# ARTICLE XVIII. LANDSCAPING AND BUFFERS\*

\*Editor's note: Ord. No. 2009-017, § 1, adopted April 21, 2009, amended Art. XVIII in its entirety to read as herein set out. Former Art. XVIII, §§ 3-5-391--3-5-408, pertained to similar subject matter and derived from Ord. No. 2003-062, § 1, adopted Aug. 26, 2003.

Cross references: Tree requirements, § 3-2-186 et seq.

DIVISION 1. GENERALLY

## Sec. 3-5-391. Purpose.

(a) *Landscaping.* The purpose of the landscaping provisions of this article is to establish standards for landscaping areas associated with parking, traffic circulation, and other vehicular use. These standards are intended to provide a comprehensive and consistent, yet flexible, framework for landscaping intended to improve the appearance of the county by creating green space where development occurs, enhance soil conservation and the natural control of air, thermal, and water pollution, and ensure the compatibility of different land uses over time.

(b) *Buffers.* The purpose of the buffering provisions of this article is to establish standards for transitional landscape buffers and screening. Certain uses of property when abutting each other may be incompatible and create conflicts that may be reduced or eliminated by transitional buffers. These standards are intended to provide a comprehensive and consistent, yet flexible framework for providing adequate transitional buffer areas and screening between abutting incompatible uses. These standards are intended to improve the appearance of the county by eliminating or minimizing potential nuisances such as noise, lighting, unsightly buildings and structures, the visibility of outdoor aspects of intensive land uses, and off-street parking and loading areas, as well as assist in soil conservation and the natural control of air and water pollution and ensure the compatibility of different land uses over time.

(Ord. No. 2009-017, § 1, 4-21-09)

## Sec. 3-5-392. Definitions.

Unless otherwise specifically stated in this article, or unless otherwise clearly indicated by the context, the following terms when used in this article shall have the meanings indicated in this section:

Abutting shall have the same meaning and the same limitations as adjacent.

Accent tree or understory tree means the trees referenced as accent trees or understory trees in Exhibit 9 hereto.

Access aisle means the principal means of vehicular ingress and egress to abutting property from a street, right-of-way or easement.

Active use parks means all recreational parks with the exception of those used primarily as nature trails, mitigation banks, or for environmental study and interpretation.

Adjacent means contiguous, next to. When determining whether one land use or zoning district

is adjacent to another, the existence of an intervening natural or man-made waterway (measured between mean high water lines or apparent high water lines), drainage facility, greenbelt, alley, or right-of-way which, alone or in combination are less than two hundred (200) feet in width, shall not be considered and the properties shall be treated as adjacent. The term adjacent is used interchangeably with abutting.

Alley means any public or private right-of-way intended to be used as a secondary means of access or service to abutting properties and not intended for general traffic circulation.

*Barrier* means a durable opaque structure or hedge at least three (3) feet high used within the parking lot screening or decorative perimeter.

*Buffer* means the area required to be constructed and maintained as provided in division 3 of this article.

Canopy tree means any of the trees referenced as canopy trees in Exhibit 9 hereto.

Decorative perimeter landscaping means the planted space between the right-of-way and that part of the perimeter of the property not used as parking area.

Department means the Charlotte County Growth Management Department.

Development or development activity shall have the meaning set forth in section 3-2-186 of this Code.

*Establishment period* means the time between planting and new root growth. During the establishment period, regular supplemental watering to the root zone is required.

*Florida friendly* means water-conserving, drought-tolerant landscaping techniques using appropriate native plants and non-invasive plants which require relatively little attention and relatively little water to thrive. This term is also known as Xeriscaping.

*Future land use map* or *FLUM* means the map contained in the county's comprehensive plan, as amended.

*Ground cover* means low growing plants, other than turf grass, normally reaching an average maximum height of not more than twenty-four (24) inches at maturity, planted in such a manner as to form a continuous cover over the ground.

*Hedge* means a row of closely planted shrubs intended and designed to form an interlocking, continuous boundary or screen.

*Landscaping* means grass, ground cover, mulch, shrubs, vines, hedges, trees, berms, and complementary structural landscape features such as rock, foundations, sculpture, decorative walls and tree wells.

*Native vegetation* means any plant species with a geographic distribution indigenous to the Southwest Region of Florida.

Outdoor storage yard means any use of property where items such as boats, vehicles, recreational vehicles, contractor supplies, construction materials and other similar items are stored in other than a completely enclosed building.

*Parking area* means the total area designated on the landscape plan for the off-street parking of vehicles, including vehicles held for sale, and includes driveways, ingress and egress lanes, specialized vehicular use areas, walkways and aisles.

Parking lot screening means the planted space between the right-of-way and the parking area.

*Perimeter landscape strip* means the planted space between a right-of-way and subject property. The term includes parking lot screening and decorative perimeter landscaping.

Screening refers to fences, walls, berms, trees, shrubs, vegetation or a combination of any of these items used as screening devices.

Shrub means a woody plant of relatively low height distinguished from a tree by having several stems rather than a single trunk; any self-supporting, woody, evergreen and flowering perennial plant (excluding prohibited plants) characterized by multiple stems growing continuously from the base.

