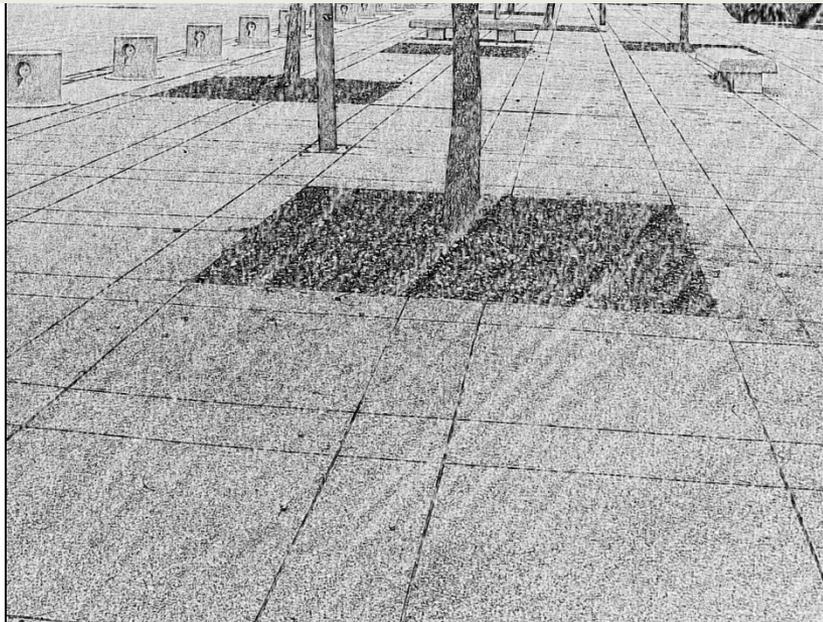




Article X Tree Ordinance



Overview and Introduction of Tree Ordinance



Talking Points

- *Criteria for an Effective Tree Ordinance*
- *Current 'Tree Preservation, Removal, and Replacement' Ordinance*
- *Approved Replacement Tree List – Preliminary*
- *Protected Tree List - Preliminary*

