for additional drainage facilities.
- (7) Reduce the clear-cutting of land.
- (8) Preserve the country atmosphere and natural environment that define the community character of the town and make it a unique and desirable community.
- (9) Mitigate the ill effects of rapid and intense urbanization.

Sec. 94-2. - Applicability of chapter provisions.

The terms and provisions of this chapter shall apply to real property within the town's corporate limits and extraterritorial jurisdiction as follows:

- (1) All real property upon which any protected, specimen, or historic tree is located, excluding property that has already been developed for single-family and two-family residential uses.
- (2) All vacant and undeveloped real property.
- (3) All real property to be subdivided or re-subdivided, including record plats and replats.
- (4) The yard areas of all developed property, excluding property already developed for single-family and two-family residential uses.

Secs. 94-3—94-12. - Reserved.

ARTICLE II. - MEASUREMENT

Sec. 94-13. - Landscape, nursery, or replacement trees.

Unless specified otherwise, tree caliper (diameter) or circumference shall be measured at a height of 12 inches above ground level. The caliper of multi-trunk trees shall be measured by determining the diameter or circumference of the largest trunk at full caliper added to one-half of the diameter or circumference of each remaining trunk, measured at a height of 12 inches above ground level.

Sec. 94-14. - Existing, established, and/or native trees.

The caliper or circumference of existing, established, and/or native trees shall be measured in accordance with the measuring rules and procedures as developed and updated by the Texas Forest Service. A copy of these procedures shall be made available for review in the office of the tree preservation and enforcement officer. The current procedure is outlined below.

(1) *Caliper width or circumference.*

General rule: Measure the smallest trunk caliper width or circumference between the diameter at breast height ("DBH") point (4.5 feet) and the ground, but below the lowest fork. Also record the height above the ground, in inches, where the measurement was taken.

(2) *Determining DBH point.*

Tree on slope: Measure up 4.5 feet along the axis of the trunk on both the high and low sides of the trunk; DBH point is midway between these two planes.

Leaning tree: Measure 4.5 feet along both the top and under sides of the trunk; DBH point is midway between these two planes.

Low branches: When determining where on the trunk to measure circumference, ignore portions of the tree that do not form part of the tree's crown, such as dead branches or forks, and epicormic sprouts.

Obstruction at DBH: If there is a bump, burl, branch, or other obstruction at the DBH point, measure the circumference of the trunk above and below the obstruction and record the smaller value. A buttress that forms between the trunk and root system as a natural feature of the species (e.g.—bald cypress, water tupelo) should not be considered an obstruction.

(3) *Multiple trees.* In practice, it must be determined whether a tree has a single trunk, or whether it represents two or more stems growing very close to one another. Trunks that have clear separation or included bark at or near the ground line should be considered separate trees; trunks of different species should also be considered separate stems, no matter how closely aligned. When following the measurement rules above, if the point below the lowest fork places the measurement at the ground line, the stems should be considered and measured as separate.

Secs. 94-15—94-20. - Reserved.

ARTICLE III. - PRESERVATION

Sec. 94-21. - Tree designations.

Protected, specimen, and historic trees, except as specified in this section, shall possess the following respective characteristics or criteria:

- (1) *Protected trees.* Any tree listed on the small, medium, or large protected tree lists in section 94-22 that measures six inches in caliper width or greater and which is at least ten feet in height and located outside of existing public streets, alleys, rights-of-way, utility easements, drainage easements, fence easements, pedestrian access easements, or other existing public rights-of-way or easements.
- (2) *Specimen tree.* Except as specified in this section, any tree listed on the town's small, medium, or large protected tree lists can be considered a specimen tree if it reaches the designated size for that list. For the small tree list, a specimen tree shall be any tree that measures 13 inches or more in caliper width. For the medium tree list, a specimen tree shall be any tree that measures 19 inches or more in caliper width. For the large tree list, a specimen tree shall be any tree that measures 25 inches or more in caliper width. All measurements shall be taken in accordance with the measuring rules and procedures as outlined and maintained by the Texas Forest Service. These procedures are outlined in section 94-14 of this chapter. In addition to the provisions of this subsection, a specimen tree shall be any other tree that has been designated by the town council, upon recommendation by the environmental conservation commission, after public hearing and due notice to the owner of the tree, to be of high value because of its type, size, age or other relevant criteria. Specimen trees shall not be regulated as protected trees. Specific requirements are set forth in this chapter regarding specimen trees.
- (3) *Historic tree.* Upon recommendation by the environmental conservation commission, a historic tree shall be any tree that has been designated by the town council, after public hearing and due notice to the owner of the tree, as a tree of notable historical interest and value to the town because of its location or historical association with the community. A listing and map of all designated historic trees shall be maintained and updated by the tree preservation and enforcement officer or authorized designee and made available to the public upon request. Historic trees are not dependant on or determined by diameter or caliper width as are protected and specimen trees. Specific requirements are set forth in this chapter regarding historic trees.

Subject to the review and approval of the tree preservation and enforcement officer or authorized designee, a protected or specimen tree shall not include any living tree that a registered arborist or landscape architect certifies in writing is injured, dying, diseased or infested with harmful insects; that is in danger of falling, interferes with utility service or creates unsafe vision clearance; in any manner creates a hazardous or dangerous condition so as to endanger the public health, welfare or safety. Further, a protected tree shall not include any living tree that is identified on approved subdivision construction plans as necessary to be removed to comply with EPA storm water permitting requirements or FHA lot grading plans.

Subject to review and approval of the tree preservation and enforcement officer or authorized designee, a protected, specimen, or historic tree shall not include any tree that a registered arborist or landscape architect certifies in writing is dead.

Sec. 94-22. - Protected tree lists.

- (a) *Generally.* The tree species lists contained in this section have been developed and will be periodically updated by the town's environmental conservation commission and shall be maintained and distributed to the public by the tree preservation and enforcement officer or authorized designee as guides for the identification and selection of tree species that meet the various standards and requirements of this chapter. Trees included on this tree species list were selected on the basis of one or more of the following criteria or factors: hardiness, resistance to disease, suitability relative to local climate and soil conditions, adaptability for transplantation, longevity, adaptability to various landscape conditions, resistance to drought, aesthetic qualities, shade provision, windbreak provision, and screening qualities.

- (b) *Lists of trees that are protected.* Unless otherwise specified in this chapter, only those tree species found on the following lists shall be subject to the preservation, protection and replanting requirements of this section.

