



## Legislation Details (With Text)

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**Title:** Receive a report and hold a discussion regarding the adoption of an ordinance of the City of Denton, Texas, amending Subchapter 35.3 Procedures, Subchapter 35.13 Site Design Standards, and Subchapter 35.23 Definitions and Terms, of the Denton Development Code related to tree preservation and landscape requirements. (DCA17-0005, Tree Preservation and Landscape Requirements Update, Haywood Morgan).

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** 1. Attachment 1 Citizen Survey, 2. Attachment 2 Stakeholder Feedback, 3. Attachment 3 Letters of Support, 4. Attachment 4 Summary of Proposed Revisions, 5. Attachment 5 Benchmark Cities Analysis, 6. Attachment 6 Proposed Amendments Section 35.13.7, 7. Attachment 7 Subsection 35.13.7 redline, 8. Attachment 8 Subsection 35.3.11 redline, 9. Attachment 9 Benchmark Cities Analysis, 10. Attachment 10 Exempt Tree List, 11. Attachment 11 Subsection 35.23.2 redline, 12. Attachment 12 2016 State of the Denton Urban Forest\_Preservation Tree

Date	Ver.	Action By	Action	Result
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## Agenda Information Sheet

**DEPARTMENT:** Development Services

**CM/ ACM:** Jon Fortune, 349-8235

**Date:** February 6, 2017

### SUBJECT

Receive a report and hold a discussion regarding the adoption of an ordinance of the City of Denton, Texas, amending Subchapter 35.3 Procedures, Subchapter 35.13 Site Design Standards, and Subchapter 35.23 Definitions and Terms, of the Denton Development Code related to tree preservation and landscape requirements. (DCA17-0005, Tree Preservation and Landscape Requirements Update, Haywood Morgan).

### BACKGROUND

The existing tree preservation and landscape requirements ("Tree Code") were adopted in 2004 to promote tree preservation and to facilitate site design and construction that would allow for the long-term viability of trees. While it has served to protect some of the existing tree canopy, additional parameters are necessary to further maintain essential tree cover and to provide clear guidance for tree preservation and mitigation during site development.

Although multiple attempts to revise this section of the Denton Development Code were made between 2007 and 2013, none were successful due to the lack of consensus on the proposed revisions. In its current state, the

Tree Code is difficult to navigate, and the formulas identified for determining minimum tree preservation and mitigation for site development are very complex. Moreover, the existing Tree Code provides minimal support to the City's current goals to build a green infrastructure network and to protect and expand tree canopy.

In the fall of 2014, following discussions on the history and status of the Tree Code and related programs, Council directed staff to proceed with a new update to the Tree Code. Proposed revisions to the Tree Code would accomplish the following objectives to:

1. Streamline the code to make it more user-friendly;
2. Align City standards with industry best management practices (BMP's) of the American National Standards Institute (ANSI) and the International Society of Arboriculture (ISA); and
3. Provide a more robust code that will expand and protect tree canopy consistent with Denton Plan 2030 and the City of Denton Strategic Plan goals.

## CONSIDERATIONS

1. In order to effectively review and recommend amendments, a baseline had to be created using five core components of the existing ordinance:
  - **Number of Established Tree Designations.** These are classifications of trees that are subject to the tree preservation requirements. Generally, the classifications are based on species type and diameter at breast height (DBH).
  - **Minimum Preservation Percentage.** This refers to the minimum percentage of the existing trees on site that shall be retained and protected during the development of the site.
  - **Tree Mitigation Ratios.** Penalties that are applied when the minimum preservation percentage is not met. (Example. A 1:2 ratio would require two diameter inches to be mitigated for each one removed.)
  - **Tree Fund Payments** - Refers to payments collected when it is determined that mitigation of tree removal by planting of trees on site is not feasible or desirable.
  - **Preservation Incentives** - Intended to encourage developers to preserve more than the minimum required by providing additional benefits for preserving a certain percentage of designated trees on a site. (Example. A site is offered a 1:2 credit for preserving Heritage Trees that can count towards landscape canopy requirements.)