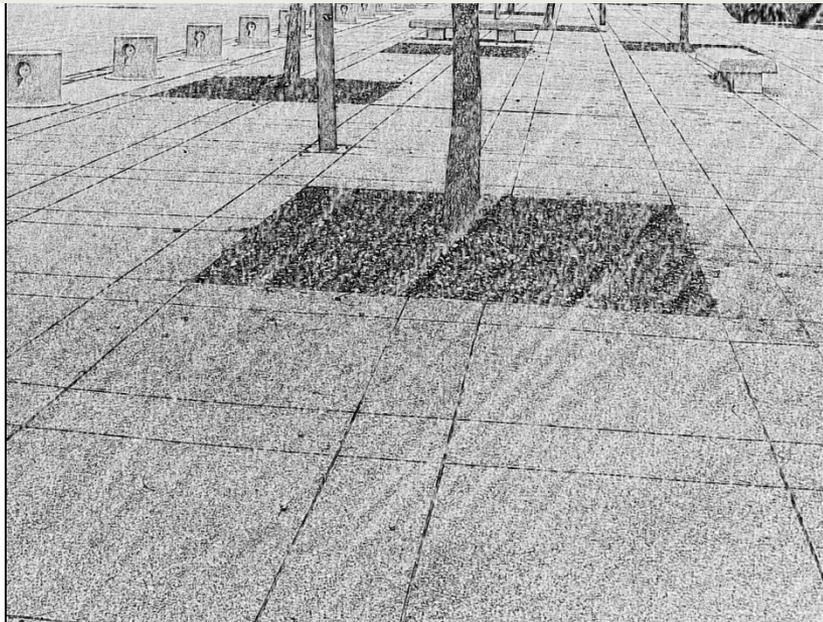




Article X Tree Ordinance



Criteria for an Effective Ordinance



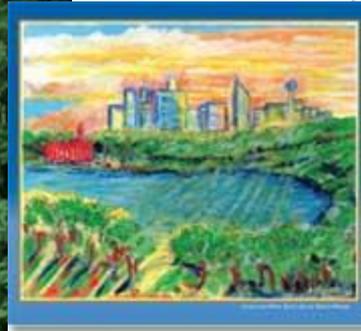
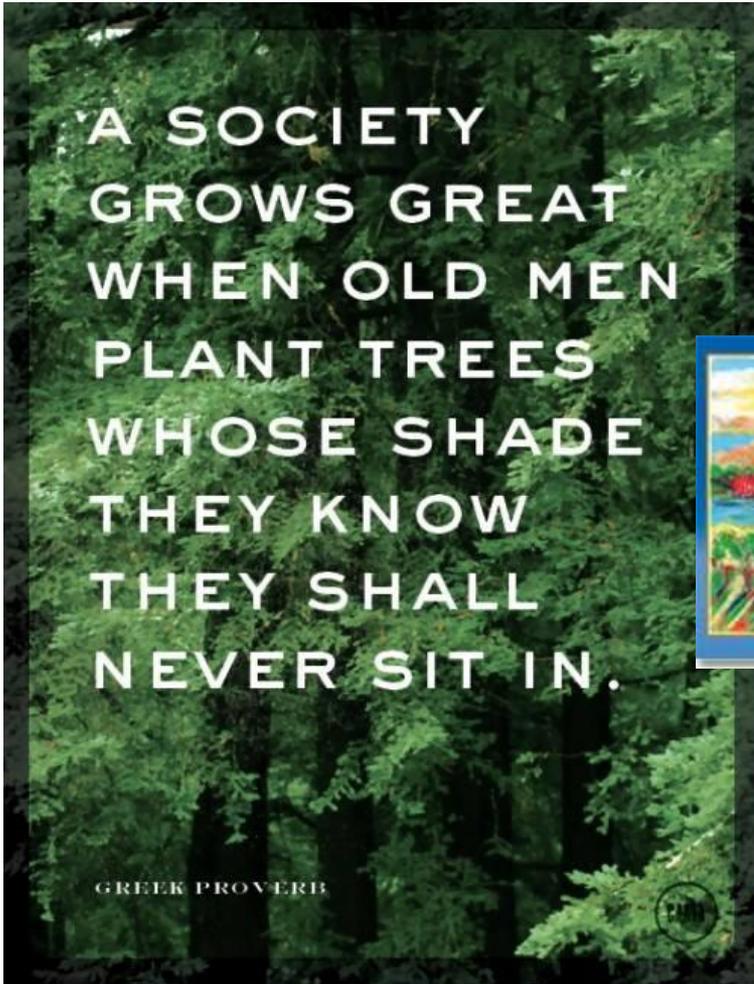
Criteria for an Effective Ordinance

1. Establish clearly stated **goals**.
2. Designate **responsibility and authority**.
3. Provide basic **performance standards**.
4. Provide **flexibility**.
5. Specify **enforcement** methods.
6. Be part of a **comprehensive management strategy**.
7. Develop with **community support**.

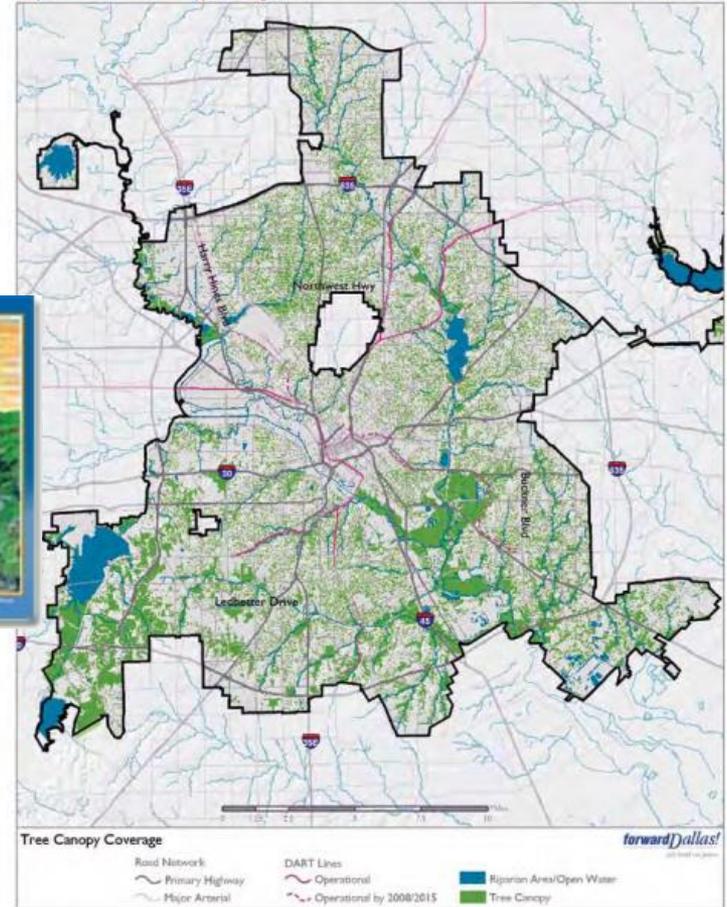
- Guidelines for Developing and Evaluating Tree Ordinances – International Society of Arboriculture (ISA)

Tree Ordinance Analysis

Goals



Map I-1.2 Dallas Tree Canopy Coverage



Increasing tree canopy coverage along riparian areas helps cool stream corridors for wildlife and visitors.