Small Tree List

Common Name	Scientific Name
Carolina buckthorn	(Rhamnus caroliniana)
Yaupon holly	(Ilex vomitoria)
Possum haw	(Ilex deciduas)
Redbud	(Cercis species)
Texas buckeye	(Aesculus glabra variety arguta)
Chickasaw plum	(Prunus agustifolia)
Mexican plum	(Prunus mexicana)

Medium Tree List

Common Name	Scientific Name
Slippery elm	(Ulmus rubra)
Cedar elm	(Ulmus crassifolia)
Winged elm	(Ulmus alata)
Blackjack oak	(Quercus marilandica)
Persimmon species	(Diospyros species)
Chittamwood	(Bumelia languinosa)
Western soapberry	(Sapindus drummondii)

Sweetgum	(Luquidambar styraciflua)
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Large Tree List

Common Name	Scientific Name
Post oak	(Quercus stellata)
Shumard red oak	(Quercus shumardi)
Texas red oak	(Quercus texana)
Southern live oak	(Quercus virginiana)
Water oak	(Quercus nigra)
Bur oak	(Quercus macrocarpa)
Chinquapin oak	(Quercus muehlenbergii)
American elm	(Ulmus Americana)
Pecans and Hickories	(Cayra species)
Magnolia	(Magnolia grandiflora)
Bald cypress	(Taxodium distichum)
Pine species	(Pinus species)
Ash species	(Fraxinus species)
Sycamore	(Plantanus occidentalis)
Black walnut	(Juglans nigra)

Sec. 94-23. - Tree survey; development projects.

Tree surveys are required to accompany an application for a development plan, site plan, record plat, replat, oil and gas well drilling permit, oil and gas pipeline permit, tree removal permit, or tree transplanting permit. A tree survey may be required to accompany a zoning application or a master plan amendment if it is deemed necessary by the town's tree preservation and enforcement officer. Each tree survey shall contain, but not be limited to, the following information/parts:

- (1) The location of all specimen trees and historic trees on the subject site.
- (2) The location of the trunk and the extent of the canopy spread of each specimen tree and historic tree on the subject site.
- (3) A table containing the following information for each specimen tree and historic tree:
 - a. Tree number;
 - b. Common and scientific name of each tree;
 - c. Diameter (DBH) of each tree measured in accordance with section 94-14 of this chapter;
 - d. General health/condition of each tree;
 - e. Average canopy spread;
 - f. Status (specimen or historic) of each tree;
 - g. Whether each identified tree will remain or be removed; and
 - h. Location coordinates (northings and eastings, State Plane - NAD 1983) for each tree.
- (4) Each specimen tree and historic tree shall be affixed with a permanent tag bearing the corresponding number on the tree survey. This tag shall be placed on the trunk of the tree, between five and six feet in height on the south face of the tree's trunk.
- (5) Each tree survey shall contain a count of all protected trees located on the property.
- (6) Each tree survey shall contain a count of all protected trees that will be removed from the buildable area on the property. The phrase "buildable area" is defined in section 94-32 of this chapter.
- (7) Protected trees designated for preservation shall be flagged in a distinguishing manner approved by the town for such purpose. In addition, those trees designated for removal shall be flagged in a different distinguishing manner as approved by the town.
- (8) The tree survey must be signed, and stamped or sealed, by a certified arborist, certified forester, or a registered landscape architect. Each tree survey submitted shall contain one sheet of the tree survey as described above, one sheet with the tree survey data overlain with the site information, and one sheet with the site information overlain on an aerial photo for the site. The tree survey shall be on drawings measuring 24 inches x 36 inches and shall be drawn to a scale of no less than 100 feet to one inch, unless otherwise approved by the tree preservation and enforcement officer. When necessary the tree survey shall be on several sheets accompanied by an index sheet, showing the entire area of the survey. Necessary site information includes:
 - a. The location and dimensions of all existing or proposed public streets, alleys, rights-of-way, utility easements, drainage easements, fence easements, pedestrian access easements or other public rights-of-way or easements;
 - b. The location and dimensions of the designated parking area and designated stockpile area required in this subdivision and of any site proposed or anticipated to be proposed for a temporary batching plant permit; and,

- c. The location of all existing or proposed property lines, lot lines, building lines, setback and yard requirements, any proposed building footprint or floor plan, and other special relationships or significant features of the proposed development plan, record plat or site plan of the development.

Sec. 94-24. - Tree survey; residential lots.

Tree surveys are required to accompany an application for a building permit for the construction of homes on undeveloped residential lots. For lots that are one acre in size or larger, the tree survey shall be completed as described in section 94-23 of this chapter. For lots that are less than one acre in size, the tree survey shall contain, but not be limited to, the following information/parts:

- (1) A site plan showing: The location and configuration of the proposed house/structure, all required setbacks, sidewalks, driveway locations, porches, etc.
- (2) Further, the site plan shall show the location of all specimen or historic trees located on the site.
- (3) The survey shall depict the location of the trunk and the extent of the canopy spread of each specimen or historic tree.
- (4) A table (spreadsheet) shall be supplied containing the common name, caliper width (DBH), and tree number of each specimen tree and historic tree shown on the site plan/tree survey. All measurements shall be in accordance with section 94-14 of this chapter.
- (5) A count of all protected trees on the site and all protected trees proposed for removal shall be included on the tree survey.

Secs. 94-25—94-30. - Reserved.

ARTICLE IV. - PERMITS, MITIGATION, PENALTIES, AND INCENTIVES

Sec. 94-31. - Generally.

No person, directly or indirectly, shall cut down, destroy, remove or effectively destroy through damaging any protected, specimen, or historic tree on any real property within the town without first obtaining a tree removal permit as required in the terms and provisions of this article. Further, the replanting of any protected, specimen, or historic tree requires a tree replanting permit in accordance with the terms and provisions of this article.

Sec. 94-32. - Trees located in a buildable area.

The phrase "buildable area" shall mean and include all that portion of the building lot, oil and gas pad site, development site or other site inclusive of the approved footprint of the building, structure, or oil and gas pad site, and projected ten feet from the outside of each such structure or facility. "Buildable area" shall also mean and include those areas on a building lot, oil and gas pad site, development site, or other site as shown on the required site plan or development plan that is necessary for the construction of other improvements such as driveways, parking areas, pools, detention ponds/structures, tennis courts, and accessory buildings including sufficient adjacent area to allow the normal operation of construction equipment. Further, "buildable area" shall also mean and include all new commercial and residential rights-of-way and easements as shown on newly approved record plats, replats, and amended plats. Buildable area shall not include TXDOT rights-of-way or town-required easements.

