

Legislative #  
090878

## ORDINANCE NO. 090878

**An ordinance of the City of Gainesville, Florida, amending the Code of Ordinances and the Land Development Code relating to landscape and tree management; by amending Sec. 30-23 Definitions; by amending Article VII. Development Review Process (Division 2. Subdivisions and Street Vacation and Division 4. Planned Development District); by amending Article VIII. Environmental Management (Division 1. Generally, Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policy, and Division 4. Relief and Enforcement); by amending Appendix A. Special Area Plans (for College Park, Traditional City, Central Corridors and University Heights); by amending Chapter 2. Administration (Division 12. Tree Board of Appeals and Division 13. Tree Advisory Board); providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an effective date.**

**WHEREAS**, publication of notice of a public hearing was given that the text of the Land Development Code and the Code of Ordinances of the City of Gainesville, Florida, be amended; and

**WHEREAS**, notice was given and publication made as required by law and a public hearing was then held by the City Plan Board on February 25, 2010 and by the City Commission on May 6, 2010; and

**WHEREAS**, city staff prepared and released a draft ordinance for review and comment in March 2011; and

**WHEREAS**, several public stakeholders expressed concern with and interest in revising the draft ordinance; and

**WHEREAS**, in July 2011, the Gainesville CRA directed CRA staff to hire a consultant to review the draft ordinance and coordinate a stakeholder review process, and on March 19, 2012, a revised draft was presented to the CRA board by the CRA staff and consultant, and

**WHEREAS**, on May 30, 2012, Planning staff provided the revised draft to stakeholders, and

**WHEREAS**, on June 4, 2012, the Tree Advisory Board reviewed and approved the draft with revisions; and

**WHEREAS**, at least 10 days notice has been given once by publication in a newspaper of general circulation notifying the public of this proposed ordinance and of a public hearing to be held in the City Commission Auditorium, City Hall, City of Gainesville; and

**WHEREAS**, the public hearings were held pursuant to the published notice described

above, at which hearings the parties in interest and all others had an opportunity to be and were, in fact, heard.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION  
OF THE CITY OF GAINESVILLE, FLORIDA:**

**Section 1.** Section. 30-23, of the Land Development Code of the City of Gainesville, is amended as stated below. Except as amended herein, the remainder of Sec. 30-23 remains in full force and effect.

**Sec. 30-23. Definitions.**

Canopy means the uppermost layer of vegetation in a forest consisting of the tops of trees forming a kind of ceiling.

Champion tree means those trees that are the largest of their species as listed in the Florida Champion Tree Register maintained by the State of Florida Division of Forestry.

City tree mitigation fund means a separate city fund that holds funds collected as tree mitigation. This fund may be used for new tree plantings associated with public improvement projects or for the preservation of trees through the purchase of conservation lands, but shall not be used for tree maintenance or for the installation of new trees that are required for a development.

Council of Tree and Landscape Appraisers means to a group of professional societies specializing in arboriculture, horticulture and nursery practices that have established a methodology for appraising the financial value of trees and landscaping.

Crown means the foliated portion of a tree, from the lowest branch to the treetop; synonymous with canopy, ~~main mass of branching of a plant above ground.~~

Crown spread means the measurement of the outermost tips of a tree's branches as they form a circle. It is calculated by averaging the diameters of two circles - the distance across the narrowest point and at the widest point ~~branching distance measured across the greatest diameter of a crown.~~

Diameter breast height (DBH) means the diameter of the main stem of a tree as measured 4.5 feet above the natural grade at the base. The diameter of a multi-stemmed tree is measured at the narrowest point below the lowest branch.

Dripline means the minimum rooting volume of a tree necessary to sustain the tree's life, generally defined by the tree's crown spread or a radius of every 1.25 feet for every 1 inch DBH, whichever is greater, and from the surface to a depth of 3 feet.

Establish or establishment (in reference to planted trees) refers to the period of care that

1 must be provided to a young tree after planting, which is a minimum of one year and additional  
 2 time as needed to ensure the survivability of the trees. If after three years, a young tree has  
 3 developed a strong trunk, roots, branches and foliage, it is considered established and can be  
 4 expected to survive without supplemental watering, even during drought.

5  
 6 Fair or better condition means that the tree has a relatively sound and solid root, trunk,  
 7 and canopy structure, no major insect infestation or pathological problem, or problems that  
 8 cannot be remedied with cultural practices, and a life expectancy greater than 15 years as  
 9 determined by the city manager or designee. In the event of a disputed health condition, the  
 10 condition rating system outlined in the latest edition of the Council of Tree and Landscape  
 11 Appraisers Guide for Tree Appraisers shall be used by the city manager or designee to evaluate  
 12 the health condition. A score of 60 or higher shall qualify a tree as fair or better condition.

13 Gainesville tree list refers to the list in Sec. 30-267 of this code.

14 Heritage trees are native trees that are larger than 20 inches diameter breast height.

15 High quality trees are any trees of the following species: Live Oak (*Quercus virginiana*),  
 16 Sand Live Oak (*O. geminata*), Bluff Oak (*O. austrina*), Basket Oak (*O. michauxii*), Southern  
 17 Red Oak (*O. falcata*), Southern Magnolia (*Magnolia grandiflora*), Florida Maple (*Acer*  
 18 *barbatum*), Longleaf Pine (*Pinus palustris*), Spruce Pine (*P. glabra*), Cedar Elm (*Ulmus*  
 19 *crassifolia*), Winged Elm (*U. alata*), Florida Elm (*U. floridana*), Bald Cypress (*Taxodium*  
 20 *distichum*), Pond Cypress (*T. ascendens*), Tupelo (*Nyssa sylvatica*), Mockernut Hickory (*Carya*  
 21 *tomentosa*), Pignut Hickory (*C. glabra*), Pecan (*C. illinoensis*), Persimmon (*Diospyros*  
 22 *virginiana*), Basswood (*Tilia Americana*), Tulip Poplar (*Liriodendron tulipifera*), White Ash  
 23 (*Fraxinus Americana*), Green Ash (*F. pensylvanica*) and Yaupon, Dahoon, and American Holly  
 24 species (*Ilex vomitoria*, *I. cassine*, and *I. opaca*).

25 High quality heritage trees are heritage trees of the species identified in the definition of  
 26 high quality trees.

27 High quality shade trees are trees of the native species listed in the definition of high  
 28 quality trees that are identified on the gainesville tree list in the category "high quality shade."

29 ~~Improvement means any manmade, immovable item which becomes part of, is placed~~  
 30 ~~upon, or is affixed to real estate.~~

31 Improvements means physical changes made to ~~raw~~ land and structures placed on or  
 32 under the land surface, in order to make the land more usable. Typical improvements would be  
 33 clearing and grubbing, grading, street pavements, curb and gutter, drainage ditches, ~~street~~  
 34 required trees, storm and sanitary sewers, streetlights, fire hydrants, street name signs,  
 35 permanent control points (PCP's).

36 Invasive, non-native plant species, refer to Section 30-251(6)(g) and (h).



1        Landscape materials means improvements such as living trees, shrubs, vines, grasses,  
 2 ground covers and other plants, sand, or wood mulch and other materials which do not require  
 3 soil compaction for their installation, ~~walls and fences and other nonliving, durable materials~~  
 4 ~~commonly used in landscaping; landscape water features; and similar materials and design~~  
 5 features; provided that visible synthetic materials shall not qualify.

6        Public utility means a utility owned, operated and maintained by a public or  
 7 governmental entity or a publicly-regulated utility company, including but not limited to  
 8 stormwater, drainage, water, wastewater, reclaimed water, chilled water, natural gas, electric or  
 9 telecommunications facilities.

10       Public utility easement (PUE) is a non-possessory, non-exclusive interest in the land of  
 11 another and the right to use the property for the purpose of installing, operating and maintaining  
 12 public utility facilities.

13       Qualitative tree survey, refer to Tree survey, qualitative.

14       Regulated trees are those of 8 inches or greater in diameter breast height or any tree that  
 15 was planted in compliance with an approved development order or to mitigate the removal of a  
 16 regulated tree. Slash and Loblolly Pines are not regulated until they reach 20 inches in  
 17 diameter, except those that were preserved during development in order to meet a landscaping  
 18 requirement, which are considered regulated regardless of size.

19       Required trees mean those planted to meet a specific landscaping requirement such as  
 20 trees in buffers, landscape islands, and stormwater management areas.

21       Rootzone refers to the allotted area of soil that is provided for the growth of tree roots.

22       Rootzone media refers to the appropriate soil structure and texture to accommodate  
 23 healthy root growth for required landscaping. The minimum components of rootzone media are  
 24 uncompacted soil (bulk density less than 1.50 g/cc in loam, 1.70 g/cc sand, or 1.40 g/cc clay soil)  
 25 devoid of seeds of invasive exotic species and of pH 5.5 to 6.5, composted leaf mold or peat  
 26 moss, and well-graded, medium angular sand (0.50 to 0.25 mm). The natural topsoil of the site  
 27 qualifies if the above qualities exist. The maximum depth for structural soil used as root zone  
 28 media shall be 36", the maximum depth for root zone media used with structural root box cells  
 29 shall be 45".

30  
 31       Root zone volume refers to a measurement of the net soil volume not including structural  
 32 components such as stone. The root zone can include soil within the tree opening or soil under  
 33 pavement, as long as the soil volumes are compacted to no more than 85% dry density.  
 34 Structural soils are exempt from this compaction requirement. A variety of techniques are  
 35 suitable for under pavement locations, including but not limited to structural root box cells,  
 36 structural soil, tree wells, root paths and soil trenches. The soil volumes must be accessible to  
 37 the tree roots to be considered part of the root zone volume. Rooting space should be composed

of soil defined in the ordinance as root zone media. The depth of root zone, for purposes of calculating the volume, shall not exceed four feet.

Root paths are narrow trenches under pavement filled with root zone media and strip drain board, which are used to guide roots out of confined planting areas.

Soil trenches are trenches under reinforced structural slabs filled with root zone media compacted to a maximum 80% proctor, which are used to guide roots out of confined planting areas.

Soil bulk density is a measure of soil compaction expressed as the mass of soil per unit of volume.

Soil compaction is compression of the soil resulting in a reduction of the total pore space, especially the macropores (air-filled spaces between soil particles) and micropores (which fill with water).

Structural soil is a designed medium which can meet or exceed pavement design and installation requirements while remaining root penetrable and supportive of tree growth.

Structural root box cells are fiberglass-reinforced polypropylene structures including frames and decks designed to support pavement loads and hold root zone media for the purpose of supporting tree growth.

Tree appraised value means the dollar value to the city of a tree on private or public property used for the purpose of calculating cash recompense for removal or destruction. The Tree appraised value shall be calculated as follows:

$$(3.14) \times (\frac{1}{2} \text{ diameter breast height})^2 = \text{trunk area}$$

$$(\text{trunk area}) \times (\text{unit factor for square inch price, as determined annually by the Tree Advisory Board in consultation with the City Manager or designee}) = \text{square inch value}$$

$$(\text{square inch value}) \times (55\% \text{ diminution rating}) = \text{tree appraised value}$$

Example calculation: 20" Live Oak in fair or better condition:

$$(3.14) \times (1/2 \times 20)^2 = 314 \text{ square inches of trunk area}$$

$$(314 \text{ sq in}) \times (\$40) = \$12,560 \text{ square inch value}$$

$$(\$12,560) \times (.55) = \$6,908 \text{ tree appraised value}$$

Tree grouping or major tree grouping means an assemblage of closely spaced trees that encompass an area of at least 400 square feet and that provide coverage of at least 50% of that area. with the following characteristics:

- (1) ~~The perimeter of the assemblage encompasses at least 400 square feet; and~~
- (2) ~~The coverage of the assemblage tree canopy is at least 50 percent.~~

Tree lawn refers to a pervious area between the back-of-curb and sidewalk or along the street edge intended for the planting of street trees.

Tree root plate refers to the below-ground area adjacent to the trunk where the major buttress roots and support roots occur, generally a circular area with a radius of four (4) times the diameter of the tree trunk at ground level. For example, a 2 foot diameter trunk has a root plate radius of 8 feet outside the trunk on all sides.

Tree survey is a map that depicts the geographic location of regulated trees with their scientific names (both genus and species) and indicates the diameter of each regulated tree measured at 4.5 feet above the natural grade at the base.

Tree survey, qualitative is an alternative to the tree survey. A qualitative tree survey shall be prepared by and executed by a certified arborist with current credentials from the International Society of Arboriculture or by a licensed landscape architect. The report must show the surveyed location, diameter, genus and species of all Heritage trees, all regulated trees of high quality shade tree species, other trees worthy of protection, and existing trees planted to comply with earlier approved development plans. On-site meetings with the city manager or designee will confirm which trees shall be included in the survey and to confirm that the survey meets code requirements. The survey shall also cover matters identified as significant relative to the urban forest based on site conditions.

Tree wells consist of an complete or partial enclosure below ground, filled with rootzone media, where a tree is planted. Apertures at the surface are provided to conduit air and water to the tree roots.

Urban forest refers to the sum total of all vegetation growing within the city limits, whether on public or private property.

**Section 2.** Sections 30-180, 30-182(c)(2), 30-183(e)(2), 30-183 (g), and 30-183(i)(2), 30-184, 30-187(c)(1), 30-187(p), 30-187(t), and 30-188(c)(3) of Article VII. Development Review Process, Division 2. Subdivisions and Street Vacation of the Land Development Code of the City of Gainesville, are amended as stated below. Except as amended herein, the remainder of Article VII. Development Review Process, Division 2. Subdivisions and Street Vacation, remains in full force and effect.

#### **Sec. 30-180. Purpose and intent.**

This article is intended to provide direction and standards for the division of land in a manner that would facilitate the coordination of land development in accordance with orderly physical patterns; to encourage development of an economically stable and healthful community; to ensure proper identification, monumentation and recording of real estate boundaries; to ensure that adequate and necessary physical improvements of lasting quality will be installed in subdivisions by the subdividers and that taxpayers will not bear this cost; to provide for safe and convenient vehicle, bicycle, pedestrian and transit access; to provide an efficient, adequate and

economic supply of utilities and services to new land developments; to prevent periodic or seasonal flooding and to protect groundwater and surface water quality through provision of protective flood control and stormwater management facilities; to help conserve and protect physical and scenic resources; to sustain and replenish the urban forest; to promote the public health, safety, comfort, convenience and general welfare; and to implement the city's comprehensive plan.

**Sec. 30-182. Pre-application conference.**

(c) *Concept Review (Sketch drawing).*

(2) The sketch shall contain the following data:

- a. Approximate tract boundaries;
- b. Approximate location with respect to section lines;
- c. Streets on and adjacent to the tract;
- d. Proposed general street layout;
- e. Environmental features including but not limited to significant topographical and physical features including regulated surface waters and wetlands, regulated natural and archaeological resources, creeks, uplands, lakes and wetlands FEMA and community determined flood plains, and heritage trees;
- f. Generalized existing vegetation; including areas of native forest where the land shows no evidence of prior use for agriculture;
- g. Proposed general lot layout and the total number of lots;
- h. Existing buildings on the property;
- i. Land use and zoning designation of the subject property; and
- j. Generalized stormwater management plan.

**Sec. 30-183. Design plat requirements and approval.**

(e) *Specifications.*

(2) The design plat shall also contain or be accompanied by:

- h. The location of all major tree groupings and identification of all heritage trees by genus and species on the subdivision tract, a designation of which tree groupings and heritage trees are proposed to be removed, and identification by genus and species of all regulated trees ~~as defined in section 30-254~~ located in or within 15 feet of any proposed right-of-way or utility improvement. A generalized landscaping plan that shows the locations of the required shade trees with the appropriate space allocations to meet code requirements for street trees, buffers, retention basins and stormwater management facilities. The design plat and the final plat shall include a statement that all champion and high quality heritage trees shall be preserved or mitigated in accordance with the requirements of this



code.

- n. A plan for the elimination and future control of invasive non-native plant species from the site. The non-native removal shall be completed as specified in the management plan prior to the issuance of the first certificate of occupancy and yearly inspections for three years to assure that infested areas have remained at less than 10 percent of the initial population.

- (g) *Review of design plat~~n~~.* The development review board review shall include consideration of staff findings and evidence and testimony from the general public. The board shall determine if the proposed subdivision is in conformity with the general goals and objectives of the city with respect to the officially adopted comprehensive plan; the city's official roadway map; existing zoning requirements, including amendments thereto; policies and plans established by the city with respect to neighborhoods, lake levels, water supply, maintenance of the tree canopy levels identified in the comprehensive plan, control of invasive non-native plant species, protecting environmental features, provision for emergency access, consideration of pedestrian, bicycle and transit access and greenway connections, waste disposal and other essential utilities; the overall stormwater management plan including landscaping of stormwater management basins; and policies for development in any special improvement and redevelopment districts. Particular attention shall be given to the arrangement, location and width of streets, the provision of high quality shade trees along the streets, their relation to the topography of the land, water supply, sewage disposal, stormwater management, lot sizes and arrangement and the present or future development of abutting property.

- (i) *City commission review.*

- (2) The city commission shall review the recommended design plat and consider findings made by the development review board and/or staff. The city commission shall determine if the proposed subdivision is in conformity with the general goals and objectives of the city with respect to the officially adopted comprehensive plan; existing zoning requirements, including all amendments thereto; policies and plans established by the city with respect to neighborhoods, lake levels, water supply, sustaining the urban forest, protecting environmental features, provision for emergency access, consideration of pedestrian, bicycle, vehicle and transit access and greenway connections, waste disposal and other essential utilities; the overall stormwater management plan; and policies for development in any special improvement and redevelopment districts. Particular attention shall be given to the arrangement, location, function and width of streets, their consistency with the goal of developing a multimodal transportation network and providing sufficient space for street trees both above and below ground, their interaction with the overall transportation system and relation to the topography of the land, water supply, sewage disposal, stormwater management, lot sizes and arrangement and the present or future development of abutting property.

**Sec. 30-184. Preparation, submission and review of construction plans.**

(a) *Preparation.* Following the city commission approval of the design plat, the subdivider shall submit construction plans and specifications for all subdivision improvements required, in accordance with this article. The construction plans must be prepared, by an engineer registered in the state, in conformance with section 30-188 of this article, the design manual on file in the public works department, and other applicable local, state and federal regulations.

(b) *Submission and review.* The subdivider shall submit five multiple sets of plans as necessary to facilitate review by the City. ~~to the planning division within the planning and development services department for review by the following: public works department, Gainesville Regional Utilities, Alachua County Environmental Protection Department, planning and development services department and the building department or other department to be determined by the planning division.~~

The plans shall be submitted to the planning division during a regular review cycle for development review. Following their reviews, if the construction plans are consistent with the approved design plat and comply with all standards and specifications, public works department and Gainesville Regional Utilities shall notify the subdivider and the planning division within the planning and development services department of construction plan approval. If the construction plans are not consistent with the design plat as approved by the city commission or do not comply with all standards and specifications, the public works department and Gainesville Regional Utilities shall notify the subdivider of:

- (1) Conditional construction plan approval, subject to any necessary modifications which shall be indicated on the plans or attached to them in writing; or
- (2) Disapproval of the construction plans or any portion thereof, indicating in writing the reasons for the disapproval. The subdivider shall be responsible for timely resubmittal of acceptable plans within 12 months from the date of approval of the preliminary development order.

