

# Chapter 5

## Urban Forestry

### Section 5.1 Purpose of This Chapter

The purpose of this chapter is to promote, conserve, and enhance the City's Urban Forest by:

- Recognizing the historical and cultural importance of the Eastern Cross Timbers and its impact on Colleyville
- Recognizing the environmental, economic, social, and aesthetic benefits of trees
- Encouraging and facilitating site planning and design which preserves trees and natural areas
- Protecting trees during construction
- Limiting the removal of trees
- Providing for the establishment of a diversity of native and adapted trees.

It is the further intent of this chapter to:

- Compliment *Destination Colleyville*, the City of Colleyville Comprehensive Master Plan
- Compliment The City of Colleyville Parks Master Plan
- Maintain and enhance Colleyville's identity as a Tree City USA.

### Section 5.2 Authorization for Adoption of This Chapter

The regulations contained in this chapter have been adopted under the authority of *Chapter 51 – General Powers of Municipalities of the Texas Local Government Code*, which authorizes a municipality to adopt ordinances, rules, or police regulations that are for the good government, peace, or the trade and commerce of the municipality. This chapter is also adopted under the authority of *the Home Rule Charter of the City of Colleyville*, which authorizes the City Council to exercise all powers granted to municipalities by the Constitution or the laws of the State of Texas.

### Section 5.3 Variances and Appeals

Except where provided in this chapter, any person seeking approval of a development as required by this Land Development Code may request a variance from a requirement contained in this chapter, or appeal a decision of an Administrative Official by submitting a request using the procedures described in *Chapter 1 – General Provisions* of this Land Development Code.

### Section 5.4 Definitions

Definitions applicable to this chapter may be found in *Chapter 2 – Definitions* of this Land Development Code.

### Section 5.5 Tree Removal and Damage

No person directly or indirectly shall cut down, destroy, remove, move, damage, or effectively destroy through damaging the roots, trunk or canopy, any tree without first obtaining the required approvals or permits as outlined in this chapter, unless otherwise exempted by the provisions of this chapter.

### Section 5.6 Applicability

- A. Prior to the following activities, review and approval of that activity's compliance with this

chapter (Urban Forestry Review) shall be completed by the Administrative Official unless subject to the exemptions in Paragraph B:

1. Removal, damage, or adverse impact of any Protected Tree.
2. Construction or expansion of structures for which a building permit is required.
3. Demolition of structures.
4. Clearing, grading, excavation, filling, or paving on any site or property that has existing Protected Trees.
5. Subdivision of land into lots by Preliminary Plat, Final Plat, Minor Plat, or Replat.
6. Required site and landscape plan submittals for commercial or institutional uses as well as any site plans for a PUD, SUP, or other Zoning Case.

B. Exemptions to Urban Forestry Review:

1. Authorized City employees or contractors and authorized Franchise Utility employees or contractors may, in the course of official business, remove, damage, or adversely impact Protected Trees or portions thereof which exist in a dedicated public street right-of-way or a public utility easement which the City or Franchise Utility has an interest in. The removal, damage, or adverse impact shall be limited to the extent reasonably necessary to install, maintain, or replace utilities or infrastructure. If a Tree Preservation Plan is approved showing to preserve trees in public utility easement or street right-of-way dedicated for new or expanding streets, then those trees shall be preserved and protected per the approved plans. Ordinance O-98-1130 shall govern management and control of all trees within City street right-of-ways, City public parks, and City owned facilities.
2. Any of the above activities may be done without Urban Forestry Review on properties with an active single-family use that are zoned RE, R-40, R-30, R-20, & R-15 and where a habitable single-family home exists and is occupied as the primary residence of the landowner. If the landowner owns contiguous individual lots or tracts, the sum of all land shall be used to determine the size restriction of this exemption.
3. All landscape nurserymen shall be exempt from the terms and provisions of this section only in relation to those trees planted and growing on the nursery premises which are planted and grown for the sale or intended sale to the general public.

## **Section 5.7 Tree Preservation and Canopy Cover**

All new development and redevelopment, to include additions, shall provide a minimum site tree canopy coverage per this Section through preservation of existing trees on the same site and establishment of new trees on the same site.

