

CHAPTER 900. DEVELOPMENT STANDARDS

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. Landscaping includes trees, shrubs, and groundcover.

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
<ul style="list-style-type: none"> Alteration of vehicular use area other than restriping, resealing, or resurfacing. 	<ul style="list-style-type: none"> Expanded area shall provide the required minimum landscape area as required by Table 905.2.C.
<ul style="list-style-type: none"> Existing structure size is expanded by up to twenty-five (25) percent. 	<ul style="list-style-type: none"> Building perimeter landscaping shall be required adjacent to any addition, where feasible.
<ul style="list-style-type: none"> Structure size is expanded by more than twenty-five (25) percent. 	<ul style="list-style-type: none"> Building perimeter landscaping shall be installed adjacent to the entire building, where feasible.
<ul style="list-style-type: none"> Value of work associated with redeveloped, remodeled, or renovated structure is between twenty-five (25) and fifty (50) percent of the appraised value. 	<ul style="list-style-type: none"> Buffers shall be installed: <ul style="list-style-type: none"> Along roadways. Adjacent to residential properties. Building perimeter landscaping adjacent to addition.
<ul style="list-style-type: none"> Value of work is between fifty-one (51) and seventy-five (75) percent of the appraised value. 	<ul style="list-style-type: none"> All property buffers shall be installed. Building perimeter landscaping adjacent to addition, where feasible.
<ul style="list-style-type: none"> Value of work exceeds seventy-five (75) percent of the appraised value. 	<ul style="list-style-type: none"> All property buffers. All building perimeter landscaping, where possible. All vehicular use landscaping.

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) 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.

- (3) 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 (SWFMD) 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. General Standards

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, 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.
 - (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.

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 (6) 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.

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 (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 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.

- 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:

Size of Lot (Square Feet)	Minimum Number of Trees
Less than 3,500	1
3,500-6,000	2
6,001-7,500	3
7,501-9,500	4
9,501-16,000	6
Over 16,000 to Under 1 Acre	8
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

This requirement does not apply to lots of record existing on or before February 26, 2002.

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	<p>Shade trees, shrubs, dwarf shrubs, and ground cover plants shall be used in terminal islands.</p> <p>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.</p>
Alternative Planting Beds	<p>Planting beds may be used to satisfy ten (10) percent of the landscaping requirement.</p> <p>Planting beds may be in addition to the required landscape islands.</p> <p>Planting beds must be five (5) feet wide (minimum); 150 square feet.</p> <p>Shade trees shall be planted with a minimum of one (1) tree per thirty (30) linear feet of planting bed. The remainder of the planting bed shall be planted with shrubs, dwarf shrubs, and ground cover plants.</p> <p>When planting beds are used, the terminal island may be reduced to a minimum width of five (5) feet measured inside the curb.</p> <p>Pedestrian walkways shall be provided through or adjacent to planting beds to provide access to parking areas.</p> <p>These walkways may be included in meeting the ten (10) percent minimum landscaping if the planting bed shelters the walkway along its entire length.</p>
General Requirements	<p>Landscape areas shall be protected from vehicular encroachment.</p> <p>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.</p> <p>The amount of required interior landscaping shall be shown on all preliminary development plans and landscape plans.</p>
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 landscapings 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, perimeter landscaping is required on all 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.

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.

**Applies to major County roads and Type 1 subdivision collectors 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	<p>Ten (10) feet wide.</p> <p>Single row of trees; maximum sixty (60) feet on center.</p> <p>Continuous row of evergreen shrubs.</p>
<ul style="list-style-type: none"> • Type B 	<p>Fifteen (15) feet wide</p> <p>Single row of trees; maximum sixty (60) feet on center.</p> <p>Visual screen designed to be eighty (80) percent opaque within one (1) year.</p> <p>Screening a minimum of six (6) feet in height at the time of the installation.</p> <p>Screening shall include one (1) or more of the following:</p> <ul style="list-style-type: none"> • Opaque Fence • Wall • Berm • Hedge <p>Wooden fences are prohibited.</p> <p>Fences and walls shall not exceed eight (8) feet in height and may be placed adjacent to the property line.</p> <p>Shrubs used to provide a visual screen shall be placed a maximum of five (5) feet on center.</p>