The following provisions shall apply to trees located within the buildable area:

- (1) For residential building lots one acre in size or larger, no protected, specimen, or historic trees shall be removed from the lot or site prior to the issuance of a building permit relating to the lot or site, prior to the issuance of any necessary tree removal permits, and prior to determining mitigation or replacement requirements on the lot or site. The removal of protected and/or non-protected trees located within the approved buildable area on a lot or site does not require a tree removal permit; however, such trees shall not be removed from a lot or site prior to all of the other conditions listed above being met.
- (2) For residential building lots less than one acre in size, as well as for existing public rights-of-way and easements, protected and non-protected trees located within the buildable area of a building lot or site may be removed without a tree removal permit and prior to the issuance of a building permit, with prior approval of the tree preservation and enforcement officer and after determining mitigation or replacement requirements for the lot or site. However, a tree removal permit is required prior to the removal of any specimen or historic trees on the lot or site.
- (3) For all other development projects, no protected, specimen, or historic trees shall be removed from the lot or site prior to the approval of a record plat, site plan, development plan, zoning planned development, or oil and gas well permit, where buildable area is established, and prior to a preconstruction meeting with appropriate town staff authorizing grading and construction activities to begin on the lot or site, and prior to the issuance of any necessary tree removal permits, and prior to determining mitigation or replacement requirements on the lot or site. The removal of protected and non-protected trees located within the approved buildable area on a lot or site does not require a tree removal permit, however; such trees shall not be removed from a lot or site prior to all of the other conditions listed above being met.

Sec. 94-33. - Tree transplanting permit.

An application for a tree transplanting permit for protected trees located on undeveloped property or developed nonresidential property within the town may be submitted at any time and need not be submitted in conjunction with a development plan or record plat or a building permit. Tree transplanting permits shall be obtained by making application to the town's tree preservation and enforcement officer or authorized designee on forms prescribed by the town when a protected tree is proposed to be transplanted within the town. No fee shall be charged to make application for a tree transplanting permit. The application shall also be accompanied by a written document indicating the reasons for transplanting the protected tree and two copies of a legible tree survey. The tree survey should be prepared in accordance with section 94-24 of this chapter.

Upon receipt of a proper application for a tree transplanting permit, the town's tree preservation and enforcement officer or authorized designee shall review the application and may conduct field inspections of the site or development and/or refer the permit application to other departments for review and recommendations as deemed necessary and appropriate by the town manager or authorized designee. The application for a tree transplanting permit shall be approved unless the town's tree preservation and enforcement officer or authorized designee determines that the proposed transplanting will unnecessarily damage or jeopardize the health of the trees proposed to be transplanted. A denial of an application for a tree transplanting permit by the tree preservation and enforcement officer or authorized designee may be appealed to the environmental conservation commission. The decision of the environmental conservation commission regarding the appeal from the denial of such tree transplanting permit application shall be final.

Sec. 94-34. - Tree removal permit.

Tree removal permits are required for the removal of protected trees located outside the buildable area of a lot or site, and for any specimen trees and historic trees that are intended for removal from a lot or site in conjunction with the development, redevelopment, subdivision and/or re-subdivision of real property within the town.

An application for a tree removal permit, when required, shall be submitted at the earliest point in the application process where entitlements and/or buildable area are established. The following outlines the process associated with tree removal permit applications.

- (1) Tree removal permit applications, when required, shall be submitted in conjunction with a zoning planned development (ZPD) or a development plan and shall be considered by the environmental conservation commission prior to the project proceeding to the planning and zoning commission. The application shall be placed on the same town council agenda for action as the ZPD or development plan; or
- (2) Tree removal permit applications, when required, shall be submitted in conjunction with site plans or record plats for the development of subdivisions of four lots or less where the construction of necessary infrastructure necessitates a tree removal permit, and shall be considered by the environmental conservation commission and acted upon by the town council prior to the site plan or record plat proceeding to the planning and zoning commission for approval; or
- (3) Tree removal permit applications, when required, shall be submitted in conjunction with the development of individual residential or nonresidential platted lots and shall be considered by the environmental conservation commission and acted upon by the town council prior to the issuance of a building permit.

No protected trees located outside the buildable area, specimen trees, or historic trees approved for removal in accordance with this chapter shall be removed from any building lot or site until:

- (1) Proper mitigation or replacement requirements have been determined and approved for the lot or site; and
 - (2) A preconstruction meeting has been held with proper town staff authorizing grading and construction activities to begin on the lot or site; and/or
 - (3) A building permit, where needed, has been issued for the lot or site.
- (a) *Tree removal permits for fewer than ten protected trees or four specimen trees.* A tree removal permit shall be obtained by making application to the town's tree preservation and enforcement officer or authorized designee on forms prescribed by the town. The application shall include the following:
- (1) A written document indicating the reasons for removal of the protected, specimen, or historic trees on the lot or site.
 - (2) Photographs of each tree requested for removal.
 - (3) Photographs of required signage on the site as described below.
 - (4) Two copies of a tree survey for the lot or site prepared as described in section 94-23 of this chapter.
- (b) *Tree removal permits for greater than ten protected trees or four specimen trees.* Applicants requesting to remove greater than ten protected trees or greater than four specimen trees, shall have the option of requesting a comprehensive tree removal permit. The fee for this permit will be \$1,000.00. All other requirements and incentives remain unchanged.
- (c) A sign shall be placed on each separate lot or tract for which a tree removal permit is requested to inform the general public that an application for a tree removal permit has been filed relative to a protected, specimen, or historic tree.
- (1) The size of the signs shall be three feet by four feet.

- (2) The signs shall be made out of aluminum or corrugated plastic material.
- (3) The signs shall be mounted on stakes/poles.
- (4) The signs shall be visible from the street.
- (5) There shall be one sign for each street frontage.
- (6) The signs shall have a white background, with letters and borders being green in color. The signs shall state the following:

TOWN		OF		FLOWER		MOUND,		TX
A		TREE		REMOVAL				REQUEST
IS	BEING	MADE		ON		THIS		PROPERTY
FOR				INFORMATION				CALL

Sec. 94-35. - Tree removal permit on property zoned agricultural district (A) uses.

No fee shall be charged to make application for a tree removal permit for the removal of protected trees located on real property having an agricultural zoning district classification. However, if within any 12-month period, tree removal permits for the removal of 20 or more protected trees are issued for the same agricultural property or tract, or any of its portions, the agricultural zoning district classification of such property cannot be changed, nor can an application for approval of a development plan, planned development or zoning amendment relative to such property be made, for a period of 60 months following the most recent 12-month period during which 20 or more protected trees were removed from such agricultural zoned property.

Sec. 94-36. - Special provisions for agricultural district (A) uses.