In the current Tree Code, staff identified seven (7) established tree designations and 39 options for tree preservation which vary by lot size, type of development, and tree designation. Minimum tree preservation percentages range from zero to 25 percent. There are no requirements to preserve trees greater than 18 inches in diameter. Mitigation ratios for trees that are removed range from zero to 1:2. In addition to the lack of clear standards, there currently is no clear process for review or enforcement of this section of the code, or a manageable process for variances.

2. In an effort to evaluate the existing tree code requirements as they relate to industry standards, staff conducted a benchmark analysis that compared the City of Denton's tree preservation and landscape requirements to those of 10 cities around the State. These cities are similar in terms of population, growth projections, development trends, corporate city limits and ETJ. The cities were also chosen because most have effective and well-constructed tree preservation ordinances and practices that could provide guidance for Denton's revised Tree Code.

The results of the benchmark city analysis as it relates to the five core components are reflected below:

Core Component	Benchmark Results	City of Denton
Number of Established Tree Designations	Average of 3	7
Minimum Preservation Percentage	Average of 30 percent	Ranges from 0 to 25 percent depending on lot size and tree designation
Tree Mitigation Ratios	Ranges from 1:1 to 1:3	Ranges from 0 to 1:2
Tree Fund Payments	\$150 to \$300 per diameter inch	\$125 per diameter inch
Preservation Incentives	½ of the cities offer incentives	Available only for preservation above the required minimums

3. As part of the analysis for the existing tree code, staff conducted a visual preference survey of 301 people on December 11<sup>th</sup> and 15<sup>th</sup>, to gauge citizen' interest in trees and landscaping in public places. Surveyors were stationed at the entrances of the City's library and recreation facilities and the three area Kroger grocery stores (attached for reference). The survey consisted of six questions, four of which used visual preference cues intended to solicit responses to four scenarios:

- Residential street views;
- Commercial street views;
- Perimeter fencing in residential areas; and
- Commercial parking lots.

An online version of the survey was also launched that ran from December 18, 2015 to February 1, 2016. 912 people completed the survey, of this 912, we received 719 written comments. The feedback received indicated the following:

1. The City of Denton should work to preserve and grow more trees;
2. Mature trees that are preserved during construction, and new trees that are planted after construction is completed should be well-maintained;
3. Trees should be planted in a manner that preserves clear lines of sight in parking lots and views of business addresses and signage;
4. Pedestrian safety on sidewalks and parking lot safety, particularly at night, must be considered when deciding on tree planting locations; and
5. Landscaping in parking lots should be designed to provide shade in the summer months, but deter bird populations that nest in the trees.

4. A technical advisory committee that was comprised of representatives from seven City departments, convened in a series of meetings in the fall of 2015 to identify needed improvements to the existing tree

preservation and landscape requirements and to draft initial recommendations.

5. In December 2015, at the conclusion of the technical advisory committee meetings, staff presented the initial recommendation to the Denton Community Development Alliance (DCDA) and Keep Denton Beautiful (KDB).

Following the P&Z presentation on March 23, 2016, staff held a series of meetings with several stakeholder groups to provide additional opportunities for review of the proposed revisions and to receive additional feedback (attached for reference), these groups included:

- KDB,
- UNT,
- TWU,
- Native Plant Society of Texas, and
- The DCDA.

The feedback received from the groups was generally in line with the proposed recommendations. Letters of support were submitted from UNT and TWU (attached for reference). While DCDA did provide some general feedback on the proposed revisions, additional comments at the P & Z work Session in July.

6. Studies have shown that trees have structural and environmental value that can be quantified. The structural value is the value of a tree (e.g., the cost incurred when replacing a tree with a similar tree). This is important because it enables the assignment of a quantitative value to the resources that need to be protected. It also provides a basis for identifying the replacement cost in the event that tree canopy is lost.