Criteria for an Effective Ordinance Goals

901496

WHEREAS, the City of Dallas desires to recognize the 20th Anniversary of Earth Day; and

WHEREAS, the City recognizes that trees are valuable assets to the environmental character of all city properties; and

WHEREAS, significant individual trees and stands of trees are found throughout the city; and

WHEREAS, many citizens of Dallas have expressed concern for the protection and preservation of trees in the city; and

WHEREAS, existing ordinances which contain tree protection elements apply to geographically specific areas within the city; Now, Therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

|| SECTION 1. That the City of Dallas shall support the protection and preservation of trees throughout the entire city.

|| SECTION 2. That the City Council directs the Park and Recreation Department, in cooperation with other appropriate departments, to design a mechanism to achieve this end.

SECTION 3. That this resolution shall take effect immediately from and after its passage in accordance with the provisions of the City of Dallas, and it is accordingly so resolved.

APPROVED BY
CITY COUNCIL

APR 25 1990


City Secretary

Criteria for an Effective Ordinance Goals

The process of development with its alteration of the natural topography, vegetation, and creation of impervious cover can have a negative effect on the ecological balance of an area by causing increases in air temperatures and accelerating the processes of runoff, erosion, and sedimentation. The economic base of the city can and should be protected through **the preservation conservation and enhancement of the unique natural beauty, environment, and vegetative space in this area.** Recognizing that the general objectives of this article are to promote and protect the health, safety, and welfare of the public, the city council further declares that this article is adopted for the following specific purposes:

- (1) To aid in stabilizing the environment's ecological balance by contributing to the processes of air purification, oxygen regeneration, ground-water recharge, and storm water runoff retardation, while at the same time aiding in noise, glare, wind, and heat abatement.
- (2) To provide visual buffering between land uses of differing character to alleviate the harshness of urban life.
- (3) To enhance the beautification of the city.
- (4) To safeguard and enhance property values and to protect public and private investment.
- (5) To conserve energy.
- (6) To provide habitat for wildlife.
- (7) **To encourage the preservation of large trees which, once removed, can be replaced only after generations. (1994 addition)**
- (8) **To recognize and conserve the urban forest as part of the City's natural/green infrastructure**
- (9) **To conserve water**

Criteria for an Effective Ordinance

Goals

ForwardDallas! Key Initiatives include:

- Ensure environmental sustainability -
‘This initiative focuses on protecting Dallas’ water quality and watersheds, promoting energy efficiency, increasing the urban tree canopy, improving air quality, protecting and enhancing open space, planning for more parks and maintaining important views and vistas.’

Criteria for an Effective Ordinance

Goals

- Environmental Element of *ForwardDallas!*
 - Goal 6.1 – Protect Dallas water quality and watersheds.**
 - Goal 6.2 – Preserve and increase tree canopy.**
 - Goal 6.3 – Improve energy efficiency and air quality.
 - Goal 6.4 – Identify, protect and restore open space.**
 - Goal 6.5 – Provide access to parks, open spaces and recreational opportunities.
 - Goal 6.6 – Increase recycling and conservation of renewable resources.

Criteria for an Effective Ordinance

Goals

- Environmental Element of *ForwardDallas!*
Goal 6.2 – Preserve and increase tree canopy.
Policies include a tree canopy coverage enhancement plan by:
 - Develop an Urban Forestry Master Plan with a Street Tree Master Plan.
 - Develop and maintain a baseline tree canopy coverage.
 - Develop additional regulatory tools to preserve tree canopy based on analysis of existing tree canopy and identification of priority areas.

