FLORIDA DEPARTMENT *of* STATE

RICK SCOTT
Governor

KEN DETZNER
Secretary of State

October 27, 2016

Ms. Paula S. O'Neil
Clerk and Comptroller
The East Pasco Governmental Center
Pasco County
14236 6th Street, Suite 201
Dade City, Florida 33523

Attention: Marie Miller, Records Clerk II

Dear Ms. O'Neil:

Pursuant to the provisions of Section 125.66, Florida Statutes, this will acknowledge receipt of your electronic copy of Pasco County Ordinance No. 16-30, which was filed in this office on October 27, 2016.

Sincerely,

Ernest L. Reddick
Program Administrator

ELR/lb

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BOARD OF COUNTY COMMISSIONERS **ORDINANCE NO. 16-30**

AN ORDINANCE BY THE PASCO COUNTY BOARD OF COUNTY COMMISSIONERS AMENDING CHAPTER 800 NATURAL RESOURCE PROTECTION; SECTION 802 TREE PRESERVATION AND REPLACEMENT; CHAPTER 900 DEVELOPMENT STANDARDS; SECTION 905 GREENSPACE REQUIREMENTS; CREATING NEW SECTION 905.3 OF THE LAND DEVELOPMENT CODE, ENTITLED PLANTINGS IN RIGHTS-OF-WAY OF RESIDENTIAL SUBDIVISIONS – RESIDENTIAL STREET TREES AMENDING APPENDIX A DEFINITIONS TO INCLUDE AND DEFINE "RESIDENTIAL STREET TREES"; PROVIDING FOR ENFORCEMENT, VIOLATIONS AND PENALTY; APPLICABILITY; REPEALER; PROVIDING FOR SEVERABILITY, INCLUSION IN THE PASCO COUNTY LAND DEVELOPMENT CODE, AND AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners of Pasco County, Florida, is authorized under Chapters 125, 162, 163, and 380 Florida Statutes, to enact zoning and other land development regulations to protect the health, safety and welfare of the citizens of Pasco County; and

WHEREAS, Sections 163.3201, 163.3202, 163.3211 and 163.3213, Florida Statutes, empowers and requires the Board of County Commissioners of Pasco County, Florida, to implement adopted Comprehensive Plans by the adoption of appropriate land development regulations and specifies the scope, content and administrative review procedures for said regulations; and

WHEREAS, Section 163.3202, Florida Statutes, provides that certain specified and mandated regulations are to be combined and compiled into a single land development code for the jurisdiction; and

WHEREAS, the Board of County Commissioners finds the planting and maintenance of trees along residential streets improves the aesthetic appearance of residential areas by softening the impact of paved surfaces and allowing for tree-lined streets that offer shade, encourage wildlife habitation, offer privacy and help establish a more harmonious and relaxing residential environment; and

WHEREAS, the Board of County Commissioners finds that establishing minimum standards for the planting, installation and maintenance of trees along rights-of-ways ensures tree-lined streets in neighborhoods are aesthetically pleasing, good for the environment and cause minimal disruption to the hardscapes, developed structures, and roadways; and

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WHEREAS, a Street Tree Working Group, a subgroup composed of certified arborists, landscape architects, engineers, developers, homeowners' association representatives, and subject matter employee-experts on County Staff was created and tasked to help clarify and simplify the County's approach in permitting street trees along residential roadways; and

WHEREAS, the Street Tree Working Group held its first meeting in October 2015, where it defined its intent and purpose, outlined goals, and set the timeline for goal attainment; and

WHEREAS, the Street Tree Working Group concluded its work effort in mid-2016 with County Staff presenting its findings to the Horizontal Roundtable Group in July 2016 resulting in the proposed Land Development Code Section 905.3; and

WHEREAS, the Board of County Commissioners has conducted duly noticed public hearings as required by law, at which hearings all parties-in-interest and citizens were afforded notice and the opportunity to be heard; and

WHEREAS, the Board of County Commissioners hereby finds and declares that this Ordinance is in the best interest of the public health, safety, and welfare, and that it advances a valid and important public purpose.

NOW, THEREFORE, BE IT ORDAINED by the Board of County Commissioners of Pasco County, Florida, as follows:

SECTION 1. Authority.

This ordinance is enacted pursuant to Chapter 125, Florida Statutes (2016) and under the home rule powers of the County.

SECTION 2. Legislative Findings of Fact.

The foregoing Whereas clauses, incorporated herein, are true and correct.

SECTION 3. Section 802, Tree Preservation and Replacement, of the Land Development Code is hereby amended as follows:

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SECTION 802. TREE PRESERVATION AND REPLACEMENT

802.1. **Intent and Purpose**

It is the intent and purpose of this section to preserve, maintain, and protect existing native and noninvasive trees on site and to require a minimum number of trees as a condition of land development approvals. **A** list of native trees **is available at** http://www.floridayards.org/fyplants/index.php.

802.2. **Applicability**

This section shall apply to all land in unincorporated Pasco County, except for the activities of registered commercial growers on the premises of plant or tree nurseries, botanical nurseries, botanical gardens, or tree farms (sponsored by the American Forest Foundation).

802.3. **Tree Removal**

A. Permits Required

A Tree Removal Permit is required for the removal of all five (5) inch diameter at breast height (dbh) or greater trees, except in the following circumstances:

1. Utilities

Removal by agents of a utility for overhead and underground utilities service, including distribution, collection and transmission lines, and pipelines subject to the following limitations:

a. Pruning or trimming a tree inconsistent with the American National Standards Institute (ANSI) 300A 2001, as amended, is prohibited.

b. Removal of trees eighteen (18) inches dbh and larger within corridors and/or easements shall require notification, prior to removal, by telephone to the County Administrator or designee and notification to the property owner and/or occupant at least three (3) business days prior to removal.

2. County Maintenance

County Road and Drainage Maintenance Projects

3. Management Plans with Tree and Vegetation Removal

Projects for which a plan has been approved by a Federal, State, or local agency or water management district for the removal of undesirable invasive or nonnative vegetation on lands owned, controlled, or managed for conservation, excluding vegetation in surface waters and wetlands. This includes alteration of vegetation pursuant to an adopted management plan for government-maintained parks, recreation areas, wildlife management areas, conservation areas, and preserves.

4. County Approved Management Plan

Activities consistent with a management plan adopted by or reviewed and approved in writing by the County, provided that the activity furthers the natural values and functions of the ecological communities present, such as clearing firebreaks for prescribed burns.

5. Fencing

The minimal removal of trees necessary to install a fence or wall defining a property line, provided that all of the following conditions are complied with:

a. The fencing or wall is not related to the requirements of a development plan;

b. The path cleared for the fence does not exceed ten (10) feet in width;

c. No equipment heavier than a one (1) ton pickup truck, hand-held outdoor power equipment, or a standard farm tractor is used in clearing the fence or installing the fence; and

d. No dredge or fill activity is required other than the installation of posts and fence materials.

6. Survey or Other Test Required

The necessary removal of vegetation by, or at the direction of, a State of Florida licensed professional surveyor and mapper, professional geologist, or professional engineer to conduct a survey or other required test, provided that no tree of special significance ~~tree~~ is removed and the path cleared does not exceed ten (10) feet in width.

7. Exotic Species (provided the tree is not part of a required landscape plan or tree permit plan) and Invasive Species

8. Palms and Pines

Any tree of the palm family or pine family (other than long-leaf pine) on single-family lots, unless part of an adopted replanting or landscaping plan.

9. Bona Fide Agricultural Land

Tree removal on lands classified as bona fide agricultural land for ad valorem taxation purposes pursuant to Section 193.461, Florida Statutes, or proposed for bona fide agricultural purposes, except that such activity must be done in compliance with the Southwest Florida Water Management District (SWFWMD), the Florida Department of Environmental Protection regulations, and silviculture Best

Management Practices. Tree replacement and/or mitigation shall be required for trees removed pursuant to a proposed application for land classification if such application is not granted within one (1) calendar year of removal. This exemption from the tree removal requirements shall expire upon submittal of a PSP (Preliminary Site Plan) or PDP (Preliminary Development Plan) application, unless the PSP or PDP is denied, rescinded or expires, in which case the exemption shall be reinstated. Pine trees and palm trees or other trees planted specifically for harvesting are not included and may be harvested pursuant to the agricultural exemption. Applications for a PSP or PDP submitted prior to the effective date of the 2016 amendments to this subsection may continue to rely on this exemption after the submittal of a PSP or PDP. The expiration of the exe3mption from the tree removal requirements hereunder shall not affect a landowner's ability to apply for, receive or maintain an agricultural classification pursuant to Florida Statues section 193.461.

10. Single-Family Residential Lots with Existing Homes

Tree Removal Permits on single-family lots with existing homes are only required for trees greater than ~~ten~~ **five** (~~10~~ **5**) inch diameter at breast height.

B. Tree Removal Permit Applications

1. Tree Removal Associated with Development Activity

a. Intent and Purpose

It is intended that consideration of tree removal will be part of a holistic evaluation of a project proposal. While retaining existing trees and vegetation is encouraged, it is also recognized that trees have a life span and are subject to injury and disease. It is the intention of this section to protect trees that are currently healthy and viable and are able to remain so for a significant period after development. It is also recognized that tree removal is often an inevitable part of development and as such, replacement of tree canopy is often a necessary and preferred alternative.

b. Development Plan Submittals

Applications associated with Development Permit requests shall include the following:

(1) A tree location survey identifying all trees ~~ten~~ **five** (~~10~~**5**) inches dbh and larger. Unless otherwise permitted by the Zoning Administrator or designee, tree surveys shall not have been completed more than three (3) years in advance of submittal. In no case, shall tree surveys have been completed more than five (5) years in advance of submittal, unless part of a previous approval. If a tree survey was prepared in association with a previous approval, a modified tree

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survey verifying tree diameter information (as certified by an arborist) shall be submitted at the time of preliminary site plan review.