Notwithstanding anything contained in this chapter to the contrary, for tracts zoned agricultural district (A) uses, the tree survey requirements contained in this article shall be limited in their application to proposed rights-of-way, easements and an area equal to 20 feet on any side of such rights-of-way and easements, provided that the applicant executes a development agreement with the town that all trees on the tract and outside of such areas, for the purposes of such agreement, are protected trees (regardless of their species or caliper width) and that the unauthorized removal of such trees shall result in the revocation of any previously approved development plan and record plat for a period of 60 months from the date of the most recent unauthorized removal of one or more trees from the subject property.

Sec. 94-37. - Review of application.

- (a) An application for a tree removal permit for a protected tree located outside of the buildable area shall be accompanied by an administrative fee per tree proposed for removal in the amount listed in appendix A of this Code, not to exceed a total per permit application in an amount listed in appendix A of this Code. An application for a tree removal permit for a specimen tree, or historic tree shall be accompanied by an administrative fee per tree proposed for removal in the amount listed in appendix A of this Code. Upon receipt of a properly completed application accompanied by the appropriate fee, the tree preservation and enforcement officer or his authorized designee shall review the application and may conduct field inspections of the development and/or refer the permit application to other departments for review and recommendations as deemed necessary and appropriate by the tree preservation and enforcement officer or his authorized designee.
- (b) The application for a tree removal permit, if required, shall be considered an integral part of the application for development plan or site plan approval, or the application for an oil and gas well

permit. No development plan or site plan for any development, or oil and gas well permit, subject to the terms and provisions of this subdivision, shall be approved without approval of such tree removal permit. It is further provided that if a property owner or developer does not submit a tree removal permit application prior to town approval of a development plan covering a particular site, then if a tree removal permit application for the site is submitted later, approval of the development plan may be revoked. In this event, a revised development plan must be submitted for review by the town.

- (c) The tree preservation and enforcement officer may approve, approve with conditions, or deny a request for a tree removal permit for protected trees located outside the buildable area of a lot or site, provided that the requested tree removal permit is for the removal of trees in a development district other than the Cross Timbers Conservation Development District. An appeal of the decision of the tree preservation and enforcement officer may be made to the Environmental Conservation Commission.
- (d) An application for a tree removal permit for specimen, historic, or protected trees located outside the buildable area of a lot or site within the Cross Timbers Conservation Development District or an application for a tree removal permit for specimen, or historic trees within all other districts shall be submitted to the environmental conservation commission for review and recommendation to the town council that the permit application be approved, approved with conditions or denied. The environmental conservation commission shall not recommend an application for a tree removal permit be approved or approved with conditions, unless the commission finds that the subject development, redevelopment, subdivision or re-subdivision cannot reasonably be developed, based on economic and/or practical considerations, without removal of the trees included in the permit application.
- (e) The environmental conservation commission's recommendation concerning an application for tree removal permit shall be reviewed by the town council. The town council may then approve the application, approve it with conditions, or deny the application; however, the town council may overturn the denial of an application for tree removal permit by the environmental conservation commission only upon a finding that the subject development, redevelopment, subdivision or re-subdivision cannot reasonably be developed, based on economic and/or practical considerations, without removal of the trees included in the permit application.
- (f) Approval for removal of a historic tree shall require a three-fourths majority vote of the environmental conservation commission and the town council, respectively.

Sec. 94-38. - Per-caliper-inch cash value; replacement trees.

A per-caliper-inch cash value for replacement trees shall be set, and updated as necessary by the town council after review and recommendation by the environmental conservation commission. The per-caliper-inch cash value shall be used to calculate mitigation costs for authorized and unauthorized removals of protected, specimen, and historic trees. the tree preservation and enforcement officer or his authorized designee shall maintain a record of the current per-caliper-inch cash value of replacement trees.

Sec. 94-39. - Mitigation requirements for authorized tree removal.

- (a) *Replacement trees required for the removal of protected trees located within the buildable area on a lot or site.* It shall be the responsibility of any person removing a protected tree located within the buildable area of a lot or site to replace each protected tree removed with one, two and one-half to three-inch caliper tree measured in accordance with section 94-13 of this chapter. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree

preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance with section 94-38 of this article.

- (b) *Replacement trees required for the removal of protected trees located outside the buildable area on a lot or site.* It shall be the responsibility of any person obtaining a tree removal permit for a protected tree located outside of the buildable area on a lot or site to provide replacement with trees having a total caliper width equivalent to one and one-half times that of the tree(s) to be removed. Total caliper width for replacement trees shall be calculated using measurements taken in accordance with section 94-14 of this chapter. For example, if a ten-inch protected tree is removed, then that tree must be replaced by trees having a total caliper width of 15 inches. This total caliper width could be satisfied by an approved combination of replacement trees to meet the required caliper width replacement. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and each replacement tree shall have a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations approved by the tree preservation and enforcement officer or his authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance to section 94-38 of this chapter.
- (c) *Replacement trees required for the authorized removal of specimen trees.* It shall be the responsibility of any person obtaining a tree removal permit for a specimen tree to provide replacement trees having a total caliper width equivalent to two times that of the tree(s) to be removed. Total caliper width for replacement trees shall be calculated using measurements taken in accordance with section 94-14 of this chapter. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and have a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in a location approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance to section 94-38 of this chapter.
- (d) *Replacement trees required for the authorized removal of historic trees.* It shall be the responsibility of any person obtaining a tree removal permit for a historic tree to provide replacement trees having a total caliper width equivalent to two and one-half times that of the tree(s) to be removed. Total caliper width for replacement trees shall be calculated using measurements taken in accordance with section 94-14 of this chapter. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and have a minimum caliper width of two and one-half inches to three inches, measured in accordance

with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations as approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance to section 94-38 of this chapter.

Any fees or payments made to the town to satisfy the mitigation or replacement requirements of this article shall be paid at the time of a preconstruction meeting authorizing grading or construction activities to occur on the lot or site. In cases where a preconstruction meeting is not required, all fees or payments shall be made prior to the issuance of a building permit for the lot or site.

Sec. 94-40. - Incentives for preservation of protected, specimen, and historic trees.

If any protected, specimen, or historic tree is preserved within an area that would otherwise be considered a buildable area, credit for preservation shall be given that will be counted toward the mitigation requirements for the removal of protected trees within the buildable area on a site or project. Such mitigation credits shall be given only for those trees whose critical root zones are left predominately in their natural state. No cutting, filling, or other construction related activities are allowed within the critical root zones of trees eligible for mitigation credit unless otherwise approved in writing and in advance by the town. Following is a list of credits available for the preservation of protected and specimen trees on a site or project.