(c) *Required maps and drawings.* Plans for the proposed improvements and a boundary survey shall be required to be approved by the planning and development services department, parks, recreation and cultural affairs department, public works department and Gainesville Regional Utilities prior to approval of the final plat by the city commission. The final plat shall be recorded in the public records unless the subdivider has complied in all respects with subsection 30-186(e). The improvement plans shall show the proposed locations, sizes, types, grades and general design features of each facility, and shall be based upon reliable field data. These drawings shall include, at a

minimum, a topographic map, stormwater management plan, a landscape plan, an invasive exotic plant control plan, and construction drawings showing street profiles, street cross sections and water supply, sewer and stormwater management as specified by the public works department and Gainesville Regional Utilities and all champion and heritage trees identified for preservation or removal, with protective barricades drawn to scale. The landscape plan shall show all buffers and stormwater management areas as well as the locations and specifications for street trees.

**Sec. 30-187. Design standards.**

(c) *Streets.*

(1) The arrangement, character, extent, width, grade and location of all streets shall conform to the comprehensive plan, particularly any neighborhood elements, now in existence or as may hereafter be adopted, and shall be considered in their relation to existing and planned streets, to topographical conditions, to the provision of wide tree lawns and tree planting to yield shaded streets, to public convenience and safety, and in their appropriate relation to the proposed uses of the land to be served by such streets.

(p) *Utilities easements.* When they are necessary to serve the subdivision, utilities easements shall be provided, with a minimum width of 15 20 feet, located along lot lines. The location of the utility easements shall not interfere with the required space devoted to street trees and tree lawns. Additional width may be required for sewer or stormwater management easements. Side lot line easements may be decreased to ten feet in width when serving a single electric, cable TV, gas or telephone utility. Rear lot line easements shall be discouraged, unless they are provided along an alley.

(t) *Stormwater facilities.*

(4) Trees selected from the Gainesville tree list that are identified as appropriate for stormwater basins shall be planted to meet the requirements identified in Sec. 30-253.2.

**Sec. 30-188. Required improvements.**

(c) *Street specifications.* Streets shall be designed in accordance with the following:

(1) Standards contained in the design manual that specify dimensions and construction standards for subgrade, pavement base, wearing surface and minimum pavement width for minor local streets, major local streets, minor local collectors, major local collectors, minor arterials, and major arterials; and

(2) Guidelines that address curb and gutter roadways, non-curb and gutter roadways, roadway widths for on-street parking, and the location of sidewalks.

(3) Street trees shall be planted along the sides of all streets within the subdivision and on the subdivision side of any contiguous street, meeting the requirements of Sec. 30-251 and 30-253.1.

**Section 3.** Sec. 30-211 of Article VII. Development Review Process, Division 4. Planned Development District, Land Development Code of the City of Gainesville, is amended as stated below. Except as amended herein, the remainder of Section 30-211 remains in full force and effect.

**Sec. 30-211. Purpose and intent.**

(b) *Objectives.* The PD provisions are intended to promote flexibility of design and integration of uses and structures, while at the same time retaining in the city commission the absolute authority to establish limitations and regulations thereon for the benefit of the public health, welfare and safety. By encouraging flexibility in the proposals which may be considered, while at the same time retaining control in the city commission over the approval or disapproval of such proposals, the PD provisions are designed to:

(3) Preserve to the greatest extent possible, and utilize in a harmonious fashion, existing and outstanding landscape features, high quality heritage trees, and scenic vistas.

(7) Promote the use of traditional, quality-of-life design features, such as pedestrian scale, parking located to the side or rear of buildings, narrow streets, connected streets, terminated vistas, front porches, recessed garages, alleys, aligned building facades that face the street, streets canopied by large shade trees located within wide tree lawns or in tree wells constructed to allow sufficient space, and formal landscaping along streets and sidewalks.

**Section 4.** Section 30-250 (a) and (b), Article VIII. Environmental Management, Division 1. Generally, of the Land Development Code of the City of Gainesville, is amended as stated below. Except as amended herein, the remainder of Section 30-250 remains in full force and effect.

**Sec. 30-250. Purpose; objectives; environmental review.**

(a) *Purpose.* This article is established for the purpose of protecting the immediate and longterm public health, safety and general welfare by preserving, enhancing, conserving or restoring the natural environment. The intent with respect to the urban forest is to establish and maintain a sustainable tree canopy in which the healthiest and strongest



existing trees are preserved during development, and new high quality shade trees are planted. Development and other activities within the city shall be in accordance with this purpose.

(b) *Objectives.* The provisions in this article are intended:

(42) To diminish the severity and frequency of southern pine beetle outbreaks in Gainesville by reducing the density of loblolly pines in urban areas.

(43) To preserve high quality heritage trees, especially where they occur within 20 feet of the public right-of-way.

(44) To favor replanting with native species of high quality shade trees, including requiring such trees to be planted in locations that will reintroduce seed sources to adjacent natural communities.

**Section 5.** Section 30-251, Section 30-252 and Section 30-253, of Article VIII. Environmental Management, Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policies, Subdivision I. Landscape and Tree Management, Land Development Code of the City of Gainesville, are amended as stated below. Except as amended herein, the remainder of Article VIII. Environmental Management, Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policies, Subdivision I. Landscape and Tree Management remains in full force and effect.

#### **Sec. 30-251. Elements of compliance.**

All property within the city shall be subject to the following regulations except as exempted by subsection 30-251(2)h. No parcel within the city may be cleared, grubbed, filled or excavated, nor shall any building be demolished, altered or reconstructed in a manner which negatively impacts regulated trees, changes the site plan, site use or increases the impervious surface area except in compliance with this article. Requirements of these sections do not exempt property owners from compliance with any other section of this chapter.

~~(1) — Minimum percentage of developed area devoted to landscaping. Property shall be designed, constructed and used so that the total of the areas devoted to landscape materials of any site is at least 20 percent of the area devoted to development,~~

~~(2)(1)~~ *Minimum requirements for landscaped areas.* All areas designed to meet the requirements of these sections shall comply with the following:

(a) ~~Any required landscape island containing a tree shall have a minimum of 140 square feet.~~ Street trees shall be provided a minimum rootzone volume

of 700 cubic feet, except street trees which share a rootzone volume shall require a minimum of 550 cubic feet. All other required shade trees shall be provided a minimum of 420 cubic feet of rootzone volume. Where existing conditions preclude the provision of the minimum rootzone volume, the reviewing board or city manager or designee may approve a lesser volume that meets the arboriculture needs of the tree within the existing conditions. The width of any side shall be at least nine feet. Underground utility lines shall not be located within the rootzone volume, except for those lines that are four-inch diameter or less, and then only where the utility separation requirements in subsection (b) below are met. Prior to planting, any limerock or construction debris found in this area shall be removed, and rootzone media soil shall be provided to a depth of at least 3 feet. Pedestrian walkways should not reduce the minimum area or width requirements for any landscape island containing a tree. Shade trees shall be located a minimum of 10 feet from a building face or from major architectural features of the building (including but not limited to balconies, awnings, bay windows or porches).

(b) ~~Landscaping of stormwater management areas shall conform to all requirements of this chapter and the public works department design manual. Retention/detention areas should be landscaped with trees, shrubs, ground covers and native perennials appropriate to the function as a wet or dry basin. If the landscaped area is also designed to meet on-site stormwater management requirements, one of the following conditions must be met:~~

1. ~~The area must be designed to provide an aesthetic focal point, such as a lake, creek or other water feature; to preserve a tree grouping; or to utilize the existing terrain and/or geological features of the site;~~
2. ~~The area must be preserved in such a manner as to maintain an existing wetland function or to preserve or establish habitat for a viable population of native plant, animal or insect species.~~
3. ~~The design of the retention/detention basin shall meet the following criteria:~~
  - i. ~~Varying side slopes or vertical side slopes (basins 18 inches or less in depth);~~
  - ii. ~~The basins shall be of an irregular shape, having no parallel sides;~~

iii. ~~Twenty five percent or more of the basin area including the shoulders shall be landscaped, and shall include the equivalent of at least one shade tree for every 35 linear feet, or part thereof, of basin perimeter; spacing of trees may be closer when trees are planted in groups for aesthetic effect; and~~

iv. ~~The landscaping for the basin shall be integrated with the entire landscape plan.~~

4. ~~The retention/detention area utilizes wetland and aquatic vegetation compatible with cleaning of stormwater runoff.~~

(b) A minimum separation requirement of 7.5 feet is required between new trees and existing or proposed water, wastewater force main, reclaimed water, gas, electric and telecommunications main and service utility lines, to protect against root incursion. A minimum separation requirement of 10 feet is required between new trees and existing or proposed wastewater gravity collection mains and laterals. Where feasible, separations should be marginally increased in order to account for inaccuracies in surveying, engineering or construction. Reduced separation distances to 3.5 feet may be allowed at the discretion of the utility company. In these instances the utility company may require one of the following measures to protect the utility lines, in accordance with the standards established by the utility company:

1. Compaction of the soil immediately adjacent to the underground lines to 98 percent proctor density from the utility line to within 12 inches of ground surface; or
2. Encasing the utility line with excavatable flowable fill, steel casing, or other acceptable methods; or
3. Wrapping the utility line with an herbicide-impregnated geo-textile bio-barrier cloth; or
4. Protecting the utility line with structural barriers of cast-in-place or pre-cast concrete panels, steel or high-density plastic sheet-pile barriers; or
5. Steel casing, installed in accordance with standards established by the utility company.

Where an existing tree is to be preserved, trenchless installation shall be

required for the installation of underground utilities, using directional boring or jacking-and-boring of a casing pipe throughout the tree root plate.

(c) An irrigation system, or a readily available water supply within a distance of 100 feet, shall be supplied for all landscaped areas. An automatic irrigation system shall be provided for developments ~~or redevelopments of existing property in accordance with subsection 30-251(3)b.4.~~, if the total area of impervious surfaces devoted to vehicular use areas exceeds 10,000 22,500 square feet. Such irrigation shall promote water conservation by such methods as drip irrigation and/or efficient sprinkler zoning, as well as reducing the amount of irrigation as plants become established. Each required tree shall be served by a drip ring or bubblers or other appropriate means necessary to ensure that the entire rootball is irrigated. The irrigation system shall be designed and located to minimize the watering of impervious surfaces. Successful establishment of trees should occur within one year. After that time, use of the automatic irrigation system may be discontinued. If the required trees die within 3 years of planting, they shall be replaced in accordance with Sec. 30-265(b), and replanted trees will require irrigation throughout the next establishment phase.

(d) ~~Plants shall be sized such that, within three years of the time of planting, at least half of the required landscaped development shall be devoted to living plants. Remaining Landscape areas that are not planted shall be grassed or~~ mulched with organic materials. Grassed areas shall be planted with sod that has been certified free of noxious weeds by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry.

(e) When a landscaped area is adjacent to or within a vehicular use area, curbing shall be used to protect landscaped areas from encroachment. Parking spaces shall be designed to provide pervious surface for the vehicle overhang area. Shrubs and trees shall be placed away from the wheel stop, so that they will not be encroached upon by vehicles. In lieu of curbing, the alternative means of preventing encroachment shall be shown on the site plan.

(f) All required trees shall be selected from the Gainesville Tree List. Tree species not appearing on the Gainesville Tree List may be planted only with prior approval of the city manager or designee or appropriate reviewing board. ~~In order to encourage plant diversity, no more than 50 percent of the selected canopy trees shall be of the same genus, except for street tree plantings, which, on a given street should be uniform with respect to genus, size, and shape.~~ Developments which require 16 or more shade trees shall have at least four different high quality shade tree species.



Street tree diversity is to be attained city-wide in order to reduce the effect of loss of street tree species due to insect or disease outbreaks, even though street tree diversity may not be attained on an individual street. The applicant or landscape contractor shall schedule an on-site meeting with the ~~city arborist~~ city manager or designee prior to the installation of any trees or shrubs to ensure compatibility with infrastructure and compliance with landscape code requirements.

(g) Any landscaped area adjacent to an intersection or driveway shall conform to the requirements for the vision triangle, article IX, section 30-341.

(h) Trees located near the street shall be planted in locations that meet the clear zone requirements of the city public works department or the maintaining agency.

(2) ~~h.~~ Exemptions to landscaping requirements:

(1)(a) Lots within single-family zoning districts and the developed portion of any lot over two acres in actual single-family residential use are exempt from the requirements of this section, except as provided in Section 30-254. ~~that section 30-257, pertaining to Champion trees, section 30-258, pertaining to Heritage trees, and section 30-261, pertaining to subdivision requirements, shall apply.~~

(2) ~~Excluded areas as defined in section 30-266.~~

(3) ~~Lots in actual industrial use or having been zoned as I-1 limited industrial district, or W-warehousing and wholesaling district, or which are zoned MU-2 mixed-use medium or CCD central city district, are exempt from section 30-253, pertaining to buffer strip requirements, when such buffer strips occur along any common boundary with property in active use for rail transportation or zoned I-1, I-2 or W. Paved areas devoted to loading and outside storage are exempt from subsection 30-252(b)(2) as it pertains to interior landscaping of vehicular use areas.~~

(4)(b) Development within the approach and clear zone areas as specified on the Gainesville Regional Airport master plan as of 1999, on file with the director of aviation, Gainesville Regional Airport, shall be exempt from the provision of required shade trees in areas where federal regulations prohibit shade trees or where shade tree growth can be expected to penetrate airport zone surfaces regulated under Federal Aviation Regulations 14 CFR, Part 77. If permitted, understory trees shall be substituted. Trees may be removed from such areas upon filing a tree removal permit accompanied by submission of written authorization from the Gainesville/Alachua County Regional Airport Authority

or FDOT to the city manager or designee; ~~no reforestation is required.~~  
Reforestation is not required in areas where federal regulations prohibit trees or  
where shade tree growth can be expected to penetrate airport zone surfaces  
regulated under Federal Aviation Regulations 14 CFR, Part 77. Mitigation  
will not be required except for high-quality heritage trees, which shall be  
mitigated in accordance with Sec. 30-254.

(c) Where required shade trees are expected to conflict with planned solar energy  
generation, developments may compensate for the required trees by relocating  
them to a designated area or preserving an equal number of existing high-  
quality shade trees elsewhere on the site. At least 140 square feet shall be  
provided for each new shade tree to be planted, and existing trees shall be  
preserved in accordance with Sec. 30-255. These trees shall be located so that  
they can grow to maturity without obstructing the generation of solar energy,  
and the area where they are planted or preserved shall be delineated and noted  
as a "designated tree area" on the development plans.

(5) ~~All parking garages shall be exempt from section 30-252, pertaining to~~  
~~landscaping requirements for vehicular use areas; however, vehicles shall be~~  
~~screened from adjacent properties and public rights-of-way through the use of~~  
~~opaque materials at ground level.~~

(3) ~~Expansion of neighborhood shopping centers (NSC), community shopping centers~~  
~~(SC) as defined in article II, or developments of 50,000 square feet or more.~~  
~~Expansion of neighborhood shopping centers, community shopping centers, or~~  
~~developments of 50,000 square feet or over shall comply with the following~~  
~~regulations:~~

Expansions of existing developments which contain 50,000 square feet or more  
shall comply with the following regulations:

(a) ~~The applicant or his/her representative shall submit an amendment to an~~  
~~approved development plan as provided in article VII, or, if there is no~~  
~~approved development plan for the development, shall file a development~~  
~~plan in accordance with the procedures provided in article VII. The~~  
~~amendment or development plan shall, at the option of the applicant, show~~  
~~either full compliance with the provisions of this article or provide a~~  
~~complete phasing schedule for the installation and completion of all~~  
~~landscape requirements as provided in this article.~~

(b) ~~The phasing schedule shall conform, at a minimum, to the following~~  
~~standards.:~~

Proposed Development Site Plan Amendment	Mandatory Compliance
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1.	Any expansion which increases the gross floor area of a development by <u>10</u> <del>ten</del> percent or less.	The expansion <u>area</u> , all areas adjacent to the public right-of-way, <u>as practicable</u> , and all parking spaces directly related to such <del>area</del> ; <u>the expansion area</u> .
2.	Any expansion which increases the gross floor area of a development by more than ten percent but less than 20 percent.	The expansion <u>area</u> , all areas adjacent to the public right-of-way, and all property within 25 feet, where practicable, plus 25 percent of the remainder of the development. <u>Removal of asphalt to create street buffers and parking lot islands will be considered practicable.</u>
3.	Any expansion which increases the gross floor area of a development by 20 percent or more but less than 35 percent.	The expansion <u>area</u> , all areas adjacent to the public right-of-way, and all property within 25 feet, where practicable, plus 50 percent of the remainder of the development. <u>Removal of asphalt to create street buffers and parking lot islands will be considered practicable.</u>
4.	Expansion which increases the gross floor area of a development by 35 percent or more.	The entire development

(c) ~~Provided, further, that the phasing schedule shall show that an additional ten percent of the remainder of the development shall be brought into compliance each and every succeeding year thereafter until the entire development complies with the landscape requirements of this article. This provision shall not apply to expansions of the gross floor area which do not exceed the following dimensions:~~

1. ~~Ten percent of the floor area; and~~

2. ~~4,000 square feet of the floor area;~~

~~whichever requirement is less.~~

For purposes of this subsection, repeated expansions of property, including the construction or erection of separate buildings or accessory structures, ~~constructed within a period of 36 months,~~ which meet the above thresholds in the table shall comply with the provisions of this article as provided above.

(d) The determination of the exact location of the remainder area which shall be brought into landscape compliance shall be made by the appropriate reviewing board. ~~plan board~~. In determining the exact location of such remainder area, the following factors shall be considered:

1. Buffering incompatible land uses;

2. Improvement to areas of visual or environmental impact;
3. The economic and technical feasibility of landscaping particular areas; and
4. The visibility of landscaping areas from public roads or sidewalks.

(4) ~~Expansion or alteration of existing uses except neighborhood shopping centers, community shopping centers and~~ Expansions of existing developments which contain of less than 50,000 square feet shall comply with the following regulations:

- (a) Expansions of vehicular use area ~~added after June 10, 1992,~~ shall meet the requirements of section 30-252 for the expanded area and shall also meet requirements for street and use buffers adjacent to the expanded area.
- (b) Whenever expansion of a developed area, independently or cumulatively, ~~accomplished after June 10, 1992,~~ totals 4,000 square feet, or more than 35% percent of the gross square footage of the developed area, whichever is less, the entire site shall be brought into compliance with this article. For the purposes of this subsection, repeated expansions or alterations of the property, including the construction or erection of separate buildings or accessory structures, constructed within a period of 36 months which meet the above threshold, shall comply with the provisions of this article.
- (c) Any new use of property which alters the use of existing structures from a residential use to a nonresidential use, ~~or any use of property which alters the use of property from one use to any other use,~~ shall be required to meet all applicable landscaping requirements. The city manager's or designee shall determine the applicable requirements based on the character and orientation of the proposed mixed-use development. ~~For purposes of this subsection, nonresidential use shall mean any office, commercial, public, semipublic, institutional or industrial use, including motels and hotels.~~
- (d) The use of property, including outdoor activities and parking, which expands the lot area of any use, when such property adjoins property in actual use as a single-family residence or shown in any single-family zoning district, shall be required to conform with all buffer requirements.
- (e) ~~Where a structure or parking facility existing prior to June 10, 1992, would be prohibited from expansion or change of use from one nonresidential use to another solely on the basis of an inability to provide the required landscaping around and in such previously existing facilities, then the development review board or plan board may allow reasonable use of the property in compliance with all other aspects of this chapter, if the applicant~~

can show that:

1. ~~The structure and/or parking facility existed prior to June 10, 1992;~~  
and

2. ~~The amount of existing landscaping would not be diminished.~~

(e) Expansions of outdoor storage shall require screening in accordance with the requirements in Sec. 30-97.