Sight triangle means the triangular area at the intersection of vehicular travel ways where a driver's vision of oncoming traffic must remain unobstructed. Two (2) sides of the triangle are formed by two (2) forty-foot segments running at the edge of a right-of-way, easement or driveway, which meet at the intersection. The third side is the line connecting the ends of the forty-foot segments farthest from the intersection. [Note that the shape will be roughly triangular wherever the travel way is curved.] Within this area there shall be a clear space with no obstruction to vision between a height of two (2) feet and a height of six (6) feet above grade; trees shall be permitted in the clear space if there is no foliage between these heights.

Specialized vehicular use areas means areas used for new or used motor vehicles, equipment, boats, local and inter-urban passenger bus terminals and service facilities, and motor freight terminals and loading docks. The term does not include areas set aside for access, employee parking or areas open to public parking.

*Topping* refers to the trimming of limbs to stubs larger than three (3) inches in diameter within the tree's crown to such a degree as to remove the normal canopy and disfigure the tree. The term is also known as stubbing, heading, hatracking, heading-back, stubbing off, tipping, topping-off, dehorning, lopping, roundover, and cutover).

*Tree* means a self-supporting woody plant (or palm with six (6) feet of clear trunk) of a species normally growing to a mature height of at least fifteen (15) feet.

Vines mean any of a group of woody or herbaceous plants which may climb by twining, by means of aerial rootlets, or by means of tendrils, or which may simply sprawl over the ground or other plants.

(Ord. No. 2009-017, § 1, 4-21-09)

### Sec. 3-5-393. Table and exhibits.

The following tables and exhibits are adopted by reference and declared to be a part of this article:

- (a) Table 1A, Table of Buffer Type Requirements;
- (b) Exhibits 1 through 5, Buffer Type Illustrations;
- (c) Exhibits 6 and 7, Berm, Wall, and Fence Illustrations;
- (d) Exhibit 8, Sample Buffer Illustration;
- (e) Exhibit 9, List of Canopy Trees, Accent Trees and Understory Trees; and
- (f) Exhibit 10, List of Prohibited Species.

(Ord. No. 2009-017, § 1, 4-21-09)

#### Sec. 3-5-394. Applicability.

(a) The provisions of this article shall apply only in the unincorporated areas of Charlotte County.

- (b) The provisions of this article do not apply to:
  - (1) Paved areas used for parking and other vehicular uses that serve single-family

residences or two-family residences, or

(2) Paved areas associated with permitted principal uses within the agricultural zoning districts (AG and AE).

(c) The provisions of this article shall not be construed as prohibiting additional plant material, screening or buffering beyond that which is required by this article or to prohibit the improvement of landscape buffers existing on the effective date of this article.

(d) Properties that require buffers and landscaping may not "buy out" the tree points.

(e) Whenever both perimeter landscaping and a buffer are required on the same location on a parcel, the more intensive landscaping requirements apply.

(Ord. No. 2009-017, § 1, 4-21-09)

### Sec. 3-5-395. Landscape plan.

(a) Florida friendly design principles shall be employed in all landscape plans.

(b) All applicants subject to the provisions of this article shall submit a landscape plan as required by the department. The number of copies to be submitted shall be determined by the department.

(c) The landscape plan must be approved prior to the issuance of the associated building permit.

(d) For development requiring site plan approval, the landscape plan shall be submitted with or prior to the application for preliminary approval and must be approved prior to final site plan approval.

(e) Landscape plans shall:

(1) Be signed and sealed by a landscape design professional as defined by F.S. Ch. 481.

(2) Be drawn to scale, including all dimensions, distances and acreage;

(3) Show the square footage and location of the existing and proposed parking spaces, specialized vehicular use areas, access aisles, and driveways;

(4) Indicate all utility and drainage easements, existing and proposed utility lines, buildings, structures, stormwater retention and detention areas, and similar features;

(5) Indicate all abutting public rights-of-way;

(6) Identify the zoning of the subject property and all adjacent parcels;

(7) Indicate the type, location and features of the irrigation system for the required landscaping, including, including times, sensors, zones, and water source as applicable;

(8) Provide an irrigation narrative on the landscape plan stating the features used to provide for the efficient use of water including: sensors which prevent watering during rain or when the ground is saturated, timers to water during optimal watering hours, and placement of vegetation in zones based on watering needs as applicable;

(9) Identify and describe the location and characteristics of all landscape materials to be installed including the square footage and dimensions of all planters and landscape islands;

(10) Show all landscape features, including areas of vegetation required to be preserved, in context with the location of existing and proposed buildings and other improvements on the site;

(11) Indicate in table format the number, species and caliper of trees to be planted or preserved, the gross acreage of the development site and the square footage of paved areas;

(12) Show all measures taken to protect landscape elements from damage caused by vehicles, including curbing, edging, wheel stops, raised planting surfaces, and other protective measures;

(13) Indicate proposed grades if existing vegetation is to be retained within the buffer;

(14) Show all measures to be taken to alter any greenbelts, easements, native shoreline or riparian vegetation which is being used to satisfy the requirements of this article;

(15) Graphically show sight triangles.

(Ord. No. 2009-017, § 1, 4-21-09)

### Sec. 3-5-396. Installation standards.

(a) All landscaping shall be installed in conformance with the landscape plan approved by the department or site plan review final approval.

(b) All landscaping required by this article (except sod) shall be installed by persons or entities properly licensed or qualified pursuant to chapter 3-2, article I, of this Code.

