

**Division 51A-10.130. Tree Conservation [~~Preservation, Removal, and Replacement~~].**

**SEC. 51A-10.131. APPLICATION OF DIVISION.**

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

(1) lots smaller than two acres in size that contain single-family or duplex uses; and

(2) lots in an [a] overlay district or a planned development district with [~~landscaping and~~] tree preservation regulations that vary appreciably from those in this article, as determined by the building official.

(b) In this section, a demolition permit is a declaration of intent to remove the single family or duplex use on the property. The tree removal property is considered to be vacant when a demolition permit for the single family use or duplex use issued. The tree removal property is considered to be vacant until:

(1) The demolition permit is closed (not expired) by the building inspector (being proof of the return of the single family or duplex use); or

(2) a certificate of completion is provided to the tree removal property owner indicating a new structure for occupancy is completed on the property.

**SEC. 51A-10.132. TREE REMOVAL APPLICATIONS.**

(a) Tree removal application and posting [~~When a tree removal application must be approved and posted~~].

(1) Except as provided in this subsection, a [A] responsible party must post either an approved tree removal application in accordance with this section or a building permit in a conspicuous place at the entrances to the tree removal property [~~lot or tract~~], before removing or seriously injuring a protected tree on that tree removal property [~~lot or tract~~].

(2) For trees removed from a public right-of-way, it is not necessary to post the required tree removal permit.

(b) Application for review. An application required under this section must be filed with the building official on a form furnished by the city for that purpose. The application must include the following:

(1) The name, address, telephone number, and signature of the applicant. The applicant may be the owner of the tree removal property or a contracted agent acting for the

owner. [If the applicant is not the owner of the lot or tract, he shall submit a letter from the owner authorizing him to act on the owner's behalf].

(2) The name, address, and telephone number of each tree removal property owner [of the lot or tract].

(3) The street address, zoning district, or overlay district of the tree removal property [lot or tract].

(4) A tree survey that shows the location, caliper, and name (both common and scientific) of all trees on the lot or tract (trees in close proximity that all have a caliper of less than eight inches may be designated as a "group of trees" with only the number noted), or an estimate of the total caliper inches of protected trees, calculated and documented in a manner determined by the building official to be reasonably accurate. The survey does not have to be prepared by a registered surveyor, architect, or landscape architect. Trees not proposed for removal or serious injury, or located within 20 [50] feet of proposed construction activity need not be shown on the survey unless the building official determines it would help evaluation of the application.

(5) A forest stand delineation may be used for the purpose of calculating the total square footage of forest canopy coverage of building sites, and providing an ecological assessment of a property. An FSD must be approved by the building official. Required information in an FSD is determined by the building official. The FSD is applicable to:

(A) Tree canopy cover assessment for protected single species tree stands of juniper or mesquite trees on property of ten acres or larger when:

(i) a stand, or partial stand, of a monoculture of mesquite or juniper trees or juniper-mesquite dominant mix is located in a development impact area;

(ii) the forest stand delineation excludes areas within 50 feet of a floodplain, 50 feet of a wetland, 50 feet of an escarpment zone, and 150 feet of a stream bank; and

(iii) the trees in the stand, or partial stand, is designated in an age class based on site and historical data.

(aa) Age class of 20-40 years = a 80 percent reduction of the tree canopy cover requirements.

(bb) Age class of 41-60 years = a 60 percent reduction of the tree canopy cover requirements.

(cc) Age class of 61-80 years = a 20 percent reduction of the tree canopy cover requirements.

(B) Tree canopy cover credit for single family and duplex construction.

(C) Sustainable development incentives tree canopy cover assessment of development impact areas.

(D) Tree canopy cover assessment where trees are removed without authorization.

(E) Tree canopy cover assessment on properties five acres or larger with institutional and community service uses or recreation uses when:

(i) The measured tree canopy coverage is the baseline for determining the number of trees required for replacement by using the canopy cover replacement calculation for legacy trees in the Sustainable Development Incentives replacement option. The property must maintain the balance of, or increase, the tree canopy coverage for the property recorded in the most recent FSD.