(2) An inventory of identified trees by type and size [not including palm and pine trees (except for longleaf)].

(3) A tree plan prepared or approved by a registered landscape architect as authorized by Chapter 481, Florida Statutes, as amended, or other type of professional as approved by the County Administrator or designee. The tree plan shall be part of the landscape plan for the site and the overall design plan and shall consider the following:

(a) Minimizing tree removal through design creativity and sensitivity using requests for alternative standards and modifications as appropriate to permit existing trees to remain on site.

(b) Design and location of streets, accessways, sidewalks, and other hardscape shall consider the location of trees.

(c) Stature, strength, health, and endurance of existing trees with due consideration given to fill requirements of the proposed development.

c. Development Approval Required

Approval to remove trees shall be part of the overall development approval and shall only be allowed after the development approval is granted.

2. Individual Tree Removal Permits

a. Applications

Applications for individual Tree Removal Permits or Tree Removal Permits not in association with a development proposal, shall be submitted on the forms and in the manner prescribed by the County Administrator or designee in the Development Manual. The application shall include a sketch of the location of the tree or trees proposed for removal and an analysis of the reason removal should be authorized.

b. Criteria to Allow Removal

The following shall be considered by the County Administrator or designee when determining whether to approve a request for tree removal:

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(1) Proximity to Structures

Whether the tree or root system is determined to be detrimental to the integrity of a structure or proposed structure's foundation.

(2) Thinning

Whether the removal of the tree would be beneficial to the enhanced growth of other trees on site.

(3) Safety

Whether the tree poses a hazard and the hazard cannot be eliminated through other means, such as trimming.

(4) Condition of Tree

Whether the tree is dead; irreversibly diseased; insect ridden; or weakened by age, storm, fire, or other natural causes or act of God rendering it beyond saving. When this condition is field verified by an arborist, tree replacement is not required.

(5) Not Viable **in Future**

If the tree will be damaged or killed by required site grading, excavation, and/or fill.

(6) Whether the tree is subject to the provisions of Section 802.3.D, Removal of Previously Approved and Required Tree Plantings.

c. Denied Requests

In circumstances where the request to remove a tree or trees is denied by the County Administrator or designee, the applicant may supply additional information from a certified arborist for review.

C. Tree Replacement and Mitigation

1. Tree Replacement

a. Residential Tree Replacement **where trees were not planted in accordance with a site or development plan approved by the County.**

A replacement tree shall be required to be planted for each tree removed from existing single family, two (2) family, or

mobile home lots, including those on agriculturally zoned property, where the removal will result in fewer beneficial trees remaining on the lot ~~than shown below:~~ **in accordance with Section 905.2.D.2.a.**

b. Replacement on Other Than Residential Lots

(1) Replacement Ratio

Trees of ~~ten (10)~~ **five (5)** inches dbh and larger which are allowed to be removed shall be replaced as follows:

(a) For live oak (*Quercus virginiana)*, the total caliper inches of replacement trees shall equal the total caliper inches of live oaks removed, rounded to the nearest whole number.

(b) For other trees, the total caliper inches of replacement trees shall equal one-third the total caliper inches removed, rounded up to the next whole inch.

(2) Planting Credit

Credit against the required replacement trees will be given for trees planted pursuant to the landscaping and buffering requirements. Trees located within environmentally sensitive lands shall not be credited toward the total number of required trees.

(3) Tree Mitigation Fund

If the applicant demonstrates to the satisfaction of the County Administrator or designee that a site cannot accommodate the total number of replacement trees required by this section as a result of insufficient planting area, the applicant shall provide a monetary contribution to the Tree Mitigation Fund at the rate established by resolution of the Board of County Commissioners (BCC).

D. Removal of Previously Approved and Required Tree Plantings **where trees were planted in accordance with a site or development plan approved by the County.**

1. Applicability

This section applies only to trees that were planted as part of a development project where the trees installed in accordance with the

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approved plan are damaging utilities, sidewalks, parking areas, or structures (problem trees).

2. Verification of Problem Trees **where trees were planted in accordance with a site or development plan approved by the County prior to January 1, 2017.**

   ~~A licensed arborist~~ **The applicant** shall provide written ~~verification~~ **confirmation** that the tree is causing damage and that measures, such as excavation under roots, meandering or reinforcing the sidewalk, or pruning roots are not appropriate and the tree should be removed. If ~~not~~ all trees of a particular species are causing **similar-type** damage, it may be presumed that the remaining trees of that species will become problematic in the future and may also be removed pursuant to this section.

3. **Verification of Problem Trees where trees were planted in accordance with a plan approved by the County after January 1, 2017**

   A licensed arborist or certified landscape architect shall provide written verification that the tree is causing damage and that mitigation efforts, such as excavation under roots, meandering sidewalks, installation of alternate sub-base materials or pruning roots are not appropriate and the tree should be removed.

~~3.~~**4.** Authority to Request Removal of Problem Trees

a. In residential projects, the homeowners' association, Community Development District, or similar entity having authority may submit an application for removal of problem trees located on the property under the control of the entity. ~~or where the owner has authorized the entity to act on its own behalf.~~ Where such entities do not exist, an authorized representative of the neighborhood, through petition of the affected owners, may apply.

b. In nonresidential projects, the property owner, merchants' association, or similar entity having authority may submit an application for problem tree removal.

~~4.~~**5.** Submittal Requirements

An applicant shall submit required information in the form as specified by the County Administrator or designee. Plans shall be drawn at a readable scale and include:

a. The location and number of the problem trees to be removed;

b. The planting locations and number of replacement trees

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including botanical names;

c. Application fee; and

d. Proof of authority.

~~5.~~**6.** Replanting Requirements

a. Problem trees shall be replaced at 1:1 for each problem tree removed.

b. Replacement trees shall be of a species appropriate for the placement area and comply with the principle of "right plant, right place." Additional resources, such as Costello, L.R. & Jones, K.S. Reducing Infrastructure Damage By Tree Roots: A Compendium of Strategies, 2003, should be consulted.

c. Replacement trees shall meet the quality of standards in this Code and be planted, installed, and maintained according to the requirements of this Code.

d. **Replacement trees shall only be planted within an easement so as not to interfere with the use of that easement, and shall not be planted under any present or planned overhead or underground utility, nor within any County maintained rights-of-way or on public lands without prior County approval through the appropriate review process.**

e. **Replacement trees proposed for planting in County maintained rights-of-way will require the submittal of a report and mitigation plan prepared by a Certified Landscape Architect or Licensed Arborist. Said mitigation plan shall outline preventive measures for trees that have a potential to cause damage to structures, including but not limited to, sidewalks, utilities, parking areas, storm drains, or common ground walkways as identified by Certified Landscape Architect or Licensed Arborist. Such mitigation measures shall include solutions such as installation of alternative sub-base materials, installation of root barriers, meandering sidewalks or other similar preventive measures to ensure the most favorable outcome for healthy and viable plantings.**

f. Where possible, replacement trees shall be installed in the same location as the problem tree was formerly located.

~~e.~~**g.** If an appropriate replacement tree cannot be installed in the same location as the problem tree, the replacement tree shall be planted on site in **another location or in** other common areas, such as around drainage ponds, near a clubhouse, a

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park, or at the entrance of the project.

~~f.~~**h.** If all of the replacement trees cannot be replaced on site, the applicant shall contribute to the Tree Mitigation Fund as provided for in Section 802.3.C.1.b.(3) and 802.3.E.

E. Tree Mitigation Fund

1. Establishment

A tree mitigation trust fund is hereby established. All monies received by the County pursuant to this section shall be deposited in a separate revenue account known as the Tree Mitigation Fund, established and maintained apart from other general revenue funds and accounts of the County.

2. Purpose

The fund shall be used solely for the reimbursement of the purchase and planting of drought tolerant trees, as listed by the SWFWMD or the University of Florida Institute of Food and Agricultural Sciences and by the County Administrator or designee, and other landscape plants or native trees and landscaping plants meeting the intent and purpose of this Code and the administrative costs as designated by the BCC.

3. Authorized Locations

Trees and other landscaping plants and materials purchased with fund monies may only be planted:

a. On land owned by or under the control of the County;

b. Where the County desires to assist homeowners and affordable housing project meet the tree plant requirements of this Code, after an assessment by the Community Development Division of property value and income level;

c. To assist in the redevelopment of designated portions of Pasco County, including providing assistance to individual property owners; and

d. To assist the District School Board of Pasco County in the creation and maintenance of attractive community assets. In this circumstance, the assistance shall be specifically approved by the BCC.

F. Tree Standards

All trees required by this section to remain or be planted shall be alive, in good health, and meet the following standards:

1. Florida Grade No. 1. Trees to be planted shall be Florida Grade No. 1 or better pursuant to the Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Grades, and Standards for Nursery Plants, which is incorporated herein by reference.

2. Trees shall be equal to or greater than two (2) inches in caliper. Multi-trunked trees shall be equal to or greater than two (2) inches in caliper with a minimum of three (3) trunks.