Criteria for an Effective Ordinance

Responsibility & Authority of Urban Forest

City Arborists – Building Inspection

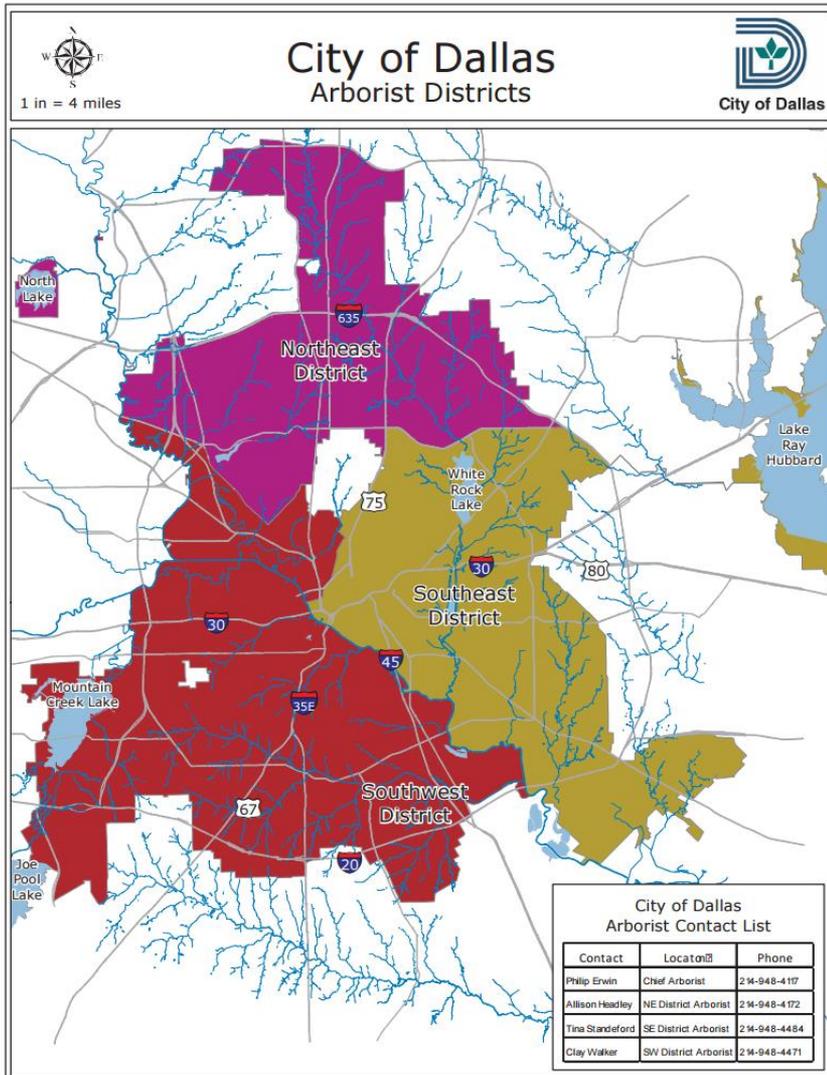
- All Article X policy, enforcement, and administration.
- Interacts with all departments, engineers, land professionals, and other city officials on all urban forest and tree-related issues.
- Manages Reforestation Program.

City Forester – Dallas Parks and Recreation

- Oversight of public lands and training of tree service crews.
- Interacts with all departments, engineers, land professionals and other city officials on urban forest and tree-related issues.
- Coordinates public land tree planting projects with citizens, and trains volunteers.

Criteria for an Effective Ordinance

Responsibility & Authority of Urban Forest



Arborist General Duties

- Report to the Building Official.
- Plan Review
- Landscape Inspections
- Enforcement of landscape and tree regulations.
- Tree survey verification and analysis
- Tree assessment (Level 1 only)
- Pre-development consultation
- Consultations with citizens, city staff, contractors, developers, engineers, private consultants, and city boards and commissions.
- Zoning review for PD's and SUP's
- Plat reviews

Criteria for an Effective Ordinance

Performance Standards

- City of Dallas currently regulates
 - All tree species except those not protected
 - Tree protection from construction
 - Protected tree replacement at inch for inch
 - Timing of replacement
 - Diversity standards for replacement trees
 - Specific methods of replacement/mitigation
- No restriction on trees to be removed (it's not a preservation ordinance)
- No performance standards to meet the general goals mentioned in the “Resolution”, “Purpose” statement of Article X or *ForwardDallas!*.

Criteria for an Effective Ordinance

Performance Standards

- Performance Standards can be established once goals for the community are pursued (ex.: levels of canopy coverage, species protection, tree maintenance standards).
- ‘Effective performance standards address the urban forest as a whole rather than focusing exclusively on individual trees.’

Criteria for an Effective Ordinance

Flexibility

- Article X provides for an appeals process for special exceptions and variances as well as appeals for decisions of the building official to the Board of Adjustment for relief.
- The current ordinance provides for several options for compliance with tree replacement and encourages retention of trees with site tree credits. Amendments should strongly improve on these incentives.

Criteria for an Effective Ordinance Enforcement

- Article X provides for fines and stop work orders that may be applied to tree protection or tree removal violations.
- Building Inspection process also requires compliance with landscape and tree ordinance conditions before completing final inspections and issuing certificates of occupancy.
- All tree mitigation and landscaping must be completed before project completions.

Criteria for an Effective Ordinance

Comprehensive Management Strategy

- The City of Dallas does not have a comprehensive forest management strategy.
- A comprehensive management strategy can help establish the goals needed for the City.
- Tree ordinances provide the legal framework for successful urban forest management.

Criteria for an Effective Ordinance

Community Support

- Community support is critical to ordinance effectiveness.
- As a practical matter, most tree ordinances rely heavily on voluntary compliance.