(c) All landscaped areas and buffers shall be protected from vehicles by curbing or wheel stops (minimum five (5) inches in height) when adjacent to pavement. In addition, the department may approve the limited use of durable barriers, such as bollards and boulders.

(d) Tree pruning shall be conducted according to the latest edition of the National Arborist Association standards.

(e) It is unlawful to top any tree regardless of development approval date.

(f) Landscaping shall not interfere with or obstruct existing or proposed overhead or underground utilities.

(g) The property owner may choose to postpone installation of the required landscaping and/or buffering to the rainy season (June thru October). In order to request this one time option, the owner may submit a notarized affidavit to the zoning official stating that they choose to postpone the installation and understand that the landscaping and/or buffering must be installed as specified in the approved landscape plan by a specific date (which must be approved by the zoning official.) no extensions shall be granted. The owner shall be responsible to ensure stabilization of the site until such time as the landscaping is installed. Site stabilization may be accomplished by utilizing seed and mulch or other alternative methods, as may be approved by the zoning official.

(Ord. No. 2009-017, § 1, 4-21-09)

## Sec. 3-5-397. Planting standards.

(a) All plants, except transplanted plants, shall meet the quality standards for Florida No. 1 or better, as provided by *Grades and Standards for Nursery Plants*, Parts I and II, latest edition, State of Florida, Department of Agriculture, Tallahassee.

(b) *Tree size:* Trees used for points must have a minimum diameter (as measured by caliper or forestry diameter tape) of two (2) inches measured at twelve (12) inches above the soil line,

have a minimum height of eight (8) feet at installation, and be on the approved tree list (Exhibit 9).

(c) Palm trees used for points must have a minimum of six (6) feet of clear trunk and be on the approved tree list (Exhibit 9).

(d) Required trees not needed for tree points must:

(1) Have a minimum diameter, measured by caliper or forestry diameter tape, of one (1) inch measured twelve (12) inches above the soil line;

- (2) Have a minimum height of six (6) feet at installation; and
- (3) Be on the approved tree list (Exhibit 9), or be approved by the department.

(e) Tree species mix. When more than ten (10) trees are required, a mix of species shall be planted as provided in the table below. No individual species shall comprise more than sixty (60) percent of the tree species mix. This subsection does not apply to areas of vegetation which have been preserved in the natural state.

TABLE INSET:

Required Number of Trees	Minimum Number of Species
1120	2
2130	3
3140	4
41+	5

(f) Shrubs and hedges for decorative perimeter and interior landscaping must be a minimum twelve (12) inches in height upon planting, be spaced eighteen (18) to thirty-six (36) inches on center determined by the type of plant used, and be of the type that reach at least twenty-four (24) inches on maturity.

(g) Hedges for parking lot screening and buffers must be a minimum eighteen (18) inches in height upon planting, be spaced and maintained in order to form a continuous, solid visual screen within one (1) year from planting, and be of the type that reach at least forty-eight (48) inches on maturity.

(h) Hedges used to replace an existing buffer wall must be at least four (4) feet tall (ten-gallon plant) at installation.

- (i) Vines shall be a minimum of twenty-four (24) inches in height at time of planting.
- (j) Ground cover.

(1) Ground cover shall be planted in such a manner as to present a finished appearance, provide soil stabilization and shall be used with a mulch when the ground is not completely covered by the ground cover at the time of planting. The height and size (gallon) of ground cover do not have to be designated on the landscape plan.

(2) Ground cover not meeting the initial ground cover requirements may be approved by the department if the applicant establishes that the ground cover has water conservation properties.

(k) Grass.

(1) Areas to be planted with grass may be sodded, plugged, sprigged or seeded using drought resistant and low water using strains.

(2) Solid sod must be used in swales and other areas subject to erosion, including retention/detention ponds. Retention/detention pond floors may be seeded.

(3) Seeded areas must be sufficiently seeded to produce a ground cover within thirty (30) days.

(4) No more than twenty-five (25) percent of required landscaping may be planted in turf grass.

(I) All clearing, grading, installation and site preparation shall be done in accordance with this Code.

(m) Existing vegetation used to meet the requirements of this article shall be protected by the measures provided in chapter 3-2, article IX of this Code.

(n) Where overhead power lines exist or are planned, the required canopy trees shall be replaced with trees approved for planting under power lines.

(o) Alterations to landscaping and buffers require the written permission of the department.

(p) Prohibited species. It is unlawful to plant any of the prohibited species identified in Exhibit10. In addition, the prohibited species Australian pine, Brazilian pepper, melaleuca and downy rose myrtle must be removed during site preparation.

(Ord. No. 2009-017, § 1, 4-21-09)

### Sec. 3-5-398. Irrigation.

(a) *[In general.]* All required landscaping and buffers may be served by an automatic irrigation system designed to eliminate the application of water to impervious areas and reduce impacts to existing native vegetation. All required landscaping and buffers shall be irrigated during the establishment period. The applicant may use a temporary irrigation system or hand watering if the applicant can demonstrate that such an approach will provide adequate water for plant survival. All alternative plans of irrigation must be approved by the zoning official.

(b) *Irrigation design standards.* The following standards shall apply to the design installation and maintenance of the irrigation systems:

(1) Automatic rain and soil moisture sensing devices shall be installed with irrigation systems in accordance with industry standards.