3. Trees shall meet the following diversity standards:

Required Number of Trees	Required Species
1-5	1
6-10	2
11-15	3
16-20	4
21-25	5
26-30	6
31-35	7
35 or more	8

4. Invasive ~~or exotic~~ species located within a project area shall be removed.

5. Tree plans shall designate a person or entity, other than the County, to be responsible for maintenance.

6. All trees shall be planted according to the Florida Chapter, International Society of Arboriculture Standards for Planting, which is incorporated herein by reference. All trees must be maintained in good condition and planted in locations with adequate open space to allow for mature tree-canopy development.

7. A tree of the required size and type shall replace any required tree that dies within one (1) year from completion of construction of associated infrastructure improvements; issuance of a Certificate of Occupancy (CO) for the lot; or where no CO is required, final inspection or first use of the lot. Planting of such tree shall take place within thirty (30) days, unless an extension is requested by the applicant and granted by the County Administrator or designee. To increase likelihood of survivability, the tree may be located elsewhere on site.

8. Trees shall not be planted within any easement so as to interfere with the use of that easement, nor under any present or planned overhead utility, nor in any rights-of-way or on public lands without County approval through the appropriate review process.

9. Palms

Palm trees may be substituted for shade trees at a rate of three (3) palm trees, grouped together, for one (1) shade tree. Exceptions may be made for the Phoenix (not including Roebellini), which may be planted individually. Palms must have a minimum of ten (10) feet of clear trunk at the time of installation.

G. Tree Protection Requirements

To ensure a healthy tree canopy in Pasco County, the following tree protection measures shall be complied with:

1. Tree Protection During Development

a. Marking and Barriers. Prior to the clearing or grubbing of land or the removal of any tree, the applicant shall clearly mark all trees for which Tree Removal Permits are requested and shall erect barriers around trees to be retained so as to create a protected zone.

(1) The protected zone shall radially extend from the tree trunk at a minimum distance equal to the tree's drip line.

(2) Barriers a minimum three (3) feet in height shall be erected outside the protected zone to prevent encroachment. Barriers shall remain in place and be in good condition throughout all development and building activity. Silt barriers, hay bales, or similarly effective erosion-control barriers shall be required in any areas where erosion or siltation may cause damage to retained trees.

(3) For large property areas, contained stands of trees to be retained that are separated from grubbing, clearing, and construction, in lieu of placing barriers around each tree, the stand of trees may be partitioned off by placing the barriers around the perimeter of the stand area on the sides where grubbing, clearing, construction, etc., is occurring, as long as an equivalent protected zone is established.

b. The application shall not cause or permit the movement of equipment or the storage of equipment, material, and debris or fill to be placed in the protected zone. No excavation shall occur within the protected zone, and there shall be no cleaning of equipment or material or the storage or disposal of waste materials, such as paints, petroleum products, oils, solvents, asphalts, concrete, mortar, or any other material within the protected zone. There shall be no fire or burning within thirty (30) feet of the protected zone.

c. Protective barriers may be removed for the final grading. Removal of vegetation or any landscaping activities within the barrier area shall be accomplished by mowing or hand

clearing. If landscaping is to be located within the protected zone, clearing by light rubber-wheeled machinery only in the area and to the extent necessary shall be allowed.

2. Utilities

Utility lines which are tunneled beneath tree roots in order to protect feeder roots are permitted. Elsewhere, trenching is allowed no closer to the tree's trunk than two-thirds of the drip line radius. However, protective measures shall be taken as specified in the *Tree Protection Manual for Builders and Developers*, as amended and published by the Florida Department of Agriculture and Consumer Services, which protective measures for feeder roots are incorporated herein by reference.

3. Activities Prohibited

When a tree is damaged by acts/omissions prohibited by this section, separate violations (or counts) may be charged for each inch of the tree measured at dbh.

The following are prohibited:

a. Irreversible damage to a tree.

b. Pruning or trimming any tree (except invasive) in a manner inconsistent with ANSI Pruning Standards, Section A300 2001, as amended, which is incorporated by reference.

c. Topping of any tree.

d. Damaging, in any manner, any tree located on public lands.

e. Failure to remove guy or support wires, where used, from trees within six (6) months after planting.

H. <u>Trees of Special Significance</u>

1. Designation

Trees of special significance are those trees or grouping of trees designated as such by resolution of the BCC. Designations can only be initiated by the property owner(s) of such trees or, if on County property, by County staff. After initiation, designation requests shall be reviewed by County staff, and those trees meeting the requirements of this section shall be presented to the BCC who shall decide whether to approve the designation. Trees may be designated if one (1) of the following criteria exists:

a. It is a historic tree, which is a tree of notable historical interest and value to the County because of its location or historical association with the community.

b. It is a specimen or grand tree, which is a tree of high value to the community because of its type, size, age, exceptional characteristics, or other relevant criteria.

c. It is a champion tree, which is a tree that has been identified by the State Division of Forestry as being the largest of its species in the United States or the world.

2. Trees designated as trees of special significance shall have a preservation easement, prepared by the owner(s) of the tree(s), created around them, and extending a minimum of fifteen (15) feet in all directions from the trunk. The preservation easement shall be recorded by the owner(s) of the tree(s) in the Public Records of Pasco County.

3. Special Protection

An administrative variance of the required minimum front, rear, and side yard setbacks may be granted to allow the preservation of trees of special significance. Topping, irreversible damage to, or incorrect pruning of trees of special significance shall be subject to all penalties and fines as provided by this Code. The removal of any designated tree of special significance requires a permit, a site inspection, and a written evaluation by a certified arborist demonstrating that removal is deemed necessary to avoid the immediate peril to life, and/or property, and/or the condition of the tree warrants removal; removal must be approved by the BCC and the replacement requirements shall be as determined by the BCC.

SECTION 4. Section 905, Greenspace Requirements and Standards, of the Land Development Code is amended as follows:

SECTION 905. GREENSPACE REQUIREMENTS AND STANDARDS

905.2. **Landscaping and Buffering**

A. Intent and Purpose

It is the intent and purpose of this subsection to promote the health, safety, and general welfare of the current and future residents of the County by establishing minimum standards for the preservation, development, installation, and maintenance of native and water-efficient landscaping within the County. (The types of native trees can be found at http://www.floridayards.org/fyplants/index.php.) Landscaping includes trees, shrubs, and groundcover. **This section does not include trees planted along residential streets in rights-of-ways (see Section 905.3).**

The use of plant materials improves the aesthetic appearance of public, commercial, industrial, and residential areas by reducing the visual impact of large building masses; by softening the visual impact of paved surfaces and vehicular-use areas; by screening conflicting uses from one another; and otherwise helping establish a harmonious relationship between the natural and built environment.

B. Applicability

1. This section shall be applicable to ~~all~~ development plans submitted on or after February 26, 2002, ~~and to single and two (2) family residential~~

~~lots with the exception of those within agricultural zoning districts~~.

2. Redevelopment Landscaping. Developments that existed on February 26, 2002, that do not comply with the provisions of this subsection shall be brought into compliance when a new building permit or preliminary site plan application is submitted pursuant to this Code according to the following:

a. Intent and Purpose

The intent and purpose of this section is to provide for the timely compliance with the landscaping and buffering provisions of this Code, while recognizing and encouraging redevelopment. As such, the requirement for bringing a site into conformance with this section will be based on the degree of investment proposed for the site.

b. Improvements Required

Landscaping and buffering requirements in circumstances of redevelopment shall be as shown in Table 905.2-A.

TABLE 905.2-A

Circumstance	Conformity Required
• Alteration of vehicular use area other than restriping, resealing, or resurfacing.	• Expanded area shall provide the required minimum landscape area as required by Table 905.2.C.
• Existing structure size is expanded by up to twenty-five (25) percent.	• Building perimeter landscaping shall be required adjacent to any addition, where feasible.
• Structure size is expanded by more than twenty-five (25) percent.	• Building perimeter landscaping shall be installed adjacent to the entire building, where feasible.
• Value of work associated with redeveloped, remodeled, or renovated structure is between twenty-five (25) and fifty (50) percent of the appraised value.	• Buffers shall be installed: o Along roadways. o Adjacent to residential properties. • Building perimeter landscaping adjacent to addition.
• Value of work is between fifty-one (51) and seventy-five (75) percent of the appraised value.	• All property buffers shall be installed. • Building perimeter landscaping adjacent to addition, where feasible.
• Value of work exceeds seventy-five (75) percent of the appraised value.	• All property buffers. • All building perimeter landscaping, where possible. • All vehicular use landscaping.

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NOTE: Appraised value shall be as shown by the Property Appraiser. The value of improvements shall be cumulative from February 26, 2002.

c. Options for Relief

Recognizing that redevelopment and renovation presents its own special challenges, an applicant may pursue the following approaches to obtain relief from the strict application of the above standards.

(1) Alternative Standards. An applicant may propose an alternative standard pursuant to Section 407.5 to the required planting, meeting the purpose and intent of this section for a balance between conformity with this section and the encouragement of redevelopment. Alternative standards may be appropriate based on the adjacent uses and the ability of practical installation.

(2) The County Administrator or designee may grant relief from the strict application of the above standards without requiring an alternative standard application pursuant to Section 407.5, if the applicant is able to demonstrate with the preliminary plan/preliminary site plan that the landscaping and buffering provided is the maximum possible that can be accommodated given the existing conditions on site.