A. Calculation of Tree Canopy:

1. The canopy area for each existing Protected Tree shall be assumed as a circle having a radius in feet equal to the DBH (Diameter at Breast Height) in inches of that tree. Example: A 10 inch DBH tree would have a canopy diameter of 20 feet and a canopy area of 314 square feet.
2. *Protected Tree*. A Protected Tree is defined as a woody perennial plant which has attained a DBH of six (6) inches or more and has an overall height of at least fifteen (15) feet. Mesquite (*Prosopis glandulosa*), Hackberry/Sugarberry (*Celtis laevigata*), Chinese Tallow (*Triadica sebifera*), Hercules' Club (*Zanthoxylum clava-herculis*), Honeylocust (*Gleditsia triacanthos*), Osage Orange (*Maclura pomifera*), Callery Pear (*Pyrus calleryana*), Chinaberry (*Melia azedarach*), Eastern Cottonwood (*Populus deltoides*) less than 18 inches DBH, and Eastern Redcedar (*Juniperus virginiana*) less than 13 inches DBH are excluded from this category and are considered Non-Protected Trees. Any Non-Protected tree used as a replacement (mitigation) tree or as a required tree on a commercial landscape plan shall require replacement (if removed) with a tree or trees that meet the caliper or canopy requirements for that lot, land use, or district.

3. The canopy area for each new tree shall be credited based on the categories of large, medium, and small canopy trees: Large – 2,000 sq. ft.; Medium – 1,000 sq. ft.; Small – 100 sq. ft. The Administrative Official shall develop, update, and maintain on file a list of tree species and their associated size category and canopy credit.
- B. Non-single-family residential uses:
1. Preservation of a minimum of 50% of the Protected Tree Canopy outside the Commercial Building Envelope (building footprint plus a five (5) foot buffer) shall be required.
  2. In addition to the minimum tree preservation as required in #1, provision of a minimum of 50% site tree canopy coverage on the lot outside the Commercial Building Envelope (building footprint plus a five (5) foot buffer) shall be required. This is accomplished through the preservation of existing trees and/or the supplemental planting of new trees per the tree planting credit in Paragraph 'A' above. See appendix 'A' for examples.
- C. Development or redevelopment of single-family residential uses on individual lots or tracts:
1. Preservation of a minimum of 50% of the Protected Tree Canopy outside the Residential Building Envelope (building footprint plus a ten (10) foot buffer) shall be required.
  2. In addition to the minimum tree preservation as required in #1, provision of a minimum of 50% site tree canopy coverage on the lot outside the Residential Building Envelope (building footprint plus a ten (10) foot buffer) shall be required. This is accomplished through preservation of existing trees and/or the supplemental planting of new trees per the tree planting credit in Paragraph 'A' above. See appendix "A" for examples.
- D. Additions and expansions to existing single-family residential uses on individual lots or tracts:
1. When an addition or expansion to the footprint of a single-family residence equals 50% or more of the existing footprint, the regulations per Paragraph 'C' above shall apply.
- E. Development of new single-family residential subdivisions:
1. Preservation of a minimum of 50% of the Protected Tree Canopy on the entire subdivision shall be required. The calculation shall include Protected trees located in newly dedicated streets (public or private), public water, sanitary sewer, gas, electric, telecommunication, drainage and general utility easements. The calculation shall exclude trees located in existing public utility easements containing existing in-service water, sanitary sewer, gas, electric, or telecommunication installations as well as additional public street right-of-way dedicated adjacent to an existing public or private street. The purpose of not excluding trees in new streets and easements is to promote subdivision design and layout that prioritize preservation of trees.
  2. Within the required primary building setback areas (non-buildable areas for primary structure), a minimum of 75% of the Protected Tree Canopy shall be preserved. This is a separate calculation from that in Paragraph E.1.
  3. Once the subdivision is constructed, all improvements are accepted by the City, the Administrative Official has inspected and verified compliance with required tree preservation, and Community Development has issued a letter of acceptance allowing submittal of new single-family building permits, then the preservation requirements of Paragraph C shall apply and each lot will be reviewed separately for tree preservation and planting based on that lots remaining trees and proposed location of single-family home.

F. Artificial Lots:

1. When more than 50% of a lot or tract being developed or redeveloped is to remain untouched by tree removal, grading, excavation, filling, paving, or building, then an artificial lot may be delineated around the portion being developed and serve as the basis for calculation of tree canopy preservation and coverage. The delineation should not leave small strips or gaps adjacent to property lines and should generally only leave out one side of a property. Review and pre-approval of delineation for artificial lots shall be required.

G. Dead, Declining, and Hazardous Trees:

1. Any tree that the Administrative Official determines to be dead, declining beyond reasonable recovery effort, or that has a high or extreme hazard rating based on the ISA Basic Tree Risk Assessment that cannot be mitigated to a lower risk, shall be exempt from inclusion in the review of tree preservation and canopy cover calculation.