- (1) One mitigation tree credit will be given for each protected tree preserved within a buildable area on a site or project.
- (2) The following schedule outlines tree credits that will be given for each specimen tree preserved within a buildable area on a site or project.

Buildable Area Mitigation Specimen Tree Credit Schedule

Caliper Size (Diameter)	Tree Credits
13—18 inches	3
19—24 inches	4
25—30 inches	5
Greater than 30 inches	6

For purposes of this section, one mitigation tree credit shall be the equivalent of one container-grown tree of a variety selected from the replacement tree list having a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. In the event the tree preservation and enforcement officer or authorized designee approves the payment of money in an amount equal to the per-caliper-inch cash value of the removed tree(s) instead of providing the replacement trees required by this article one mitigation tree credit shall be the equivalent of the per-caliper-inch cash value for a replacement tree having a minimum caliper width of two and one-half inches to three inches.

Sec. 94-41. - Penalties for unauthorized removal of protected, specimen, and historic trees.

If any protected, specimen, or historic trees are removed from any real property without a tree removal permit, or if a protected, specimen, or historic tree is injured because of failure to follow required tree protection measures such that the tree dies or may reasonably be expected to die, the town shall have the authority to impose one or more of the following administrative and civil penalties on the developer and/or owner of the property:

- (1) A monetary penalty of \$250.00 per-caliper-inch of width of the protected tree(s) removed or damaged, payable to the town. A monetary penalty of \$500.00 per-caliper-inch of width of the specimen tree(s) removed or damaged, payable to the town. A monetary penalty of \$750.00 per-caliper-inch of width of the historic tree(s) removed or damaged, payable to the town. Funds paid to the town as tree removal penalties shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town, and/or to support the administration and enforcement of the town's tree preservation regulations.
- (2) For each protected tree that is removed or damaged, replacement with new trees having a total tree caliper width equivalent to five times that of the removed or damaged tree(s). For each specimen tree that is removed or damaged, replacement with new trees having a total tree caliper width equivalent to ten times that of the removed or damaged tree(s). For each historic tree that is removed or damaged, replacement with new trees having a total tree caliper width equivalent to 15 times that of the removed or damaged tree(s). Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and have a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations as approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed or damaged tree(s) may be paid to the town instead of providing replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance with section 94-38 of this article.

Secs. 94-42—94-50. - Reserved.

ARTICLE V. - TREE PROTECTION

Sec. 94-51. - Enumeration.

The following tree protection measures shall be required:

- (1) Prior to any and all construction or land development activity, the developer or property owner shall install four-foot-high plastic (or equivalent) safety fencing around the drip line of protected trees and six-foot-high chain-link fencing around the drip line of specimen and historic trees.
- (2) Prior to any and all construction or land development activity, the developer or property owner shall establish designated parking areas for the parking and maintenance of all vehicles, trailers, construction equipment and related items, designated stockpile areas for the storage of construction supplies and materials during construction of the subdivision and designated drive areas for vehicles and equipment. The location and dimensions of such designated areas shall be clearly identified on both subdivision construction and site plans and shall be approved by the tree preservation and enforcement officer or authorized designee prior to any construction or land development activity in, on or about the subdivision. Such designated areas shall be completely fenced with chain-link fencing and gates for safety purposes and to separate protected, specimen, or historic trees from the construction area and related construction activity. With the approval of the tree preservation and enforcement officer or authorized designee, the designated parking and stockpile areas may be combined into one fenced area, provided that the preservation of protected trees is not adversely affected or jeopardized. Supplies and pipe and other items that are customarily unloaded where installed shall not be required to be stored within the designated stockpile areas. Sites approved for temporary batching plant permits shall be fenced and gated in the same manner as designated parking and stockpile areas. Temporary batching plant permits shall also be required for the operation of all batching plants, pursuant to the regulations of this chapter.
- (3) During construction, the developer or property owner shall prohibit the cleaning of equipment or materials and/or the disposal of any waste material, including, but not limited to, paint, oil, solvents, asphalt, concrete, mortar, etc., under the canopy or drip line of any protected, specimen, or historic tree or group of such trees.
- (4) No attachments or wires of any kind, other than those of a protective nature, shall be attached to any protected tree(s).
- (5) With major grade changes of six inches or greater, a retaining wall or tree well of rock, brick, landscape timbers or other approved materials shall be constructed around the tree no closer than the drip line of the tree. The top of the retaining wall or tree well shall be constructed at the new grade.
- (6) Unless otherwise approved by the town, no construction or construction-related activity shall occur under the canopy or drip line of any protected, specimen, or historic tree or group of such trees.
- (7) Any tree(s) removed during land development, construction or construction-related activities shall be chipped or hauled offsite. Burning of removed trees is prohibited unless prior approval is given by the town's fire marshal.
- (8) The tree preservation and enforcement officer or authorized designee may require additional protection measures or best management practices as needed on a case by case basis to adequately protect protected, specimen, or historic trees.

Secs. 94-52—94-60. - Reserved.

ARTICLE VI. - TREE PLANTING REQUIREMENTS AND PLANTING LISTS

Sec. 94-61. - Street yard trees.

Trees shall be planted or existing trees preserved within the street yard of a nonresidential lot or building tract according to the following provisions:

- (1) For street yards less than 10,000 square feet in area, one tree shall be provided for each 1,000 square feet, or fraction of such amount, of street yard.
- (2) For street yards between 10,000 and 110,000 square feet in area, ten trees shall be required for the first 10,000 square feet plus one additional tree shall be required for each 2,500 square feet, or fraction of such amount, of street yard area in excess of 10,000 square feet.
- (3) For street yards over 110,000 square feet in area, 50 trees shall be required for the first 110,000 square feet plus one additional tree shall be required for each 5,000 square feet, or fraction of such amount, of street yard area in excess of 110,000 square feet.
- (4) Street yard trees shall be a minimum of three-inch caliper.
- (5) Trees required to satisfy other provisions of this article and lying within the street yard may be used to satisfy the requirements of this section.

Sec. 94-62. - Street buffer trees.

Trees shall be planted or existing trees preserved within the street buffer landscaping area required by section 82-242 of this Code, street buffer landscaping, according to the following provisions:

- (1) Street buffer trees shall be provided in a ratio of one tree for every 30 feet of lineal frontage, except that a ratio of one tree for every 25 feet of lineal frontage shall be provided along scenic roadways.
- (2) Street buffer trees shall be a minimum of three-inch caliper.

Sec. 94-63. - Parking area trees.