(ii) Significant trees that are included in an FSD tree canopy coverage must be replaced according to the caliper standards for significant trees in this article.

(iii) Historic trees may not be removed.

(F) Forest analysis for baseline documentation to create a conservation easement.

(G) Forest analysis for establishment of a community management plan.

(6[5]) All permits and approvals related to floodplain, wetland, or escarpment regulations required by city departments or other agencies.

(7[6]) Any other reasonable and pertinent information that the building official determines to be necessary for review.

(c) Form of approval of tree removal application. A tree removal application is not approved until it has been signed by the building official.

(d) Separate offense for each tree removed or seriously injured without a permit. A responsible party commits a separate violation of this section for each tree removed or seriously injured without authorization by a building permit or approved tree removal application that is posted at the lot or tract.

(e) 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, is a significant tree, or a historic tree.
- (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.

**SEC. 51A-10.133. HISTORIC TREES [RESERVED].**

(a) The agreement of the property owner where the proposed historic tree is located is required for an historic tree designation to be approved by city council.

(b) Except as provided in this section, historic status lasts for the life of the tree.

(c) Historic trees may only be removed by authorization of the city council or as outlined in Section 51A-10.140.

**SEC. 51A-10.134. REPLACEMENT OF REMOVED OR SERIOUSLY INJURED TREES.**

If a ~~the~~ tree removal application is approved, a building permit is issued, an unauthorized tree removal occurs, or when a tree is removed from a public right-of-way in conjunction with a private development, one or more healthy replacement trees must be planted in accordance with the following requirements.

(1) Quantity. The total caliper of replacement trees for protected trees must equal or exceed the total caliper of the protected trees removed or seriously injured.

(2) Significant trees and legacy trees. The total caliper of replacement trees for significant trees, removed either individually or as part of a tree canopy cover, or legacy trees must equal or exceed three times the total caliper of the significant trees removed or seriously injured.

(3) Historic trees. The total caliper of replacement trees for historic trees must equal or exceed five times the total caliper of the historic trees removed or seriously injured.

(4) Species. A replacement tree is an approved tree determined by the director, ~~[must be one of the following trees,]~~ and no one species of tree may constitute more than 30 percent of the replacement trees planted on a lot or tract more than one acre in size.

**[APPROVED REPLACEMENT TREES]**

**SCIENTIFIC NAME**

**COMMON NAME**

*Acer barbatum* var. *Caddo*  
*Acer grandidentatum*  
*Acer buergerianum*  
*Carya illinoensis*  
*Cercis canadensis*  
*Chilopsis linearis*  
*Diospyros texana*  
*Diospyros virginiana* [male only]

Caddo Maple  
Bigtooth Maple  
Trident Maple  
Pecan  
Redbud  
Desert Willow  
Texas Persimmon  
Common or American Persimmon

<i>Fraxinus americana</i>	White Ash
<i>Fraxinus texensis</i>	Texas Ash
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Honeylocust
<i>Gymnocladus dioica</i>	Kentucky Coffeetree
<i>Ilex decidua</i>	Possumhaw or Deciduous Holly
<i>Ilex vomitoria</i>	Yaupon Holly
<i>Juglans microcarpa</i>	Texas Black Walnut
<i>Juniperus ashei</i>	Ashe Juniper
<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Lagerstroemia indica</i>	Crepe Myrtle
<i>Liquidambar styraciflua</i>	Sweetgum
<i>Magnolia grandiflora</i>	Southern Magnolia
<i>Pinus eldarica</i>	Eldarica, Mondell, or Afghan Pine
<i>Pinus nigra</i>	Austrian or Black Pine
<i>Pinus thunbergii</i>	Japanese Black Pine
<i>Pistacia chinensis</i>	Chinese Pistachio
<i>Prosopis glandulosa</i>	Mesquite
<i>Prunus mexicana</i>	Mexican Plum
<i>Quercus buckleyi</i>	Texas Red Oak
<i>Quercus durandii</i>	Durrand Oak
<i>Quercus fusiformis</i>	Escarpment Live Oak
<i>Quercus macrocarpa</i>	Bur Oak
<i>Quercus muhlenbergii</i>	Chinkapin Oak
<i>Quercus shumardii</i>	Shumard Oak
<i>Quercus virginiana</i>	Live Oak
<i>Sapindus drummondii</i>	Western Soapberry
<i>Sideroxylon lanuginosum</i>	Chittamwood or Gum Bumelia
<i>Sophora affinis</i>	Eve's Necklaee
<i>Taxodium ascendens</i>	Pond Cypress
<i>Taxodium distichum</i>	Bald Cypress
<i>Ulmus crassifolia</i>	Cedar Elm
<i>Ulmus parvifolia</i>	Lacebark Elm
<i>Viburnum rufidulum</i>	Rusty Blackhaw]