- (2) Drip or micro-jet irrigation should be used where possible.
- (3) Low trajectory spray nozzles are encouraged.
- (4) No above ground impact heads are permitted.

(5) Irrigation systems shall use the lowest quality water available which will adequately and safely meet the water needs of the landscaping. Shallow wells approved by Florida Department of Environmental Protection, or water management district may be used as an alternative to potable water.

(6) Planted detention areas and undisturbed natural areas do not require irrigation systems, provided however that the property owner is responsible for providing irrigation for supplemental plants within natural areas and plants within detention areas.

(7) Irrigation systems must be properly maintained and operated in a manner consistent with watering restrictions established by the applicable water management district or local authority, whichever are stricter.

## Sec. 3-5-399. Maintenance.

(a) Plantings, fences, walls, berms and irrigation systems required by this article must be maintained in good repair. Landscaped and buffer areas must be kept free of litter and debris.

(b) Damage. Damage to any of the landscaping or structures required by this article shall be replanted or replaced, as applicable, within ninety (90) days or one (1) growing season, whichever is sooner. Damage to a required fence or wall by a natural disaster shall be repaired within one hundred eighty (180) days.

(c) It is unlawful to violate any of the provisions of this article.

(d) The department may enforce compliance with this article as provided by law and may perform reasonable inspections to insure continued compliance.

(Ord. No. 2009-017, § 1, 4-21-09)

## Sec. 3-5-400. Florida friendly landscaping.

(a) *In general.* Florida friendly landscaping is based on Xeriscaping principles and has as its purpose reducing water consumption while enhancing both the beauty and hardiness of Florida landscaping. By proper design choices, a Florida friendly landscape requires less irrigation and makes better use of the water it does receive. While there is no single fixed Florida friendly landscape, all Florida friendly landscapes share a set of design principles. Proposed landscape plans shall be considered based on the following "Florida friendly" principles.

(b) Design principles.

(1) Design with awareness of sight conditions. Plants should be chosen that are suited to existing site conditions ("the right plant in the right place"). Soil amendments or terrain features can be added to create favorable conditions for plants that would not ordinarily thrive on the site. Native plants have a proven track record of thriving under native conditions with little or no supplemental water. The selection of drought tolerant plants will ensure a drought tolerant landscape even if severe water restrictions are imposed.

(2) Group plants according to their water requirements. Physically concentrating high water usage plants, medium water usage plants and low water usage plants in separate areas will allow the design of high, medium and low water usage zones that provide the plants with the necessary amount of water, without waste.

(3) Take steps to retain moisture in the soil. Use of organic mulches, such as pine straw, instead of inorganic materials, such as crushed rock, will promote the absorption of water by the soil as well as enhance water retention. Shade provided by established canopy trees reduces evaporation and allows a moist local environment. Avoid watering in the heat of the day to minimize evaporation. Amend fast draining sand soils with organics such as peat to enhance water retention. Careful application of irrigation with properly sized, adjusted, and timed irrigation heads will minimize water loss through evaporation, run-off, and excessive saturation.

(4) *Minimize the high maintenance costs of the landscape*. Devoting less area to turf grass, using it as an accent rather than the main emphasis of the landscape, will reduce water use, maintenance costs, pesticide costs and fertilizer costs. Low maintenance trees and shrubs cost less in long term maintenance and resources as well as offering possibilities of more attractive designs.

(c) [Required.] Florida friendly design principles shall be employed in all landscape plans.

## Sec. 3-5-401. Completion bond.

(a) A certificate of occupancy, or release from the completion of the fulfillment of the requirements of this article, may be obtained prior to the completion of the required perimeter landscaping or landscape buffer upon the posting of a cash bond in favor of the county.

(b) The bond shall be equal to one hundred ten (110) percent of the value of the required landscaping and buffer which remains to be completed.

(c) The bond will be forfeited to the county if the remaining required landscaping is not completed within ninety days of the issuance of the certificate of occupancy or release.

(d) The department director may, upon consideration of site specific or other extraordinary circumstances, extend the period of time for completion of the landscaping for not more than an additional one hundred eighty (180) days.

(e) Those property owners who have chosen to postpone the installation of their required landscaping and/or buffering to the rainy season in accordance with subsection 3-5-396(g) shall be exempt from this section of the Code.

(Ord. No. 2009-017, § 1, 4-21-09)

## **DIVISION 2. LANDSCAPING**

### Sec. 3-5-402. When landscaping required; exemptions.

(a) *When applicable.* The requirements of this division shall apply whenever parking area is constructed.

(b) *Parking lot screening.* Parking lot screening shall be required whenever there is construction of paved parking areas abutting a public right-of-way.

(1) Paved parking areas are those areas used for parking, storage or display of vehicles, boats, construction equipment, or similar manufactured items, including those accessory areas, adjacent to parking, used for ingress, egress or traverse.

(2) A parking area is considered paved if it has been improved from the natural state by any hard surface including asphalt, concrete, gravel, marl or shell.

(3) Existing parking areas that are scarified must comply with the provisions of this division.

(c) *Decorative perimeter landscaping.* Decorative perimeter landscaping shall be required wherever property improved by other than a paved parking areas abuts the public right-of-way.

(d) *Ground cover.* Perimeter landscape strips and interior landscape areas required by this division shall be landscaped with grass, ground cover or other approved permeable landscaping treatment in accordance with Florida friendly design principles, provided:

(1) Pavement and sand are not considered approved landscape material.