The State of Denton Urban Forest Report found that Denton has an estimated 3,463,000 trees with an estimated structural value of \$2.06 billion. The structural value was estimated by utilizing the i-Tree software suite. i-Tree is a peer review software suite from the USDA Forest Service that provides urban and rural forest analysis and benefits assessment tools. The software uses Geographic Information System (GIS) and a set of algorithms, to produce detailed inventories of urban tree canopies, calculate structural and environmental values. In addition to the structural value of Denton's Urban Forest, the environmental benefits, including carbon storage & sequestration, pollution removal, energy savings, and were estimated to be \$69.8 million per year. (Preservation Tree Service, Texas Tree Foundation and Plan-It Geo 2016 State of the Denton Urban Forest pg. 9) (Attached for reference)

7. The proposed revisions to the Tree Code address the following goal and objective of the Denton Plan 2030:

- GOAL Parks, Conservation, and Environment-2: Use an integrative approach to environmental management to create local land conservation strategies tailored to protecting Denton's water, air, ecosystems, and natural character.
  - Key Action Item 5.5: Ensure the protection of Denton's tree canopy as an essential element of Denton's cohesive, broad green infrastructure framework.

8. To comply with the public hearing notice requirements, staff published a legal notice in the Denton Record Chronicle on January 24, 2016. This item has been continued from the March 23<sup>rd</sup>, 2016 and July 27<sup>th</sup>, 2016 Planning and Zoning Commission meeting.

### **SUMMARY OF PROPOSED STAFF REVISIONS**

The review of the benchmark cities requirements revealed that the City's current code is one of the most complex when compared to the other cities. We have over twice as many tree designations as the average benchmark city and significantly more options for tree preservation. The analysis also revealed several deficiencies in our current code in terms of minimum preservation percentages, mitigation ratios, preservation incentives, and tree fund payments.

As a result of our study, staff is proposing several revisions to the current code that will address these deficiencies. The proposed changes will also clarify and help to streamline the development review process as it relates to tree preservation (attached for reference): Summary of Proposed Revisions to Section 35.13.7). Based on industry BMP'S, input from the community, and the aforementioned stakeholder's, staff is recommending the following revisions to the tree code:

- Align City standards with industry BMP's specifically ANSI A300 Tree Care Operations - Tree, Shrub and Other Woody Plant Management - Standard Practices, as reflected in the redline ordinance.)
- Reduce the number of exempt project types;
- Preserve based on tree canopy vs. DBH;
- Establish a flat preservation amount of 30% per site/development;
- Establish a flat ratio of 1:6 for mitigation via replanting;
- Revise the calculation for Tree Fund payments;
- Establish an exempt tree list;
- Allow all Preserved Trees and Mitigation Trees to count towards landscape requirements.

It should be taken into consideration that the proposed revisions do not include changes to landscape requirements for buffers, parking lots, or street trees. These revisions will be presented to the commission at a later date.

### **PRIOR ACTION/REVIEW (Council, Boards, Commissions)**

September 2014:	City Council Directed Staff to Proceed with Update
November 2015:	Research and Benchmark Analysis
November 2015:	City Staff Work Sessions
December 2015:	P&Z Briefing
December 2016:	External Stakeholder Meetings
January 2016:	Community Survey
March 2016:	P&Z Presentation
March 2016:	City of Denton Developer's Luncheon Presentation
July 2016	P&Z Presentation
September	Postponed P&Z Presentation

### **STRATEGIC PLAN RELATIONSHIP**

The City of Denton's Strategic Plan is an action-oriented road map that will help the City achieve its vision. The foundation for the plan is the five long-term Key Focus Areas (KFA): Organizational Excellence; Public Infrastructure; Economic Development; Safe, Livable, and Family-Friendly Community; and Sustainability and Environmental Stewardship. While individual items may support multiple KFAs, this specific agenda item contributes most directly to the following KFA and goal:

**Related Key Focus Area: Sustainable & Environmental Stewardship**  
**Related Goal: 5.4 Manage Land Use and Preserve Open/Natural Spaces**

**EXHIBITS**

1. Citizen Survey
2. Stakeholder Feedback
3. Letters of Support
4. Summary of Proposed Revisions
5. Proposed Amendments to Subsection 35.13.7 Tree Preservation and Landscape Requirements
6. Subsection 35.13.7 Tree Preservation and Landscape Requirements redline
7. Subsection 35.3.11 Tree Preservation Relief Procedures redline
8. Subchapter 23.2 Definitions redline
9. Summary Table of Benchmark Cities Analysis
10. Exempt Tree List
11. Urban Forestry Resource Assessment

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