(5[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, in above-ground planters, within 15 feet horizontally to the closest point of an overhead electric distribution or transmission line, or an existing or proposed street or alley unless the tree is authorized by license and permit and is required to be in that location by other ordinance.

(6[4]) Minimum size. A replacement tree must have a caliper of at least two inches.

(7[5]) Timing.

(A) Except as provided in this section, all replacement trees must be planted within 30 days of removal.

(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.

(1) If the property owner submits an application for a building permit for construction on the tree removal property within the six month period, the tree replacement requirements may be transferred to the building permit for final completion of all tree replacement prior to a final certificate of occupancy or certificate of completion for the property.

(2) If the property owner does not submit an application for a building permit for construction within the six month period, all tree replacement must be completed within 30 days after the six month period.

(C) For multi-phase residential subdivisions and multi-phase commercial development, the tree replacement may be completed in accordance with a comprehensive tree replacement plan for the subdivision. The building official may allow the property owner additional time to complete the development project to plant the replacement trees, with the following restrictions:

(D) A proposed landscape plan identifying all conceptual landscaping for the properties within the subdivision must be provided by a landscape architect and designed according to the soil and area requirements of this article. The proposed plan will specify the minimum tree size and general species distribution for the properties in accordance with this article. The tree replacement for the development identified on the proposed plan must be completed prior to the final certificate of occupancy or certificate of completion for the project.

(E) All required tree replacement which is not scheduled by approved design to be applied to the property under the comprehensive tree replacement plan must be completed within 30 days of issuance of the tree removal permit or building permit for removing trees.

~~[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.]~~

### **SEC. 51A-10.135. ALTERNATIVE METHODS OF COMPLIANCE WITH TREE REPLACEMENT REQUIREMENTS.**

(a) Mitigation. 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 tree removal property [~~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:

(1) Donate the replacement tree to the city's park and recreation department, with the approval of the director of the 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.]~~

(2) Plant the replacement tree on other property in the city that is within five [~~one~~] miles of the tree removal property, 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 transfer [~~assume mutual~~] responsibility for the replacement tree under this article to the receiving party.

(i) The agreement may be structured to allow a non-profit association dedicated to tree advocacy or the conservation of land to monitor and manage the replacement trees; and

(ii) The agreement must include a written affidavit by the owner of the property where the replacement tree will be planted agreeing to maintain the tree for five years and to be the responsible party for the replacement tree.

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

(4) Grant a conservation easement to the city in accordance with Subsection (f[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) The conservation easement area must be a minimum of 25 percent of the size of the development impact area on the tree removal property.

(b) Sustainable development incentives.

(1) A qualified development for the SDI must meet the following requirements:

(A) May only be for properties a minimum of two acres with no residential uses other than multi-family uses.

(B) A pre-development forest stand delineation and conceptual landscape plan conforming to the zoning regulations for the property, must be provided to the building official by a qualified land professional, arborist, or landscape architect, before submittal of an application for a building permit. The plan must identify the areas of tree preservation, and selected areas for legacy tree planting, as they relate to proposed buildings and other site improvements.

(C) A soil management study for the landscape areas on the site with an emphasis on soil conditions for legacy trees must be provided with the landscape plan for review. Indigenous vegetation must be retained and protected except in immediate areas of development, or except to control or remove invasive plants.