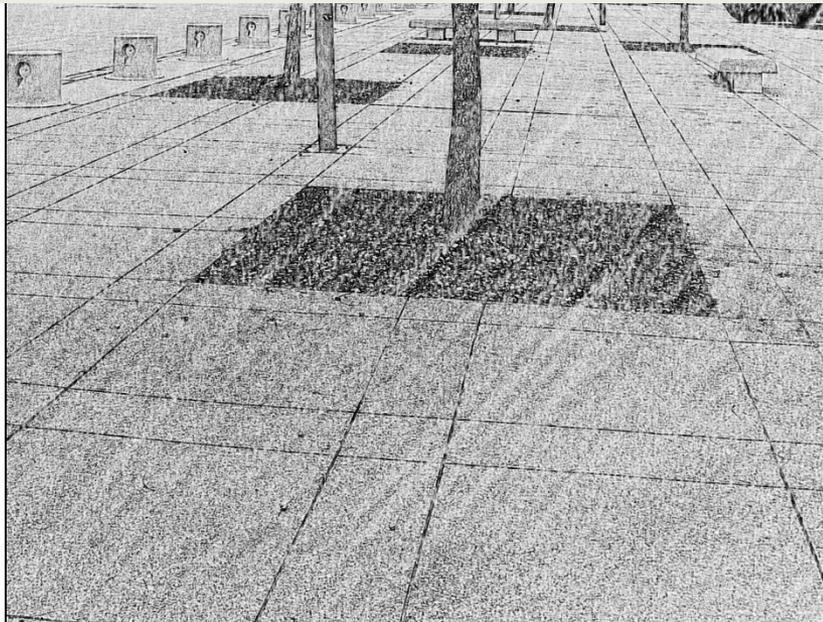




Article X Tree Ordinance



51A-10.130 – 10.140 - Trees



Primary Focus Points

- Single family & Duplex exemptions
- Significant/Heritage trees
- Land clearing standards
- Tree Protection Plan
- Planned Developments
- Reforestation Fund
- Additional alternative methods of mitigation
- Tree survey processes
- Landscape and Tree Manual
- Tree maintenance
- Tree removals without permit
- Enforcement
- Timing of mitigation
- Conservation easement
- Protected Tree List
- Approved Replacement Tree List

Tree Preservation, Removal, and Replacement

10.130

- Application of Division
- Tree Removal Applications
- Replacement of Removed or Seriously Injured Trees
- Alternative Methods of Compliance
- Preservation of Protected Trees
- Violations, Appeals, Fines
- Criminal Responsibilities and Defenses to Prosecution

Application of Division

This division applies to all property in the city except for:

- (a) lots smaller than two acres in size that contain single family or duplex uses; and
- (b) lots in a planned development district with landscaping and tree preservation regulations that vary appreciably from those in this article X, as determined by the building official.

Removal or Serious Injury

REMOVE OR SERIOUSLY INJURE means an intentional or negligent action that will more likely than not cause a tree to decline and die within five years of the act.

Actions that constitute **removing or seriously injuring** a tree include, but are not limited to: cutting down a tree; excessively pruning or topping a tree; compacting the soil above the root system of a tree; changing the natural grade above the root system of a tree; damaging the root system or the trunk of a tree (such as by operating machinery near, or by clearing or grading the area around, the trunk of a tree); failing to repair an injury to a tree from fire or other causes, which results in or permits tree infections or pest infestations into or on the tree; applying herbicidal or other lethal chemicals; and placing nonpermeable pavement over the root system of a tree.

Tree Removal Applications

- Either a tree removal permit OR a building permit must be posted before removal or serious injury of protected trees.
- Application for review includes owner's signature, tree survey, other permits or approvals for floodplain, escarpment, or wetland intrusion, and any other 'reasonable and pertinent' information.
- A separate offense for each tree removed without authorization by permit.

Tree Removal Applications

Decision of the building official

The building official shall deny a tree removal application if the removal or serious injury is not in the public interest. This decision must be based on the following factors:

- (1) The feasibility of relocating a proposed improvement that would require the removal or serious injury of the tree.
- (2) The cost of preserving the tree.
- (3) Whether the lot or tract would comply with this article after the removal or serious injury.
- (4) Whether the removal or serious injury is contrary to the public health, safety, or welfare.
- (5) The impact of the removal or serious injury on the urban and natural environment.
- (6) Whether an economically viable use of the property will exist if the application is denied.
- (7) Whether the tree is worthy of preservation.
- (8) Whether the tree is diseased or has a short remaining life expectancy.
- (9) The effect of the removal or serious injury on erosion, soil moisture retention, flow of surface waters, and drainage systems.
- (10) The need for buffering of residential areas from the noise, glare, and visual effects of nonresidential uses.
- (11) Whether a landscape plan has been approved by the board of adjustment, city plan commission, or city council.
- (12) Whether the tree interferes with a utility service.
- (13) Whether the tree is near existing or proposed structures.
- (14) Whether the proposed mitigation for tree removal or serious injury is sufficient.

Replacement of Removed or Seriously Injured Trees

Tree replacement must meet the following requirements:

- (1) **Quantity.** The total caliper of replacement trees must equal or exceed the total caliper of the protected trees removed or seriously injured.
- (2) **Species.** A replacement tree must be one of the [Approved Replacement Trees], and no one species of tree may constitute more than 30 percent of the replacement trees planted on a lot or tract.