(3) Performance Security. Where performance security in a form acceptable to the County is provided, the landscaping and buffering required in Table 905.2-A may be installed in phases over a five (5) year period.

(4) County Assistance. Developments required to be brought into compliance with this section shall be eligible to apply to the Board of County Commissioners (BCC) through the County Administrator or designee for reimbursement of the reasonable cost of drought tolerant or native trees and landscaping plants as listed by Southwest Florida Water Management District (SWFWMD) or the University of Florida Institute of Food and Agricultural Sciences (IFAS), and approved by the County Administrator or designee in an amount not to exceed $10,000.00 from the Tree Mitigation Fund. The said reimbursement amount may be amended from time to time by resolution of the BCC.

C. <u>General Standards</u>

1. Design

a. Maintenance Responsibility. Landscaping plans must designate a person or entity, other than the County, to be

responsible for maintenance of the landscaping.

b. Clear-Sight Triangle. Where a driveway/accessway intersects a road right-of-way or where two (2) road rights-of-way intersect, vegetation, structures, and non-vegetative visual screens shall not be located so as to interfere with the clear-sight triangle as defined in this Code or the *Florida Department of Transportation, Manual of Uniform Minimum Standards*, most recent edition (Green Book), whichever is more restrictive.

c. Sustainable Practices. Landscape installations shall employ environmentally sustainable principles and practices, which include Florida Friendly landscaping and utilize low-maintenance plant species. A comprehensive guide to Florida Friendly landscaping principles and materials is available at www.floridayards.org. Landscaping shall be installed so that landscaping materials meet the concept of right material/right place. Installed material shall be grouped into zones according to water, soil, climate, and light requirements. Plant groupings based on water requirements are drought tolerant, natural, and oasis.

d. Diversity

(1) A maximum of fifty (50) percent of the plant materials used, other than trees, may be nondrought tolerant. The use of turfgrass varieties with excellent drought tolerance may exceed the fifty (50) percent limitation.

(2) A minimum of thirty (30) percent of the plant materials, other than trees and turfgrass, shall be native Floridian species suitable for growth in the County.

(3) Tree diversity shall be required based on the number of required trees on site (see Table 905.2-B).

TABLE 905.2-B

Required Number of Trees	Required Species
1-5	1
6-10	2
11-15	3
16-20	4
21-25	5
26-30	6
31-35	7
35 or more	8

(4) Where more than one (1) species is required, even distribution shall be strived for and subject to County

approval through the associated review process.

(5) No one (1) plant species of shrubs or ground cover plants or combination thereof, excluding turfgrass, shall constitute more than twenty-five (25) percent coverage of the overall landscape area.

(6) Development projects one (1) acre or less in size are exempt from the diversity requirements of Subsections 3, 4, and 5 above.

e. Berms. Where berms are installed, drought tolerant ground cover or sod, such as Bahia, may be used to stabilize the berms. Trees shall be planted at the base of the berm. The height of the berm shall be measured and averaged at regular intervals on the exterior of the berm. The final height shall be determined by averaging the dimensions obtained. The measured interval distances shall be typically eight (8) feet.

f. Tree Location. Trees are required to be located on the site; however, trees may be planted along rights-of-way or on public lands **pursuant to Section 905.3, and** so long as approval is obtained through the applicable review process and all necessary agreements and/or permits have been obtained. Public and private road rights-of-way may contain trees and other landscaping material, provided their location does not present a traffic hazard, impede drainage, or adversely interfere with the use of the right-of-way by utilities. Landscaping within a public right-of-way that is approved through the applicable review process, where landscaping other than sod or ground cover is proposed, shall require a County Right-of-Way Use Permit and potentially a License and Maintenance Agreement.

g. Use of Existing, Noninvasive Plant Materials. Existing, noninvasive plant materials may be used to meet the buffering and landscaping requirements, provided there is no reduction in the required percentage of landscaped area or reduction in the number of required trees or shrubs. If existing plant materials are retained to meet the requirements, the following standards shall apply:

(1) All new development shall retain existing, noninvasive plant materials to the maximum extent possible, unless stormwater management design, necessary grade changes, required infrastructure, or approved construction footprints necessitate their removal. Areas of retained plant materials shall be preserved in their entirety with all trees, understory, and ground cover left intact and undisturbed, provided that invasive, prohibited plant materials are removed.

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(2) Numbered photographs with site plan key, showing the extent of the existing landscaping shall be provided during the review process for assessment of the existing landscaping.

(3) The protection of existing, noninvasive plant materials shall conform to the standards listed in this Code, Section 802.

(4) Where existing, noninvasive vegetation meeting the intent of a landscape buffer is retained, required berms and buffering may be eliminated in whole or part through the use of an alternative standard. The subsequent removal of the existing vegetation shall void any alternative standard approved.

(5) Trees located within environmentally sensitive lands shall not be counted or credited toward the total number of trees required. Quality of Trees

2. Quality of Trees

a. Trees to be planted shall be Florida Grade No. 1 or better pursuant to the Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Grades, and Standards for Nursery Plants, which is incorporated herein by reference.

b. Invasive Species

(1) The planting of species listed in Rule 5B 57.007, Florida Administrative Code, as amended, or classified as invasive by the Florida Exotic Pest Plant Council, is prohibited.

(2) Invasive species located within the area of the project proposed to be developed are required to be removed.

c. Shade Trees

All shade trees used to satisfy landscaping requirements shall have a two (2) inch caliper trunk and be a minimum of six (1) feet in height at the time of installation. All required shade trees shall be a species having an average mature spread of greater than twenty (20) feet.

Where interference with overhead utility lines is probable, understory shade trees shall be planted with a maximum spacing of thirty (30) feet on center. To avoid a powerline conflict, vegetation that exceeds twenty-five (25) feet in height

at maturity shall not be planted closer than twenty (20) feet of the vertical plane of an existing powerline, excluding service wires. Consultation with the affected utility should occur for assistance with the selection of suitable vegetative species.

d. Multiple-Trunk Trees

All proposed multiple-trunk trees shall have no less than three (3) trunks, equal to or greater than three (3) inches caliper, and shall be a minimum of six (6) feet in height at the time of installation.

e. Palms

Palm trees may be substituted for shade trees at a rate of three (3) palm trees, grouped together, for one (1) shade tree. Palm trees may be substituted for up to thirty (30) percent of the required shade trees. Exceptions may be made for the Phoenix (not including Roebellini), which may be planted individually. Palms must have a minimum of ten (10) feet of clear trunk at the time of installation. Shrubs

f. Shrubs

(1) Shrubs grown in the appropriate sized containers, shall have the ability to be a minimum of twenty-four (24) inches within one (1) year of planting and shall maintain that height. Shrubs shall be a minimum of eighteen (18) inches in height at the time of installation. Shrubs shall be spaced a distance appropriate to the species to create a continuous appearance within one year of planting, but at no more than thirty-six (36) inches on center at the time of installation, unless the applicant can demonstrate that the growth structure of a proposed species will obtain a continuous appearance within one (1) year of planting.

(2) Dwarf variety of shrubs, grown in the appropriate-sized containers, shall be a minimum of fourteen (14) inches in height at the time of installation. Dwarf shrubs shall be spaced a distance appropriate to the species to create a continuous appearance within one (1) year of planting, but at no more than thirty-six (36) inches on center at the time of installation, unless the applicant can demonstrate that the growth structure of the proposed species will obtain a continuous appearance within one (1) year of planting.

g. Ground Cover

Ground cover plants shall be spaced so as to present a

finished appearance and to obtain a reasonably complete coverage within one (1) year after planting. Nonliving ground cover, such as mulch, gravel, rocks, etc., shall be used in conjunction with living plants so as to cover exposed soil and suppress fugitive dust.

3. Installation of Planting Materials

a. Avoid Utility Conflicts. Landscape installations shall be placed to avoid conflict with the existing and/or proposed utilities, both underground and overhead.

b. Good Condition. All trees shall be planted according to the Florida Chapter, International Society of Arboriculture Standards for Planting, which is incorporated herein by reference. All trees must be maintained in good condition and planted in locations with adequate open space to allow for mature tree-canopy development.

c. Avoid Easements. Trees shall not be planted within any easement so as to interfere with the use of that easement, nor under any present or planned overhead utility, nor in any rights-of-way without County approval through the associated review process **as outlined in Section 905.3**.

d. Mulch. Mulch shall be used in conjunction with living plant materials so as to cover exposed soil. Mulch shall be installed to a minimum depth of three (3) inches. The mulch should not be placed directly against the plant stem or tree trunk. Mulch shall not be required for annual beds. Stone or gravel may be used to cover a maximum of twenty (20) percent of the landscaped area.

e. Quality Practices. All landscaping shall be installed in accordance with standards and practices of the Florida Nursery, Growers, and Landscape Association and the Florida Chapter of the International Society of Arboriculture.

f. Height. All height requirements shall be based on the finished grade of the landscaped area and measured at the main stem.

g. All portions of a lot upon which development has commenced, but not continued for a period of thirty (30) days, shall be planted with a grass species or ground cover to prevent erosion and encourage soil stabilization. Adequate coverage, so as to suppress fugitive dust, shall be achieved within forty-five (45) days.