(2) The use of sand, rock and aggregate are appropriate only as part of a decorative design and is subject to approval by the department.

(3) The use of non-decorative rock and aggregate for drainage purposes is permitted, but does not count toward meeting the requirements of this section.

(e) *Exemptions.* The following improvements do not cause the property to be subject to the requirements of this article:

- (1) Overflow grass parking.
- (2) Existing parking areas that are re-striped.

(3) Public buildings and structures such as those operated by law enforcement, fire and EMS including, but not limited to jails, fire stations and police stations, as determined by the board of county commissioners at their discretion.

(Ord. No. 2009-017, § 1, 4-21-09)

### Sec. 3-5-403. Perimeter landscaping.

(a) In general.

(1) Areas abutting public rights-of-way shall be screened from public rights-of-way by a perimeter landscape strip at least eight (8) feet in width.

(2) For parcels smaller than twenty thousand (20,000) square feet, the perimeter landscape strip width may be reduced to five (5) feet provided there is a minimum of three (3) feet of pervious surface adjacent to the perimeter landscape strip.

(3) For the purposes of this section, ingress and egress lanes act to separate perimeter landscape strips, and the width of ingress and egress lanes is excluded when determining the length of perimeter landscape strips.

(4) One (1) tree is required for every thirty-five (35) feet, or fraction thereof, of perimeter landscape strip. Trees within a section of perimeter landscape strip may be grounded, but the distance between trees in a section shall not exceed fifty (50) feet.

(b) Parking lot screening.

(1) In addition to the requirements of subsection (a) of this section, wherever parking areas abut public rights-of-way, a hedge, or durable non-vegetative barrier, or combination thereof, at least three (3) feet in height shall be placed along the entire length of the perimeter landscape strip, except within sight triangles.

(2) Earthen berms may be used as non-vegetative barriers but shall not exceed a slope ratio of 3:1 (horizontal to vertical) and shall be stabilized with sold, landscaping, or other aesthetic treatment.

(3) Whenever non-vegetative barriers are employed, one (1) shrub or vine shall be planted for every eight (8) linear feet, or fraction thereof. Plantings may be distributed evenly or in clusters.

(4) Shrubs must be a minimum of eighteen (18) inches in height.

(5) Vines shall be planted along the right-of-way side of the non-vegetative barrier unless of sufficient height at the time of planting to be visible from the right-of-way over the top of the non-vegetative barrier.

(c) Decorative perimeter landscaping. In addition to the requirements of subsection (a) of this section, wherever improvements other than a paved parking areas abut the public right-of-way, one (1) shrub or vine at least twelve (12) inches in height shall be planted in the perimeter landscape strip for every eight (8) linear feet, or fraction thereof.

## Sec. 3-5-404. Interior landscaping.

(a) *Purpose.* The purpose of interior landscaping is to lessen the undesired affects of large areas of impervious surface and pavement.

(b) *Minimum requirements.* A minimum of twenty (20) percent of the parking area shall be used for planter islands and landscaped as provided in this section. Perimeter landscape strips and buffer areas may be used to satisfy the requirements of this section to the extent that those areas are located within thirty (30) feet of the closest edge of a parking area.

(c) Configurations of planter islands.

(1) *Location.* Planter islands shall be constructed at the end of each row of parking spaces so that the maximum number of parking spaces between planter islands is fifteen (15).

(2) *Length.* The length of each planter island shall be one (1) car-length for single row parking or two (2) car-lengths for double row parking. In the case of parallel parking, the length of the planter island shall be ten (10) feet.

(3) *Width*.

a. At least seventy-five (75) percent of the required planter islands shall have a minimum width of nine (9) feet of soil between curbs. A minimum of one-half (1/2) of these shall contain at least one (1) canopy tree.

b. The remaining required planter islands shall have a minimum width of five (5) feet of soil between curbs. Only palms or other small root zone trees may be planted in these planter islands.

(4) *[Conformance.]* Configurations of planter islands not in strict conformity with this section may be approved if such configuration is necessary to preserve existing trees provided the minimum area requirement of subsection (b) is met.

- (d) Plantings within planter islands.
  - (1) Each planter island shall contain at least one (1) tree and shrubs or ground cover.

a. Trees not used to meet tree point requirements shall have a minimum diameter, measured by caliper or forestry diameter tape, of one (1) inch at installation.

b. Palms shall be a minimum of ten (10) feet overall height at installation.

(2) Each planter island shall contain a minimum of thirty-five (35) percent of plant coverage based on the quantity and diameter of plants used.

(3) Each planter island shall be landscaped according to the applicable guidelines published by the Florida Department of Agriculture and Consumer Services.

(4) Planter islands shall be landscaped so as not to obstruct traffic sight lines. Shrubs shall be maintained at a maximum height of two (2) feet; trees shall have a minimum of six (6) feet of clear trunk measured from the ground up.

(f) Specialized vehicular use areas. Specialized vehicular use areas are exempt from subsection (c)(1) of this section provided landscaping meeting the other requirements of this section is placed on at least twenty (20) percent of the gross parking area.

# **DIVISION 3. BUFFERING**

## Sec. 3-5-405. When buffering required; exemptions.

(a) *New construction.* The requirements of this division shall apply to all new development.