* The tree list will be discussed in more detail later in this introduction.

Replacement of Removed or Seriously Injured Trees

(3) Location. The replacement trees must be planted on the lot from which the protected tree was removed or seriously injured, except as otherwise allowed by **Section 51A-10.135**.

Replacement trees may not be planted within a visibility triangle, a water course, or an existing or proposed street or alley.

(4) Minimum size. A replacement tree must have a caliper of at least two inches.

Replacement of Removed or Seriously Injured Trees - TIMING

- (5) (A) Except as otherwise provided in Subparagraphs (B) and (C), all replacement trees **must be planted within 30 days** after the removal or serious injury of the protected trees.
- (B) If the property owner provides the building official with an affidavit that all replacement trees will be **planted within six months**, the building official may permit the property owner to plant the replacement trees during the six-month period.
- (C) If the property owner provides the building official with a performance bond or a letter of credit in the amount of the total cost of purchasing and planting replacement trees, the building official may permit the property owner **up to 18 months to plant the replacement trees**, with the following restrictions:
- (i) for single family or multifamily developments, at least 50 percent of the total caliper of replacement trees must be planted before 65 percent of the development has received a final building inspection or a certificate of occupancy, and all replacement trees must be planted prior to the completion of the development; and
 - (ii) in all other cases, the replacement trees must be planted prior to the issuance of a certificate of occupancy.
- (D) A replacement tree that dies within two years of the date it was planted must be replaced by another replacement tree that complies with this section.

NOTE: The replacement tree standard varies from the general maintenance requirement for landscaping, where required landscaping must be maintained indefinitely.

Alternative Methods of Compliance

If the building official determines that, due to inhospitable soil conditions or inadequate space, it would be impracticable or imprudent for the responsible party to plant a replacement tree on the lot where the protected tree was removed or seriously injured (the "tree removal property"), the responsible party shall comply with one or more of the following requirements:

Alternative Methods of Compliance

(1) Donate the replacement tree to the city's park and recreation department. If the director of the park and recreation department does not accept the tree, the responsible party must comply with one or more of the other alternative methods of compliance listed below.

This is the primary method of alternative compliance listed within the ordinance. The trees may be placed on any city park land in the city.

Alternative Methods of Compliance

- (2) **Plant the replacement tree on other property in the city that is within one mile of the tree removal property**, as long as the responsible party obtains the written approval of the building official for:
- (A) a **site plan** indicating the location of the tree to be removed or seriously injured, the address of the property where the replacement tree will be planted, and a site plan indicating the location of the replacement tree; and
 - (B) a **written agreement** between the owner of the property where the replacement tree will be planted and the responsible party, to assume mutual responsibility for the replacement tree under this article.

Additional information for planting on other property is given in subsection (b).³¹

Alternative Methods of Compliance

(3) **Make a payment** into a special city account, to be known as the Reforestation Fund, in accordance with Subsection (c).

In-lieu fee is further addressed in subsection (c).

The Fund may only be used for purchasing trees to plant on public property or for the acquisition of woodland or conservation easements.

Alternative Methods of Compliance

- (4) **Grant a conservation easement** to the city in accordance with Subsection (d) and the following paragraphs:
 - (A) The conservation easement area must contain **protected trees** with a combined **caliper equal to or exceeding** the caliper for which replacement tree credit is being requested.
 - (B) If the conservation easement area is **25 percent or less than the area of the tree removal property**, the responsible party will get credit for trees in the conservation easement area, **on an inch for inch basis**, up to a **maximum of 50 percent** of the total caliper of replacement trees required.
 - (C) If the conservation easement area is **more than 25 percent and less than 50 percent of the area of the tree removal property**; the responsible party will get credit for trees in the conservation easement area, **on an inch for inch basis**, up to a **maximum of 65 percent** of the total caliper of replacement trees required.
 - (D) If the conservation easement area is **50 percent or more of the area of the tree removal property**, the responsible party will get credit for trees in the conservation easement area, **on an inch for inch basis**, up to a **maximum of 80 percent** of the total caliper of replacement trees required.

Additional information for conservation easements is given in subsection (d).

Preservation of Protected Trees

Where a property owner plans to retain protected trees **on a site to be developed or otherwise disturbed** in a manner that may affect protected trees, the following requirements must be met:

Provide a Tree Protection Plan (applies to all development).