## **Section 5.8 Heritage Trees**

- A. Heritage Trees are those specimens that have attained a significant age and are the heritage of earlier residents of Colleyville or simply pre-date the community. All post oaks and blackjack oaks 15 inches DBH (Diameter at Breast Height) and larger, cottonwood, water oak, green and white ash 35 inches DBH and larger, and all other Protected Tree species 25 inches DBH and larger are hereby considered Heritage Trees.
- B. Removal of any Heritage Tree in any location shall require mitigation by one of the following options:
1. Plant trees with a total canopy credit of five (5) times the canopy area of the removed tree. Trees shall be planted on the same property that the Heritage Trees are removed unless an alternative location within the City is approved by the Administrative Official. The tree planting standards of Section 5.10 shall apply.
  2. Pay into the City of Colleyville Tree Fund at a rate of \$100 per DBH inch.

## **Section 5.9 Tree Protection Standards**

The following procedures shall be followed for all construction projects which involve activity that requires Urban Forestry Review, unless an alternative is deemed appropriate by the Administrative Official.

- A. Pre-Construction: The ensuing procedures shall be followed prior to construction.
1. All Preserved Trees shall have protective fencing located at the tree's critical root zone. The protective fencing shall be comprised of orange vinyl construction fencing, with a minimum of four-foot (4') approximate height.
  2. Lumber shall be wrapped vertically around the tree trunk and held in place with wire or any other non-damaging method if a tree is within ten (10) feet of the construction of a building or any other situation determined by the Administrative Official that would pose a physical risk to the tree trunk.
  3. In order to prevent damage to low hanging limbs, anything that may be impacted by equipment shall be pruned according to ANSI A300 standards.
  4. Each area of tree protection shall require temporary signage that indicates the area is a "Tree Protection Area" and to "Keep Out". A wording standard will be developed, updated, and maintained by the Administrative Official. The wording shall be in English

and Spanish and include the appropriate contact phone number with the City to report violations.

- B. During Construction: The following procedures shall be followed within the limits of the Critical Root Zone (CRZ) of any Preserved Tree for any activity that is subject to the requirements of this chapter.
1. No placement of materials intended for use in construction or waste materials accumulated due to excavation or demolition.
  2. No equipment may be cleaned or other liquids deposited. This would include but not be limited to, paint, oil, solvents, asphalt, concrete, mortar or other materials.
  3. No signs, wires or other attachments, other than those of a protective nature shall be attached to the trees.
  4. No vehicular and construction equipment traffic or parking.
  5. Underground utilities shall be bored underneath trees' CRZ unless pre-approved by the Administrative Official.
  6. Irrigation systems shall be designed to NOT require trenching across the critical root zone of any tree unless otherwise approved by the Administrative Official.
  7. No digging, building, paving, or elevation changes.

#### **Section 5.10 Tree Planting Standards**

All new trees required to be planted under this chapter shall meet the following standards.

- A. Minimum size shall be three (3) inch caliper for large and medium canopy trees and one and one-half (1.5) inches for small canopy trees, measured at six (6) inches above the root flare.
- B. Minimum spacing between trees is thirty (30) feet for large, fifteen (15) feet for medium, and eight (8) feet for small trees. Adjacent trees of different sizes shall meet the spacing requirement of the smaller tree.
- C. Trees shall be free from severe bark, cambium, or limb damage due to handling and planting.
- D. Trees shall be healthy and have minimal branch dieback.
- E. Trees shall have a single trunk or stem unless they are a small canopy tree whose ornamental value is attributed to having multiple stems.
- F. Trees shall not have co-dominant terminal leaders.
- G. Trees shall not be planted with the root collar bellow the soil and mulch shall not be piled up against the trunk.
- H. Newly planted trees shall be kept healthy and in good condition for a minimum of thirty-six (36) months, or three (3) years. If a newly planted tree does not survive, it shall be replaced with the same or similar tree type (large, medium, or small tree).
- I. Trees shall be selected from the City of Colleyville Preferred Tree Planting List, to be developed, updated, and maintained on file. Trees outside of the list require pre-approval by the Administrative Official.
- J. Trees shall not be planted in public utility easements or public street right-of-way without approval of the Administrative Official.

#### **Section 5.11 Permits**

- A. Tree Removal Permit

1. An application for tree removal permit must be submitted, reviewed for compliance with this chapter, and approved prior to the removal of any tree.
- B. For trees that have become an immediate high hazard to persons or property, the hazard can be mitigated to a safe condition prior to permitting, but the tree parts and evidence of the damage should not be removed from the site unless sufficient photo evidence is taken in advance. An after-the-fact tree removal permit will be required within 30 days of the event and no fees or mitigation will be required as long as sufficient evidence of the hazard can be provided. If trees are removed prior to review or approval of a tree removal permit and no evidence can corroborate the hazard then the City may enforce the penalties of this chapter.
- C. Fees: All tree removal permits shall be accompanied by a check made payable to the City of Colleyville per the following schedule:
  1. A person that owns and has primary residence of a single-family home on a lot or combination of contiguous adjacent lots or tracts that total more than one (1) acre will not be charged a permit fee.
  2. All others will require a \$50 base fee plus an additional \$25 per Protected Tree that is to be removed.
  3. Any tree that the Administrative Official determines to be dead, declining beyond reasonable recovery effort, or that has a high or extreme hazard rating based on the ISA Basic Tree Risk Assessment that cannot be mitigated to a lower risk, shall be exempt from fees under this Section 5.11(C).