~~(5) — Parking lots under lease. The area of any lot under lease which contains required parking spaces for any use as provided in article IX shall comply with the provisions of this section as a precondition to the issuance of any development order issued in connection with such lot for such use.~~

~~(5)(6)~~ *Minimum submittal criteria.* All landscape plans must be drawn to scale and have a north arrow, and accurately depict all buildings, pavement, on-site facilities, utilities and lighting systems. The landscape drawing or accompanying development plan must give the permitted use of adjacent parcels and the total square footage of all pavement on-site. Stormwater basins shall be designated as either wet or dry. A plant schedule shall be provided showing the botanical name, size, spacing and number of all required plant materials. Architectural symbols depicting trees to be installed shall not exceed the scale equivalent of five feet in diameter with a solid line; a hatched line around the solid line shall show the expected canopy dimension after twenty years as identified in the Gainesville tree list. Any native tree or shrub may be substituted for the identified plant with city staff approval, provided that the tree or shrub is adaptable to the amount of sun/shade, wet/dry and size conditions where it will be planted, and insofar as the provisions for diversity, shading and/or screening described in the article are met. Changing tree species shall not diminish the total number of high quality shade trees in their required locations. Plant material shown in addition to the required elements of the landscape plan may be labeled as optional and shall not be subject to inspection.

~~(6)(7)~~ *Design principles and standards.* All landscaped areas required by this article shall conform to the following general guidelines:

- a. The preservation of structurally sound native trees of high quality shade tree species and shrubs is strongly encouraged to maintain healthy, varied and energy-efficient vegetation throughout the city, and to maintain habitat for native wildlife species. Developments should be designed to preserve existing high quality heritage trees, especially those located within 20 feet of the public right-of-way.



- b. The landscaping plan should integrate the elements of the proposed development with existing topography, hydrology and soils in order to prevent adverse impacts such as sedimentation of surface waters, erosion and dust.
- c. The functional elements of the development plan, particularly the drainage systems and internal circulation systems for vehicles and pedestrians, should be integrated into the landscape plan. The landscaped areas should be integrated, especially to promote the continuity of on-site and off-site open space and greenway systems, and to enhance environmental features, particularly those features regulated by the environmental overlay districts (article VIII).
- d. The selection and placement of landscaping materials should maximize the conservation of energy through shading of buildings, streets, pedestrian ways, bikeways and parking areas. Where possible, shade trees should be planted along internal sidewalks that connect buildings to the street sidewalk and to other buildings on the site. ~~The use of wind for ventilation and the effect on existing or future solar access shall be considered.~~
- e. Landscaping design should consider the aesthetic and functional aspects of vegetation, both when initially installed and when the vegetation has reached maturity. Newly installed plants should be placed at intervals appropriate to their expected function as short-term or long-term elements ~~the size of the plant at maturity, and the design should use shortterm and longterm elements to satisfy the general design principles of this section over time.~~ The natural and visual environment should be enhanced through the use of materials which achieve a variety with respect to seasonal changes, species of living material selected, textures, colors and size at maturity.
- f. The placement of trees around buildings should permit access to the building by emergency vehicles.
- g. The installation of the following invasive nonnative species is prohibited as is installation of any species labeled as "Prohibited" in the most recently published version of the Institute of Food and Agricultural Science (IFAS) Invasive Species Assessment:

INVASIVE, NONNATIVE  
PLANT SPECIES

Common Name	Scientific Name
Air potato	Dioscorea bulbifera
Arrow bamboo	Pseudosasa japonica
<del>Brazilian pepper</del> <u>Brazilian waterweed</u>	<del>Schinus terebenthifolius</del> <u>Elodea densa</u>
<del>Catclaw vine</del> <u>Camphor tree</u>	<del>Macfadyena unguis- cati</del> <u>Cinnamomum camphora</u>
Chinaberry	Melia azedarach
Chinese privet	Ligustrum sinense
Chinese tallow tree	Sapium sebiferum
Chinese wisteria	Wisteria sinensis
<del>Japanese e</del> <u>Climbing fern</u>	<u>Lygodium iaponicum and Lvgodium microphyllum</u>
Cogon grass	Imperata cylindrica
<u>Coral ardesia</u>	<u>Ardisia iaponica</u>
Coral berry	Ardisia crenata
Elephant's ears	Xanthosoma sagittifolium
Glossy privet	Ligustrum lucidum
<u>Golden raintree</u>	<u>Koelreuteria paniculata and Koelreuteria bipinnata</u>
<u>Golden bamboo</u>	<u>Phyllostachys aurea</u>
Henon bamboo	P. nigra cv. "Henon"
<del>Hyacinth</del>	<del>Eichhornia crassipes</del>
Hydrilla	Hydrilla verticillata
Hygrophia	Hygrophia polysperma
<u>Japanese ardisia</u>	<u>Ardisia iaponica</u>
Japanese honeysuckle	Lonicera japonica
Japanese paper mulberry	Brousonettia papyrifera
Kudzu	Pueraria lobata
Mimosa	Albizia julibrissin
<u>Miramar weed</u>	<u>Hvgrophila polysperma</u>
<u>Oyster plant</u>	<u>Tradescantia spathacea</u>
Palm leaf bamboo	Sasa palmata (Arundinaria palmata)
<u>Skunk vine</u>	<u>Paederia foetida</u>
<u>Tropical soda apple</u>	<u>Solanum viarum</u>
<u>White-flowered small-leaved spiderwort</u>	<u>Tradescantia fluminensis</u>

Wandering spiderwort	
Water hyacinth	<u>Eichornia crassipes</u>
Wild taro	Colocasia esculenta

- h. For all new development, or redevelopment of existing property, the applicant ~~should be required to~~ shall remove all invasive nonnative plant species listed on the Florida Prohibited Aquatic Plants List or the Florida Noxious Weed List from the property in accordance with the management plan prior to issuance of the certificate of occupancy. On property with invasive nonnative plant species, a plan shall be submitted with the development application that includes a timeline, success criteria, treatment recommendations, and identifies methods that will have minimal impact on non-target species. All herbicide applications to control invasive, nonnative plants in wetland or upland set-aside areas (including buffers) shall be applied by a contractor licensed by the Florida Department of Agriculture and Consumer Services, Division of Agricultural Environmental Services, with a current certification in Natural Areas Weed Management. The city manager or designee should inspect such sites for a minimum of three years after completion to verify effectiveness of control efforts. The plan shall state the entity responsible for additional treatments during the three-year follow-up if the populations of invasive nonnative plants rebound and cover more than 10 percent of any previously infested area within the wetland or upland set-aside areas.
- i. Loblolly and slash pines should be at least 25 feet apart post-development to reduce southern pine beetle infestation outbreaks.

**Sec. 30-252. Landscaping requirements for vehicular use areas.**

(a) ~~Generally. This section provides two landscaping methods which are intended to set minimum requirements for the landscaping of vehicular use areas. Method 1 addresses shading by specifying landscape placement throughout and around the vehicular use area. Method 2 provides flexibility in the design of vehicular use area landscaping in order to accommodate unique site considerations. Method 1 shall be used for the purpose of calculating landscaping requirements for excess parking as regulated in Article IX.~~

(b) ~~Method 1, Prescriptive Landscape Requirement.~~

(1) *Perimeter requirements.*

- a. *Perimeter landscaped area required.* All vehicular use areas shall be separated by a perimeter landscaped area, a minimum of nine feet in width, from any public or private street right-of-way and from any

~~adjacent properties. boundary of the property on which the vehicular use area is located.~~

b. *Exceptions.* This landscape area is not required:

1. When the paved ground surface area is completely screened from adjacent properties or streets ~~public rights of way~~ by intervening buildings or structures; or
2. When an agreement to operate abutting properties as essentially one contiguous parking facility is in force, and both sites are in compliance with vehicular use area landscaping requirements. The agreement shall be executed by the owners of the abutting properties, and shall bind their successors, heirs and assigns. Prior to the issuance of any building permit for any site having such a contiguous parking facility, the agreement shall be recorded in the public records of the county;
3. ~~When the paved area is at least 150 feet from the nearest property line; or~~
4. ~~When the required landscape strip would be in conflict with utility installations, and such conflicts cannot be resolved, such areas may be reduced to five feet and planted with shrubs and such understory trees as may be acceptable to the utility.~~

c. ~~*Location of perimeter landscape area.*~~ The landscape area shall commence within five feet of the paved surface area, except that when a grass parking area is provided the landscaped strip may be located around such area. Where the perimeter landscape area and a required buffer strip overlap, the more stringent requirements shall be applied, except that the street buffer requirements shall be applied to street frontages not to exceed 300 feet for properties in use for auto sales. For automotive sales uses, the perimeter landscape area shall only be required for 300 feet along each street frontage in the area devoted to automobile display, with the remainder of the required plant materials being proposed for planting elsewhere on the site, such as around stormwater areas or the building foundation. ~~Perimeter landscape areas buffering shall be required for all storage, accessory service and customer parking areas at any auto sales facility.~~

d. *Modification of requirements.* The development review board or the plan board, through plan review, ~~or the board of adjustment by special exception,~~ or staff, when only staff review is required, may determine that:

1. Screening is better achieved by relocation of the landscape strip;
  2. There is an unresolvable conflict between other element(s) of the development plan and the location, width or height of the perimeter landscape area, and that the public interest is therefore best served by relocation of the landscape area, lowering the height of required material or the substitution of a solid fence or wall in conjunction with a reduction in width provided that the number of shade trees that would have otherwise been required are planted elsewhere on the development site; or
  3. ~~That the screening would only serve to emphasize a long driveway that would otherwise be unobtrusive.~~ On redevelopment sites where the conflict between existing utility line separation distances and the shade trees required within the perimeter landscaped area cannot be resolved through the practices listed in Sec. 30-251(1)(b), then the area shall be planted with shrubs and understory trees acceptable to the utility company. On projects where new utility lines are planned, sufficient space shall be allocated to meet both the utility separation requirements and the minimum tree-planting requirement.
- e. *Required plant material.* The perimeter landscape area shall contain:
1. Shrubs, arranged to provide a visual screen of 75 percent opacity and achieve a height of at least three feet within three years; and
  2. ~~At least one shade tree planted for each 50 linear feet, or part thereof, of the boundary of the vehicular use area.~~ High quality shade trees at a minimum average of three trees for every 100 feet of the linear distance of the perimeter landscape area, excluding the width of driveways that cross the landscape area. The distance between such trees shall not exceed 55 feet nor shall they be planted closer than 25 feet apart.
  3. The development review board or plan board during development plan review, or staff during administrative review, may determine that natural vegetation is sufficient to screen adjacent properties and rights-of-way. In such instance the existing vegetation, including understory plants and bushes, is protected from pruning and removal except that diseased plant material and invasive nonnative species shall may be replaced in accordance with this section. Where the property is adjacent to a railroad right-of-way or utility easement, these areas shall not be substituted for the perimeter landscape area or the required landscaping. Where



encroachments are made for utility connections, replacement plants appropriate to the ecosystem shall be required.

- (2) *Interior landscaped areas.* The interior of any vehicular use area shall also be landscaped in compliance with the following ~~except as provided in subsection (b)(2)e.~~ of this section:

- a. ~~The placement of landscaped areas throughout the interior of the paved area shall average one landscaped island for each ten parking spaces.~~ Landscape islands, equal to the size of one parking space, shall be located at an average of every ten parking spaces. At no time shall a row of parking have landscape ~~islands~~ areas greater than ~~126~~135 feet apart or closer than ~~36~~35 feet apart. Additionally, terminal landscape islands containing a tree shall enclose each row of parking spaces.
- b. Each required landscape island ~~interior landscaped area~~ shall contain at least one high quality shade tree listed on the gainesville tree list as a species appropriate for 'lot' planting. Such tree(s) shall be located within the landscaped area of at least 140 square feet to maximize the shading of the pavement.
- c. All parking lots with two or more rows of interior parking shall contain 8-foot-wide landscape strips between the rows allowing for 2-foot vehicle overhangs on each side. Shade trees, shall be planted every 50 feet on average within these landscaped areas, but outside of the 2-foot vehicle overhangs. As an alternative, every other row of head-to-head parking may provide a 16-foot-wide curbed landscape strip with shade trees every 35 feet on average. As needed, these wider landscape strips may contain sidewalks.
- ~~e.d.~~ The development review board or plan board through development plan review, or staff when only staff review is required, may allow the relocation of ~~such interior landscaped~~ areas to preserve existing trees, or where it is determined, upon review and recommendation of the city manager's or designee, that the relocation is necessary for the safe maneuvering of vehicles or pedestrians.
- ~~d.e.~~ In those vehicular use areas including but not limited to auto dealerships, storage of service or delivery vehicles, or attendant parking where interior landscaping would interfere with the customary storage or display of vehicles, the development review board or plan board through development plan review, or staff, when only staff review is required, may allow some or all of the required interior landscaping to be located near the perimeters of the paved area, including such perimeters which may be adjacent to a

building on the site. Such landscaped area would be in addition to required perimeter landscaping in the amount of one square foot of landscaped area for each 60 square feet of paved area. For each 140 square feet of relocated landscaped area, a high quality shade tree or understory tree shall be provided.

- e. Any parcel of land or lot, which has fewer than 11 interior parking spaces, shall be exempt from the above requirements when it is used for industrial or warehouse purposes in the MU-2 mixed use medium intensity district, CCD central city district, W warehousing and wholesaling district, I-1 limited industrial district, and I-2 general industrial district.

~~(c) Method 2, Performance Landscape Requirements. Method 2 requires that at least 50 percent of the vehicular use area be shaded. Alternative landscaping objectives are provided that can reduce the required amount of tree shade that must be provided in the vehicular use area.~~

~~(1) Method 2 is encouraged in the following circumstances:~~

- a. ~~The site contains unique geologic features or a tree grouping which may be adversely impacted if the requirements of Method 1 are adhered to;~~
- b. ~~The preservation and enhancement of cultural, architectural or historical elements on the site would be better achieved by Method 2; or~~
- c. ~~The design proposes a unique design element that serves as a focal point, a site unifier, or as an element which articulates a specific portion of the development and cannot effectively be integrated into the overall design through the use of Method 1; or the design of on-site stormwater facilities requires greater flexibility in the arrangement of landscaped areas.~~

~~(2) Method 2 requirements.~~

- a. ~~The vehicular use area shall be planted with trees sufficient to shade 50 percent of the total vehicular use area. Tree types shall not be substituted except as would maintain the required shading. Shrubs, ground cover and trees shall be chosen and arranged to conform with the guidelines of subsection 30-251(7).~~
- b. ~~Landscape plans for Method 2 shall be prepared by a landscape architect registered in the State of Florida, the property owner or a nurseryman, in compliance with F.S. § 481.301 et seq.~~
- c. ~~All landscape plans shall be accompanied with calculations and shadow studies in order to evidence 50 percent coverage of the interior of the vehicular use area, or meet alternative landscaping requirements as in~~

subsection 30-252(c)(3) of this section. In determining the area shaded, the following methodology shall be used:

1. ~~Calculate the proposed shading of pavement assuming that the shaded area is only that area directly under the tree canopy or dripline. The estimated crown for a twenty-year-old parking lot tree, shown in the Gainesville Tree List shall be used to calculate the percent of shaded area.~~

2. ~~Landscaped areas within the vehicular use area containing trees shall be counted in the calculation of shaded area.~~

3. ~~Paved areas under structures (such as second stories of buildings, canopies, etc.) may be deducted from the total paved area to be shaded.~~

d. ~~Alternative landscaping in lieu of the 50 percent shading requirement (see subsection 30-252(c)(3) of this section) must be listed and drawn to scale on the landscape plan, and shall meet no more than 20 percent of the vehicular use area requirement.~~

e. ~~When shade trees are planted on the perimeter of a parking area, they must be planted no closer than four feet and no farther than nine feet from the edge of the pavement, and must provide shade to either the parking area, the primary structure or an adjacent pedestrian area. If an existing tree is used to fulfill shading requirements, it should be in the vehicular use area, or within nine feet of the vehicular use area; however, a tree located further from the vehicular use area may be counted towards the fulfillment of the shading requirements, provided city staff finds that the tree casts shading equal to the minimum canopy of any parking lot tree on the Gainesville Tree List, onto the vehicular use or pedestrian areas.~~

f. ~~When any portion of a vehicular use area is not screened by buildings or required street buffer and is within 50 feet of a property line or a public right of way, a perimeter landscaped area or vegetated berm shall be provided so as to effectively screen any adjacent property or right of way.~~

~~(3) Alternative landscaping requirement in lieu of fifty percent shading requirement. A reduction to 30 percent shading of the vehicular use area may be allowed by combination of any two of the following three alternatives:~~

a. ~~Vehicular use area located on the north side of a structure, on the same lot, and receives 50 percent shading in the afternoon by the structure.~~

b. ~~Preservation of tree groupings in an amount of at least 1,000 square feet or 25 percent of the square footage of the groupings, whichever is greater.~~

c. ~~Preservation of existing wetlands that are not otherwise protected from encroachment by Article VIII or other federal, state, regional or local~~

regulations. A transitional buffer, having a minimum width of 15 feet, shall be provided. The total area so preserved shall have a minimum size of 1,000 square feet. The petitioner shall present competent evidence that such area is a viable wetland.

**Sec. 30-253. Landscape buffer requirements for buffer strip areas. Compatibility buffers.**

This section is intended to provide the minimum requirements for separation of land uses of differing type and intensity, ~~and for the provision of aesthetic streetscapes conducive to pedestrian and bicycle traffic throughout the city.~~ The need for a buffer strip between land uses shall not impede the development of appropriate pedestrian and bicycle accessways between these uses. Where such accessways are installed, they shall be landscaped in a manner to clearly delineate such trails and bikeways and also to provide shade trees as appropriate. Where certain uses or combinations of uses are difficult to categorize, as in planned developments or public service facilities, it is the intent of this section that buffering shall be provided which mitigates the impacts of such uses.

(1) Required buffer strip areas. Buffer strips between properties are intended to provide visual screening and sound attenuation of more intense land uses from abutting less intense land uses. The required buffer type, shown in Chart A below, depends on the land use designation of the subject property which is being developed and the land use designations of the abutting properties. The required width of the each buffer type and the required amount of shade trees, understory trees, and shrubs are shown in Chart B below.

a. ~~Buffer strips between properties are intended to provide a visual screen, to prevent undesirable access to surrounding properties, and to provide sound attenuation.~~

1. ~~The required buffer type, depicted on the adjacent use buffer matrix (A through E) as shown below, depends on the proposed use of a site and the adjacent use. The buffer type sets the required width and plant materials to be shown on the landscape plan. The owner/developer may choose width options X, Y or Z within the required buffer type as indicated on the matrix.~~

2. ~~The buffer matrix specifies the number of plant combinations required per 100 linear feet.~~

3. ~~Adjacent use buffer and street buffer matrix.~~

**CHART A. ADJACENT USE BUFFER AND STREET BUFFER MATRIX**

Proposed Activity	Adjacent Designated Use							
	Single-Family/ Two-Family	Multifamily	Mobile Home Park	Office Education	Commercial/ Mixed Use	Industry/ Mixed Use	Nonconforming*	Street Buffer Yards
Single-family Two-family	—	—	—	—	—	—	—	—
Multifamily	B	A	A	A	C	C	B	B
Mobile home	B	A	A	A	C	D	B	B
Office, education, assembly use	C	B	A	—	A	E	B	E
Commercial, mixed use	C	C	C	A	—	E	C	E
Industrial	D	D	D	E	E	—	D	E

\*Nonconforming: Indicates buffer to be provided by proposed use due to nonexistent or nonconforming buffer on adjacent site.