- Site Plan (show areas of construction that might affect tree protection)
- Tree Survey (referenced in 10.132, Tree Removal Applications)
- Tree Protection Measures
 - Tree Protection Fencing
 - Erosion Control Fencing and related materials

Implement the Tree Protection Plan



Damage to protected trees. Where the building official has determined that irreparable damage has occurred to trees within tree protection zones, the responsible party **must remove and replace those trees.**

Violations, Appeals, and Fines

- Stop Work Orders may be enacted by the building official. – 10.137
- The owner may appeal of a decision made by the “building official” (Arborist reviewing the plans) may be presented to the Board of Adjustment. – 10.138
- A person convicted of violating this division shall be subject to a fine of not less than \$2,000 per protected tree removed without authorization, and not less than \$2,000 per day for any other violation. - 10.139

10.140 Criminal Responsibility, and Defenses to Prosecution

A person is **criminally responsible** for a violation of this division if the person:

- (1) removes or seriously injures, or assists in the removal or serious injury of, a protected tree without complying with the requirements of this division; or
- (2) owns part or all of the land where the violation occurs.

10.140 Criminal Responsibility, and Defenses to Prosecution

Defenses to Prosecution

An approval for a tree removal application is not required if:

Tree was dead (not by intentional or negligent act), had disease or injury, or was in danger of falling, or had partially fallen.

Tree interfered with service of a public utility in a public right-of-way, or the construction and maintenance of a public utility.

Tree threatened the public health or safety as determined by a city director or chief.

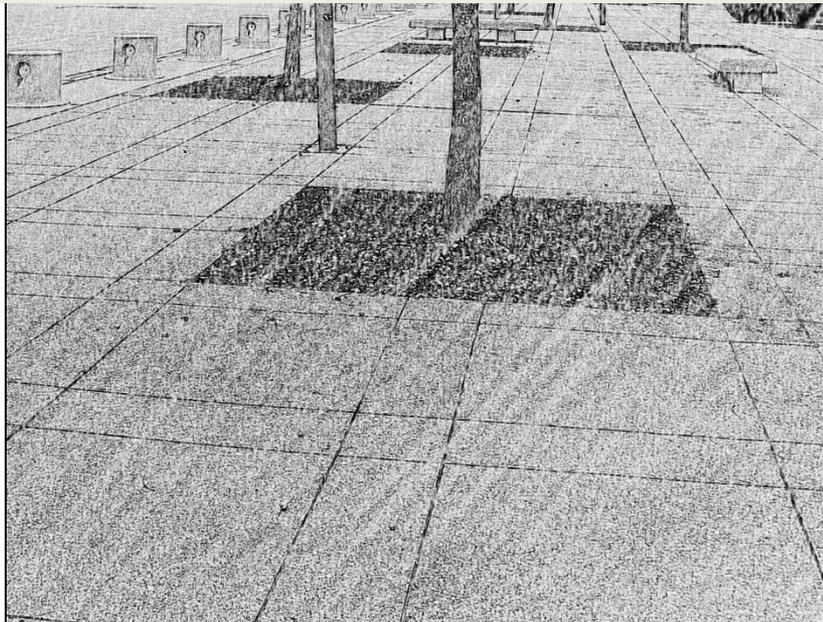
Tree was designated for removal in a landscape plan by the Board of Adjustment, Plan Commission or Council, or for construction of city infrastructure, or by a building permit.



Article X Tree Ordinance



Approved and Protected Tree Lists



Acceptable Plant Materials

Issues and Considerations

- Recommendation to amend the approved tree list in Section 51A-10.134.
- Recommendation to authorize list under administration of the director and to be placed for reference in the manual.
- The tree list is a recommended list of trees for most required landscape installation, but mandatory for required tree installation on single family and duplex uses.

Approved Tree List

Preliminary considerations

Large

| | |
|------------------------|----------|
| <u>Bur oak</u> | UFAC/DWU |
| <u>Chinkapin oak</u> | UFAC/DWU |
| <u>Live Oak</u> | UFAC/DWU |
| <u>Shumard red oak</u> | UFAC/DWU |
| <u>Pecan</u> | UFAC/DWU |
| <u>Baldcypress</u> | UFAC |
| <u>Cedar elm</u> | UFAC/DWU |
| <u>White ash</u> | UFAC |
| Post oak | UFAC |
| American elm | UFAC |

Medium

| | |
|---------------------------------------|----------|
| <u>Trident maple</u> | UFAC |
| <u>Bigtooth maple</u> | UFAC |
| <u>Common persimmon (male)</u> | UFAC/DWU |
| <u>Texas ash</u> | UFAC |
| <u>Thornless honeylocust</u> | UFAC |
| <u>Kentucky coffeetree</u> | UFAC |
| <u>Eastern redcedar</u> | UFAC/DWU |
| <u>Sweetgum</u> | UFAC |
| <u>Southern magnolia</u> | UFAC |
| <u>Eldarica, Mondell, Afghan pine</u> | UFAC/DWU |
| <u>Austrian or Black pine</u> | UFAC |
| <u>Japanese black pine</u> | UFAC/DWU |
| <u>Chinese pistache</u> | UFAC |
| <u>Mesquite</u> | UFAC/DWU |
| <u>Texas red oak</u> | UFAC/DWU |
| <u>Durrand oak</u> | UFAC/DWU |
| <u>Western soapberry</u> | UFAC/DWU |
| <u>Chittamwood, or Gum bumelia</u> | UFAC |
| <u>Lacebark elm</u> | UFAC/DWU |
| <u>Pond cypress</u> | UFAC |
| <u>Escarpment live oak</u> | UFAC/DWU |
| <u>Ashe juniper</u> | UFAC |
| <u>Caddo maple</u> | UFAC/DWU |
| Arizona cypress | UFAC/DWU |
| Ginkgo | UFAC |
| Texas pistache | UFAC |
| Carolina cherry laurel | UFAC |
| Lacey oak | UFAC/DWU |
| Blackjack oak | UFAC |
| Vasey oak | UFAC |
| Bigelow oak | UFAC/DWU |
| Winged elm | UFAC |