4. Certification Requirements for New Development

a. Certification. A registered landscape architect or other person

as authorized by Chapter 481, Florida Statutes, as amended or other type of professional as approved by the County Administrator or designee, shall conduct a final field inspection. A Certificate of Compliance with the requirements of this section shall be provided to the County and the property owner prior to obtaining a Certificate of Occupancy (CO). If the property owner installs the landscaping and irrigation, the owner shall act as the certifying agent.

b. Installation Prior to CO. Prior to the issuance of any CO, or where no CO is required, prior to final inspection or the use of the lot, all required landscaping shall be installed and in place as set out in the approved landscape plans. In cases where timely installation of landscaping is not practicable due to the season or shortage, as determined by the County Administrator or designee, a bond satisfactory to the Engineering Services Department shall be posted until the planting occurs.

D. Specific Planting Requirements

1. Generally. The following general standards and the specific planting standards below shall apply to all sites:

a. All portions of each site, which are not devoted to buildings, sidewalks, paving, or special landscape features shall be grassed. However, no more than thirty (30) percent of the required landscape area may be grassed; the balance shall be landscaped in shrubs and ground cover plants.

b. Sidewalks and other impervious areas shall not be located within a required buffer except:

(1) Driveways and sidewalks are constructed perpendicular to the buffer and provide direct access to the parcel or adjacent parcels.

(2) A meandering sidewalk, bike trail, or nature trail is provided within the buffer and the buffer width is increased by the equivalent sidewalk or trail width.

2. Specific Standards for Single and Two (2) Family Residential

a. Minimum tree planting requirement. A minimum number of trees shall be planted or retained on all property upon which either a single-family dwelling, a two (2) family dwelling, or a mobile home on an individual lot is located or to be located in accordance with the following table:

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Size of Lot (Square Feet)	Minimum Number of Trees
Less than ~~3,500~~ **6,000**	1
~~3,500-6,000~~	~~2~~
6,001~~0-7,500~~**8,999**	~~3~~**2**
~~7,501-9,500~~ **9,000 – 11,999**	~~4~~ **3**
~~9,501-16,000~~**12,000 – 14,999**	~~6~~ **4**
~~Over 16,000 to Under 1 Acre~~	~~8~~
15,000 – 17,999	**5**
18,000 – 43,559	**6**
1 Acre to Under 2.5 Acres	8
2.5 Acres to Under 5 Acres	6 per Developable Acre
5 Acres and Larger	4 per Developable Acre

b. This requirement does not apply to lots of record existing before February 26, 2002. **Trees planted in rights-of-way pursuant to Section 905.3 shall not be counted toward the minimum number of trees required in this chart, but can be counted toward minimum number of replacement trees.**

3. Vehicular Use Areas. Landscaping and buffering of vehicular use areas shall be in accordance with Table 905.2.C.

TABLE 905.2-C
Vehicular Use Area Landscaping

Purpose	To divide and break up large expanses of paving and provide shading for paved areas, creating an aesthetically pleasing environment.
When Required	All new or expanded off-street parking or other vehicular use areas. For industrial parks or land devoted to industrial use, only the parking areas between the front of the building line and the road right-of-way or easement providing access shall comply.
Landscape Area Required	A minimum of ten (10) percent of the on-site, vehicular use area shall be devoted to interior landscaped areas.
Shade Trees Required	A minimum of one (1) shade tree for every 200 square feet of required interior landscaped area.
Standards for Shade Trees	Proposed tree species shall be appropriate for the space available considering the size of the tree, root growth patterns, and water needs at maturity.

Existing Trees Preferred	Use of existing noninvasive trees is preferred when trees are located within the parking area and may feasibly be incorporated into the parking area design in a manner ensuring survivability. The island size shall be large enough to allow the continued health of the retained tree. Where existing trees are retained in the landscape islands to satisfy the requirements of this Code, the number of interrupted parking spaces in a row may be increased to fifteen (15).
Landscape Islands	A minimum of one (1) landscape island per every ten (10) parking spaces. These may be reduced to every fifteen (15) spaces when the existing trees are incorporated.
Island Size	100 square feet; minimum dimension of eight (8) feet.
Plantings Required and Location	A minimum of one (1) shade tree with shrubs, dwarf shrubs, and/or other ground cover plants per each island. Other than trees, planting materials shall naturally grow no taller than thirty (30) inches. Trees shall be set back from drive aisles a minimum of four (4) feet.
Terminal Islands Required	All rows of parking shall be bordered by a terminal landscaped island. The terminal island shall be a minimum of nineteen (19) feet long for a single row of parking; thirty-eight (38) feet long for a double row. Each terminal island shall be a minimum of eight (8) feet wide.
	Where a terminal island abuts a required buffer area or where two (2) rows of parking abut either perpendicularly or at an angle, the required plantings may be relocated elsewhere on the site upon approval of the landscape plan.
Landscaping Required for Terminal Islands	Shade trees, shrubs, dwarf shrubs, and ground cover plants shall be used in terminal islands. If a large tree with a mature canopy of thirty-five (35) feet or more is proposed in a double island, only one (1) such tree shall be planted in the island.

Alternative Planting Beds	Planting beds may be used to satisfy ten (10) percent of the landscaping requirement. Planting beds may be in addition to the required landscape islands.

General Requirements	Landscape areas shall be protected from vehicular encroachment. Parking lots shall be designed so that water runs into the landscaped areas to the greatest extent possible to maximize stormwater retention; e.g., islands are recessed and curbing has openings to allow water.
Alternative Standards	Alternative standards meeting or exceeding the intent and purpose of this section may be approved by the County Administrator or designee. If any approved alternative standards has applicability to other sites, the County Administrator or designee may take the alternative standard to the BCC for approval as an available template to be used by other applicants.

4. Building Perimeters

The intent and purpose of building perimeter landscaping is to provide for visual interest, prevent monotony, break up wall and pavement expanses, and clearly define entryways. Building perimeter landscaping shall be placed such that a minimum of fifty (50) percent of the building perimeter is landscaped.

a. All shopping center, retail, office, apartment, condominium, townhouse, clubhouse, and similar uses shall provide perimeter building landscaped beds in a minimum amount equal to ten (10) percent of the proposed building ground-level floor area.

b. These building perimeter landscaping shall be located adjacent to the building and shall consist of landscaped areas, raised planters, or planter boxes that are a minimum of five (5) feet wide. These landscaped areas shall include shade trees, understory trees and/or palms, shrubs, dwarf shrubs, and ground cover plants.

Alternative design solutions for these building perimeter landscaping requirements that meet or exceed the intent and purpose of this section may be approved through the alternative standards review process.

5. Perimeter Landscape Buffering and Screening

The intent and purpose of providing landscape buffering and screening is to provide for an aesthetically pleasing developed environment and separation between uses and intensities where appropriate. ~~Generally,~~ ~~p~~Perimeter landscaping is required on all

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sides of a lot~~, with the exception of single, two (2), and mobile home lots where the landscaping shall be required on individual lots and around the project as a whole~~. Buffer type required is based on the subject property's district/use and the adjacent district/use as shown in Tables 905.2-D and 905.2-E.

a. Where the buffers are located within subdivisions, the buffers shall be indicated as tracts and the applicable minimum side or rear yard shall be measured from the tract line.

b. For residential uses where the buffers are not located within a subdivision, they shall be delineated by an easement and the applicable side or rear yard shall be increased by the width of the required buffer. Additionally, where the buffer is located within an easement, the applicable side- or rear-yard setback, as required by the zoning district, shall be measured from the easement line. Further, when a buffer is located within an easement, additional conditions relating to the maintenance and disclosure of the buffer requirements to the lot owner may be imposed by the County.

TABLE 905.2-D

BUFFER REQUIREMENTS BY ZONING CLASSIFICATION												
Subject Property's District/Use***		Adjacent District/Use										
		1	2	3	4	5	6	7	8	9	10	11
1.	Agricultural Districts (A-C Agricultural, AC-1 Agricultural, A-R Agricultural-Residential, AR-1 Agricultural-Residential, AR-5 Agricultural-Residential, AR-5MH Agricultural-Residential)	-	-	-	-	-	-	-	-	-	-	F
2.	Residential Single-Family Districts (E-R Estate-Residential, ER-2 Estate-Residential, R-1 Rural Density Residential, R-2 Low Density Residential, R-3 Medium Density Residential, R-4 High Density Residential)	A	-	B	B	B	B	B	D	C	C	F
3.	Multiple Family Districts (MF-1 Multiple Family Medium Density, MF-2 Multiple Family High Density, MF-3 Multiple Family)	A	B	-	B	B	B	B	D	C	C	F
4.	Mobile Home Districts (R-MH Mobile Home, R-1MH Single-Family/Mobile Home, R-2MH Rural Density Mobile Home)	A	B	B	-	B	B	B	D	C	C	F
5.	Commercial Districts/Uses (C-1 Neighborhood Commercial, C-2 General Commercial, C-3 Commercial/Light Manufacturing)*	A	B	B	B	A	A	A	D	B	C	F
6.	Professional Office Districts/Uses (PO-1 Professional Office, PO-2 Professional Office)	A	B	B	B	A	A	A	D	B	C	F
7.	Industrial Districts/Uses (C-3 Commercial/Light Manufacturing, I-1 Light Industrial Park, I-2 General Industrial Park)	B	C	B	B	B	B	E	D	B	C	F
8.	Rights-of-Way**	-	D	D	D	D	D	D	-	G	C	F
9.	Automotive Service Stations and Convenience Stores With Gas Pumps	B	C	C	C	B	B	B	G	B	C	F
10.	Vehicle Dealerships	A	H	H	H	A	A	A	D	A	A	D
11.	Mining Operations/Construction and Demolition Debris Disposal Facilities/Landfills (All Types)	-	C	C	C	C	C	C	C	C	-	F
12.	Controlled Access Roadways	F	F	F	F	F	F	F	F	F	F	-

*For golf courses, the play area buffer may consist of the required number of plants and trees grouped so as to delineate the golf course boundaries.