(D) All quality top soils disturbed during construction must be restored, where applicable.

(E) Grading and clearing in or around the development impact area may not encroach in a floodplain area, escarpment zone, wetland, or within 50 feet of a streambank, except in conjunction with the construction of drainage facilities, approved through private development engineering review. Development must be fitted to the topography and soils to minimize cut and fill sections. Grading near preserved trees, and around the edge of the development impact area, must be planned and implemented so as to have the least disturbance

on the area's natural topography, watercourses, vegetation, and wildlife. This may preclude all development in certain areas.

(F) Utility easement planning and locations must be designed for least impact to preserved trees and sensitive land area.

(G) All tree preservation and legacy tree plantings must fully comply with the tree protection requirements and soil area and tree spacing standards of this article.

(H) A qualified arborist must be consulted throughout the development and provide periodic inspections of the preserved trees, confirm the standards for tree planting of the legacy trees, and report findings to the building official before the final landscape inspection.

(I) Water conservation irrigation standards must be designed for optimum water conservation management on the property, with dedicated irrigation for all legacy trees.

(J) A sustainable site maintenance, schedule, and implementation plan covering a minimum of 5 years must be written by a qualified professional and implemented for the development, and retained on the property

(2) Existing healthy large and medium trees preserved on the property are provided tree replacement credit by establishing the tree canopy cover of eligible preserved trees in the development impact area by completing a forest stand delineation and a conceptual landscape plan. Qualified trees must be preserved as required in this article.

(3) Legacy trees may be established on the property in enhanced landscape areas for tree replacement credit. The tree credit is achieved by planting an approved large or medium tree in a minimum surface soil area, and volume, which is determined best suited to establish and sustain the tree to full maturity projected over an extended period of time. Legacy trees and their tree credit cover are established as follows:

(A) Large legacy trees must be planted in an open soil area of at least 500 square feet (or 1500 cubic feet) per tree. The area must be increased to 750 square feet in shallow soils of less than two feet in depth. Large legacy trees will provide a projected 1200 square feet per large legacy tree to the tree canopy cover total for the development.

(B) Medium legacy trees must be planted in an open soil area of at least 400 square feet (or 1200 cubic feet) per tree. The area must be increased to a minimum of 600 square feet in shallow soils of less than two feet in depth. Medium legacy trees will provide a projected 750 square feet per legacy tree to the tree canopy cover total for the development.

(4) The cumulative tree canopy coverage of existing trees excluding FEMA-designated 100-year floodplain, the escarpment zone setback, and the projected 50 feet beyond a streambank, and planted legacy trees on the final approved landscape plan determines the credited tree canopy cover and is then compared to the projected tree canopy goal for the property. The required tree replacement inches is reduced by the percentage of legacy tree cover and existing tree cover in the development impact area as compared to the goal tree canopy cover for the property.

<u>Street Typology</u>	<u>Goal Canopy Cover</u>
<u>Residential</u>	<u>50%</u>
<u>Mixed Use</u>	<u>45%</u>
<u>Commercial &amp; Freeways</u>	<u>40%</u>
<u>Industrial</u>	<u>30%</u>
<u>Parkways</u>	<u>60%</u>
<u>Freeways</u>	<u>40%</u>

(5) Protected trees not in the development impact area will be credited

(6) A development which demonstrates by a SITES rating sheet a minimum compliance with SITES (Sustainable Sites Initiative) Certified-rating or greater may achieve additional credit based on the percentage of the achieved score relative to SITES Platinum-rating. The percentage increase of projected tree canopy may be applied to each planted legacy tree when the estimated established score is approved by the building official.

(c) Tree canopy cover credit for single family and duplex construction. To receive a reduction of tree removal mitigation requirements a portion of existing tree canopy over a single family or duplex construction building site must be preserved.

(1) The tree canopy cover credit square feet threshold goal is 40 percent of the building site. If the goal is not achieved, a penalty is not applied for not attaining the goal.