### **Section 5.12 Plan Submittals**

All activity that requires Urban Forestry Review shall have the following plans submitted for review. The Administrative Official shall maintain and keep on file an outline for all specific items required on the following plans as well as any permit applications or additional documents required for review of each activity.

- A. Tree Survey: shall include, but is no limited to, an inventory of all Protected Trees on the property, property boundaries, property easements, existing structures and paving, tree trunk location, a unique tree identification number, common name or species, trunk Diameter at Breast Height (DBH), and an outline of the Critical Root Zone (CRZ). If there are no Protected Trees on the property the Administrative Official may waive this submittal.
- B. Urban Forestry Plan shall include, but is not limited to: property boundaries and easements; building setbacks; all Protected Trees; identify trees to be removed or preserved; outline the preserved trees' CRZ; show grade changes; show all new improvements such as structures, paving, major utilities; show locations, types, and sizes of new trees.

### **Section 5.13 Penalties and Violations**

- A. Civil Penalty: The Administrative Official shall have the authority to impose a civil tree mitigation penalty on any person, firm, or corporation who causes any Protected Tree to be cut down, destroyed, removed, moved, damaged, or effectively destroyed through damaging the roots, trunk or canopy without first obtaining the required approvals or permits as outlined in this chapter. The violator shall choose one, or a combination of, the violation remedy options contained in this section. The City shall have the authority to hold any development related administrative approvals for the property on which the violation occurred and may impose a stop work order until the penalty is addressed. Where the

DBH size of any tree cannot be measured due to that part of the tree being removed from the site or destroyed, the City shall have the authority to estimate the tree's DBH size based on any remaining physical evidence, photos, and documents.

1. Option 1. Tree Planting: The violator shall plant new trees with a canopy credit equal to five (5) times the canopy area of the removed trees. If the tree is a Heritage Tree, then the violator shall plant new trees with a canopy credit equal to ten (10) times the canopy area of the removed tree. All tree plantings shall meet the standards of Section 5.10. Trees shall be planted on the same property that the violation occurred unless an alternative location within the City is approved by the Administrative Official. A tree planting plan and timeline for installation of the new trees shall be provided to the Administrative Official no later than 30 days from the date of the offense. The new trees shall be planted no later than 90 days from the date of the offense or, if the site is under construction, the new trees shall be planted prior to final inspections. In the event that the trees are not planted within the prescribed timeframe, the City may delay any related administrative approvals for the property and may impose a lien on the property until such time the trees are planted.
  2. Option 2. Tree Fund: The violator shall pay into the City of Colleyville Tree Fund at a rate of \$250 per DBH inch of tree removed. If the tree is a Heritage Tree, then the violator shall pay \$500 per DBH inch of tree removed. Payment must be provided no later than 30 days after the Offense. In the event that the fees are not paid within the prescribed timeframe, the City may delay any related administrative approvals for the property and may impose a lien on the property until such time the fess are paid.
- B. Criminal Penalty: In addition to the civil penalties of this chapter, where any person, firm, or corporation violates or fails to comply with any provision or requirement of this chapter, the Administrative Official shall have the authority to issue a citation for a misdemeanor to any and all such persons, firms, or corporations, who upon conviction shall be fined not more than two thousand dollars (\$2,000.00) per violation. When the violation involves the cutting down, destruction, removal, or damage to a Protected Tree, each tree shall be considered a separate offense. Additionally, a separate offense shall be deemed committed upon each day during or on which each separate violation or failure to comply occurs or continues to occur and shall be punishable as such.

**Section 5.14 Appeals**

Any appeal to the provisions of this chapter and/or any appeal to a decision of the Administrative Official relative to the provisions of this chapter shall be heard by the City Council.

**Section 5.16 Amendments**

Reserved for listing of amendments to this chapter.

<b>Ord. Number</b>	<b>Date</b>	<b>Subject</b>
O-00-1214	4-18-00	Adoption of Tree Preservation in Land Development Code
O-09-1734	11-4-09	Amendments to Chapter 5 based on recommendations of consultant
O-14-1933	10/6/2014	Comprehensive amendments including incentives for preserving native tree stands, addition of fees, changes to penalties and other modifications
O-19-2073	01/22/2019	Substantial amendment to the chapter as part of a total LDC review

## Appendix "A"