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Applies to major County roads and Type 1 subdivision collectors, **except rights-of-ways as outlined in Section 905.3, or as required by this Code. Where a local roadway exists, the required buffer shall be determined by the adjacent district/use directly across the local roadway.

***Within MPUD Master Planned Unit Developments, the buffering required shall be in accordance with the use within that phase, portion, and parcel of the MPUD plan.

TABLE 905.2-E

Landscaping Buffer and Screening Requirements

Type A	Ten (10) feet wide. Single row of trees; maximum sixty (60) feet on center. Continuous row of evergreen shrubs.
Type B	Fifteen (15) feet wide Single row of trees; maximum sixty (60) feet on center. Visual screen designed to be eighty (80) percent opaque within one (1) year. Screening a minimum of six (6) feet in height at the time of the installation. Screening shall include one (1) or more of the following: • Opaque Fence • Wall • Berm • Hedge Wooden fences are prohibited. Fences and walls shall not exceed eight (8) feet in height and may be placed adjacent to the property line. Shrubs used to provide a visual screen shall be placed a maximum of five (5) feet on center.

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Type C	Twenty (20) feet wide. Two (2) staggered rows of trees with a maximum spacing of sixty (60) feet on center per row. Visual screen designed to be eighty (80) percent opaque within one (1) year. Screening a minimum of six (6) feet in height at the time of installation. Screening shall include one (1) or more of the following: • Opaque Fence • Wall • Berm • Hedge Wooden fences are prohibited. Fences and walls shall not exceed eight (8) feet in height and may be placed adjacent to the property line. Shrubs used to provide a visual screen shall be placed a maximum five (5) feet on center.
Type D Nonlocal Roadway	Landscape buffer shall be required: • Adjacent to any road right-of-way external to the development. • Adjacent to any nonlocal access roads internal to a development. • Adjacent to all double-frontage lots. The minimum width will vary according to the ultimate width of abutting right-of-way and project size as follows: **Right-of-Way Width** — **Buffer Required** 0-99 Feet — 10 Feet 100 or More — 15 Feet 15 Acres or Larger Project Regardless of Right-of-Way Width — 20 Feet When a corridor right-of-way is dedicated in accordance with this Code, the Type D buffer width may be reduced to no less than ten (10) feet as part of plan review, provided the purpose and intent of this section are met. Shade and understory trees shall be planted an average of thirty (30) feet apart. Minimum spacing twenty (20) feet; maximum forty-five (45) feet.

	The remainder of the buffer shall be landscaped with shrubs at a minimum rate of five (5) shrubs per tree or palm and ground cover plants. Where a vehicular use area abuts the right-of-way buffer, the buffer shall ~~also contain an earthen berm~~ **contain** a minimum **three-foot high screen which may be comprised of plantings, an earthen berm, wall, fence, or any combination thereof. Plantings shall consist of a double row of staggered evergreen shrubs so as to form a continuous, unbroken, solid visual screen within one (1) year of the time of planting.** ~~of eighteen (18) inches in height; shall be planted so as to form a continuous, unbroken, solid visual screen within one (1) year of time of planting; and ground cover plants.~~ • **Landscaping shall be eighty (80) percent opaque at the time of planting and shall be a minimum of three (3) feet in height at the time of installation and all times thereafter.** • **The visual screen may be undulating to allow tree placement, avoid any utilities appurtenances and promote visual interest.** • **The visual screen shall not be required within clear-sight triangle area.** ~~Berms and landscaping shall be eighty (80) percent opaque and shall be a minimum of three (3) feet in height at the time of planting and all times thereafter.~~ ~~Berm may be undulating to allow tree placement and promote visual interest.~~ ~~Berm shall not be required within clear-sight triangle area.~~ No more than thirty (30) percent of the required landscape area shall be grassed. Wooden fences shall be prohibited Where a wall is used: • The masonry or other ornamental wall, not to exceed eight (8) feet in height, may be located within a required Type D buffer (right-of-way buffer) to separate a residential development from the roadway. • The masonry or other ornamental wall shall be installed so as to allow the required landscaping to be provided along the right-of-way side of the wall.

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Type E Industrial to Industrial	Five (5) foot wide buffer. Shade trees planted a maximum of sixty (60) feet on center. No substitution of palms is permitted. When the industrial uses are adjacent, such as sharing of side-yard line, the buffer is only required to extend from the front property line to that point parallel to the front building line. A continuous row of evergreen shrubs. The remainder shall be landscaped with other plantings and/or drought-tolerant sod.
Type F: Controlled Access Roadways	Twenty (20) feet adjacent to any controlled access roadway. In residential districts: • A sound wall, a minimum of ten (10) feet high when the closest residential lot or potential lot is within 500 feet of the controlled access highway. • When a residential lot or potential lot is more than 500 feet from a highway, a wall a minimum of eight (8) feet high is required. • Masonry or other ornamental walls shall be used. Wooden and plastic-type fences, including PVC are prohibited. • Walls may be placed atop berms to achieve minimum height. • Walls shall be installed to allow required landscaping to be provided on the right-of-way side of the walls. In all other districts: • Shrubs, undulating berms, walls, or any combination a minimum of eight (8) feet high. • Shrubs used as a visual screen shall be eighty (80) percent opaque within one (1) year. • Masonry or other ornamental walls shall be used. Wooden and plastic-type fences, including PVC are prohibited. • Wall may be placed atop berms to achieve minimum height. • Walls shall be installed to allow required landscaping to be provided on the right-of-way side of the walls.

	• This requirement shall not apply to those portions of the perimeter where existing wetlands adjacent to the controlled access roadway are to be retained on site. • For corporate business parks, this requirement shall only apply to those portions of the park's vehicular use areas adjacent to the controlled-access roadway rights-of-way. Required Landscaping: • Row of trees, maximum sixty (60) feet on center. • Minimum five (5) shrubs per tree or palm. • Shrubs may be in groups or hedgerows. • Remaining area planted with ground cover plants and grassed. It is not the intent to obscure from view decorative items, such as emblems, tile molding, and wrought iron. For corporate business parks, the required landscaping may be grouped to delineate the boundaries of the park and to soften the walls and berms as an alternative to the planting requirements of this section.
Scenic Highways	Areas adjacent to designated scenic highways shall provide a visual screen consisting of native vegetation and double rows of trees or stands of trees. The number and specific planting criteria shall meet the intent of shielding the traveling public's view of sound walls, walls and fences, and signage while providing for views of open space and natural areas. In no case shall the plantings be less than generally required for a Type H buffer.

Type G: Service Stations and Convenience Stores with Gas Pumps	Twenty (20) feet in width between the right-of-way and project. **When a corridor right-of-way is dedicated in accordance with this Code, the Type G buffer width may be reduced to not less than ten (10) feet as part of plan review, provided the purpose and intent of this section are met.** • ~~Minimum twenty-four (24) inch high earthen berm.~~ • ~~Maximum 3:1 slope.~~ • ~~Entire length of buffer.~~

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	• ~~Shrubs shall be planted in staggered, double rows and maintained to form a continuous, unbroken, solid visual screen within one (1) year from planting.~~ • ~~Berms shall be planted with ground cover plants, shrubs, trees, and palms.~~ • ~~Berms and landscaping shall be eighty (80) percent opaque and shall be a minimum of three (3) feet high at the time of installation and shall be maintained at least at that height.~~ • **If a berm is provided, it may be undulated to allow tree spacing and provide visual interest.** • **Plantings shall consist of a double row of staggered evergreen shrubs so as to form a continuous, unbroken, solid visual screen within one (1) year of the time of planting.** • **Landscaping shall be eighty (80) percent opaque at the time of planting and shall be a minimum of three (3) feet in height at the time of installation and all times thereafter.** • **The visual screen may be undulating to allow tree placement, avoid any utilities appurtenances and promote visual interest.** • **The visual screen shall not be required within clear-sight triangle area.** • Height shall be measured at finished grade of vehicular use area. • ~~Berm~~**Landscaping** shall not be required within the clear-sight triangle areas for any driveways or pedestrian walkways. • Shade trees shall be planted in staggered, double rows with an average of thirty (30) feet on center.

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Type H: Vehicle Dealership/Residential	Seventy-five (75) foot wide buffer. The first thirty (30) feet adjacent to the exterior of the site shall be planted with trees, shrubs, ornamentals, and ground cover. The interior forty-five (45) feet shall also be planted with turf grass, ornamentals, shrubs, trees, ground cover, or any combination thereof. Only stormwater features may be installed within the interior forty-five (45) feet of the buffer. Trees shall be planted a maximum of sixty (60) feet on center. A continuous row of evergreen shrubs, a minimum of twenty-four (24) inches in height at planted, and spaced as appropriate for the species, but not more than thirty-six (36) inches apart, shall be installed within the exterior thirty (30) feet.

c. Joint Landscape Areas. When side or rear perimeter landscape areas are required on adjacent properties, the County Administrator or designee may approve a Joint Landscape Area permitting installation of one (1) such landscape area on the adjacent boundary, as long as such agreement is binding on both property owners and their successors in interest, and is approved as part of the permit application by the County Administrator or designee. It is intended that Joint Landscape Areas be utilized where adjacent uses have similar densities and intensities.

d. Alternative Standards. The County Administrator or designee may approve a request of alternative standards when the intent and purpose of this section are met or exceeded by the proposed buffering design. This section is specifically designed to encourage the application of creativity in proposals for landscape solutions. If an approved alternative standard has applicability to other circumstances, the County Administrator or designee may take the alternative standard to the BCC for approval as an available template to be made available for use by other applicants.