Letters in adjacent use buffer and street buffer matrix relate to buffer types in Chart B.

Street buffer: Petitioner may use shade tree or understory tree requirement, except as limited by prudent utility practice.

#### CHART B. BUFFER TYPE MATRIX

		Number and Type of Plant Material Required For 100 Linear Feet			
Buffer Type	Width (feet)	Shade Tree	Understory Tree	Large Shrub	Small Shrub
Buffer A:					
Option Y	9	2	3	15	8
Option Z	15	1	2	10	5
Buffer B:					
Option X	9	3	4	25	0
Option Y	15	2	3	20	0
Option Z	20	2	2	15	0
Buffer C:					
Option X	9 (W)	2	3	0	0



Option Y	15	3	4	15	8
Option Z	20	2	3	12	6
Buffer D:					
Option Y	50	3	4	25	10
Option Z	100	2	2	15	6
Buffer E:					
Option Y	9	3	2	8	13
Option Z	15	3	2	5	6

**Legend:**

Width: The required width of the buffer strip.

W: Indicates a wall or fence is required.

Option: Petitioner may choose width option; however, when commercial, mixed use, or industrial activities are adjacent to single family, two family, multifamily or manufactured home uses, the applicable reviewing board or staff may determine that, in addition to the trees and shrubs specified above, a wall is required to mitigate the effects of certain uses or to control access.

**CHART A. LAND USE BUFFER TYPES**

<b>FUTURE LAND USE DESIGNATION</b> <i>Abutting property →</i> <i>Subject property ↓</i>	<b>Single Family Res. Low</b>	<b>Res. Medium Res. High MU Residential Office</b>	<b>MU Low MU Medium MU High UMU 1 UMU 2</b>	<b>Commercial Business Ind.</b>	<b>Industrial</b>	<b>Education Recreation Public Facilities</b>	<b>Agriculture Conservation</b>
<b>Single Family Residential Low</b>	-	-	-	-	-	-	A
<b>Res. Medium Res. High MU Residential Office</b>	A	-	-	-	-	A	A
<b>MU Low MU Medium MU High UMU 1 UMU 2</b>	B	A	-	-	-	A	B
<b>Commercial Business Ind.</b>	C	B	A	-	-	B	C
<b>Industrial</b>	C	C	C	B	-	C	C
<b>Education Recreation Public Facilities</b>	A	A	-	-	-	-	A
<b>Agriculture</b>	-	-	-	-	-	-	-

Conservation

1  
2  
3 **CHART B. REQUIRED WIDTH AND PLANTINGS FOR BUFFER TYPES**  
4

BUFFER TYPE	MINIMUM WIDTH	SHADE TREES (per 100 linear feet)	UNDERSTORY TREES (per 100 linear feet)	SHRUBS (per 100 linear feet)
A	9'	2	2	20
B	9'	3	2	20
C	15'	3	3	25

5  
6 (2) Buffer widths. The appropriate reviewing board, or the city manager or designee,  
7 may require the expansion of the minimum width of the buffer strip to ensure that  
8 trees will meet separation requirements from utility lines, buildings, or paved  
9 areas, or to allow for the inclusion of an existing high-quality shade tree in the  
10 buffer strip.

11  
12 4.(3) Driveways and sidewalks. The widths of driveways and pedestrian or bicycle  
13 facilities that cross through a required buffer shall be subtracted from the linear  
14 feet of buffer length for the purposes of calculating the number of required  
15 plantings in Chart B above.

16  
17 (4) Existing trees and natural vegetation in buffers. Any shade regulated, high  
18 quality shade trees existing within the minimum required buffer width shall be  
19 protected in accordance with section 30-255. Credit for preserving existing trees  
20 shall be applied in accordance with section 30-263 30-264. High quality heritage  
21 trees within buffer areas should be preserved with the area underneath the canopy  
22 dripline protected. Sidewalks and bicycle access infrastructure may be permitted  
23 within the protection zones of a high quality heritage tree but not within the root  
24 plate. Natural vegetation, if it achieves a continuous 75 percent opacity for ten  
25 months of the year, may be substituted for the required shrubs. If a buffer that  
26 preserved existing vegetation is subsequently cleared by the property owner or  
27 when permits for tree removal are granted post-development, then the required  
28 shrubs and trees in accordance with this section shall be required.

29  
30 (5) Invasive nonnative vegetation in buffers. All buffers shall be maintained to  
31 remove invasive nonnative plant species and curtail natural regeneration of  
32 seedling loblolly and slash pines. The density of loblolly and slash pines in a  
33 natural buffer should be managed so the remaining pines grow no closer than 25  
34 feet and seedling regeneration is curtailed.

35  
36 5. ~~Where a required masonry wall would damage trees within the~~  
37 ~~buffer area, or a majority of abutting property owners object to the~~  
38 ~~installation of a wall, the development review board, or plan board~~

during development plan approval, or staff through administrative review when board approval is not required, may approve the substitution of a fence or hedge for a required wall.

b. ~~Street buffer yards are located along public rights of way. The required width of street buffer yard and amount of plant material, per 100 linear feet, are determined by the proposed land use (see buffer matrix above). Street buffer yards are not required when buildings abut the right-of-way; however, if the right of way can be landscaped, the required trees shall be planted provided the city manager or designee, or the agency having jurisdiction over the right of way, approves. In zoning districts where the required street buffer yard is greater than the required setback, the street buffer yard may be decreased by the amount necessary for placement of the building at the required setback. If a building is placed beyond the required setback, the required street buffer yard shall be equal to the building setback. When required landscaping cannot be provided in the street buffer area, required trees and landscape material shall be planted within the right of way subject to approval by the city manager or designee, or the agency having jurisdiction over the right-of-way. Where street buffer yards overlap buffer strip areas which are required to satisfy vehicular use area requirements, the screening provided shall at a minimum satisfy the requirements for vehicular use areas.~~

~~(2) Conditions for implementation of buffer strip.~~

a. ~~Utility easements cannot be used as a substitute for the required buffer strip between residential zoning districts, or between residential and nonresidential zoning districts as classified in section 30-41. No shade tree shall be planted within 12 feet of a buried utility conduit. Easements for overhead wires shall require the relocation of required shade trees or substitution of trees acceptable to the utility.~~

~~(3) Reserved.~~

~~(4)~~ (6) Sound attenuation. ~~The development review reviewing board, or city manager or designee, may address the need for sound attenuation of certain equipment, such as refrigeration units, motors, fans, power tools, etc., or uses such as loading, vehicle repair, outdoor recreation, etc., by requiring a study, prepared by a licensed engineer or architect, to address the potential for noise disturbance to be transmitted to adjacent properties by the proposed use, and providing recommendations for mitigation or by requiring~~ may require the installation of a wall, fence or berm in addition to the required landscape material. The wall, fence or berm may be located within the required buffer or directly around the equipment or use which requires sound attenuation.

(5) ~~Exceptions to the buffer strip requirement.~~

a. ~~No new wall, fence or berm shall be required on property where the adjoining or subject property contains an existing wall or fence meeting the requirements of this section, provided that the existing wall is located no more than 20 feet from the property line, and provided further, that no outdoor use on the subject property extends above the height of the existing wall or buffer strip.~~

b. ~~No new wall, fence or plant material shall be required where the development review board through development plan review, or the city manager or designee if development plan review is not required, determines that existing natural vegetation to be retained on-site is sufficient to screen adjacent properties or public rights of way. The same shall be true if the distance between the developed area and the nearest property line is at least one hundred fifty (150) feet and is determined to sufficiently screen adjacent properties or public rights of way.~~

**Section 6.** New Sections 30-253.1 and 30-253.2 are created and added to Article VIII. Environmental Management, Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policies, Subdivision I. Landscape and Tree Management to read as follows:

**Sec. 30-253.1. Street landscaping.**

(a) Street trees. Street trees shall be planted along the sides of all streets within a development and on the development side of any contiguous street. Street trees shall be planted for every 30 to 50 feet of street frontage, depending on the canopy area needed for the tree species. The widths of driveways along a street shall be subtracted from the linear feet of street frontage length for the purposes of calculating the number of required street trees. In no case shall trees be spaced closer together than 25 feet or farther apart than 60 feet. Alleys are exempt from this requirement for street trees.

(1) Street trees shall be high quality shade trees and shall be planted in tree lawns with a minimum width of 8 feet, or within tree wells with minimum 4-foot by 4-foot surface openings.

a. On-street parking spaces may be located between street trees, as long as the required number of trees are planted along the street frontage, and the minimum rootzone volume is provided for each tree.

b. Tree wells may be enclosed with pavers or other hardscape materials above the required rootzone volume. The city manager or designee may determine if installation of an aeration system is necessary to conduit water and oxygen to the roots of trees within tree wells.

- (2) Where possible, street trees shall be planted between the street and the public sidewalk. Street trees may be planted between the sidewalk and adjacent buildings only where the location of existing or proposed utility lines along the street, or the clear zone requirements of the public works department or other maintaining agency, prevent the location of trees between the street and sidewalk. Where street trees are approved to be planted between the sidewalk and adjacent buildings, the trees may be located as close as 5 feet away from building face.
- (3) The reviewing board, or the city manager or designee, may require the adjustment of the prescribed build-to line in order to accommodate the required street trees and ensure that the trees will meet separation requirements from utility lines, buildings, and paved areas.
- (4) Where possible, developments shall be designed to preserve as street trees any existing champion or high quality heritage trees which are located in the right-of-way or on private property within 20 feet of the right-of-way. Where these trees are preserved, no new construction or grading shall occur within the tree root plate, and new buildings shall be designed so that no more than 25 percent of the crown of the trees is removed. The area underneath the canopy of the preserved trees shall be exempt from tree planting requirements, and the required distances between street trees may be modified.
- (5) A minimum 10-foot separation shall be provided between street trees and street stormwater inlets, except where bioretention inlets that incorporate trees are utilized.
- (6) Where the required street trees would overlap with trees that are required to satisfy perimeter landscaping requirements for vehicular use areas, only the requirements for the vehicular use area must be met.
- (b) *Parking structures along a street.* Except at points of ingress and egress, parking structures shall provide a 10-foot-wide landscaping strip between the public sidewalk and the structure, which is designed to screen automobiles from pedestrians on the street. This strip shall be planted with evergreen shade trees at an average of four trees for every 100 feet of the linear distance of the street frontage of the structure, excluding the width of driveways. The required trees shall be supplemented with a continuous line of shrubs. This landscaping strip is required when the ground floor use is parking, but is not required where parking structures are shielded from the street by liner buildings or provide office or commercial uses along the first floor street frontage.

#### **Sec. 30-253.2. Landscaping of stormwater management areas.**

- (a) All stormwater basins shall be designed and landscaped to meet the following criteria:



(1) Shade trees shall be planted at an average of one tree for every 35 linear feet of the basin perimeter. Spacing of trees may be closer when trees are planted in groups for aesthetic effect, but the minimum distance between the trees shall be 10 linear feet. Trees shall be selected from the Gainesville tree list that are appropriate for use within stormwater areas, and all landscaping shall be selected according to the function as a wet or dry basin. Trees shall be located at least 20 feet away from inflow and outflow structures. Bioretention swales and exfiltration facilities are exempt from these tree planting requirements.

(2) Twenty-five percent or more of the basin perimeter or littoral zone shall be landscaped with shrubs, groundcover, native perennials, or aquatic plants.

(b) Individual stormwater basins that are greater than 5,000 square feet in total area shall be designed with curvilinear sides that mimic a natural wetland, lake, or stream. The landscaping for these basins shall be integrated with the other required site landscaping.

(c) Individual stormwater basins that are greater than 40,000 square feet in total area shall also be designed to meet at least one of the following criteria:

(1) Provide a recreational or functional pathway for pedestrians or bicyclists and an aesthetic focal point such as a water feature or pedestrian structure; or

(2) Be designed to preserve and incorporate a significant tree or tree grouping; or

(3) Be designed to maintain an existing wetland function or to preserve or establish habitat for native animal species.

**Section 7.** Section 30-254 and Section 30-255 of Article VIII. Environmental Management, Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policies, Subdivision I. Landscape and Tree Management are amended as stated below. Except as amended herein, the remainder of Section 30-254 and Section 30-255 remain in full force and effect.

**Sec. 30-254. Permits for tree removal; mitigation.**

(a) *Removal or relocation permits.* Except as provided below, no living regulated tree ~~living tree that is eight inches or more in diameter or two feet in circumference, whichever dimension is lesser, at a point 4½ feet above ground level,~~ may be removed or relocated without a removal permit and mitigation as provided for in this section. Only the tree advisory board may approve or deny the removal, relocation or replacement of champion trees. Trees that require such a permit for removal or relocation shall be called "regulated trees." Exceptions to this general provision are as follows:

(1) On property with single family residential zoning, permits shall be required only for the removal of champion or heritage trees. ~~Pine trees of the slash or loblolly species~~

which are at least 12 inches in diameter or three feet in circumference, whichever dimension is lesser, at a point 4½ feet above ground level, shall be considered regulated trees.

- (2) Removal of loblolly or slash pines less than 20 inches in diameter from a natural or naturalized landscape shall not require mitigation planting, unless the removals result in a uniform tree density on the site of less than one tree per 900 square feet of unpaved area. Where resulting tree density would be less, sufficient mitigation trees meeting the standard of Sec. 30-257 must be established to achieve the specified minimum density. ~~(2) No Heritage or Champion trees as defined in this article may be removed or relocated except as specifically provided in this article.~~
- (3) ~~Tree removals for utility operations shall comply with the provisions of Article VIII.~~ Removal of regulated trees in connection with ecosystem management or restoration on parcels with conservation easements, in conservation management areas or on parcels managed as nature parks or preserves, provided the following criteria are met:
- a. A plan for the removal and revegetation of the area has been approved by the city manager or designee.
  - b. The only trees that may be removed are of the following species: Loblolly Pine, Slash Pine, Water Oak, Laurel Oak, Sweetgum, Sugarberry, and any species not native to Alachua County.
  - c. The tree removal is being done in furtherance of restoration of a natural community or communities appropriate to the site as indicated by soils, remnant vegetation, and hydrological and geological conditions.
  - d. The applicant has demonstrated that after the removals, the land will be maintained in a manner that promotes the continuation of the restored natural community.
  - e. The plan has been approved by the nature centers commission.
- (4) For the immediate protection of the health, safety, or welfare of the public, trees may be removed without obtaining a permit in advance. However, the property owner or its authorized agent must file a permit application during the next city work day. Permit approval shall be granted, provided the trees removed are mitigated in accordance with this code. ~~Trees which cause, or that can be demonstrated by competent evidence will in the near future cause, structural damage from roots, absorption of large amounts of water causing soil expansion and contraction, or other structural problems to buildings or underground facilities, may be removed, relocated or replaced with the approval of the appropriate board for projects requiring board approval or the city manager or designee for other projects. Verification of such claims, when the damage is apparent shall be provided by a statement from an engineer registered in the State of Florida. Verification shall identify the trees causing such structural problems, shall give an explanation of the problem, and shall bear the embossed seal of the engineer. Such statements of verifications shall be accepted by~~

1 the plan board or the city manager.

2 (b) Methods of mitigation. Mitigation shall be allowed by two methods, mitigation trees  
3 (on an inch-for-inch basis or as otherwise specified) and mitigation payment. The  
4 amount of mitigation is as specified in subsections (c) and (d) below.

5 (1) Mitigation trees shall be of high quality shade species as identified on the Gainesville  
6 tree list, meeting the specifications in Sec. 30-265, and sited in accordance with the  
7 requirements of Sec. 30-251(1). The installation of new trees for a development as  
8 required by this chapter may count as mitigation for trees removed from the site,  
9 except where those removed trees are of a high-quality species. Increasing the  
10 diameter of trees required to be planted with a development shall not be used to meet  
11 mitigation requirements. The preference is for mitigation trees to be planted on the  
12 site, but where it is demonstrated that no space is available, mitigation trees may be  
13 planted offsite within City limits. In these instances, the required mitigation trees  
14 may be established on a different site within the city limits approved by the city  
15 manager or designee, or the city manager or designee may allow a payment in an  
16 amount to be made to the city tree mitigation fund equivalent to the cost of the trees  
17 that would have been purchased.

18 (2) Mitigation payment shall be based on tree appraised value, or as otherwise specified in  
19 this code. Payment shall be made prior to the issuance of a certificate of occupancy, or at  
20 such other time as specified in a development order. Mitigation payments received by the  
21 City shall be deposited in the City tree mitigation fund. This fund may be used for new  
22 tree plantings associated with public improvement projects or for the preservation of trees  
23 through the purchase of conservation lands, but shall not be used for tree maintenance or  
24 toward the installation of new trees that would already be required for a development.

25 ~~(b)(c)~~ Removal and mitigation or relocation of regulated trees subject to subdivision or  
26 development plan approval. A separate tree removal permit will not be required in  
27 conjunction with developments requiring development plan approval by the appropriate  
28 board. Plans for tree removal or relocation will be considered and either approved or  
29 denied as part of the development review process. Construction drawings should be  
30 submitted to the building department and application for construction permits made  
31 before any trees are removed. After a certificate of occupancy has been issued for a  
32 development, any tree removal shall require either a tree removal permit or an approved  
33 plan amendment. Failure to obtain a permit before removing or relocating a regulated tree  
34 shall be subject to the measures for enforcement and replacement specified in section 30-  
35 311, pertaining to violations, and the provisions of Article X of this chapter. When tree  
36 removal or relocation is contemplated in conjunction with any development requiring  
37 approval of a development plan or subdivision plat, such removal or relocation shall be  
38 considered and either approved or denied at the same time a development plan or plat is  
39 approved or denied, based upon the criteria specified in subsection (e) of this section. No  
40 separate tree removal permit is required. All of the required plans, data or other

information required with the application shall be included on the proposed development plan or on the supporting documents submitted with the plan or the plat. The following requirements apply:

(1) Decisions on tree removal shall be based on a tree survey or a qualitative tree survey. The landscaping plan shall show all trees to be preserved, provide for protective tree barriers that meet the requirements of Section 30-255, and specify the details of the mitigation required in this section.

(2) Construction drawings shall be submitted to the building department and application for building permits made before any trees are removed.

(3) After a certificate of occupancy has been issued for a development, any additional tree removal shall require either a tree removal permit or a development plan amendment. Failure to obtain a tree removal permit before removing or relocating any existing regulated tree or any tree that was planted to comply with the approved development plan shall be subject to the measures for enforcement specified in Sec. 30-311.