Trees shall be planted or existing trees preserved within off-street parking areas according to the following provisions:

- (1) One tree shall be provided for each ten parking spaces provided on the site; provided, however, that churches and/or schools shall be required to provide one tree for each 20 parking spaces provided on the site.
- (2) Parking area trees shall be minimum of three-inch caliper, except as provided in subsection (4) of this section.
- (3) All parking spaces shall be located within 50 feet of a tree that is located within the same parking area, measured from the trunk of the tree; provided, however, that for churches and/or schools, all parking spaces shall be located within 100 feet of a tree that is located within the same parking area, measured from the trunk of the tree.
- (4) A maximum of 30 percent of the trees used to satisfy the requirements of this section may come from subsection 94-66(b), approved median and right-of-way planting list.

Sec. 94-64. - Median and right-of-way trees.

Trees may be planted in medians and rights-of-way only with the approval of the town, provided that such trees are selected from subsection 94-66(b), approved median and right-of-way planting list.

Sec. 94-65. - Residential lots.

The following tree planting requirements shall be satisfied prior to the issuance of a certificate of occupancy for a single-family, duplex or multi-family use:

- (1) A minimum of three trees, with a minimum caliper width of two and one-half inches to three inches, and at least six feet in height, shall be provided on each single-family and duplex lot prior to the issuance of a certificate of occupancy. At least one of the required trees shall be located within the front yard area of the lot.
- (2) A minimum of one tree, with a minimum caliper width of two and one-half inches to three inches, shall be provided for each 3,000 square feet of gross lot area on each multi-family lot prior to the issuance of a certificate of occupancy. At least 50 percent of the required trees shall be located within either the front or side yard area of the lot.
- (3) From July 1 until September 1 of each year, only container grown trees shall be used to satisfy the requirements of this section; and, the builder/developer shall certify that any such trees are container grown.
- (4) Homeowners desiring to plant trees of a caliper width in excess of two times the requirements of this article may, from July 1 until September 1 of each year, file a town-approved affidavit with the town manager to this effect. Such trees shall be planted by March 1 of the following year in which the affidavit was filed. Failure to comply with the requirements of this article shall be considered a misdemeanor, punishable as such by a fine in accordance with section 1-13 of this Code.

Sec. 94-66. - Approved tree planting lists.

Unless otherwise specified in this chapter, only those tree species included in this section shall satisfy the tree planting requirements of this article.

Generally. The tree species lists contained in this section have been developed and will be periodically updated by the town's environmental conservation commission and shall be maintained and distributed to the public by the tree preservation and enforcement officer or authorized designee as guides for the identification and selection of tree species that meet the various standards and requirements of this article. Trees included on these tree species lists were selected on the basis of one or more of the following criteria or factors: hardiness, resistance to disease, suitability relative to local climate and soil conditions, adaptability for transplantation, longevity, adaptability to various landscape conditions, resistance to drought, aesthetic qualities, shade provision, windbreak provision, and screening qualities.

- (1) *Approved tree planting list.* Only those tree species found on the following approved tree planting list shall satisfy the tree planting standards and requirements of this article:

Approved Tree Planting List

Common Name	Scientific Name
Southern live oak	(Quercus virginiana)

Escarpment live oak	(Quercus fusiformis)
Shumard oak	(Quercus shumardi)
Chinkapin oak	(Quercus muehlenbergii)
Bur oak	(Quercus macrocarpa)
Texas red oak	(Quercus texana)
Water oak	(Quercus nigra)
American elm	(Ulmus americana)
Cedar elm	(Ulmus crassifolia)
Winged elm	(Ulmus alata)
Lacebark elm	(Ulmus parvifolia)
Bald Cypress	(Taxodium distichum)
Pecans and hickories	(Carya species)
Juniper tree	(Juniperus species)
White ash	(Fraxinus Americana)
Green ash	(Fraxinus pennsylvanica)
Texas ash	(Fraxinus texensis)
Western soapberry	(Sapindus drummondii)
Sweet gum	(Liquidambar styraciflua)
Eastern red cedar	(Juniperus virginiana)
Pines	(Pinus species)

Chinese pistache	(Pistachia chinensis)
Leyland Cypress	(Cypressocyparis leylandi)
Black Walnut	(Juglans nigra)
Magnolia	(Magnolia grandiflora)

- (2) *Approved median and right-of-way tree planting list.* The following tree species shall be allowed to be planted in medians and rights-of-way when approved by the town. Additional tree species with non-aggressive root systems/deep root systems maybe authorized for planting in such areas by the director of recreational services:

Approved Median and ROW Tree Planting List

Common Name	Scientific Name
Sweet gum	(Liquidambar styraciflua)
Crepe myrtle	(Lagerstroemia indica)
Wax myrtle	(Myrica cerifera)
Plum	(Prunus species)
Holly	(Ilex species)
Possum haw	(Ilex decidua)
Native pecan	(Carya species)
Redbuds/whitebuds	(Cercis species)
Fruitless crabapples	(Malus species)
Southern live oak	(Quercus virginiana)
Escarpment live oak	(Quercus fusiformis)

Texas red oak	(Quercus texana)
Shumard oak	(Quercus shumardi)
Chinkapin oak	(Quercus muehlenbergii)
Bur oak	(Quercus macrocarpa)
Water oak	(Quercus nigra)
Winged elm	(Ulmus alata)
Cedar elm	(Ulmus crassifolia)
Lacebark elm	(Ulmus parvifolia)
Slippery elm	(Ulmus rubra)
Bald Cypress	(Taxodium distichum)
Hickories	(Carya species)
Pines	(Pinus species)
Chinese pistache	(Pistachia chinensis)
Juniper tree	(Juniperus species)
Texas buckeye	(Aesculus glabra variety arguta)
Common persimmon	(Diospyros virginiana)
Texas ash	(Fraxinus texensis)
White ash	(Fraxinus Americana)
Green ash	(Fraxinus pennsylvanica)
Western soapberry	(Sapindus drummondii)

Black walnut	(Juglans nigra)
Magnolia	(Magnolia grandiflora)
Yaupon holly	(Ilex vomitoria)
Carolina buckthorn	(Rhamnus caroliniana)
Thornless honey locust	(Gleditsia triacanthos variety inermis)

- (3) *Approved mitigation and replacement tree planting list.* The following list of tree species shall be allowed to be planted to satisfy mitigation and replacement standards for trees removed from the buildable area on sites, trees removed with approved tree removal permits, and/or trees removed without authorization.