6. Water Management Systems

a. All manmade dry and wet retention areas that are visible from the right-of-way or located within a required buffer shall be designed to appear natural by providing offsets in the edge alignment. Offsets should be a minimum of five (5) feet with a maximum spacing of fifty (50) feet.

Alternative design solutions, such as grouping of plantings, may be approved through the applicable review process as long as a minimum of one (1) tree is provided for each fifty (50) linear feet of retention pond bank. The said retention ponds shall be landscaped in accordance with this Code and may contain special site features, such as fountains and reflecting pools. Existing, natural vegetation may be used in lieu of new plantings.

b. Retention/detention ponds and swales shall be permitted within a required buffer provided they are consistent with the following criteria:

(1) Retention/detention ponds and swales shall not exceed, at any location within the required buffer, seventy (70) percent of the required buffer width. A minimum five (5) foot wide, level planting area shall be maintained between the retention/detention pond or swale and the public right-of-way or adjacent parcel. This area shall be planted with trees and shrubs, ~~as determined by this Code, Section 802~~ **to provide a natural appearance.**

(2) The required vegetation shall be chosen and placed such that the functionality of the stormwater design is not impeded.

(3) To reduce soil erosion and visually soften the edge of the water management areas, trees shall be planted along the banks of the water management area at a minimum rate of one (1) tree per fifty (50) linear foot of pond bank.

c. The banks of dry retention areas shall be sodded to the pond bottom. Wet retention areas shall be sodded to the seasonal high water line. Bahia grass may be used or planted in retention/detention areas, drainage areas, wetland setback areas and mitigation areas.

d. Stormwater retention and detention areas that are visible from the public right-of-way or located within a required buffer and, if required to be fenced in accordance with the SWFWMD requirements, shall be enclosed with a nonopaque, six (6) foot decorative, metal or vinyl-coated chain-link fence. Regular chain-link fences shall not be permitted.

E. Landscape Maintenance and Prohibitions

1. All landscaping, including those areas located in the public right-

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of- way, **including those as outlined in Section 905.3** as approved through the applicable development review process, shall be maintained by an entity other than the County**. Such maintenance shall be outlined and specified per a License & Maintenance Agreement signed by said entity.**

2. All required landscaping shall be maintained in a healthy condition in perpetuity in accordance.

3. All installed landscaping shall be neat and orderly in appearance and kept free of refuse, debris, disease, pests, and weeds, and shall be fertilized and irrigated as needed to maintain plants in a healthy condition.

4. On-going maintenance to prevent the establishment of prohibited, invasive species is required.

5. Any plant materials of whatsoever type and kind required by these regulations shall be replaced within thirty (30) days of their demise and/or removal.

6. Paving, treating, or covering a required landscape area in any way that renders it impervious is prohibited.

7. Parking of vehicles shall not be permitted in required landscape areas.

F. Alternative Standards

Alternative standards may be approved when design solutions meet or exceed the intent of this section or in cases related to government buildings and the Department of Homeland Security.

SECTION 5. Section 905.3, Plantings in Rights-of-Ways of Residential Subdivisions (Street Trees), of the Land Development Code is created as follows:

905.3 PLANTINGS IN RIGHTS-OF-WAY OF RESIDENTIAL SUBDIVISIONS – RESIDENTIAL STREET TREES

A. Intent and Purpose

It is the intent and purpose of this subsection to promote the development of residential communities in Pasco County that will promote the health, safety and general welfare of future residents of residential communities by establishing minimum standards for the planting, installation and maintenance of non-invasive trees along rights-of-ways to ensure street-lined trees in neighborhoods are esthetically pleasing, good for the environment, and cause minimal disruption to hardscapes, developed structures and roadways.

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The use of trees planted along residential streets improves the aesthetic appearance of residential areas by softening the impact of paved surfaces and allowing for tree-lined streets that offer shade, encourage local wildlife habitation, offer privacy and help establish a more harmonious and relaxing residential environment.

B. Applicability

This section shall be applicable to all residential development plans submitted on or after January 1, 2017, and to single and two (2) family residential lots.

C. Intent and Purpose

The intent and purpose of this section is to provide for the timely compliance with the landscaping tree preservation and replacement provisions of this Code, while recognizing and encouraging development.

D. Definition

"Residential Street Trees" shall be defined as those trees planted in accordance with a subdivision development plan and to single and two (2) family residential lots along streets and roadways which are located within the designated right-of-way.

E. General Standards

1. Trees planted in accordance with this section shall not be counted toward yard-tree minimum planting requirements as outlined in section 905.2 of this Code, and are not required to comply with the tree diversity requirements outlined in Table 905.2-B of this Code, but can be counted toward the minimum number of replacement trees.

2. Design

a. Maintenance Responsibility. Landscaping plans must designate a person or entity, other than the County, to be responsible for maintenance of the trees planted in accordance with this subsection of the Code.

b. Where a CDD, HOA or other like entity is designated, said designee shall be responsible for the maintenance of sidewalks, shrubbery, walkways, parking areas, and all common areas located in the rights-of-way, and shall not hold individual homeowner or property owner responsible

for said areas, and shall be so noted in the License and Maintenance Agreement signed with Pasco County.

c. Clear-Sight Triangle. Where a driveway/access-way intersects a road right-of-way or where two (2) road rights-of-way intersect, tree plantings shall not be located so as to interfere with the clear-sight triangle as defined in this Code.

d. Allowable Tree Types.

i. All trees planted in rights-of-way pursuant to this Code shall be of a non-invasive species, suitable for growth in the County, and shall be chosen in compliance with Table 905.3-A.

ii. Utilities and Easements. Where utilities are located either underground or above-ground, and are less than 12 linear feet from a proposed tree planting, said tree placement shall be installed using mitigation standards such as alternate sub-base materials, root barriers, or other such methods as submitted to and approved by the County (for a list of suggested preventative measures, see Table 905.3-B). Said linear footage measurement is in addition to the square footage minimum measurement. If both measurements cannot be met at said location, a tree planting is not approved for that location. Trees with a mature height of 25' are not permitted to be planted underneath overhead power lines. Utilities shall include pressure pipes, underground and above ground utility boxes, water meters and other such structures installed for and by utility companies, but does not include storm water underdrains or sewer lines.

3. Tree plantings pursuant to this subsection of the Code shall require a County Right-of-Way Use Permit and a License and Maintenance Agreement.

4. Quality of Trees

Trees to be planted shall be Florida Grade No.1 or better pursuant to the Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Grades, and

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Standards for Nursery Plants, which is incorporated herein by reference.

TABLE 905.3-A STREET TREES – RECOMMENDED TREES AND PLANTING SPACE

Tree Type		Minimum Green Space Required (Without Preventative Measures)		Minimum Green Space Required (If Preventative Measures are Used) *See Table 905.3-B	
Common Name	Botanical Name	Square Feet (SF)	Single Dimension (LF)	Square Feet (SF)	Single Dimension (LF)
Large Shade Trees (Mature Ht. 40' + Avg. and Mature Spread 40' + Avg.)					
Florida Maple	Acer barbatum	80 SF	8'	40 SF	4'
Red Maple	Acer rubrum	80 SF	8'	40 SF	4'
River Birch	Betula nigra	100 SF	10'	60 SF	6'
Pignut Hickory	Carya glabra	100 SF	10'	60 SF	6'
Pop Ash	Fraxinus caroliniana	100 SF	10'	60 SF	6'
White Ash	Fraxinus americana	100 SF	10'	60 SF	6'
Green Ash	Fraxinus pennsylvanica	100 SF	10'	60 SF	6'
Loblolly Bay	Gordonia lasianthus	80 SF	8'	60 SF	4'
Sweetgum	Liquidambar styraciflua	100 SF	10'	60 SF	6'
Southern Magnolia	Magnolia grandiflora	100 SF	10'	60 SF	6'
Black Gum	Nyssa sylvatica	100 SF	10'	60 SF	6'
Sand Pine	Pinus clausa	100 SF	10'	60 SF	6'
Slash Pine	Pinus elliottii	100 SF	10'	60 SF	6'
Longleaf Pine	Pinus palustris	100 SF	10'	60 SF	6'
Loblolly Pine	Pinus taeda	100 SF	10'	60 SF	6'
Sycamore	Platanus occidentalis	100 SF	10'	60 SF	6'
Bluff Oak	Quercus austrina	100 SF	10'	60 SF	6'
Laurel Oak	Quercus laurifolia	100 SF	10'	60 SF	6'
Swamp Chestnut Oak	Quercus michauxii	100 SF	10'	60 SF	6'
Chestnut Oak	Quercus prinus	100 SF	10'	60 SF	6'