(4) The requirements for mitigation of regulated trees approved for removal as part of development plan or subdivision plat review are as follows:

<u>CATEGORY</u>	<u>MITIGATION</u>
<u>High quality heritage trees, in fair or better condition</u>	<u>Mitigation payment based on tree appraised value, limited to three trees per acre averaged over the entire site. If more than three trees per acre in this category are located on the site then the trees with the highest tree appraised value throughout the site shall be used to calculate the payment. High quality heritage trees proposed for removal in excess of the overall average of three per acre shall require mitigation trees on an inch-for-inch on a diameter basis.</u>
<u>Heritage trees of other than high quality species, in fair or better condition</u>	<u>Mitigation trees on an inch-for-inch diameter basis.</u>
<u>Any heritage trees in less than fair or better condition; and any other regulated tree</u>	<u>Mitigation trees consisting of two trees of high quality shade species established for each tree removed.</u>

(e)(d) ~~Removal and mitigation or relocation of regulated trees not part of subject to subdivision or development plan approval or in exempt areas as defined in section 30-266.~~ Any

person desiring to remove or relocate a regulated tree, except tree removal approved as part of subdivision or subject to development plan approval ~~or trees in an exempt area~~, shall file a tree removal permit with the city manager or designee. As a condition to granting a permit, the applicant shall mitigate each tree being removed. The following requirements apply: ~~an application for a permit. The application shall include or be accompanied by:~~

(1) Permit applications shall include the name of the property owner, address from which tree will be removed, tree species and diameter, and reason for removal of the tree. The permit application shall be signed by the property owner and, if applicable, its authorized agent. Applications for tree removal shall also include a scaled drawing of the site showing tree size and location, and a statement of how any other regulated trees are to be protected during any approved tree removal and any associated construction or clearing, or grade changes. The city manager or designee shall attempt to verify the information contained in the application and shall either approve or deny the application as to each regulated tree proposed to be removed.

(2) Where construction is associated with the tree removal, construction drawings shall be submitted to the building department and application for building permits made before any trees are removed.

(3) The requirements for mitigation of regulated trees not associated with development plan or subdivision plat review are as follows:

<u>CATEGORY</u>	<u>MITIGATION</u>
<b><u>Properties in Single Family Residential Zoning Districts (only heritage trees are regulated)</u></b>	
<u>High quality heritage trees, in fair or better condition, wherever they are located on the property.</u>	<u>Mitigation trees on an inch-for-inch diameter basis, with a minimum of two shade trees of high quality species planted on site for each tree removed.</u>
<u>Heritage trees of other than high quality species and high quality heritage trees in less than fair or better condition, wherever they are located between the property lines and legal setbacks.</u>	<u>Mitigation trees consisting of two shade trees of high quality species planted on the site for each tree removed.</u>
<b><u>Properties in all other Zoning Districts</u></b>	



<u>High quality heritage trees, in fair or better condition.</u>	<u>Mitigation payment based on tree appraised value, and mitigation trees consisting of a minimum of two shade trees of high quality species planted on site for each tree removed.</u>
<u>Heritage trees of other than high quality species, in fair or better condition; and high quality heritage trees, in fair or better condition, which are causing structural problems to buildings or underground utilities.</u>	<u>Mitigation trees on an inch-for-inch diameter basis, with a minimum of two shade trees of high quality species planted on site for each tree removed.</u>
<u>Any heritage trees in less than fair or better condition; and any other regulated tree.</u>	<u>Mitigation trees consisting of two shade trees of high quality species planted on the site for each tree removed.</u>

- 1
- 2       ~~(1) An overall development plan or proportional sketch of the site, easement or right-~~
- 3       ~~of way upon which the tree is located, showing the shape and dimensions of the~~
- 4       ~~site and the location, configuration and size of existing and proposed structures,~~
- 5       ~~driveways and other improvements. The plan or sketch shall also identify the~~
- 6       ~~location and type of all regulated trees and all major tree groupings on the site that~~
- 7       ~~will be impacted by the proposed project. Trees or groups of trees on a site that~~
- 8       ~~will not be impacted by the proposed project need not be shown on the plan or~~
- 9       ~~sketch.~~
- 10       ~~(2) A designation of any regulated trees proposed to be removed or relocated along~~
- 11       ~~with the reasons for such removal or relocation.~~
- 12       ~~(3) A statement of how any other regulated trees are to be protected during any~~
- 13       ~~approved tree removal or relocation and any associated construction or clearing.~~
- 14
- 15       ~~(4) A statement identifying any proposed grade changes on the site and the~~
- 16       ~~precautions to be taken to ensure that such changes will not adversely impact or~~
- 17       ~~endanger any regulated trees that are not to be removed or relocated. Spot~~
- 18       ~~elevations may be required prior to issuance of construction permits.~~
- 19
- 20       ~~(5) As a condition of the granting of a permit, the applicant will be required to replace~~
- 21       ~~each tree being removed with two replacement trees as adopted by resolution of~~
- 22       ~~the city commission. Two trees will be required for each tree removed that will~~
- 23       ~~reach comparable size at maturity from the Gainesville Tree List.~~
- 24       ~~(d) Permit approval procedure. The city manager or designee shall, within five working days~~
- 25       ~~of the filing of such applications, attempt to verify the information contained in the~~
- 26       ~~application and either approve or deny the application as to each regulated tree proposed~~

1 to be removed or relocated.

2 (e) ~~Permit approval criteria. Removal or relocation of regulated trees shall be approved by~~  
 3 ~~the city manager or designee upon a finding that the trees pose a safety hazard; have been~~  
 4 ~~weakened by disease, age, storm, fire or other injury; or prevent the reasonable~~  
 5 ~~development of the site, including the installation of solar energy equipment. Regulated~~  
 6 ~~trees shall not be removed, damaged or relocated for the purpose of locating utility lines~~  
 7 ~~and connections unless no reasonably practical alternative as determined by the city~~  
 8 ~~manager or designee is available. Removal or relocation of a regulated tree may be~~  
 9 ~~approved by the reviewing board, city manager or designee based upon one of the~~  
 10 ~~following findings:~~

11 (1) that the tree poses a safety hazard or has been weakened by disease, age, storm, fire  
 12 or other injury; or

13  
 14 (2) that the tree contains a disease or infestation that could spread to other trees; or

15  
 16 (3) that the tree prevents the reasonable development of the site, including the installation  
 17 of solar energy equipment or the installation or replacement of utility lines; or

18  
 19 (4) that the tree is causing or is likely to cause (as evidenced by competent substantial  
 20 evidence) structural damage or problems to buildings or underground facilities due to  
 21 excessive root or trunk growth, or soil expansion and contraction caused by uneven  
 22 water uptake; or

23  
 24 (5) should be removed for some other reason related to the public health or welfare. This  
 25 finding cannot serve as the sole basis for removal of high quality trees.

26  
 27 The city manager or designee may require the applicant to provide verification of the  
 28 findings in the form of a written report signed and sealed by an appropriate licensed  
 29 professional within the State of Florida. Regulated trees shall not be removed, damaged  
 30 or relocated for the purpose of installing, replacing or maintaining utility lines and  
 31 connections unless no reasonably practical alternative is available, as determined by the  
 32 city manager or designee. Where a tree may be preserved by cutting the tree roots  
 33 instead of removing a tree, that strategy shall be preferred.

34  
 35 (f) ~~Removal or relocation approval in conjunction with other approval. When tree removal~~  
 36 ~~or relocation is contemplated in conjunction with any development requiring approval of~~  
 37 ~~a development plan or subdivision plat by the development review board or plan board,~~  
 38 ~~such removal or relocation shall be considered and either approved or denied by the~~  
 39 ~~development review board or plan board at the same time a development plan or plat is~~  
 40 ~~approved or denied, based upon the same standards for approval as specified in~~  
 41 ~~subsection (e) of this section. All of the required plans, data or other information required~~

with the application shall be included on the proposed development plan or on the supporting documents submitted with the plat.

(g) ~~Standards for tree relocation or replacement.~~ As a condition of the granting of a permit, the applicant will be required to replace or relocate the trees being removed with suitable replacement trees. ~~Replacement trees will be from the Gainesville Tree List. Two trees will be replaced for every tree removed, except healthy Heritage trees. When healthy Heritage trees are removed, they will be replaced on an inch-for-inch basis. In determining the required location of relocated or replacement trees that will be planted either on-site or offsite, the city manager or designee, or the development review board or plan board the developments as specified in subsection 30-254(f), shall consider the needs of the intended use of the property together with a realistic evaluation of the following:~~

(1) ~~Existing tree coverage, including percentage of canopy.~~

(2) ~~Number of trees to be removed on the entire property.~~

(3) ~~Area to be covered with structures, parking and driveways.~~

(4) ~~Topography and drainage of the site and its environs.~~

(5) ~~Character of the site and its environs.~~

(6) ~~Ecology of the site.~~

(7) ~~Characteristics and amount of shrubs, grass and trees proposed for planting on the site by the applicant.~~

(8) ~~The requirements of section 30-260.~~

(9) ~~The health and desirability of existing trees.~~

(10) ~~The impact of features included in the proposed project (e.g., buffer areas, etc.) and areas not to be impacted by the proposed project.~~

(f)(h) *Natural emergencies or disasters.* In the case of natural emergencies or disasters such as hurricanes, windstorms, floods or other disasters, issuances of permits for the removal of damaged trees may be waived by the city manager or designee. Such waiver may not be for an indefinite period and shall expire when the city manager or designee determines that emergency conditions have ended.

(g)(i) *Commercial tree removal permits.* Commercial tree removal permits may be granted for the removal of trees associated with forestry management, tree harvest and other similar commercial purposes in accordance with the requirements of this subsection.

(1) *Applicability.* Commercial tree removal permits may be requested in lieu of other tree removal permits required by this section where no development of the property is intended. Where development of the property is planned, the petitioner shall address tree removal within the development plan review or normal tree removal processes:

(2) *Permit granting authority.* The city manager or designee, the board of adjustment and the development review board have authority to grant commercial tree removal permits as described below.

(3) *Receipt of request.* Owners of property may request the appropriate authority to grant a permit for the commercial removal of trees by filing such an application with the planning and development services department, on forms supplied by the department, together with the appropriate fee. The request shall be accompanied with the following information supplied by the applicant:

- a. Suitability of the trees for harvest.
- b. Harvesting methods to be used.
- c. Sedimentation and erosion control measures to be used.
- d. Plan of property showing location of required buffers next to water bodies and property lines and tree canopy to remain as applicable.
- e. Tree protection measures for trees to remain.
- f. Species of trees to be used for replacement.

(4) *Notice.* Whenever a property is under consideration for a permit, except any property designated agriculture on the future land use map, all owners of property adjacent to the property shall be given notice by mail. Such notice shall be mailed at least 15 days prior to the granting of the permit. For the purpose of this notification, an owner of property shall be deemed to be the person who, by his/her address, is so shown on the tax rolls of the city. If any such property is part of the common area of a condominium, notice shall be sent to all of the condominium unit owners as shown on the latest tax rolls. Additionally, the property under consideration shall also have a sign posted at least five days prior to the date the permit is to be granted. The sign shall specify that the property is under consideration for a permit allowing tree removal for commercial purposes and specify the date the permit is to be granted.

(5) *Procedure for review.* If less than 20 percent of the noticed property owners file a written objection to the proposed tree removal within 15 days of the mailing of

the notice, the commercial tree removal permit may be issued provided all other provisions of this section and this chapter have been met.

a. *Parcels of five acres or less, other than property designated agriculture on the future land use map.* If 20 percent or more of such noticed property owners file a written objection within 15 days of the date of mailing of the notice, the application will be referred to the board of adjustment for a public hearing according to the notification for special exception procedures as found in article X. The board of adjustment in deciding whether to approve or disapprove the application shall consider the factors delineated in subsections (i)(7) and (8) of this section.

b. *Parcels of more than five acres, other than property designated agriculture on the future land use map.* If 20 percent or more of such noticed property owners file a written objection within 15 days of the date of mailing of the notice, the development review board shall hold a public hearing in accordance with its rules. The development review board, in deciding whether to approve or disapprove the application, shall consider the factors as delineated in subsections (i)(7) and (8) of this section.

c. *Parcels designated agriculture on the future land use map.* All applications for tree removal on such parcels shall be reviewed by the city manager or designee, who, in deciding whether to approve or deny the application, shall consider the factors delineated in subsections (i)(7) and (8) of this section. Appeals of the decision of the city manager or designee shall be made to a hearing officer. The procedure for the appeal shall be the same as is provided in section 30-352.1(a) for appeals from decisions of the development review board.

(6) *Action on application.* Upon receipt of a completed application and following the notice period specified above, or after the permit has been granted after a hearing under subsection (i)(5), the city manager, or designee, will issue the commercial tree removal permit, except as may be modified below, with the following conditions:

a. Unless otherwise specified herein, trees will be removed according to best management practices, as specified in the "A Landowner's Handbook for Controlling Erosion from Forestry Operations," published by the state department of agriculture and consumer services, division of forestry, or subsequent manuals on file with the public works department.

b. No regulated tree shall be removed and no logging road shall be constructed:



1. Within 35 feet of the break in slope at the top of the bank of any creek;
2. Within 35 feet of the landward extent of a lake or wetland; or
3. Within a designated conservation management area.

This requirement may be waived where crossing of the creek by a bridge is necessary to access the property where trees are to be removed. Such waiver shall be limited to the area necessary to construct the bridge. For the purposes of this subsection, creeks shall be those identified by the surface water district provisions of article VIII.

- c. Following removal of the trees granted by the permit, the petitioner shall within 18 months provide for reforestation of the site by one of the following means:

1. Where forestry or other agricultural use of the property is to continue in the conservation or agriculture districts, pine seedlings or other forestry or agricultural crops, including pasture, may be planted.
2. Where forestry use is to be abandoned or in districts where it is not a permitted use, replacement of trees shall be required as per section 30-260. This requirement may be waived when an adequate number of trees of appropriate size and species remain on-site to meet this requirement and are certified by the city manager or designee to be in good health and free from damage caused by harvest operation which may result in the death of the tree.

- d. All invasive nonnative tree species listed in subsection 30-251(7)(g) may be required to be removed from the property.

- (7) *Imposition of additional conditions.* The city manager or designee, board of adjustment or development review board, as appropriate, may impose other reasonable conditions where need is demonstrated. Such conditions may include restrictions on percentage of canopy removed or the prohibition of tree removal from certain portions of the site under consideration. The city manager, board of adjustment or development review board, as appropriate, shall be guided by, but not restricted to, the following criteria in imposing such additional conditions:

- a. The need to provide buffers to adjacent developed property;
- b. The need to protect soils highly susceptible to soil erosion as identified by the soil survey of the county;

- c. The need to protect slopes in excess of ten percent, particularly near creeks and other bodies of water;
- d. The need to protect existing wetlands, floodplains and flood channels and other environmentally sensitive areas as shown on existing maps, photographs and other reliable and available sources; and
- e. The need to preserve endangered, threatened or special concern animal and vegetative species, habitats and communities, rare hardwood hammocks or champion trees as identified from competent sources.

(8) *Removal of trees specifically planted or managed for harvest.* Where environmental and other factors limit the removal of trees on 75 percent or more of the site under consideration, the commercial tree removal permit may be denied. However, factors identified above may not be used to unduly prohibit the harvest of trees where it is demonstrated that the trees to be harvested were specifically planted for that purpose.

#### **Sec. 30-255. Tree preservation during development and construction.**

- (a) *Barriers required.* Prior to clearing, demolition, or other construction activities, the city manager or designee or reviewing board shall determine which trees, if any, require protection. ~~p~~Protective barriers shall be constructed, as necessary, to prevent the destruction or damaging of regulated trees that are located within 50~~15~~ feet of any construction activity or storage of equipment and materials. Barrier placements along subdivision streets are regulated in accordance with the provisions of section 30-183(e)(2)i. Trees identified for preservation which are destroyed or ~~receiving major severely damaged~~ shall be mitigated in accordance with section 30-254 ~~replaced before prior to~~ issuance of a certificate of occupancy or use, ~~if such certificate is required, unless approval for their removal has been granted under permit.~~ The city manager or designee shall determine which trees, if any, require protection or replacement. To avoid conflicts between barrier placements and demolition and construction activities, barriers shall be drawn to scale on the demolition, grading and paving sheets of the development plan.
- (b) *Barrier zones.* All regulated trees in areas of demolition or construction that have not been permitted nor ~~not~~ designated for removal ~~may be required by either~~ the terms of the permit or approved development order shall be protected ~~to be protected~~ by barrier zones erected and inspected prior to construction of any structures, road, utility service or other improvements, Barricades shall comply with the following: ~~and may be required by the terms of the permit to comply with the following if determined to be necessary by the city manager or designee:~~

- (1) Protective barriers shall be plainly visible and shall create a continuous boundary around trees or vegetation clusters in order to prevent encroachment by machinery, vehicles or stored materials. To further protect tree roots, a layer of wood chips at least 8 inches thick shall cover the soil within the barricade. Barricades must be at least three feet tall and must be constructed of either wooden corner posts at least two by four inches buried at least one foot deep, with at least two courses of wooden side slats at least one by four inches with colored flagging or colored mesh attached, or constructed of one-inch angle iron corner posts with brightly colored mesh construction fencing attached. High quality heritage trees shall be protected by galvanized chain link fencing a minimum of 48 inches high, 11-gauge wire, 2 inch mesh size secured with 1-7/8 inch line posts no further than 10 feet apart secured at a depth of 3 feet below soil line. Corners shall be secured with 2-3/8 inch line posts secured to a depth of 4 feet below soil line.
- (2) Barriers shall be placed at the greater of the following as follows:
- a. At or outside the dripline for all Hheritage and Echampion trees and all regulated pine and palm trees.;
  - b. At a minimum of two-thirds of the area of the dripline for all other regulated species.;
  - c. At the tree root plate.
- (3) If complying with the above placement of barriers is found to unduly restrict development of the property, the city manager or designee, or the appropriate reviewing board may approve alternative barrier placements or methods of protection provided that at least 50 percent of the area under the canopy dripline remains undisturbed (no grade change or root cut) and further provided that there shall be no disturbance to the tree root plate. Protective barriers may not be removed or relocated without such approval.
- (4) No grade changes shall be made within the protective barrier zones without prior approval of the city manager or designee. Where roots greater than one inch in diameter are damaged or exposed, they shall be cut cleanly and re-covered with soil within one hour of damage or exposure.
- (5) Protective barriers shall remain in place and intact until such time as landscape operations begin. ~~or construction needs dictate a temporary removal that will not harm the tree.~~ If construction needs dictate a temporary removal (for less than 24 hours), the city manager or designee, may approve or deny the temporary removal of protective barriers.

(6) Landscape preparation in the protected area shall be limited to shallow discing of the area. Discing shall be limited to a depth of ~~two~~ 4 inches unless specifically approved otherwise by the city manager or designee. ~~or the plan board, as applicable.~~

(7) No building materials, machinery or harmful chemicals shall be placed within protective barriers ~~defined in subsection (b)(2) of this section~~, except short-duration placements of clean fill soil that will not harm the tree. Such short-duration placements shall not exceed 7 ~~30~~ days. The city manager or designee shall be notified of the dates the short duration placement will begin and end. The original soil grade that existed within the protected areas prior to the placement of such fill shall be restored.