Small

| | |
|-------------------------------------|----------|
| <u>Desert willow</u> | UFAC/DWU |
| <u>Texas persimmon</u> | UFAC/DWU |
| <u>Possumhaw or Deciduous holly</u> | UFAC/DWU |
| <u>Yaupon holly</u> | UFAC/DWU |
| <u>Texas black walnut</u> | UFAC |
| <u>Crepe myrtle</u> | UFAC/DWU |
| <u>Mexican plum</u> | UFAC/DWU |
| <u>Rusty blackhaw</u> | UFAC/DWU |
| <u>Eve's necklace</u> | UFAC/DWU |
| <u>Eastern redbud</u> | UFAC/DWU |
| Catclaw acacia | UFAC |
| Shantung maple | UFAC/DWU |
| Texas buckeye | UFAC |
| Red buckeye | UFAC |
| Texas redbud | UFAC/DWU |
| Reverchon hawthorne | UFAC |
| Green hawthorne | UFAC |
| Texas hawthorne | UFAC |
| Goldenball leadtree | UFAC |
| Saucer magnolia | UFAC |
| Wildgoose plum | UFAC |
| Carolina buckthorn | UFAC/DWU |
| Smooth sumac | UFAC |
| Prairie-leaf sumac | UFAC/DWU |
| Texas mountain laurel | UFAC |
| Mexican buckeye | UFAC/DWU |
| Vitex | UFAC/DWU |
| Jujube | UFAC |
| Wright acacia | DWU |
| Chitalpa | DWU |
| Roughleaf dogwood | DWU |
| Alligator juniper | DWU |
| Ashe juniper | DWU |
| Blue point juniper | DWU |
| Wichita blue juniper | DWU |
| Wax myrtle | DWU |
| Mexican redbud | DWU |
| American smoketree | DWU |

Article X current list underlined.

Added recommendations by:

- UFAC (2009 recommendations)
- DWU ('Natural Beauties')

Final tree list to be determined.

Some tree selections may be adjusted in class based on their size (height and width).

Non-Protected Tree List

Issues and Considerations

- Recommendation to amend the protected tree list in Section 51A-10.101(22), Protected Trees.
- Recommendation to retain the protected tree list within the Article X ordinance definitions.

Non-Protected Tree List

Preliminary recommendations

Trees listed with underline are NOT protected in current ordinance.

| |
|----------------------------|
| <u>Silver maple</u> |
| <u>Tree-of-Heaven</u> |
| <u>Mimosa, or Silktree</u> |
| <u>Arizona ash</u> |
| <u>Chinaberry</u> |
| <u>Chinese tallow</u> |
| <u>Siberian elm</u> |

Trees listed below are under consideration for importance to the urban forest, have been amended in 2003, or are presented for the first time for consideration*.

| | | | |
|--------------------------------|---|--|--|
| <u>Hackberry or sugarberry</u> | Reconsideration | | |
| <u>Black willow</u> | Reconsideration | | |
| Eastern redcedar | Reconsideration. 2003: Protected at 12" and greater, with exceptions where protected at 8". | | |
| <u>Bois d' arc</u> | Reconsideration. Female trees only not protected. | | |
| Mesquite | Reconsideration. 2003: Protected at 12" and greater, with exceptions where protected at 8". | | |
| Cottonwood* | Under first consideration | | |
| Mulberry* | Under first consideration | | |
| Callery pear* | Under first consideration for all cultivars | | |
| Palm* | Under first consideration for all plants in family of Palmae | | |

NEXT STEPS.....

- Single family & Duplex exemptions
- Significant/Heritage trees
- Reforestation Fund

REFERENCES

- Guidelines for Developing and Evaluating Tree Ordinances - ISA
- ForwardDallas
- State of the Dallas Urban Forest – Texas Tree Foundation
- Natural Beauties – Dallas Water Utilities
- UFAC Recommendations for Article X Amendment (2009)
- Athens-Clarke County, Georgia Best Management Practices for Community Trees

- All reference material and other sources can be found on the website below
- <https://sites.google.com/site/dallastrees/> (Dallastrees.net)