Approved Mitigation and Replacement Tree Planting List

Common Name	Scientific Name
Native pecan	(Carya species)
Texas red oak	(Quercus texana)
Shumard oak	(Quercus shumardi)
Bur oak	(Quercus macrocarpa)
Water oak	(Quercus nigra)
Winged elm	(Ulmus alata)
Slippery elm	(Ulmus rubra)
Post oak	(Quercus stellata)
Cedar elm	(Ulmus crassifolia)

- (4) *Approved overhead utility easement tree planting list.* The following list of tree species shall be allowed to be planted in overhead utility easements where required. These species were selected due to their relatively small mature size and growth characteristics. Trees planted in these areas shall be planted at a ratio of three trees for every one tree required.

Common Name	Scientific Name
Yaupon holly	(Ilex vomitoria)
Carolina buckthorn	(Rhamnus caroliniana)
Possum haw	(Ilex decidua)
Plum	(Prunus species)
Redbuds/whitebuds	(Cercis species)
Wax myrtle	(Myrica cerifera)
Crepe myrtle	(Lagerstroemia indica)

Sec. 94-67. - Landscape credit for large trees.

- (a) Trees that are newly planted or already established and growing shall be counted for credit toward the requirements of section 82-241 of this Code, street yard landscaping, and section 82-243 of this Code, parking area landscaping, as follows, provided that they are located within the street yard and/or parking area:

12 inches or greater diameter:	2,000 square feet
6 inches or greater diameter:	1,000 square feet

No credit shall be allowed or given if, in the opinion of the tree preservation and enforcement officer or authorized designee, grade alterations surrounding the established tree are detrimental to the survival of the tree. It shall be incumbent upon the developer to demonstrate the site development follows recommended procedures to guarantee survival of established trees. If existing trees are to be retained in a parking lot area, sufficient ground (the drip line) shall be left ungraded around each tree to allow for the survival of the tree. Special consideration shall be given to the preservation of large oak, elm, pecan and hickory trees. Preservation of trees shall be in conformance with article V of this chapter.

Existing trees that have either been preserved or replanted and meet the minimum standards of the following tree credit schedule may be substituted or credited toward the requirements of this article, tree planting requirements and planting lists as follows. Fractional measurements shall be rounded to the nearest whole number. Caliper width shall be measured at a point four and one-half feet above natural grade level.

Tree Credit Schedule

Caliper Size (Diameter)	Tree Credits
Less than 6 inches	0
6—10 inches	2
11—14 inches	3
15—20 inches	4
21—26 inches	5
27—32 inches	6
Greater than 32 inches	7

However, no tree credits shall be allowed or permitted for trees that are dead, dying, diseased or infested with harmful insects; trees which have not been adequately protected using required tree protection measures, as defined in article V of this chapter, or which are otherwise likely to die; trees that are not included on the protected tree list; or trees that are located within recreational tracts, golf courses or similar sub-areas of planned developments which are not intended to be developed for either residential or nonresidential uses.

Sec. 94-68. - Limits on credit for preservation of existing or established trees.

Existing protected trees, which are not being applied toward compliance with landscaping requirements, may be applied as a credit against required buildable area mitigation. Similarly, existing specimen trees, which are not being applied toward compliance with landscaping requirements, may be applied as credit toward required buildable area mitigation. In order for trees to qualify for credit, all standards described in article V of this chapter, shall be met completely. Further, all requirements set forth in section 94-40 shall also be met for credit to apply toward required buildable area mitigation for such trees. If the trees are compromised in any way, credit will not be given. Eligibility for credit will be determined by the tree preservation and enforcement officer or authorized designee. In no event shall any tree be counted for credit against both the landscaping requirements and the buildable area mitigation requirements.

Secs. 94-69—94-80. - Reserved.

ARTICLE VII. - MISCELLANEOUS

Sec. 94-81. - Exceptions.

The following exceptions from the terms and provisions of this chapter are hereby authorized and granted:

- (1) If any protected, specimen, or historic tree shall be determined to be in a hazardous or dangerous condition so as to endanger the public health, welfare or safety, and require immediate removal without delay, authorization for removal may be given by the town manager, upon recommendation of the tree preservation and enforcement officer or authorized designee, and such protected, specimen, or historic tree may then be removed without obtaining a written permit as required in this article.
- (2) During the period of an emergency, such as a tornado, storm, flood or other act of God, the requirements of this article may be waived as may be deemed necessary by the town council.
- (3) All licensed plant or tree nurseries shall be exempt from the terms and provisions of this article only in relation to those trees planted and growing on the premises of such licensee that are so planted and growing for the sale or intended sale to the general public in the ordinary course of such licensed business.
- (4) Utility companies, franchised or otherwise, that are authorized to provide utility service within the town may remove protected, specimen, or historic trees that endanger public safety and welfare by interfering with utility service, except that where such trees are on owner-occupied properties developed for single-family or duplex use, removal of such trees shall be at the option of the property owners and require the property owners' consent and approval.
- (5) For recreational property or uses, such as golf courses and baseball, soccer, football or similar athletic facilities, and public works projects such as water or wastewater treatment plants, pump stations, storage tanks, and public streets and drainage improvements, the buildable area of the property shall include that portion of the property necessary for the construction of such recreational and public works improvements, including sufficient adjacent area, to allow the normal operation of construction equipment.
- (6) The terms and provisions of this article shall not apply to any development, subdivision or re-subdivision for which a record plat has been approved by the town council and filed in the plat records of the county prior to October 6, 2008.
- (7) All easements and rights-of-way included on a record plat approved by the town and filed in the plat records of the county.
- (8) Trees that are situated within a town-required easement shall not be considered as being located within the "buildable area" as that term is defined herein above.

Sec. 94-82. - Penalty upon failure to comply with chapter provisions.

- (a) Any person violating or failing to comply with any provision or requirement of this chapter shall be deemed guilty of a misdemeanor and, upon conviction, shall, without exception, be fined the maximum amount provided in section 1-13 of this Code. A separate offense shall be deemed

committed upon each day or portion of a day during or on which each separate violation or failure to comply occurs or continues to occur and shall be punishable as such.

- (b) Notwithstanding the foregoing, any violation by any person of any provision of this chapter that constitutes an immediate danger or threat to any protected, specimen, or historic tree shall be subject to the administrative penalties set forth in this chapter.
- (c) Notwithstanding the foregoing, any violation by any person of any provision of this chapter that constitutes an immediate danger or threat to the health, safety and welfare of the public may be enjoined in a suit brought by the town for such purpose.
- (d) In addition to any other remedies or penalties contained in this section, the town may enforce the provisions of this chapter pursuant to the applicable provisions of V.T.C.A., Local Government Code ch. 54, which chapter provides for the enforcement of municipal ordinances.
- (e) Allegation and evidence of a culpable mental state is not required for the proof of an offense defined by this chapter.

Sec. 94-83. - Informational assistance.