(b) *Improvements to existing development.* Whenever additions to existing buildings, structures or parking are constructed, the requirements of this division apply if:

(1) The square footage of the addition(s) exceeds fifty (50) percent of the square footage of the existing improvement(s), or

(2) The estimated cost of the addition(s) or improvement(s) exceeds fifty (50) percent of the appraised value of the existing improvement(s).

(c) Exemptions.

(1) Private recreational facilities constructed for use by the residents of a development when the facility is located in the interior of the development.

(2) Public buildings and structures such as those operated by law enforcement, fire and EMS including, but not limited to jails, fire stations and police stations, as determined by the board of county commissioners at their discretion.

(3) Property which is separated from the adjacent property by more than two hundred (200) feet of waterway, right-of-way, greenbelt, drainage facility, or combination thereof.

(4) The front property line of property zoned IL, IOP, IG, CI, or CH but only when the adjacent property is zoned CG, CN, CT, NBR, MU, CI, CH, IG, IL or IOP.

(5) Whenever the application of the strict requirements of this division to the renovation, restoration, reuse or rehabilitation of property developed prior to June 20, 2001, will result in the loss of other site improvements required by this Code, the department may approve a site-specific buffer plan which best meets the purpose and intent of these buffer requirements, provided:

a. All new development occurs within the footprint of the existing improvements and structures, and

b. No new impervious surfaces are created.

(Ord. No. 2009-017, § 1, 4-21-09)

## Sec. 3-5-406. Types of buffering.

(a) *Minimum buffer requirements.* The minimum buffer requirements pursuant to this division shall be as provided in Table 1A, and Exhibits 1 through 9, unless otherwise specifically provided in this section.

(b) *Greenbelts, easements, native shoreline and riparian vegetation.* Greenbelts, easements, native shoreline and riparian vegetation may be used to satisfy the requirements of this division if:

(1) The plant materials and density comply or can be altered to comply with the requirements of this article;

(2) The greenbelt, easement, native shoreline or riparian vegetation can be maintained

in accordance with the provisions of this article; and

(3) The applicant provides written authorization from all persons or entities having an ownership interest in the greenbelt, easement, native shoreline or riparian vegetation for the use and maintenance of the area as a buffer.

(c) On-site plantings outside the required buffer area may be used to satisfy the requirements of this division to the extent that the plantings are located within the distance of three (3) times the width of the required buffer measured from the closest edge of a required buffer location.

(d) Mangroves growing below the mean high water line, or waterward of a seawall or bulkhead, may be used to satisfy the requirements of this division, provided:

(1) Such mangroves are under the ownership and control of the owner of the site being developed, or

(2) The applicant has provided to the department the written consent of the owner of the site on which the mangroves are located, or authorized representative thereof, to the use of the mangroves as an off-site buffer.

(3) The canopies of the mangrove trees extend to no less than six (6) feet above the final graded elevation of the portion of the property on which the buffer is established.

(Ord. No. 2009-017, § 1, 4-21-09)

### Sec. 3-5-407. Special provisions.

(a) *Outdoor storage yards.* The perimeter of all outdoor storage yards shall be buffered with a Type D buffer regardless of the width of any adjacent road or easement. Buffer requirements may be reduced to Type B on interior lot lines abutting IL or CI zoning districts.

(b) *Planned developments.* The buffering required by this division shall be included in all planned developments. The type of buffering required will be determined based on the most intense use permitted within the planned development.

(c) *Special exceptions.* The requirements of this division shall apply to property being used under the authority of a special exception. The type of buffering required will be established as a part of the special exception process.

(d) Land uses for which a buffer type is not specifically provided for in this article shall be buffered at the level most likely to achieve the stated purpose of this division.

(Ord. No. 2009-017, § 1, 4-21-09)

### Sec. 3-5-408. Installation standards.

(a) Buffers areas shall be placed adjacent to the lot lines except:

- (1) Where necessary to avoid obstructions within the sight triangle;
- (2) At approved ingress and egress lanes;

(3) Where easements or covenants regarding the use of the land prohibit such placement; or

(4) Where natural features of the land prevent such placement.

(b) Buffer areas may not be located on any portion of an existing or dedicated right-of-way or roadway easement.

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(c) No development or impervious surface is permitted within the required buffer.

(d) No grading, development, or land-disturbing activities is permitted within the buffer unless approved by the department.

(e) Stormwater detention or treatment areas may not occupy more than fifty (50) percent of the width of the buffer; provided however that this restriction does not apply to parcels less than or equal to ten thousand (10,000) square feet.

(f) Buffer areas may be used for passive recreation, sitting areas, and pedestrian and bicycle paths, provided, in the case of paths, that the width of the buffer is increased by the width of the path wherever the path is located and all other requirements of this division are met.

(g) Buffer areas may be used for utility placement but only if:

(1) No canopy tree will be displaced or damaged by the installation or maintenance of the utility; and

(2) The applicant has produced written evidence that the utility has granted authority for such use;

(h) Buffers must be maintained in compliance with this division.

(i) *Landscaping arrangement.* Plants and trees shall be arranged in a uniform manner as depicted on the approved landscape plan.

(j) *Retention of existing vegetation.* Retaining existing native trees and vegetation within a buffer is encouraged unless a grade change exceeding six (6) inches is required.

(k) All prohibited plant species, identified in Exhibit 10, subsection 3-5-393(f) of this Code, must be removed from the developed site.