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Shumard Oak	Quercus shumardii	100 SF	10'	60 SF	6'
Live Oak	Quercus virginiana	100 SF	10'	60 SF	6'
Pond Cypress	Taxodium ascendens	80 SF	8'	40 SF	4'
Bald Cypress	Taxodium distichum	70 SF	7'	30 SF	3'
Winged Elm	Ulmus alata	70 SF	7'	30 SF	3'
Chinese Elm	Ulmus parvifolia	70 SF	7'	30 SF	3'
Small and Medium Shade Trees (Mature Ht. < 30' Avg. and Mature Spread > 30' Avg.)					
Sweet Acacia	Acacia farnesiana	60 SF	6'	30 SF	3'
Red Cluster Bottlebrush	Callistemon 'Red Cluster'	60 SF	6'	30 SF	3'
Eastern Redbud	Cercis canadensis	60 SF	6'	30 SF	3'
Fringetree	Chionanthus virginicus	60 SF	6'	30 SF	3'
Texas Olive	Cordia boissieri	60 SF	6'	30 SF	3'
Flowering Dogwood	Cornus florida	60 SF	6'	30 SF	3'
Japanese Blueberry	Elaeocarpus decipens	70 SF	7'	40 SF	4'
Stoppers	Eugenia, spp.	60 SF	6'	30 SF	3'
Dahoon Holly	Ilex cassine	60 SF	6'	30 SF	3'
Burford Holly	Ilex cornuta 'Burfordii'	60 SF	6'	30 SF	3'
American Holly	Ilex opaca	60 SF	6'	30 SF	3'
Yaupon Holly	Ilex vomitoria	60 SF	6'	30 SF	3'
East Palatka Holly	Ilex x attenuata	60 SF	6'	30 SF	3'
Mary Nell Holly	Ilex x 'Mary Nell'	60 SF	6'	30 SF	3'
Nellie R. Stevens Holly	Ilex x ' Nellie R. Stevens'	60 SF	6'	30 SF	3'
Southern Red Cedar	Juniperus silicicola	60 SF	6'	30 SF	3'
Eastern Red Cedar	Juniperus virginiana	60 SF	6'	30 SF	3'
Crape Myrtle	Lagerstroemia spp.	60 SF	6'	30 SF	3'
Ligustrum	Ligustrum japonicum	60 SF	6'	30 SF	3'
Sweet Bay	Magnolia virginiana	70 SF	7'	40 SF	4'
Wax Myrtle	Myrica cerifera	60 SF	6'	30 SF	3'
European Olive	Olea europaea	60 SF	6'	30 SF	3'
American Hornbeam	Ostrya virginiana	60 SF	6'	30 SF	3'

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Redbay	Persea borbonia	70 SF	7'	40 SF	4'
Chickasaw Plum	Prunus angustifolia	60 SF	6'	30 SF	3'
Flatwoods Plum	Prunus umbellata	60 SF	6'	30 SF	3'
Sand Live Oak	Quercus geminata	70 SF	7'	40 SF	4'
Indian Hawthorn	Raphiolepis spp.	60 SF	6'	30 SF	3'
Viburnum	Viburnum spp.	60 SF	6'	30 SF	3'
Palms					
European Fan Palm	Chamaerops humilis	30 SF	3'	N/A	N/A
Ribbon Fan Palm	Livistona decipiens	30 SF	3'	N/A	N/A
Date Palm	Phoenix spp. (except roebellini)	60 SF	6'	N/A	N/A
Sabal Palm	Sabal palmetto	30 SF	3'	N/A	N/A

Notes

Where bound on two or more sides by hardscape surfaces, trees shall be planted in the center of the greenspace and shall be a minimum of 12 linear feet from any underground or above ground utility installation or meter.

This is a list of recommended trees to be used as Street Trees. Other trees may be presented and approved during site plan review. Not all trees will be appropriate for all sites. Plant characteristics, growth habits, native status, drought tolerance, water, soil texture, pH and light requirements may found at Florida yards.org website or The Florida-Friendly Landscaping Guide to Plant Selection & Landscape Design, published by University of Florida.

Preventative measures include various solutions to discourage root growth conflicting with sidewalks and curbs in small landscape strips. A list of recommended preventative measures may be found on Table 902.99-B. Alternative preventative measures may be presented and approved during site plan review.

Where site constraints or required street sections do not allow for recommended minimum green space, alternative green space may be presented and approved through site plan review, pending that applicant may provide documentation that proposed species will be supported in the provided space.

Minimum landscape strip / green space required is defined as area between two hardscape surfaces.

Trees shall not be placed where they will obstruct views of stop signs or other safety and traffic control signs. Trees and palms of the Phoenix type shall be placed a minimum of 30' from the face of any stop sign or safety and traffic control signs. Other types of palms with smaller heads should be placed a minimum of 15' from the face of any stop sign or safety and traffic control signs.

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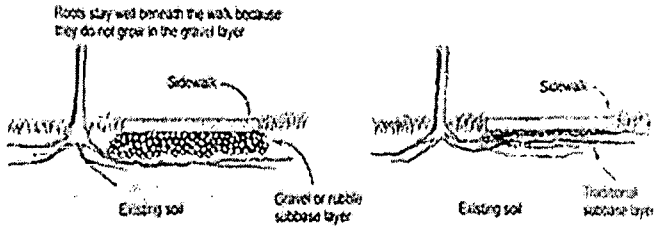
Where overhead utilities exist, refer to governing utility standards for acceptable trees.
Callistemon viminalis/Weeping Bottlebrush is prohibited due to invasive status per FEPPC.
When small trees and/or multi-trunk trees are used as street trees they shall have clear trunks and be tree form. They shall be placed so as not to impede clear sight from driveways and intersections.
Species that have natural characteristics to be full to ground are not recommended for planting where they may block views from drives and may cause sight clearance concerns. However they have been included in this table for use on certain roadways where appropriate.
This list is not intended to restrict use of trees in right of way. Generally, median plantings may be more flexible since more green space is available so long as other requirements of LDC are met.
Street trees are optional and not required by code. Where proposed within County owned and maintained rights-of-way, they may be subject to Right-of-Way Use Permit and License and Maintenance Agreement.
For purpose of compliance with this ordinance, in no case shall shrubs be substituted for trees.

TABLE 905.3-B SUGGESTED PREVENTATIVE MEASURES

Install alternate sub-base material

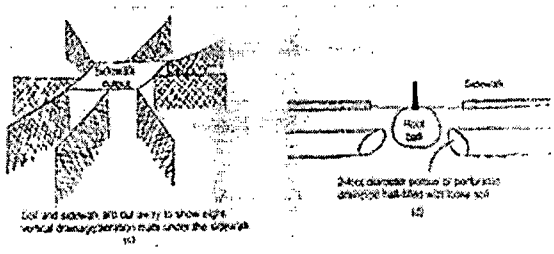


- Layer of washed gravel installed as sub-base material - roots remained under the gravel (left)
- Roots did not grow directly under the slab as they often do when a sand, limestone, or no sub-base is used (right)
- Gravel installation helped prolong the life of sidewalks

CONCRETE SIDEWALK WITH ROOT PROTECTOR OR ALTERNATIVE SUB BASE MATERIAL

Channeling roots under pavement

Tree roots can be directed to grow in channels provided for by good design

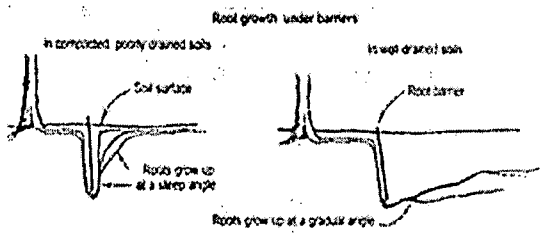


(LEFT) One-inch thick aeration or drainage pads installed to increase the effective root zone beyond the small planting pit

(RIGHT) Using pipes about 2 feet in diameter half filled with loose top soil and slow release fertilizer

CHANNELING ROOTS UNDER PAVEMENT

Root barriers can deflect roots



- Roots are deflected horizontally and down by most of the barriers on the market
- In compacted soils and soils with a high water table, roots grow under the barrier and up the other side
- In well drained soil, roots may remain at deeper depths longer

ROOT BARRIERS TO DEFLECT ROOTS HORIZONTALLY AND DOWN

SECTION 6. Appendix A, Definitions, of the Land Development Code is amended as follows:

Residential Street Trees. Those trees planted in accordance with a subdivision development plan and to single and two (2) family residential lots along streets and roadways which are located within the designated right-of-way.

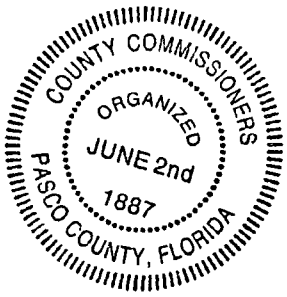
SECTION 7. Severability.

It is declared to be the intent of the Board of County Commissioners of Pasco County, Florida, that if any section, subsection, sentence, clause, or provision of this Ordinance shall be declared invalid, the remainder of this Ordinance shall be construed as not having contained said section, subsection, sentence, clause, or provisions and shall not be affected by such holding.

SECTION 8. Effective Date.

A certified copy of this ordinance shall be filed with the Florida Department of State by the Clerk to the Board within ten (10) days after adoption and shall take effect upon such filing.

ADOPTED with a quorum present and voting this 25th day of October, 2016.



BOARD OF COUNTY COMMISSIONERS

OF PASCO COUNTY, FLORIDA

ATTEST:

BY: _____

Paula S. O' Neil, Ph.D.

Clerk & Comptroller

APPROVED
IN SESSION
OCT 25 2016
PASCO COUNTY
BCC

BY: _____

Kathryn Starkey, Chairman

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