(8) ~~The "Tree Protection Manual for Builders and Developers," as published by the state department of agriculture and consumer services, division of forestry (October 1980 edition), the standards of the National Arborist Association, The American National Standards Institute A-300 Part V: Management of Trees and Shrubs During Site Planning, Site Development, and Site Construction or other nationally recognized arboricultural standards approved by the city manager or designee may shall be used as guidelines for tree protection, planting, pruning and care during development and construction.~~

~~(e) Attachments to trees prohibited. No attachments or wires other than those of a protective and nondamaging nature shall be attached to any tree.~~

(c) Preservation generally. Trees may be preserved on development sites in locations where a new tree would be required. Credit for the preservation of such a tree will be given if the requirements listed below are met. During construction, if the requirements are not being met and/or the preserved tree is unlikely to survive in satisfactory condition, the owner shall apply for a tree removal permit in accordance with the requirements of this code.

(1) 50 percent of the area within the dripline of the tree shall be naturally preserved, both above- and below-ground. Under no circumstances shall permission be given for any construction activity within the tree root plate. The 50 percent protection zone must include the entire tree root plate. Landscape materials are permitted within the 50 percent protection zone but not within the tree root plate. Within the 50 percent protection zone there shall be no alteration to the existing grade, no trenching or cutting of roots, nor shall there be any storage of materials or fill. No heavy equipment shall be permitted within the protection zone. All work must be done by hand. There shall be no compaction of the soil, as from heavy construction equipment, and no concrete, paint, chemicals or other foreign substances placed within this protection zone.

(2) The city manager or designee may approve paving blocks within the protection

zone, provided that all work is done by hand (no machinery), and that the soil area under the pavers is not compacted beyond the bulk density limits of 1.40 g/cc in clay, 1.50 g/cc in loam, or 1.70 g/cc in sand. No lime rock or other material shall be used underneath the pavers. Pavers may not be placed within the tree root plate.

(3) There shall be no evidence of active insect infestation potentially lethal to the trees, and no damage from skinning, barking or bumping.

(4) The root plate of regulated trees within the public right-of-way should not be impacted by adjacent development, even where the tree root plate encroaches on the private property. The installation of new utilities or improvements to public utilities required to serve the development should not require the removal of trees on the public right-of-way, where the required separations from the utilities can be met.

(5) If any preserved tree is not alive and healthy three years after the certificate of occupancy is granted, it shall be removed and replaced with the tree or trees which originally would have been required by this code. The area that was preserved to accommodate the preserved tree shall be maintained in an unpaved condition and the replacement trees established in this area.

(6) The planning and development services department shall maintain, and make available to the public, descriptions and illustrations of tree preservation and protection practices which will assist in assuring that preserved trees survive construction and land development.

(d) *Inspections.* The city manager or designee shall conduct periodic inspections of the site before work begins and/or during clearing, construction and/or post-construction phases of development in order to ensure compliance with these regulations and the intent of this section.

(e) *Denial; conditions.* The reviewing board or city manager or designee may deny a proposal for development because one or more champion or high quality heritage trees have not been preserved or adequately protected, or may require special conditions of approval that may include but are not limited to the following:

(1) Requiring the trees to be protected with chainlink barricades.

(2) Requiring a soil aeration system in the vicinity of tree roots as needed, particularly where fill will be added over roots of preserved trees or where compaction may reduce the availability of water and oxygen to tree roots.

**Section 8.** Existing Sections 30-256, 30-257, 30-258, 30-259, 30-260, 30-261, 30-262,



30-263 and 30-264 of Article VIII. Environmental Management, Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policies, Subdivision I. Landscape and Tree Management of the Land Development Code are deleted in their entirety as follows:

**~~Sec. 30-256. Replacement stock.~~**

~~In all cases wherein this article shall require replacement of any tree, such replacement shall be made with replacement stock. "Replacement stock" is hereby defined as any tree contained on the herein referenced replacement stock list having a height of at least eight feet and a Florida Nursery Grade of Number 1 or better. Survival of replacement stock will be guaranteed until such replacement stock meets with the definition of "tree" as defined in article II. Replacement stock may be any of the trees listed on the Gainesville Tree List. When ten or more replacement trees are required, the trees shall consist of no more than 50 percent of any one tree genus. Development within airport flight paths are excluded from the genus requirement. When ten or more replacement trees are required, the trees shall consist of no more than 50 percent of any one tree genus. Development within airport flight paths are excluded from the genus requirement.~~

**~~Sec. 30-257. Champion trees.~~**

~~(a) — Champion trees are those that have been identified by the state division of forestry as being the largest of their species within the state or by the America Forestry Association as the largest of their species in the U.S. The current list of Champion trees in the city and the county that have been identified is on file in the planning and development services department. This list is subject to revision and will be updated yearly.~~

~~(b) — Champion trees shall be considered regulated trees in both excluded areas, as defined in subsection 30-266, and nonexcluded areas.~~

~~(c) — The removal, relocation or replacement of Champion trees in conjunction with development requiring board approval shall be in accordance with subsections 30-254(b) and 30-254(f). The removal, relocation or replacement of Champion trees shall be by special exception of the board of adjustment.~~

**~~Sec. 30-258 Heritage trees.~~**

~~(a) — The Heritage designation is conferred on the large trees that are the major distinguishing feature of Gainesville's urban forest. All native tree species are designated heritage trees when they reach the size of 20 inches in diameter when measured at 4½ feet above ground level. Exceptions are Water Oaks (*quercus nigra*), Laurel Oaks (*quercus hemispherica*), Sweetgums (*Liquidambar styraciflua*) and Loblolly Pine (*pinus taeda*), which become Hheritage trees only when they are larger than 30 inches in diameter when measured at 4½ feet above ground level.~~

~~(b) Heritage trees shall be considered regulated trees in exempt areas, as defined in subsection 30-251(2)h.~~

~~(c) The removal, relocation or replacement of Heritage trees in conjunction with development requiring board approval shall be in accordance with subsections 30-254(b), 30-254(f) and 30-254(g). In exempt areas as defined in subsection 30-251(2)h., the removal, relocation or replacement of Heritage trees shall be by special exception as provided by this chapter. No permit shall be required for the removal of Heritage trees on property with single-family zoning district classifications (RSF-1, RSF-2, RSF-3 and RSF-4) when the trees are located outside of the required yard and limited to a maximum of two compact areas. Any permission given for the removal of any Heritage tree that is healthy and that is not causing structural damage, whether this permission is through an approved development plan or through the issuance of a tree removal permit, will require replacement on an inch for diameter inch basis. Trees may be planted on site or off site, or given to the city for planting on public property.~~

**~~Sec. 30-259. Clearing and grubbing.~~**

~~Clearing and grubbing is only permitted after a site has received development plan approval or conditional plat approval with appropriate permits, or a building permit is issued where development plan review is not required, including existing developed single-family lots, except as may be permitted in agricultural districts and legal nonconforming agricultural uses.~~

**~~Sec. 30-260. Reforestation.~~**

~~As a condition of any development order issued for commercial harvest for any property other than excluded areas, there must exist or be planted on such property within one year shade trees (except for pines and palms) from the Gainesville Tree List, in accordance with section 30-265, 12 shade trees per acre for sites over five acres. Newly planted trees shall be located so as to ensure that the appropriate proportion of trees is planted within the developed area of the property.~~

**~~Sec. 30-261. Tree removal and planting of street trees in new subdivisions.~~**

~~(a) *During construction.* During the construction of required subdivision improvements, the developer shall only remove those trees that will hamper the installation of the improvement. To ensure that this limitation is not exceeded, the appropriate reviewing board may require, during the subdivision approval process, that the subdivider provide plans, aerial photographs or other data sufficient to allow an accurate determination to be made.~~

~~(b) *Street trees.* The subdivider shall plant street trees from the Gainesville Tree List within five feet of the right-of-way of each street or within the right-of-way if such a planting strip has been part of the development plan. Trees shall be planted along all streets constructed within the subdivision. One such tree shall be planted for every 50 linear feet of street right-of-way on both sides of the street, except for gateway streets, which shall comply with section 30-262. Existing native trees in good health may be counted as~~

required trees, if approved by the city manager or designee. Where property on one side of the right-of-way is not owned by the subdivider, such trees shall be planted only on the side of the street owned by the subdivider. Such trees shall be no closer together than 50 feet.

**Sec. 30-262. Tree planting in gateway street district.**

(a) ~~Generally.~~ The applicant shall plant gateway trees adjacent to the right-of-way from the Gainesville Tree List. Trees planted to meet this requirement shall be located on the applicant's property, and no closer than five feet, or farther than ten feet, from the right-of-way or public utility easement, or within the street median. One tree shall be planted for every 35 linear feet of right-of-way or street median. Large or medium shade trees shall be utilized in all areas outside of medians. Median trees shall be selected from the "small or medium gateway tree" list. For installations adjacent to overhead utility lines, one small gateway tree for every 25 linear feet shall be planted. For installations adjacent to streetlights, the following clear zones shall be maintained:

(1) ~~Large gateway trees: 50-foot clear radius.~~

(2) ~~Medium gateway trees: 35-foot clear radius.~~

(3) ~~Small gateway trees: 25-foot clear radius.~~

For the purpose of meeting the gateway street tree requirement, existing streetlights adjacent to the applicant's property may be substituted for trees on a one-to-one basis.

(b) ~~Exemption.~~ No gateway street trees shall be required if, in the opinion of the city manager or designee, gateway street objectives are achieved by the preservation of existing healthy trees.

**Sec. 30-263. Credit for preservation of existing trees.**

Whenever the terms of these sections require the provision of shade trees on any lot, credit shall be given for the preservation of existing trees which are properly protected during any clearing or construction on the property, pursuant to section 30-264, and which meet the following criteria:

(1) ~~Such trees must meet the requirements of these sections for location, spacing and type of tree.~~

(2) ~~Any such trees which have a minimum two-inch trunk diameter at a point 4½ feet above ground level and a minimum crown spread of ten feet shall provide credit on a one-for-one basis for trees required pursuant to subsections 30-261(b) or 30-252(b) and (c).~~

(3) ~~Credit toward the requirements of section 30-260 shall be given in accordance with the following table:~~

Existing Crown Spread of Preserved Tree	Or	Diameter of Tree Trunk 4½ Feet Above Natural Grade	Number of Trees Credited
90 feet or greater	or	36 inches or greater	7
60—89 feet	or	30—35 inches	6
50—59 feet	or	26—29 inches	5
40—49 feet	or	20—25 inches	4
30—39 feet	or	13—19 inches	3
20—29 feet	or	8—12 inches	2
10—19 feet	or	2—7 inches	1

**Sec. 30-264. Tree protection preservation requirements generally.**

(a) ~~To receive credit for the preservation of an existing tree, the following requirements must be met:~~

(1) ~~Fifty percent of the area within the dripline of the tree shall be naturally preserved or provided with pervious landscape material and shall be maintained at its original grade with no trenching or cutting of roots in this area. Within this area, there shall be no storage or fill or compaction of the soil, as from heavy construction equipment, or any evidence of concrete, paint, chemicals or other foreign substances in the soil.~~

(2) ~~The tree shall not be damaged from skinning, barking, bumping and the like.~~

(3) ~~There shall be no evidence of active insect infestation potentially lethal to the trees.~~

(4) ~~There shall be no impervious surface or grade change within five feet of the trunk.~~

(b) ~~If it is determined by the city manager or designee that the requirements of subsection (a) of this section have not been complied with, credit for an existing tree may be given upon proof from the county forester and city arborist, satisfactory to the building official, that such tree is healthy and has not been seriously damaged during development.~~

(c) ~~If any tree for which credit was given pursuant to section 30-263 is not alive and healthy one year after all associated construction and development of the property is completed, it shall be removed and replaced with the tree or trees which originally would have been required.~~

(d) ~~The planning and development services department shall maintain, and make available to the public, descriptions and illustrations of tree preservation and protection practices which will assist in assuring that preserved trees survive construction and land development.~~

**Section 9.** Existing Section 30-265 of Article VIII. Environmental Management, Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policies, Subdivision I. Landscape and Tree Management, of the Land Development Code is re-numbered and amended as stated below.

**Sec. 30-265256. Standards for installation and maintenance of landscape materials.**

(a) *Installation.*

(1) *Quality.* All plants shall be Florida Nursery Grade Number 1 or better, according to the Florida Department of Agriculture Division of Plant Industry Grades and Standards for nursery plants. They shall be healthy, disease-free and pest-free, and hardy for the North Florida region. Nursery invoices or labels must clearly specify that Grade Number 1 or better plants were purchased for installation.

(2) *Tree size.* Trees shall have a minimum height of 7 feet and a minimum trunk caliper of 2 inches. Trees shall be in minimum 30-gallon containers or field-grown material shall have a ball diameter of at least 28 inches. Trees shall have healthy root systems that have been pruned according to the Florida Grades and Standards best practices. Trees must be at least 7 feet tall with a trunk caliper of 2 inches (+ or - ½ inch) and grown in a 15 gallon container. Tree species shall be selected from the Gainesville tree list with estimated size at maturity at least as large as the tree being replaced. All trees shall have an average height of eight feet at the time of planting. However, trees at least 7½ feet in height at the time of planting are eligible for the purpose of determining the average height of all trees.

(3) *Tree planting and mulching specifications.* Trees should be planted in holes at least twice the diameter of the rootball. The final level of the newly planted tree



- (3) Tree planting and mulching specifications. Trees should be planted in holes at least twice the diameter of the rootball. The final level of the newly planted tree should place the root-trunk union between .5 and 1.5 inches above grade. Mulch should be no deeper than 1 inch over the top of the rootball. A tree ring to hold water in place should be constructed to overlap the meeting of the edge of the rootball and surrounding soil. This tree ring and an area 1 foot outside it should be covered with 4 inches of mulch. ~~Plants may be installed during the period of the year most appropriate for planting the particular species. If this option requires that some or all of the landscaping be planted at a time after the issuance of a certificate of occupancy, the developer shall post a performance bond sufficient to pay the costs of the required, but not yet installed, landscaping before the certificate shall be issued.~~
- (4) Utility and landscaping compatibility. Lighting fixtures, transformer boxes, fire hydrants, power, cable television or telephone lines, sewer or water pipes, or any other existing or proposed utility facilities and associated appurtenances, shall be located and designed to provide adequate service in the presence of landscape materials when such landscape reaches maturity. Reasonable efforts shall be made to install utility service without impacting existing trees. Excavation to install utility services shall remain at least 5 feet outside the root plate of any existing high quality heritage tree. Lighting fixtures shall be located a minimum of 10 feet from all required shade trees. ~~Lighting fixtures, power, cable television or telephone lines, sewer or water pipes, or any other existing or proposed overhead or underground utility service, shall be located and designed to provide adequate service in the presence of landscape materials when such landscape reaches maturity. For existing mature trees, reasonable efforts shall be made to install utility service without removing such trees. No shade tree that exceeds 40 feet in height at maturity shall be placed within 15 feet of any overhead utility. Fire hydrant connections and building fire connections shall not be obstructed by plant material, nor shall dangerous plants such as Spanish bayonet be located within 15 feet of such facilities. Small, low-growing shrubs (ten 10 inches or less in height) may be planted to soften the visual impact of these facilities, provided that the necessary access to such facilities is maintained.~~
- (5) Native trees. At least 75 percent of trees on the required landscape plan should be native species. Cultivars of native trees are considered native species. ~~In order to satisfy the requirements of this section, at least 50 percent of the total number of trees shall be native species selected from the Gainesville Tree List for all development approval issued before June 10, 1995. On or after June 11, 1995, 75 percent of the number of total trees shall be native species.~~
- (6) Environmental suitability. The use and location of all landscaping materials shall be compatible with the soil and light needs of the proposed plant material. At the time of the required pre-purchase on-site inspection with the city manager or

designee, substitution of plant species may be approved due to environmental unsuitability of the specified plant materials or due to existing infrastructure conditions on the site. If changes will occur for more than 25 percent of the trees on the site, then the changes must be red-lined on the plans on file with the community development and building inspections departments. Tree substitutions should be for trees that reach the same maximum height at maturity.

(7) The use of grass, lawn, or turf shall be minimized to conserve water. All sod shall be inspected prior to purchase and installation and shall be certified as free of noxious weeds by the Florida Department of Agriculture and Community Consumer Services, Division of Plant Industry. All landscaped areas not covered with vegetation shall be covered with organic mulches. No plastic surface covers shall be used.

~~(8) — Walls, fences and berms. All required walls shall be of solid masonry construction and shall have a minimum height of six feet, and shall be installed in such a manner so as not to disturb existing vegetation or the character of the buffer strip. Fences shall be opaque and constructed to a height of six feet of pressure treated wood. Fences and walls shall be screened on each side in amounts equalling one third or more of the face of the fence. A berm may be substituted for a wall if the berm attains at least four feet and has plant material of at least two feet. No berm shall have a slope of greater than one to three.~~

(b) *Replacement of dead material.* All trees planted in compliance with an approved development plan or as mitigation for the removal of regulated trees shall be maintained in good health. Within 6 months of a determination by the city manager or designee that a required tree or plant is dead or severely damaged or diseased, the tree or plant shall be replaced by the owner in accordance with the standards in section 30-256. If replacement trees die repeatedly, the city manager or designee may require that additional high quality shade trees be planted on the site. Within six months of a determination by the county forester, city arborist or other city designated qualified specialist, that a required tree or plant is dead or severely damaged or diseased, the tree or plant shall be replaced by the owner/developer in accordance with the standards specified in this article.

(c) *Pruning.* All trees may be pruned to maintain shape and promote their shade-giving qualities and to remove diseased or dying portions in areas where falling limbs could be a hazard to people or property. Tree pruning shall be done in accordance with the most current version of the American National Standard for Tree Care Operations "Tree, Shrub and Other Woody Plant Maintenance" (ANSI A300) and "Pruning, Trimming, Repairing, Maintaining, and Removing Trees, and Cutting Brush—Safety Requirements"(ANSI Z133). No more than 25 percent of the crown should be removed at one time. On young trees, limb removal shall leave no more than 33 percent of the trunk bare of branches. So that shade trees can grow with sturdy structure, the top branch or leader shall not be removed. Hooks shall not be used to climb trees unless the tree is being taken down.