(I) Native trees may be used to meet the buffer plant material requirements if properly preserved as provided in chapter 3-2, article IX, of this Code.

(m) Berms must be graded to appear smooth, rounded and natural; slopes must not exceed a slope ratio of 3:1.

(n) Whenever a berm wall is required, the wall shall be located between the berm and the higher intensity use. Berm walls required by this article are exempt from zoning setbacks requirements.

(o) The finished side of the fence or wall required by this division, and at least seventy-five (75) percent of the required plant material, shall face the property zoned or used for less-intensive uses.

(p) Fences and walls shall be:

- (1) A minimum of six (6) feet in height from finished grade;
- (2) Opaque;
- (3) Decorative; and

(4) Be made of one (1) of the following: concrete aggregate, stucco finish (either painted or colored), brick, stone, vinyl or plastic.

(q) Fences and walls constructed of wood or bare concrete block, even if painted, are prohibited.

(r) Chain link fences are prohibited.

(s) Gates are allowed in fences and walls, provided such gates are opaque and remain closed when not in use.

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(t) Walls and fences may be constructed in separate segments provided all other provisions of this division are met.

(u) In order to reduce a "walled in" effect, a hedge maintained at a minimum of four (4) feet in height may be substituted for a required fence or wall when the required buffer faces any of the following roads:

- (1) U.S. 41 (Tamiami Trail).
- (2) S.R. 31.
- (3) S.R. 776.
- (4) C.R. 775.
- (5) C.R. 771.
- (6) U.S. 17.
- (7) C.R. 39 (Toledo Blade Blvd.).
- (8) C.R. 74.
- (9) C.R. 765 (Burnt Store Road).
- (10) C.R. 769 (Kings Highway).
- (11) Veterans Highway.
- (12) Harborview Road.
- (13) Jones Loop Road.
- (14) Tuckers Grade.

(Ord. No. 2009-017, § 1, 4-21-09)

Secs. 3-5-409--3-5-420. Reserved.

## APPENDIX

Table 1A: Table of Buffer Type Requirements (Minimum)

TABLE INSET:

Abutting Zoning ;arrowrt;	RSF, AE, RE	RMF, RMT- T	MHS, MHC	MHP	RVP	OMI, COP	CG, CN, CT, NBR, MU	CI, CH	IL, IOP	IG
Developing Lot's Zoning										
Single-Family Residential (RSF) Agricultural Estates (AE) Residential Estates (RE)	-	-	-	-	-	-	-	-	-	-

Multifamily Residential (RMF) Residential Multifamily/Tourist (RMF-T)	В	-	-	-	-	-	-	-	-	-
Mobile Home Subdivision (MHS) Mobile Home Conventional (MHC)	В	А	-	-	-	-	-	-	-	-
Mobile Home Park (MHP)	В	В	В	-	-	-	-	-	-	-
RV Park (RVP)	С	С	С	С	-	-	-	-	-	-
Office, Medical, Institutional (OMI) Commercial, Office Park (COP)	С	С	С	С	В	-	-	-	-	-
Commercial General (CG) Commercial Neighborhood (CN) Commercial Tourist (CT) Neighborhood Business Residential (NBR) Mixed Use (MU)	С	С	С	С	В	A	-	-	-	-
Commercial Intensive (CI) Commercial Highway (CH)	D	D	D	D	с	В	A	-	-	-
Industrial Light (IL) Industrial Office Park (IOP)	D	D	D	D	С	С	В	А	-	-
Industrial General (IG)	E	E	E	E	D	D	D	В	А	-
Towers (regardless of zoning)	E	E	E	E	E	Е	E	Е	E	-
Essential Services as defined in § 3- 9-74 (regardless of zoning)	A	A	A	A	A	A	A	A	A	-
Active Use Parks (regardless of zoning)	С	С	с	С	С	С	-	-	-	-
Storage Yards (regardless of zoning)	D	D	D	D	D	D	D	D	D	D
Preserve/mitigation lands and passive	-	-	-	-	-	-	-	-	-	-

use parks						
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1. There are no changes in zoning on the eastern or western borders. There is a change in zoning for the properties to the north and south. The southern border will not require buffering since the zoning of the developing parcel is less intensive than the zoning to the south. There is a change in zoning that will require buffering to the north.

2. Go to Table 1A. Table 1A requires a Type C buffer along the northern 237 foot property line.

3. Choose the buffer width from Exhibit 3 (seven-foot wide buffer was chosen for this example).

4. Select the appropriate multiplier and number of plants from Exhibit 3 and insert the numbers into the formula below (the multiplier = 0.8, canopy trees = 5, accent trees = 3, and shrubs = 20 for this example).

(linear feet of property line)/100 feet (multiplier) (# of plants)

(237/100) (0.8)  $(5) = 9.48 = 10^*$  canopy trees (\* All fractions shall be rounded to the next highest whole number.)

(237/100) (0.8) (3) = 5.69 = 6 accent trees

(237/100) (.08) (20) = 37.92 = 38 shrubs

5. Select the appropriate structure from Exhibit 3 (a fence is required for this example).

The 237 linear feet of the buffer, in this example, requires ten (10) canopy trees, six (6) accent trees, thirty-eight (38) shrubs and a fence.