<p>Type C</p>	<p>Twenty (20) feet wide.</p> <p>Two (2) staggered rows of trees with a maximum spacing of sixty (60) feet on center per row.</p> <p>Visual screen designed to be eighty (80) percent opaque within one (1) year.</p> <p>Screening a minimum of six (6) feet in height at the time of installation.</p> <p>Screening shall include one (1) or more of the following:</p> <ul style="list-style-type: none"> • Opaque Fence • Wall • Berm • Hedge <p>Wooden fences are prohibited.</p> <p>Fences and walls shall not exceed eight (8) feet in height and may be placed adjacent to the property line.</p> <p>Shrubs used to provide a visual screen shall be placed a maximum five (5) feet on center.</p>								
<p>Type D Nonlocal Roadway</p>	<p>Landscape buffer shall be required:</p> <ul style="list-style-type: none"> • 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. <p>The minimum width will vary according to the ultimate width of abutting right-of-way and project size as follows:</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;"><u>Right-of-Way Width</u></th> <th style="text-align: left;"><u>Buffer Required</u></th> </tr> </thead> <tbody> <tr> <td>0-99 Feet</td> <td>10 Feet</td> </tr> <tr> <td>100 or More</td> <td>15 Feet</td> </tr> <tr> <td>15 Acres or Larger Project Regardless of Right-of-Way Width</td> <td>20 Feet</td> </tr> </tbody> </table> <p>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.</p> <p>Shade and understory trees shall be planted an average of thirty (30) feet apart. Minimum spacing twenty (20) feet; maximum forty-five (45) feet.</p>	<u>Right-of-Way Width</u>	<u>Buffer Required</u>	0-99 Feet	10 Feet	100 or More	15 Feet	15 Acres or Larger Project Regardless of Right-of-Way Width	20 Feet
<u>Right-of-Way Width</u>	<u>Buffer Required</u>								
0-99 Feet	10 Feet								
100 or More	15 Feet								
15 Acres or Larger Project Regardless of Right-of-Way Width	20 Feet								

	<p>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.</p> <p>Where a vehicular use area abuts the right-of-way buffer, the buffer shall also contain an earthen berm a minimum 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.</p> <p>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.</p> <p>Berm may be undulating to allow tree placement and promote visual interest.</p> <p>Berm shall not be required within clear-sight triangle area.</p> <p>No more than thirty (30) percent of the required landscape area shall be grassed.</p> <p>Wooden fences shall be prohibited</p> <p>Where a wall is used:</p> <ul style="list-style-type: none">• 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.• Any sidewalk located adjacent to the said masonry or other ornamental wall shall be separated from the masonry or other ornamental wall by a single row of trees spaced thirty (30) feet on center.• The trees shall be planted so as to provide shade along the sidewalk. Vines and ground cover may also be incorporated into the landscaping. It is not the intent of this requirement to obscure from view decorative elements, such as emblems, tile molding, and wrought iron.
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<p>Type E Industrial to Industrial</p>	<p>Five (5) foot wide buffer.</p> <p>Shade trees planted a maximum of sixty (60) feet on center. No substitution of palms is permitted.</p> <p>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.</p> <p>A continuous row of evergreen shrubs.</p> <p>The remainder shall be landscaped with other plantings and/or drought-tolerant sod.</p>
<p>Type F: Controlled Access Roadways</p>	<p>Twenty (20) feet adjacent to any controlled access roadway.</p> <p>In residential districts:</p> <ul style="list-style-type: none"> • 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. <p>In all other districts:</p> <ul style="list-style-type: none"> • 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.

	<ul style="list-style-type: none"> • 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. <p>Required Landscaping:</p> <ul style="list-style-type: none"> • 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. <p>It is not the intent to obscure from view decorative items, such as emblems, tile molding, and wrought iron.</p> <p>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.</p>
Scenic Highways	<p>Areas adjacent to designated scenic highways shall provide a visual screen consisting of native vegetation and double rows of trees or stands of trees.</p> <p>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.</p> <p>In no case shall the plantings be less than generally required for a Type H buffer.</p>
Type G: Service Stations and Convenience Stores with Gas Pumps	<p>Twenty (20) feet in width between the right-of-way and project.</p> <ul style="list-style-type: none"> • Minimum twenty-four (24) inch high earthen berm. • Maximum 3:1 slope. • Entire length of buffer. • Berm may undulate to allow tree spacing and provide visual interest.

	<ul style="list-style-type: none"> • 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. • Height shall be measured at finished grade of vehicular use area. • Berm shall not be required within the clear-sight triangle areas for any driveways or pedestrian walkways. <p>Shade trees shall be planted in staggered, double rows with an average of thirty (30) feet on center.</p>
<p>Type H: Vehicle Dealership/Residential</p>	<p>Seventy-five (75) foot wide buffer.</p> <p>The first thirty (30) feet adjacent to the exterior of the site shall be planted with trees, shrubs, ornamentals, and ground cover.</p> <p>The interior forty-five (45) feet shall also be planted with turf grass, ornamentals, shrubs, trees, ground cover, or any combination thereof.</p> <p>Only stormwater features may be installed within the interior forty-five (45) feet of the buffer.</p> <p>Trees shall be planted a maximum of sixty (60) feet on center.</p> <p>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.</p>

- b. 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.

- c. 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.
 - (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 SFWMD 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-of-way as approved through the applicable development review process, shall be maintained by an entity other than the County.
- 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. Ongoing 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.