(2) All healthy existing large and medium trees preserved on the building site, and boundary trees, may be measured for total square footage of tree canopy cover, except for invasive trees and trees located within 20 feet on center of the nearest overhead public electric distribution line.

(3) Large and medium nursery stock trees applied as landscaping may qualify for tree canopy cover measurement at time of planting for 100 square feet of tree canopy cover under the forest stand delineation. If the tree canopy cover goal is met, additional landscape trees are not required, except that one tree must be provided in the front yard. (see landscape requirements for SF)

(4) Existing large and medium healthy trees preserved in the front yard setback may qualify for double the total square footage of tree canopy cover over the property.

(5) Qualifying trees must be protected according to Section 10.136. Boundary trees located on adjoining properties must be protected to the drip line according to the tree protection plan.

(6) The tree canopy cover must be measured by a forest stand delineation, verified and approved by the building official. The forest stand delineation must be provided by a qualified professional. The reported calculated tree canopy coverage and comparison to the goal canopy coverage must be approved by the building official.

~~[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.]~~

The replacement trees that cannot be planted on the tree removal property, and for which credit cannot be given through a conservation easement under this paragraph, must be replaced by other methods set forth in this subsection, such that the replacement trees equal in total caliper the total caliper of the trees removed or seriously injured.

~~(d[b]) Use of other property for tree replacement. A responsible party who obtains permission to plant the replacement tree on other tree replacement property in the city shall ensure that the planting and maintenance of the tree on the other tree replacement property complies with the requirements of this article. [The building official shall maintain a list of publicly or privately owned properties for which replacement trees are sought by groups such as homeowner's associations or school districts.]~~

(e[e]) Reforestation fund.

(1) The director shall administer the reforestation fund to purchase trees to plant on public property,[-] to create an urban forest master plan and to update it periodically, to fund a staff position for managing and directing the fund for planting and urban forest education, or to acquire conservation easements or wooded property. A minimum of fifty percent of all funds provided for each fiscal year must be available to planting trees on public property or to acquire conservation easements or wooded property.

(2) The amount of the payment required is calculated by using the formula for appraising the value of a tree, as derived from the most recent edition of the *Guide for Plant Appraisal* [~~Establishing Values of Trees and Other Plants~~] published by the Council of Tree & Landscape Appraisers, unless another publication is designated by the building official. If more than one tree is being removed or seriously injured or not planted, the values of the trees are added when calculating the payment required.

(3) All property purchased through this fund must be in [~~or partly in~~] the city of Dallas [~~and may not extend further than five miles from the Dallas city limit~~].

(f[~~d~~]) Conservation easement.

(1) The city manager is authorized to accept and approve on behalf of the city a conservation easement to conserve trees and other natural features, upon:

(A) approval as to form by the city attorney; and

(B) a determination by the building official that the easement area is suitable for conservation purposes, based on:

(i) the submission of baseline documents prepared by a qualified professional describing the property's physical and biological conditions and the conservation values protected by the easement;

(ii) the likelihood that the proposed conservation easement area would preserve vegetation on a parcel otherwise attractive for development;

(iii) the overall health and condition of the trees on the conservation easement property;

(iv[~~ii~~]) the suitability of the area as a wildlife habitat; [~~and~~]

(v[~~i~~]) other unique features worthy of preservation, e.g. water channels, rock formations, topography, or rare herbaceous or woody plant species;[-] and

(vi) the percentage of conservation easement land area in a flood plain does not exceed fifty percent of the overall conservation easement area.

(2) The conservation easement may be structured to be monitored and managed by a nonprofit association dedicated to the conservation of land, with the city as a joint grantee having the right, but not the duty, to monitor the management of the conservation area. [~~The joint grantee of a conservation easement may be an eligible grantee such that the grantor will have the option of receiving a property tax benefit on the assessed value of the conservation easement area.~~]

(3) The city manager may not accept a sole or joint conservation easement on behalf of the city, unless and until the owner provides the building official with:

(A) a tree survey as set forth in Section 51A-10.132, or an estimate of the caliper and type of protected trees documented in a manner determined to be reasonably accurate by the building official, or a forest stand delineation verified and approved by the building official; and

(B) a preservation strategy for the conservation easement area.