#### EXHIBIT 9 TREE LIST

### Approved (For Tree Points) Canopy Tree Species--Native

Bald Cypress(Taxodium distichum)

Bluejack Oak(Quercus incana)

Coconut Palm(Cocos nucifera)

- Everglades or Paurotis Palm(Acoelorrhaphe wrightii)
- Florida Royal Palm(Roystonea elata)
- Gumbo-Limbo(Bursera simaruba)
- Laurel Oak(Quercus laurifolia)
- Live Oak(Quercus virginiana)
- Loblobby Bay(Gordonia lasianthus)
- Longleaf Pine(Pinus palustris)
- Mahogany (Swietenia mahagoni)
- Pignut Hickory(Carya glabra)
- Pond Cypress(Taxodium ascendens)
- Pop Ash(Fraxinus caroliniana)
- Sabal or Cabbage Palm(Sabal palmetto)
- Sand Pine(Pinus clausa)
- Sea Grape(Coccoloba uvifera)
- South Florida Slash Pine(Pinus elliottii var. densa)
- Southern Magnolia (Magnolia grandiflora)
- Southern Red Maple(Acer rubrum)
- Swamp Tupeolo or Black Gum(Nyssa sylvatica)
- Sweet Acacia (Acacia famesiana)
- Sweetbay (Magnolia virginiana)
- Sweetgum(Liquidambar styraciflua)
- Sycamore(Platanus occidentalis)
- Turkey Oak(Quercus laevis)
- Water Oak(Quercus nigra)

## Approved (For Tree Points) Canopy Tree Species--Non-Native

- Golden Rain Tree(Koelreuteria formosana)
- Royal Poinciana (Delonix regia)
- Tree of Gold(*Tabebuia argentea*)
- Yellow Poinciana (Peltophorum pterocarpum)
- Washington or Petticoat Palm (Washingtonia robusta or Washingtonia filifera)

### Other Canopy Trees Which May Be Used, But Not for Tree Points

- Jacaranda (Jacaranda acutifolia)
- Queen Palm(Syagrus romanzoffiana)
- American Holly(*llex opaca*)

Baycedar(Suriana maritima) Black Mangrove(Avicennia germinans) Blolly(Torrubia obtusa; Torrubia longifolia) Button Bush (Cephalanthus occidentalis) Buttonwood(Conocarpus erectus) Catclaw Blackbeard(Pithecellobium unguis-cati) Chapman Oak(Quercus chapmanii) Cherry Laurel (Prunus caroliniana) Coastal Plain Willow (Salix caroliniana) Dahoon Holly(Ilex cassine) East Palatka Holly (*llex opaca "East Palatka"*) Florida Elm(Ulmus americana var. floridana) Florida Fiddlewood(Citharexylum fruticosum) Hercules-Club or Toothache-Tree(Zanthoxylum clava-herculis) Lime Prickly-Ash(Zanthoxylum fagara) Myrtle Oak(Quercus myrtifolia) Red Bay(Persea borbonia) Red Mangrove (Rhizophora mangle) Red Mulberry (Morus rubra) Sand Live Oak(Quercus geminata) Sea Grape(Coccoloba uvifera) Southern Red Cedar(Juniperus virginiana) Stoppers(Eugenia spp.) Sugarberry or Hackberry (Celtis laevigata) Walter Viburnum (Viburnum obovatum) Water Oak(Quercus nigra) Wax Myrtle(Myrica cerifera)

- White Mangrove(Languncularia racemosa)
- Yaupon Holly(Ilex vomitoria)

Approved (for tree points) Understory Tree Species--Non-Native

Black Olive (Bucida buceras)

- Bottlebrush(Callistemon spp.)
- Chinese Elm(Ulmus parvifolia)
- Crape Myrtle(Lagerstroemia indica)
- Jerusalem Thorn (Parkinsonia aculeata)

Loquat*(Eriobotrya japonica)* Royal Poinciana *(Delonix regia)* Silver Dollar Eucalyptus*(Eucalyptus cinerea)* 

Other Understory Trees Which May Be Used, But Not for Tree Points Ligustrum (Ligustrum spp.)

### EXHIBIT 10 PROHIBITED PLANTS

### Trees

Australian pine (Casuarina glauca and Casuarina equisetifolia)

Banyan Tree(Ficus benghalensis)

Brazilian pepper(Schinus terebinthifolius)

Catclaw mimosa (Mimosa pigra)

Carrotwood (Cupania anacardioides, Cupaniopsis anacardioides)

Chinese tallow (Sapium sebiferum)

Cuban laurel (Ficus nitida)

Eucalyptus (Eucalyptus spp., except E. cinerea)

Indian rosewood(Dalbergia sissoo)

Java plum (Syzygium jambolana, Syzygium cumini)

Lead tree(Leucaena leucocephala)

Melaleuca (Melaleuca quinquenervia)

Rubber tree (Ficus decora)

Silk oak(Grevillea robusta)

Weeping fig(Ficus benjamina)

### Shrubs

Beach naupaka(*Scaevola sericea*) Downy rose myrtle(*Rhodomyrtus tomentosa*) Surinam Cherry(*Eugenia michelii, Eugenia uniflora*)

### Vines

Air potato (Dioscorea bulbifera)

Old world climbing fern(Lygodium microphyllum)

Rosary pea(Abrus precatorius)

Wingerd yam(Dioscorea alata)

## Grasses

Cogon grass(Imperata cylindrica)

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