- (a) In furtherance of the purposes and provisions of this article, the town's tree preservation and enforcement officer or authorized designee shall develop and distribute to persons making application for either tree removal permits or tree replanting permits and make available to the general public an informational pamphlet identifying appropriate and useful facts, guidelines and how-to information relative to the preservation, protection and replanting of trees.
- (b) The tree preservation and enforcement officer or authorized designee shall also develop, maintain and make available to applicants for tree removal permits or tree replanting permits and to the general public a tree species reference book to provide more detailed information concerning tree care in general and the characteristics, soil and growth requirements and other traits of specific tree species identified on the town's protected tree list and approved tree planting and replacement list.
- (c) A current edition of the Texas Association of Nurserymen Grades and Standards, as applicable to the tree species on the town's protected tree list and approved tree planting and replacement list, shall be maintained by the tree preservation and enforcement officer or his authorized designee and made available to applicants for building permits, tree removal permits or tree replanting permits and to the general public, as only those trees meeting and planted or replanted in accordance with the applicable Texas Association of Nurserymen Grades and Standards shall satisfy the tree planting, replanting and/or replacement standards and requirements contained in this chapter.



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 3

WORK SESSION ITEM

DATE: April 5, 2016

FROM: Matthew Woods, Director of Environmental Services

ITEM: Discuss the sustainability initiatives for 2016.

BACKGROUND INFORMATION: This work session item provides the ECC the opportunity to continue to discuss the sustainability initiatives and review their proposed priorities for 2016. The ECC discussed revising the initiatives to more accurately reflect the current status and the ECC's role relative to some of the programs and initiatives, as well as combining some of the initiatives when necessary. Staff will present a revised tracking spreadsheet for the initiatives at the work session.

Following is an updated summary of the initiatives:

- 1. Conduct a review of the Tree Ordinance mitigation requirements (A comprehensive review of the Tree Ordinance was added to this initiative in 2015)** – The ECC recommended the removal of the exception clause for mitigation requirements within the Lakeside Business District, Denton Creek District, and SPAs. Town Council adopted an amendment to the Tree Ordinance on July 20, 2015, to remove the exception clause. Non-residential development projects are now required to meet the mitigation requirements for the removal of protected and specimen trees. The ECC also began conducting a comprehensive review of the Tree Ordinance in the fall of 2015. Recommendations were recently discussed with the Town Council at the February 18, 2016, joint work session. A meeting was held on March 18 with representatives from the development community to receive feedback on the proposed amendments. *Status: Completed mitigation exception review; ongoing review of the Tree Ordinance scheduled for ECC recommendation on May 3.*
- 2. Evaluate options to enhance Town-wide recycling and waste management practices; including LISD and multifamily options** – The ECC members have recognized that the Town's recycling efforts recently have been effective for single-family residential recycling rates; however, the members identified that the commercial, educational/LISD, and multi-family properties either do not have the same options or there may be some limiting factors that affect their ability to recycle. The Town is currently in the review process for companies submitting bids for the next 5-year waste and recycling agreement. ECC provided recommendations to add "green waste" diversion to the next contract in addition to a review of other recycling options. *Status: Contract/bid submittal and review process initiated in January; scheduled for Town Council consideration in April.*
- 3. Enhance Stormwater Management Program (SWMP) educational material** – Enhancing the current educational and promotional aspects of the Town's Stormwater Management Program (SWMP) would help meet the objectives proposed within the new five-year SWMP. This initiative would result in additional resources being dedicated to creating FMTV spots and enhanced webpages, educational programs and presentations, and an increase in the amount of information disseminated through utility bill inserts and other formats for stormwater-related education. *Status: Ongoing initiative through the SWMP.*
- 4. Promote and conduct environmental classes and programs** – The ECC would be actively involved with this initiative to increase the number of educational classes held at the Library and at other appropriate sites within the Town. Town resources would also be utilized to promote and conduct additional environmental programs. Some classes and programs are already being conducted by staff, so this initiative would result in additional review and participation by ECC members, as well as new educational classes dedicated to a variety of topics that could positively impact residents. Promoting and expanding the opportunities associated with the Town's volunteer

Stream Team could also be a component of this initiative. The ECC has also considered establishing an arboretum in the future as part of the Town's educational initiatives related to trees, and the acorns to oaks program is an ongoing initiative.

Status: Combined initiatives relative to environmental education; initiated and ongoing.

5. **Promote and adopt enhanced drought tolerant landscaping practices at Town facilities** – This initiative incorporates a drought tolerant landscaping standard for new Town projects and requires the inclusion of drought tolerant landscaping options during the project review process. In addition to new projects, it is proposed that landscaping revisions to existing Town facilities include drought tolerant landscaping components when landscaping is replaced. Promotion and education of drought tolerant landscaping is an additional component of this initiative. The Town has recently included such practices at the Senior Center and Operations and Maintenance Facility, so this initiative would be improving upon or enhancing a recent practice.

Status: Proposed landscaping list discussed and recommended for approval by ECC; initiated and ongoing for Town projects.

6. **Establish a program to manage small natural areas for preservation** – This initiative may help address smaller parcels of land that have unique environmental features or habitat but do not meet the criteria necessary for preservation by a third party land trust. There have been development projects with smaller areas of upland habitat, ponds, and/or open space that were too small in size to be included as part of a conservation easement. This initiative would require the Town to either establish a mechanism to accept and manage these smaller tracts during the development process or work directly with a not-for-profit organization capable of managing small tracts of land.

Status: This initiative needs to be reviewed to determine if it's still a priority due to recent interest from an additional third party/conservancy to address habitat preservation and the Cluster Development option for residential projects in the Cross Timbers Conservation Development District.

7. **Energy conservation** – This initiative includes implementing energy saving practices at Town facilities and potentially utilizing recommendations from a prior energy audit and potential future energy audits. The previously recommended implementation of LEED guided design principles for new Town facilities or enhancements for existing Town facilities may also be included within this initiative.

Status: Town Staff/Departmental Responsibility; initiated and ongoing.

8. **Conduct a Town-wide tree canopy analysis** – The tree canopy analysis will enable the ECC and staff to compare the approximate Town-wide canopy growth or loss over time and review policies and practices related to canopy protection and growth. The Town recently purchased Feature Analyst software to more effectively assess the Town's canopy. The most recent assessment utilizing the 2014 National Agriculture Imagery Program (NAIP) data resulted in approximate Town-wide canopy coverage of 27%.

Status: Completed 2014 data analysis; ongoing process on a proposed 2-year cycle.

ALTERNATIVES/OPTIONS:

N/A

RECOMMENDATION: This item is for discussion purposes; therefore, no formal action is required.