1 Mature trees overgrowing vehicular use areas shall be pruned to allow the passage of  
 2 emergency vehicles. Excessive pruning, pollarding, or pruning of trees into round balls of  
 3 crown or branches, which results in an unnecessary reduction of shade and promotes weak  
 4 branch attachments is prohibited. If the city manager or designee finds same additional  
 5 shade trees shall be required to be planted on the site on up to an inch-for-ince basis. All  
 6 trees may be pruned to maintain shape and promote their shade-giving qualities. They  
 7 should be pruned to remove diseased or dying portions in areas where falling limbs could  
 8 be a hazard to people or property. Lower limbs may be removed to provide clearance for  
 9 pedestrians. In addition, trees located in association with vehicular use areas shall also be  
 10 pruned to allow a seven-foot clearance from ground level to avoid potential for damage  
 11 or injury to both pedestrians and vehicles, after they have adapted to the site. Mature trees  
 12 overgrowing driveways should be pruned to allow the passage of emergency vehicles.  
 13 However, the exeessive pruning or pollarding of trees into round balls of crown or  
 14 branches, which results in an unnecessary reduction of shade, shall be prohibited, and  
 15 may require supplemental plantings. All pruning shall be done following the American  
 16 National Standard for Tree Care Operations "Tree, Shrub and Other Woody Plant  
 17 Maintenance – Standard Practices."  
 18

19 **Section 10.** Existing Section 30-266 of Article VIII. Environmental Management,  
 20 Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater  
 21 Connection Policies, Subdivision I. Landscape and Tree Management, of the Land Development  
 22 Code is deleted in its entirety as follows:  
 23

24 **~~Sec. 30-266. Excluded areas.~~**  
 25

26 The following ~~excluded areas~~ as referred to in this subdivision:

27 ~~Commence at the southwest corner of the intersection of N.E. 2nd Avenue and N.E. 3rd~~  
 28 ~~Street as the point of beginning; thence run south along the west right-of-way line of said~~  
 29 ~~N.E. 3rd Street to its intersection with the south right-of-way line of East University~~  
 30 ~~Avenue; thence run east along said south right-of-way line to its intersection with a~~  
 31 ~~northerly extension of the centerline of Sweetwater Branch; thence run South along said~~  
 32 ~~centerline to its intersection with an easterly extension of the north right-of-way of S.E.~~  
 33 ~~2nd Place; thence run west along said easterly extension and the north right-of-way line~~  
 34 ~~of said S.E. 2nd Place to its intersection with the northerly extension of the east property~~  
 35 ~~line of Lot 1 of Oak Hall Plat, as recorded in Deed Book "Q", pages 342 and 343 of the~~  
 36 ~~Public Records of Alachua County, Florida; thence run south along said northerly~~  
 37 ~~extension and along the east line of said Lot 1 to the north line of Lot 7 of said~~  
 38 ~~subdivision; thence run west a distance of 12 feet more or less; thence run south parallel~~  
 39 ~~to the east line of Lots 7, 8, 11 and 12 of said Oak Hall Plat to the north right-of-way line~~  
 40 ~~of S.E. 4th Avenue; thence run west along said north right-of-way line to its intersection~~  
 41 ~~with the east right-of-way line of S.W. 1st Street; thence run north along said east right-~~  
 42 ~~of-way line to its intersection with the south right-of-way line of S.W. 3rd Avenue;~~  
 43 ~~thence run west along said south right-of-way line to its intersection with a southerly~~  
 44 ~~extension of the east right-of-way line of S.W. 2nd Street; thence run north along said~~

1 east right-of-way line to its intersection with the south right-of-way of S.W. 2nd Avenue;  
 2 ~~thence run west along said south right-of-way line to its intersection with a southerly~~  
 3 ~~extension of the east right-of-way line of S.W. 3rd Street; thence run north along said~~  
 4 ~~southerly extension and the east right-of-way line of S.W. 3rd Street to its intersection~~  
 5 ~~with the south right-of-way line of West University Avenue (also known as State Road~~  
 6 ~~No. 26); thence run north to the north right-of-way line of said West University Avenue~~  
 7 ~~lying also at a point on the east right-of-way line of N.W. 3rd Street, thence run northerly;~~  
 8 ~~following the east right-of-way line of said N.W. 3rd Street to the southeast corner of~~  
 9 ~~N.W. 3rd Street and N.W. 2nd Avenue; thence run east along the south right-of-way line~~  
 10 ~~of N.W. 2nd Avenue to its intersection with the east right-of-way line of North Main~~  
 11 ~~Street (also known as State Road No. 329); thence run north along said east right-of-way~~  
 12 ~~line to the southeast corner of said North Main Street and N.E. 3rd Avenue; thence run~~  
 13 ~~east along the south right-of-way line of N.E. 3rd Avenue to the west right-of-way line of~~  
 14 ~~N.E. 1st Street; thence run south along said west right-of-way line of N.E. 1st Street to its~~  
 15 ~~intersection with the south right-of-way line of N.E. 2nd Avenue; thence run east along~~  
 16 ~~said south right-of-way line to the southwest corner of N.E. 2nd Avenue and N.E. 3rd~~  
 17 ~~Street, being the point of beginning.~~

#### 18 ~~CENTRAL CITY DISTRICT LANDSCAPE EXEMPT AREA~~

19 Note to Codifier: Please delete the map that appears under this heading.

20 **Section 11.** A new Section 30-257 is created in Article VIII. Environmental  
 21 Management, Division 2. Landscape and Tree Management, Stormwater Management and  
 22 Water/Wastewater Connection Policies, Subdivision I. Landscape and Tree Management, of the  
 23 Land Development Code for the Gainesville Tree List and the existing Gainesville Tree List is  
 24 amended as follows:

#### 25 **Sec. 30-257. Gainesville tree list.**

26 (See Attachment "A" to this ordinance. Note to Codifier: Please insert Attachment "A"  
 27 into new Section 30-257.)

28 **Section 12.** Section 30-310(a) and section 30-311(c)(2)b of Article VIII. Environmental  
 29 Management, Division 4. Relief and Enforcement of the Land Development Code of the City of  
 30 Gainesville, is amended as stated below. Except as amended herein, the remainder of Sections  
 31 30-310 and 30-311 remain in full force and effect.

#### 32 **Sec. 30-310. Relief for reasonable or beneficial use.**

33 (a) *Landscape and tree management.* As regards the provisions of the landscape and tree  
 34 management sections of this article:

35 (1) ~~Generally. In addition to the relief provisions of this chapter, and pursuant to the~~  
 36 ~~terms of article X, pertaining to the board of adjustment, the board of adjustment~~

may grant variances to the landscape and tree management sections, based on demonstrated hardship, to the minimum 20 percent of areas devoted to landscape materials requirement of section 30-251.

(2)(1) *Preserving existing trees.* The preservation of any existing regulated tree identified on the Gainesville Tree List as being a high quality shade species may be considered as a basis for the granting of a variance pursuant to the procedures established in article X.

#### Sec. 30-311. Violations, enforcement and penalty.

(c) *Landscape and tree management.* As regards the provisions of the landscape and tree management sections:

(2) Performance standards for regulated trees shall be as follows:

a. *Purpose.* In order to assist the enforcing official, the code enforcement board and/or appropriate judicial forum in remedying a violation of the landscape and tree management sections of this article and ordering appropriate corrective action against any violation of these sections, there are adopted the following performance standards which meet the objectives of these sections.

b. *Minimum requirements.*

1. A tree that was established in compliance with a development order but which has been removed from the site or has died must be replaced with a tree that meets the requirements of Sec. 30-257(b). The species should be the same as specified on the approved landscaping plan. If a different species is desired, it must fill the required function – for example, a small flowering tree cannot replace a high quality shade tree. Whenever required street trees are removed to allow for infrastructure improvement projects along a street, they shall be replaced by the entity responsible for the improvement project. To replace a regulated tree, a minimum tree of three inches in diameter and 14 feet in height when planted is sufficient, unless such a tree would be unreasonable under the circumstances, in which event a smaller variety of flowering tree may be allowed provided such tree is a minimum of two inches in diameter and ten feet in height when planted.

2. High quality heritage trees shall be used as mitigation trees for any trees that were removed without a permit. Mitigation trees should



be planted on site in all the locations that would be required by code to bring the landscaping into compliance with current standards have been filled. The remainder of the mitigation trees may, as determined by the city manager or designee, be established on other appropriate sites within the city limits or may be given to the city tree-planting program. All regulated trees shall be replaced by parking lot trees from the Gainesville Tree List, with the exception of pines and palms, which are not allowed as replacement trees. However, other varieties of trees from the list of shade trees may be used when requested by the violator; provided, further, in no event shall pine or palm trees be allowed as replacement trees.

3. All replacement or mitigation trees shall be nursery-grown trees. They may be balled and burlapped, tree spaded or containerized.
4. Replacement or mitigation trees shall be located in approximately the same location as the regulated tree that has died or has been removed from the site, unless such location does not meet utility separation requirements or would conflict with other requirements in the chapter would be unreasonable under the circumstances, in which event the location shall be determined by the city manager or designee enforcing official or other appropriate body.
5. Replacement or mitigation trees shall ~~may~~ only be required to be planted during the months of November through March, unless the trees are containerized or the site is served by an automatic irrigation system.
6. The total sum of the caliper inches of replacement or mitigation trees shall equal, at a minimum, to the total sum of the caliper inches of the regulated trees which were illegally removed without a permit. If a tree removed without a permit was a heritage tree, then the required mitigation shall be double what is required as in mitigation in Section 30-254.

**Section 13.** Appendix A. Special Area Plans, Section 3. Special Area Plan for College Park of the Land Development Code of the City of Gainesville, is amended as stated below. Except as amended herein, the remainder of Appendix A. Special Area Plans, Section 3. Special Area Plan for College Park remains in full force and effect.

#### Exhibit B. College Park Special Area Plan

*Build-to Line.*

*Intent.* The intent of a build-to line is to define the relationship between the pull the building facade and close to the street and streetside sidewalk. The distance between the buildings and the street edge should preserve the neighborhood as a place sheltered by large trees. By doing so, building Building facades along a block face ~~will~~ should be ~~aligned~~ arranged to form a street edge that frames the public realm, while retaining sufficient width for people to walk, and sufficient space to provide formal landscape created by street trees. The street edge shapes the public realm to provide a sense of comfort and security for the public space. Buildings pulled up to the street sidewalk have more of a human scale, and allow for the construction of canopies which create shade and shield the pedestrian from wet weather.

In general, the goal of a commercial build-to line should be that the width of the street corridor (as measured by opposing building facades) and the height of the buildings shall be at least a ratio of 1:1 to 3:1. (The width should be no more than 3 times the height).

*Standard.* A build-to line range is specified by building lot type.

Stoops, stairs, chimneys, and bay windows are allowed to extend beyond the build-to line as long as they do not exceed more than 25 percent of the front façade, provide a minimum 10' setback from the center of tree to any architectural feature, meet utility separation requirements, and do not encroach into the public right-of-way. Open porches, projecting signs, balconies, arcades, and awnings and outdoor cafes may also extend beyond the build-to line. However, at least 5 feet of unobstructed sidewalk width and room for ~~any~~ the required street trees tree-strip must be retained.

#### *~~Landscape Standards.~~*

~~*Total Number of Trees Required.* Developing or redeveloping properties are required to provide shade trees based on the lot's private outdoor space. The property owner is also required to improve the adjacent public right of way to the standard set by the Special Area Plan and City Manager or designee.~~

~~Three trees including at least 2 shade trees are required for every 1,200 square feet of private outdoor space on the lot.~~

~~Parking lots other than single family driveways shall meet the landscape requirements specified in the Land Development Code. Street buffer yards requirements specified in the Land Development Code shall also be met. Spacing of street trees shall be as set forth below. The front buffer requirements may be modified or reduced if the build-to line established by the City Manager or designee or the appropriate reviewing board precludes or reduces the front buffer area. Tree spacing shall be in accordance with the right-of-way planting requirements rather than the underlying buffer requirements.~~

Existing trees on the lot and on the adjacent swales may count toward the total number of trees required. The City Manager or designee shall approve which existing trees may count towards the total required trees.

*Street Trees.* Street trees intended to provide pedestrian shade shall be located in the right of way swale or near the sidewalk on the private property. The City prefers street trees between curb and sidewalk but recognizes that utilities or space constraints may dictate that street trees shall in some cases be required to be located instead on private property behind the sidewalk.

Commercial and mixed-use streets (such as University Avenue) shall have shade trees planted with an average spacing of 35 feet on center. Trees are not required when arcades and colonnades are present.

Residential Streets shall have shade trees planted an average spacing of 30 feet on center.

*Quality of Trees.* All trees planted shall be Florida Grade #1 or better, with a trunk caliper of at least 2 inches in a 25-gallon container. Species must be chosen from the list of trees in the Approved Tree List in the Land Development Code. Each shade tree shall have a minimum root area of 140 square feet at or below grade. The minimum root space requirement can be met by using soil materials that are engineered to accommodate root growth under hardscape.

#### Urban Regulations For New Construction—Type I

*Instructions.* This building type includes shopfronts, offices, apartments or mixed-use buildings with apartments.

#### *Building Placement.*

1. Shopfront and Office buildings 0 feet to 12 feet from the front property line, 0 feet to 10 feet from the side street property line. The City Manager, designee or appropriate board shall set build-to line location to ensure enough room for sidewalks, utilities, and required street trees, and ~~appropriate street trees on narrow rights of way~~. If the block is only one lot deep, new buildings should be oriented towards the street of greater hierarchy, known as the Primary Frontage Street.

#### *Encroachments.*

1. Balconies shall be permitted to encroach forward of the build-to line; but must not interfere with the expected canopy of the required shade trees at 20 years as

specified on the gainesville tree list. This shall apply to balcony construction regardless of its location on the property (front, rear or sides.) Balconies shall be a minimum of 9 feet above grade and 18 inches behind the face of the curb.

2. Stoops and open porches shall be permitted to encroach forward of the build-to line, and shall not encroach into the public right-of-way.
3. For encroachment of balconies into the public right-of-way, permission (such as an easement or other appropriate property right) is required from the public entity responsible for right-of-way.
4. There shall be no encroachment in the area reserved for the tree root plate of any tree.

#### Urban Regulations For New Construction—Type II

*Instructions.* This building type includes houses, apartments or townhouses.

#### *Building Placement.*

1. Townhouses and Apartments: 10 feet to 20 feet from the front property line, 5 feet to 10 feet from the streetside property line for the end unit. The City Manager, designee or appropriate reviewing board shall set build-to line location to ensure enough room for sidewalks, utilities, and required street trees. ~~appropriate street trees on narrow rights-of-way.~~ Rowhouse lot widths may be as narrow as the rowhouse.
2. Houses: 5 feet to 25 feet from property line, 5 feet to 10 feet from the side property line. City staff shall set build-to line location to ensure enough room for sidewalks, utilities, and required street trees. ~~appropriate street trees on narrow rights-of-way.~~
3. Accessory structures shall be a minimum of 5 feet from rear property line and 8 feet from side property line unless more space is necessary to provide a required adjacent use buffer or meet utility separation requirements.

#### Urban Regulations For New Construction—Type III

*Instructions.* This building type includes houses.

*Building Placement.*

- 2.
- Houses: ~~5~~ Five feet to 25 feet from property line, ~~5 feet to 10 feet from the side property line. The city manager, designee or appropriate reviewing board shall set build-to line location to ensure enough room for sidewalks, utilities, and required street trees. and appropriate street trees on narrow rights-of-way.~~
- 3.
- Accessory structures shall be a minimum of ~~5~~ five feet from rear property line and ~~8~~ five feet from side property line unless more space is necessary to provide a required adjacent use buffer or to meet utility separation requirements.

**Plant List**

**Landscape Regulations for New Construction and Renovation Planting on Public and Private Property**

*Large Trees:*

- ~~Ulmus alata (Winged Elm)~~  
~~Yellow fall color~~  
~~Quercus shumardii (Shumard Oak)~~  
~~Searlet fall color~~  
~~Magnolia grandiflora (Southern Magnolia)~~  
~~Evergreen~~  
~~Quercus virginiana (Live Oak)~~  
~~Evergreen~~

*Medium Trees:*

- ~~Acer rubrum (Red Maple)~~  
~~Red fall color, red spring flowers~~  
~~Ostraya virginiana (Ironwood) (Hop Hornbeam)\*~~  
~~Yellow fall color~~

*Small Trees:*

- ~~Prunus angustifolia or P. umbellata (Wild Plum)~~  
~~White flowers in early spring, sunny or part shade~~  
~~Osmanthus americanus (Wild Olive)\*~~  
~~Evergreen, shady sites~~  
~~Lagestroemia indica cv. Natchez (White Crape Myrtle)~~  
~~White flowers, yellow fall color~~

*Hedge (Sun):*

- ~~Ilex vomitoria nana (Dwarf Yaupon Holly)~~



Especially cultivar Schillings Dwarf

~~Hedge (Shade):~~

Rhododendron indicum

Cultivars (vary in height)

\* ~~Indicates availability may be limited.~~

~~In the tree planting programs in College Park, the City of Gainesville Parks Division will use the trees suggested in this section.~~

**Section 14.** Appendix A. Special Area Plans, Section 4. Special Area Plan for Traditional City of the Land Development Code of the City of Gainesville, is amended as stated below. Except as amended herein, the remainder of Appendix A. Special Area Plans, Section 4. Special Area Plan for Traditional City remains in full force and effect.

Exhibit B. – Special Area Plan for the Traditional City Area  
Minimum Development Standards

(p) ~~Fences.~~ Landscaping.

(1) ~~Intent. In the Traditional City area, landscaping should be used both to soften the "hardness" of the urban area for the pedestrian and make the pedestrian feel more comfortable by providing shade, reducing glare and helping to form public spaces, "outdoor rooms," and street corridor edges. Such formality of landscaping adds dignity to the Traditional City area.~~

(2) ~~Standard.~~

a. ~~When installed, landscaping fronting on a street must be aligned to provide a pleasant pedestrian atmosphere. Landscaping adjacent to existing and proposed street sidewalks must be formal landscaping and include shade trees and hedges that help to frame and define the public space. When installed, large shade street trees reaching at least 40 feet in height at maturity must be planted at no more than 40-foot intervals along streets.~~

b. ~~For commercial development, the spacing shall be designed to avoid obscuring entrances and building signs.~~

e. Chain link fences, barbed wire, line-voltage electrified wire, and razor wire fences are prohibited. The city manager or designee may waive the

prohibition on barbed wire or electrified fences due to public safety concerns.

**Section 15.** Appendix A. Special Area Plans, Section 5. Special Area Plan for Central Corridors of the Land Development Code of the City of Gainesville, is amended as stated below. Except as amended herein, the remainder of Appendix A. Special Area Plans, Section 5. Special Area Plan for Central Corridors City remains in full force and effect.

Exhibit B. Special Area Plan for the Central Corridors  
Minimum Development Standards

(d) *Exceptions.* Exceptions to these standards can be granted by the appropriate reviewing board, city manager or designee, upon a finding that either of the following criteria are met:

1. The proposed construction is consistent with the overall intent of the Central Corridors standards; or
2. The applicant proves an undue hardship, owing to conditions peculiar to the land or structure and not the result of the action of the applicant, would result from strict adherence to these standards.

In addition to the exceptions that may be granted above, exceptions to the *build-to line* may be granted to preserve a high quality heritage tree or to provide sufficient space for the required street trees, or if the proposed construction includes an existing structure which has been designated as a historic property or has historic significance because it is potentially eligible for listing on the national or local register, and maintaining a viewshed of the existing historic structure is in the public interest.

(k) *Build-to line.*

- (1) *Intent.* The intent of the *build-to line* is to ~~pull the~~ define the relationship between the building facade close to and the street and streetside sidewalk. The distance between the buildings and the street edge should preserve the neighborhood as a place sheltered by large trees. Because of the transitional nature of these corridors, the *build-to line* is more flexible than in the Traditional City. The *build-to line* allows new buildings to be aligned with existing buildings, or, in the future, allows a building to be built in front of the building and allows this future building to abut the streetside sidewalk. Over time, building *facades* along a block face should be aligned to form a *street edge* that frames the public realm, while retaining sufficient width for people to walk, and sufficient space to provide a *formal landscape* created by street trees. Over time, the intent is to pull building

*facades* close to the street and streetside sidewalk, frame a comfortable public realm, and prevent overly large *setbacks*.

Overly large *setbacks* are inconvenient and unpleasant for pedestrians. They can significantly increase walking distances from the public sidewalk. They prevent the pedestrian on the public sidewalk from enjoying building details and activity within the building. Similarly, overly large *setbacks* contribute to sign proliferation and visual blight because a building set back a large distance often needs to "shout," with signs, at passing motorists, transit users, bicyclists and pedestrians in order to be noticed. Buildings pulled up to the street sidewalk have more of a human scale and allow for the construction of canopies which shield the pedestrian from wet weather.