(4) No person may place playground equipment or park amenities in a conservation easement area unless the building official has made a written determination that the amenities indicated on a site plan are unlikely to be detrimental to the conservation easement area.

(5) Conservation easement areas must be in [~~or partly in the city of Dallas and may not extend further than five miles from~~] the Dallas city limit.

**SEC. 51A-10.136. CONSERVATION AND MAINTENANCE [~~PRESERVATION~~] OF PROTECTED TREES DURING CONSTRUCTION OR OTHER DISTURBANCE.**

(a) Except as provided in this section, trees on City property:

(1) must be established and maintained in accordance with ANSI A300 standards for tree care operations; or

(2) the American Nursery Standard for Nursery Stock Z60.

(b) 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 when making application, or prior to application, for a building permit:

(1[~~a~~]) Tree protection plan in general. A tree protection plan submitted to the building official must be provided in accordance with the industry-consensus specifications found in ANSI A300 Standards for Tree Care Operations, as amended, and industry-consensus best management practices.

(2) Tree protection plan additional requirements. A tree protection plan must include the following:

(A[~~1~~]) A site plan drawn to scale, indicating the location of land disturbance, clearing, grading, trenching, tree protection zones, general projection of the tree canopy area over the property, proposed underground utilities, staging areas for parking, material storage, concrete washout, and debris burn and burial holes where these areas might affect tree protection, and areas where soil compaction is likely to occur in a tree protection zone due to traffic or materials storage.

(B[2]) A complete tree survey in accordance with the requirements set forth in Section 51A-10.132, or a forest stand delineation as verified and approved by the building official. Significant and historic trees must be specifically designated on the survey.

(C[3]) Detailed drawings and descriptions of any of the following tree protection measures that will be used during development.

(i[A]) Tree protection fencing. Tree protection fences must be a minimum of four feet high, constructed with adequate, durable material (e.g. orange plastic construction fencing) approved by the building official, and located at the drip line or the edge of the critical root zone, whichever is farthest from the trunk, unless the building official determines that a fence line closer to the trunk will not be likely to result in damage to the tree. The building official may require an expansion of the critical root zone or approve encroachment, as applicable. Once established, the fence line must remain in place as approved. [~~For purposes of this subsection, "drip line" means a vertical line that runs from the outermost portion of the crown of a tree to the ground.~~]

(ii[B]) Erosion control fencing or screening. All protected trees or stands of trees, and tree protection zones must be protected from the sedimentation of erosion material. Silt screening must be placed along the outer uphill edge of tree protection zones.

(iii[C]) Tree protection signs.

(iv[D]) Transplanting specifications. Trees to be transplanted on property, or relocated from a remote property, must conform to industry-consensus specifications found in ANSI A300 Standard for Tree Care Operations, as amended.

(v[E]) Tree wells, islands, retaining walls, and aeration systems.

(vi[F]) Staking specifications.

(vii) Soil and root protection.

(viii) Trunk protection.

(ix) Tree and site watering plan.

(c[b]) Implementation of tree protection plan.

(1) The responsible party must install and maintain all tree protection measures indicated in the approved plan prior to and throughout the land disturbance process and the construction phase.

(2) No person may disturb the land or perform construction activity until the required tree protection measures have been inspected by the building official.

(3) The responsible party must mulch areas where soil compaction is likely to occur as indicated on the plan with a minimum four-inch layer of processed pine bark or wood chips, or a six-inch layer of pine straw.

(4) If a cut is made to the root of a tree that is not intended to be removed or seriously injured as indicated on the plan, the cut must be made at a 90 degree angle.

(5) The responsible party must tunnel utilities if utilities are to run through a tree protection zone, rather than being placed along corridors between tree protection zones.

(6) The responsible party must provide water to the tree protection zone as needed due to weather or site conditions, with penetration to 6 to 18 inches of soil.

(d) 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. The building official may determine irreparable damage to a tree based on, but not limited to, the following factors: site evaluation, visible extensive damage to a tree root system, extensive soil compaction around the tree protection zone, visual evidence of required tree protection either removed or in disrepair, a level one tree risk assessment, or a similar report prepared by a certified arborist or other qualified arborist indicating the current condition and prognosis for the tree and the methods for remedy.

#### **SEC. 51A-10.137. VIOLATION OF THIS DIVISION.**

(a) Stop work order. Whenever any work is being done contrary to the provisions of this division, the building official may order the work stopped by notice in writing served on any person engaged in the work or causing the work to be done. A person issued this notice shall stop work immediately until authorized by the building official to proceed with the work.

(b) Mitigation. In addition to any enforcement of criminal or civil violations on the property or responsible party, the building official may impose a mitigation requirement for the removal, or serious injury, of protected trees enacted without a tree removal application or a building permit upon written notice of a violation of this division.

(1) The mitigation may include:

(A) replacement of nursery stock trees on the property based on a tree mitigation plan provided by the responsible party, if it is determined by the building official that it is practicable to plant trees on the tree removal property;

(B) a fee to be applied to the Reforestation Fund, with the amount as determined in Section 51A-10.135; or

(C) other alternative methods of compliance in this article when approved by the building official.

(2) The responsible party must provide a tree survey or a forest stand delineation identifying all tree sizes and species, or tree canopy coverage, on the property. If the responsible party fails to provide the required information within five days of the notice of violation the building official may conduct a forest stand delineation using aerial imagery, field analysis, or other reasonable and pertinent information to review and identify the square footage of tree canopy coverage on the property. The rate per square foot of tree canopy will be calculated at a rate of two dollars per square foot of illegally removed trees.

(3) Upon a finding by the building official that tree canopy coverage removal has occurred, the building official shall give written notification to the responsible party. The tree replacement or mitigation must be completed within 30 days of the date of the notification.

#### **SEC. 51A-10.138. APPEALS.**

In considering an appeal from a decision of the building official made in the enforcement of this division, the sole issue before the board of adjustment shall be whether or not the building official erred in his or her decision. The board shall consider the same standards that the building official was required to consider in making the decision.

#### **SEC. 51A-10.139. FINES.**

A person convicted of violating this division shall be subject to a fine of not less than \$2,000.00 per protected tree removed or seriously injured without authorization, and not less than \$2,000.00 per day for any other violation of this division.

#### **SEC. 51A-10.140. CRIMINAL RESPONSIBILITY, AND DEFENSES TO PROSECUTION.**

- (a) 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.

(b) It is a defense to prosecution under this section that the act is included in one of the enumerated categories listed in this section. No approval of a tree removal application is required if the tree:

(1) was dead and the death was not caused by an intentional or negligent act of the owner or an agent of the owner;

(2) had a disease or injury that threatened the life of the tree and was not caused by an intentional act of the owner or an agent of the owner;

(3) was in danger of falling or had partially fallen and the danger or the fall was not due to an intentional act of the owner or an agent of the owner;

(4) was in a visibility triangle (unless the owner was legally required to maintain the tree there) or obstructed a traffic sign;

(5) interfered with service provided by a public utility within a public right-of-way;

(6) threatened public health or safety, as determined by one of the following city officials:

(A) the chief of the police department;

(B) the chief of the fire-rescue department;

(C) the director of public works;

(D) the director of street services;

(E) the director of sanitation services;

(F) the director of code compliance;

(G) the director of park and recreation; ~~[ ]~~

(H) the director of sustainable development and construction; or

(I) the director of aviation.

(7) was designated for removal without replacement in a landscape plan approved by the city council, city plan commission, or board of adjustment;

(8) interfered with construction or maintenance of a public utility or public right-of-way; or

(9) was removed or seriously injured to allow construction, including the operation of construction equipment in a normal manner, in accordance with infrastructure engineering plans approved under Article V of Chapter 49 or street paving and grading in a public right-of-way, storm drainage easement, detention or retention pond designation, or bridge construction, for private development. [~~Section 51A 8.404; or~~]

~~[(10) was removed or seriously injured to allow construction of improvements in accordance with a building permit.]~~

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