- (2) *Standard.* The *build-to line* shall be that which achieves the above-stated intent, as determined by the appropriate reviewing board, city manager or designee, and shall apply even if the *facade* faces a street outside of the overlay affected area. Building walls along a street that is not within the overlay affected area that are entirely more than 250 feet from the regulated corridor shall be exempt from the Build-to Line standard. If a portion of the wall along a street is within 250 feet, all of the wall is affected by the standard. In most instances, the *build-to line* shall be 80 feet from the curb or edge of pavement for at least 70 percent of the building *facade*. Factors to be considered for variations to this *build-to line* shall be as follows:

- When considering a closer *build-to line*, the building *facade* shall, in most instances, be no closer than 14 feet from the curb or edge of pavement along an arterial, 12 feet along a collector, and 11 feet along a local street, in order to leave space for adequate sidewalks, required utility separations and street trees ~~tree strips~~ (see Map A).
- When the proposed building is *adjacent* to existing buildings on an abutting property the *facade* shall, in most instances, be built at the *facade* of the *adjacent* building closest to the street, or the 80-foot *build-to line*, whichever is closer to the street. In all cases, however, space shall be created for street trees of high quality species on private property or in the public right-of-way.

**Section 16.** Appendix A. Special Area Plans, Section 6. Special Area Plan for University Heights of the Land Development Code of the City of Gainesville, is amended as stated below. Except as amended herein, the remainder of Appendix A. Special Area Plans, Section 6. Special Area Plan for University Heights remains in full force and effect.

#### Exhibit A. Special Area Plan for University Heights

IV. General Provisions

~~L. Landscape Standards:~~

Total Number of Trees Required

~~Developing or redeveloping properties are required to provide shade trees based on the lot's private outdoor space. The property owner is also required to improve the adjacent public right-of-way to the standard set by the Special Area Plan and City Manager or designee~~

~~Three trees including at least 2 shade trees are required for every 1,200 sq ft of private outdoor space on the lot.~~

~~Parking lots other than single family driveways shall meet the landscape requirements specified in the Land Development Code. Street buffer yards requirements specified in the Land Development Code shall also be met. Spacing of street trees shall be as set forth below. The front buffer requirements may be modified or reduced if the build to line established by the City Manager or designee or the appropriate reviewing board precludes or reduces the front buffer area. Tree spacing shall be in accordance with the right-of-way planting requirements rather than the underlying buffer requirements.~~

~~Existing trees on the lot and on the adjacent swales may count toward the total number of trees required. The City Manager or designee shall approve which existing trees may count towards the total required trees.~~

Street Trees

~~Street trees intended to provide pedestrian shade may be located in the right-of-way swale or near the sidewalk on the private property. The City prefers street trees between curb and sidewalk but recognizes that utilities or space constraints may dictate that street trees shall sometimes be required instead on private property behind the sidewalk.~~

~~Commercial and mixed use streets (such as University Avenue) shall have shade trees planted with an average spacing of 35 ft on center. Trees are not required when arcades and colonnades are present.~~

~~Residential Streets shall have shade trees planted an average spacing of 30 ft on center.~~

**Section 17.** Division 12. Tree Board of Appeals and Division 13. Tree Advisory Board, Chapter 2 Administration, Article V. Boards, Commissions and Committees, of the Code of Ordinances of the City of Gainesville, are amended as stated below. Except as amended herein,

the remainder of Division 12 and Division 13, remains in full force and effect.

## DIVISION 12. TREE BOARD OF APPEALS

### Sec. 2-430.16 Creation; composition; appointment; term of members; filing of vacancies.

(a) The tree board of appeals shall consist of three members nominated by the tree advisory board and appointed by the city commission. Any candidate for the tree board of appeals shall be qualified in arboriculture. The board is authorized to hear appeals from any order, decision, or determination to ~~remove dangerous or dead trees which is made by the city arborist manager or designee with respect to the removal of trees, documentation regarding failure to protect trees during development and construction, or the determination/interpretation of the tree appraised value with respect to the mitigation requirements for heritage trees.~~ Appeals shall be filed with the city ~~arborist manager or designee~~. The tree board of appeals shall apply standards and considerations found in section 30-254 and 30-254.1 of the Land Development Code and shall have authority to decide any question involving the interpretation of the city ~~arborist's manager or designee's~~ order. Each member shall be appointed for a term of three years and shall remain in office until a successor has been appointed and qualified. Vacancies shall be filled for the unexpired term of any member whose office becomes vacant. Terms shall expire on January 1 of the year the term expires.

## DIVISION 13. TREE ADVISORY BOARD

### Sec. 2-430.33. Duties.

The duties of the tree advisory board shall include:

- (1) To act as the technical information collector/exchange forum on tree issues where citizens need coordination of information from varied sources.
- (2) To clarify tree regulations that exist in the city's codes and ordinances and make them known to city residents.
- (3) To act on referrals from the city commission.
- (4) To guide the creation of a master tree plan for the city.
- (5) To assist in the development of the goals and objectives for the city's comprehensive plan with respect to trees and to review proposed changes to the Land Development Code regarding tree and landscape regulations.
- (6) To advise all departments of the city on tree issues.



- (7) To communicate general tree information and develop tree projects that would benefit the community.
- (8) To serve on the tree board of appeals (three of the five members will be recommended by the tree advisory board for appointment by the city commission).
- (9) To determine species that qualify as high quality heritage trees, and to maintain a list of ratings that identify the relative value of trees in the urban forest for the purpose of calculating tree appraised value.
- (10) To establish monetary values for trees as necessary to calculate tree appraised value, mitigation payment and other payments required for regulated trees.

**Section 18.** It is the intention of the City Commission that the provisions of Sections 1 through 17 of this ordinance shall become and be made a part of the Code of Ordinances of the City of Gainesville, Florida, and that the Sections and Paragraphs of this Ordinance may be renumbered or relettered in order to accomplish such intentions.

**Section 19.** If any word, phrase, clause, paragraph, section or provision of this ordinance or the application hereof to any person or circumstance is held invalid or unconstitutional, such finding shall not affect the other provisions or applications of the ordinance which can be given effect without the valid or unconstitutional provisions or application, and to this end the provisions of this ordinance are declared severable.

**Section 20.** All ordinances, or parts of ordinances, in conflict herewith are to the extent of such conflict hereby repealed.

**Section 21.** This ordinance shall become effective immediately upon final adoption. However, this ordinance shall not apply to any application that is filed with and determined complete by the City prior to the effective date of this ordinance.

**PASSED AND ADOPTED** this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

\_\_\_\_\_  
CRAIG LOWE, MAYOR

ATTEST:

Approved as to form and legality

\_\_\_\_\_  
KURT M. LANNON  
CLERK OF THE COMMISSION

\_\_\_\_\_  
NICOLLE M. SHALLEY  
CITY ATTORNEY

1

2

3 This Ordinance passed on first reading this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

4

5 This Ordinance passed on second reading this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

## Attachment A to Ordinance No. 090878

## Gainesville Tree List

Common Name	Scientific Name	Mature Urban Maximum Height	Est. Crown (20 Year)	Avg. Spread (35 Year)	Native	High Quality Shade	OK Under OHL	Street Buffer	Trees in Natural Buffer	Lot	Gate	Wet/ Dry	Retention Basins
Ash, Green	<i>Fraxinus pennsylvanica</i>	75' 60'	25'	50'	x	x		x	x	x		W	x
Ash, White	<i>Fraxinus americana</i>	100' 60'	30'	60'	x	x		S	x	x	Lrg		
Bay, Red	<i>Persea borbonia</i>	60' 40'	15'	25'	x		x		x				
Bay, Swamp	<i>Persea palustris</i>	35'	15'	20'	x				x			W	x
Basswood	<i>Tilia caroliniana</i>	90' 50'	30'	55'	x			S	x	x			x
Birch, River	<i>Betula nigra</i>	60' 45'	25'	35'	x		x	U	x		Med	W	x
Blackgum	<i>Nyssa sylvatica</i>	90' 45'	25'	35'	x		x	S	x	x	Med		x
Boxelder	<i>Acer negundo</i>	50'	30'	40'	x				x				
Buckeye, Red	<i>Aesculus pavia</i>	40' 25'	10'	15'	x		x	U	x				x
Buckthorn, Carolina	<i>Rhamnus caroliniana</i>	20'	10'	15'	x		x	U	x				
Bumelia	<i>Sideroxylon tenax</i>	20'	7'	12'	x		x	U	x				
Bumelia, Silver	<i>Sideroxylon alachuense</i>	20'	7'	12'	x		x	U	x				
Catalpa, Southern	<i>Catalpa bignonioides</i>	60'	20'	30'									
Cedar, Atlantic White	<i>Chamaecyparis thyoides</i>	80' 45'	15'	25'	x				x				x
Cedar, Eastern Red	<i>Juniperus virginiana</i>	60'	15'	25'	x		x	U	x			D	
Cedar, Southern Red	<i>Juniperus silicicola</i>	60'	20'	30'	x				x				
Cherry-laurel	<i>Prunus caroliniana</i>	40'	20'	20'	x			U	x				
Chinese Pistachio	<i>Pistacia chinensis</i>	60' 50'	25'	45'			x	U					
Crabapple	<i>Malus angustifolia</i>	40' 25'	20'	20'	x				x				
Crape Myrtle	<i>Lagerstromia indica</i>	35'	15'	25'			x	U			Sm		
Cypress, Bald	<i>Taxodium distichum</i>	100' 50'	20'	30'	x	x	x	U	x		Med	W	x
Cypress, Pond	<i>Taxodium ascendens</i>	90' 50'	15'	20'	x	x	x	U	x			W	x
Devil's-walkingstick	<i>Aralia spinosa</i>	30'	10'	15'	x				x				
Dogwood, Flowering	<i>Cornus florida</i>	40' 35'	25'	35'	x		x	U	x		Sm		
Elm, Cedar	<i>Ulmus crassifolia</i>	100' 60'	30'	50'	x	x		S	x	x	Lrg		
Elm, Chinese (Drake)	<i>Ulmus parvifolia</i> CV. <i>Drake</i>	60' 40'	30'	40'			x	S		x	Med		
Elm, Florida	<i>Ulmus americana floridana</i>	80' 60'	30'	50'	x	x		S	x	x	Lrg		
Elm, Water	<i>Planera aquatica</i>	25'	15'	20'	x		x		x			W	x
Elm, Winged	<i>Ulmus alata</i>	65'	30'	60'	x	x		S	x	x	Med		
Formosa Sweetgum	<i>Liquidambar formosana</i>	40'	20'	30'			x	U					
Fringe Tree	<i>Chionanthus virginicus</i>	30' 25'	10'	20'	x		x		x		Sm		x
Fringe Tree, Chinese	<i>Chionanthus retusus</i>	30'	15'	25'			x	U			Sm		
Hawthorn, Green	<i>Crataegus viridis</i>	25'	7'	10'	x		x		x				
Hawthorn, Parsley	<i>Crataegus marshalii</i>	20'	7'	10'	x		x		x				x
Hawthorn, May	<i>Crataegus aestivalis</i>	30' 25'	10'	15'	x		x		x		Sm	W	
Hawthorn, Cockspur	<i>Crataegus crus-galli</i>	20'	7'	10'	x		x		x				
Hawthorn, 1-flrd	<i>Crataegus uniflora</i>	15'	7'	10'	x		x		x				
Hercules Club	<i>Zanthoxylum clava-herculis</i>	50'	25'	40'	x				x				
Hickory, Mockernut	<i>Carya tomentosa</i>	45'	20'	30'	x	x		S	x			D	
Hickory, Pignut	<i>Carya glabra</i>	55'	20'	30'	x	x		S	x				
Hickory, Water	<i>Carya aquatica</i>	100' 40'	30'	50'	x				x			W	x
Holly, American	<i>Ilex opaca</i>	50' 35'	15'	25'	x	x	x	U	x		Med		



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Holly, dahoon	<i>Ilex cassine</i>	40' 30'	15'	25'	x	x	x	U	x		Sm	W	x
Holly, East Palatka	<i>Ilex x attenuata "E. Palatka"</i>	50' 35'	20'	30'	x		x	U		x	Sm		
Holly, Savannah, etc.	<i>Ilex x attenuata varieties</i>	50' 40'	15'	35'	x		x	U		x	Sm		
Holly, Weeping	<i>Ilex vomitoria 'Pendula'</i>	35'	15'	25'			x	U					
Holly, Yaupon	<i>Ilex vomitoria</i>	20'	15'	20'	x		x	U	x				
Hop-hornbeam	<i>Ostrya virginiana</i>	35'	25'	35'	x	x	x	U	x		Sm		
Hornbeam	<i>Carpinus caroliniana</i>	35'	25'	35'	x		x	U	x		Sm	W	x
Jerusalem-thorn	<i>Parkinsonia aculeata</i>	30'	25'	30'			x						
Loblolly Bay	<i>Gordonia lasianthus</i>	60'	20'	35'	x			x	x			W	
Locust, Black	<i>Robinia pseudoacacia</i>	50'	20'	35'									
Locust, Honey	<i>Gleditsia triacanthos</i>	40'	20'	35'	x		x	U	x		Sm		
Loquat	<i>Eriobotrya japonica</i>	30'	20'	30'		not recommended for planting							
Magnolia, Ash	<i>Magnolia ashei</i>	20'	15'	20'	x		x				Sm		
Magnolia, Oriental	<i>Magnolia spp.</i>	25'	15'	25'				U					
Magnolia, Southern	<i>Magnolia grandiflora</i>	90'	20'	35'	x	x		S	x	x	Lrg		
Magnolia, Sweetbay	<i>Magnolia virginiana</i>	80' 55'	25'	40'	x				x			W	x
Maple, Florida	<i>Acer barbatum (floridanum)</i>	60' 50'	25'	40'	x	x		S	x	x	Med		
Maple, Red	<i>Acer rubrum</i>	80' 55'	25'	40'	x				x		Med	W	x
Mulberry, Red	<i>Morus rubra</i>	50'	25'	35'	x				x				
Oak, Basket	<i>Quercus michauxii</i>	100' 60'	25'	40'	x	x		S	x	x			x
Oak, Bluejack	<i>Quercus incana</i>	60' 40'	25'	30'	x		x	U	x			D	
Oak, Bluff (local)	<i>Quercus austrina</i>	100' 60'	30'	60'	x	x		S	x	x	Lrg		
Oak, Diamondleaf	<i>Quercus laurifolia</i>	100'	40'	60'	x				x				
Oak, Durand	<i>Quercus durandii</i>	70'	40'	60'	x			x					
Oak, Laurel	<i>Quercus hemisphaerica</i>	100'	40'	60'	x	not recommended for planting							
Oak, Live	<i>Quercus virginiana</i>	80'	45'	80'	x	x		S	x	x	Lrg		
Oak, Post	<i>Quercus stellata</i>	80' 60'	25'	40'	x				x	x		D	
Oak, Sand Live	<i>Quercus geminata</i>	60'	30'	50'	x	x			x	x		D	
Oak, Shumard	<i>Quercus shumardii</i>	100'	30'	50'	x			S	x	x	Lrg		x
Oak, Southern Red	<i>Quercus falcata</i>	100' 65'	30'	50'	x	x		S	x	x			
Oak, Turkey	<i>Quercus laevis</i>	60'	25'	40'	x		x		x	x			
Oak, White	<i>Quercus alba</i>	100' 65'	20'	35'	x			S	x	x	Lrg		
Olive, Wild	<i>Osmanthus americanus</i>	40' 35'	20'	30'	x		x	U			Sm		
Palm, Cabbage	<i>Sabal palmetto</i>	80'	14'	12'	x				x		Med	W	
Palm, Date	<i>Phoenix spp.</i>	60'	26'	24'									
Palm, Pindo	<i>Butia capitata</i>	20'	14'	12'			x						
Palm, Washington	<i>Washingtonia robusta</i>	90'	12'	10'									
Pear, Bradford	<i>Pyrus calleryana (Aristocrat)</i>	40'	15'	20'			x	U			Sm		
Pecan	<i>Carya illinoensis</i>	100' 70'	35'	55'		x		S	x				
Persimmon	<i>Diospyros virginiana</i>	60'	15'	30'	x	x			x				x
Pine, Loblolly	<i>Pinus taeda (rust res.)</i>	110'	20'	30'	x								
Pine, Longleaf	<i>Pinus palustris</i>	90'	20'	30'	x	x		U	x		Lg		
Pine, Pond	<i>Pinus serotina</i>	90'	20'	30'	x							W	x
Pine, Shortleaf	<i>Pinus echinata</i>	100'	15'	25'	x								
Pine, Slash	<i>Pinus elliotii (rust res.)</i>	100'	20'	30'	x								
Pine, Spruce	<i>Pinus glabra</i>	100' 50'	25'	40'	x			U	x	x	Med		

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Plum, American	<i>Prunus americana</i>	30'	20'	30'	x		x	U	x					
Plum, Chickasaw	<i>P. angustifolia</i>	20'	15'	25'	x		x	U	x		Sm			
Plum, Flatwoods	<i>Prunus umbellata</i>	20'	15'	25'	x		x	U	x		Sm			
Podocarpus	<i>Podocarpus macrophylla</i>	40'	10'	15'										
Redbud	<i>Cercis canadensis</i>	30'	25'	30'	x			U	x		Sm			
Rusty Blackhaw	<i>Viburnum rufidulum</i>	30'	15'	20'	x			U	x		Sm			
Sassafras	<i>Sassafras albidum</i>	30'	10'	15'	x				x					
Silverbell (Two wing)	<i>Halesia diptera</i>	25'	10'	15'	x		x	U	x				x	
Snowbell, American	<i>Styrax americana</i>	20'	10'	15'	x		x	U	x			W	x	
Soapberry	<i>Sapindus marginatus</i>	35'	15'	20'	x				x	x				
Sparkleberry Tree	<i>Vaccinium arboreum</i>	20'	10'	15'	x		x		x		Sm			
Sugarberry	<i>Celtis laevigata</i>	100'	30'	50'	x			S	x	x				
Sweetgum, Formosa	<i>Liquidambar formosana</i>	40'	20'	30'			x	U						
Sweetgum	<i>Liquidambar styraciflua</i>	100'	30'	50'	x				x			W		
Sycamore	<i>Platanus occidentalis</i>	100'	40'	60'	x			S		x	Lrg			
Tulip Tree	<i>Liriodendron tulipifera</i>	100'	25'	40'	x	x		S	x		Lrg	W	x	
Tupelo, Black	<i>Nyssa sylvatica</i>	60'	20'	25'	x	x			x				x	
Tupelo, Ogeechee	<i>Nyssa ogeche</i>	60'	25'	40'	x				x			W	x	
Tupelo, Swamp	<i>Nyssa biflora</i>	60'	25'	40'	x				x			W	x	
Tupelo, Water	<i>Nyssa aquatica</i>	60'	25'	40'	x				x			W	x	
Viburnum, Walter	<i>Viburnum obovatum</i>	15'	10'	15'	x		x	U	x				x	
Walnut, Black	<i>Juglans nigra</i>	50'	20'	25'	x									
Xylosma ( Logwood)	<i>Xylosma Congestum</i>	15'	8'	12'										
Yew, Florida	<i>Taxus floridana</i>	15'	8'	12'	x				x					
U= Understory S = shade trees in Street Buffer column														
Mature Urban Height refers to the expectation for trees planted in urban condition.														