

# GROWTH AND RESOURCE MANAGEMENT DEPARTMENT PLANNING AND DEVELOPMENT SERVICES DIVISION

123 West Indiana Avenue, DeLand, Florida 32720 (386) 736-5959

**TO:** Planning and Land Development Regulation Commission

**DATE:** November 18, 2021

**SUBJECT:** Ordinance 2022-01. Amending Chapter 72, Article II of the Code of

Ordinances, Division 7 Establishment of Classifications, Section 72-241 Classifications and repealing Division 8 Supplementary Regulations, Section 72-284 Landscaping Requirements and replacing with a new Section 72-284 Minimum Landscaping

Requirements

### I. ORDINANCE SUMMARY

Pursuant to 2015 County Council direction to streamline the Code, staff drafted a full revision to the landscaping requirements of the Zoning Ordinance, to clarify and update existing requirements encouraging the preservation of existing trees and vegetation, Florida-friendly best management practices, "right plant, right place" principles, and to protect and preserve Volusia County's water resources. In addition, the product of this ordinance revision addresses an update to specific zoning classification setbacks within Section 72-241.

### II. BACKGROUND/OVERVIEW

The County Council directed staff to improve customer service by streamlining procedural requirements and updating unused or antiquated code provisions. In an effort to meet the intent of Council direction, staff thoroughly researched surrounding municipalities and other progressive landscape codes to update the existing landscaping requirements in accordance with innovative practices, similar to others utilized in northeast-central Florida and the southeastern United States.

The purpose and intent of the Zoning Ordinance amendments are to encourage the preservation of existing trees and vegetation; to identify landscape standards and plant classifications; to reduce radiant heat from surfaces and conserve energy; to provide shade; to reduce wind and air turbulence; to minimize potential nuisances such as the transmission of noise, dust, odor, litter and glare of automobile headlights; to provide visual buffering and for the separation of spaces; to enhance the beautification of the county; to reduce the amount of impervious surface and stormwater runoff; to safeguard and enhance property values and protect public and private investment; and to protect the public health, safety, and general welfare.

### III. SUMMARY OF CHANGES

The ordinance revision clarifies and updates existing landscaping requirements encouraging the preservation of existing trees and vegetation, includes Florida-friendly best management practices and "right plant, right place" principles, codifies existing practices, and establishes code provisions to protect and preserve Volusia County's water resources.

The following is a comprehensive list of clarifications and new language within the revised landscaping requirements, meeting the aforementioned provisions, while providing flexibility for the customer when developing constrained sites.

## Landscape Buffer Table

- A complete revision to the landscape buffer table, including a decrease in the number of species required per 100 lineal feet, to allow space for the required plants to fully mature in proper form.
- The landscape buffer width, quantities, and type of plant materials are determined within Tables I, II, and III. In order to prevent the planting of monocultures, Table IV determines the appropriate mix of species.
- Step-by-step directions and an example are also provided to assist customers and staff during the design and review of landscape plans.
- Staff is proposing general increases in landscape buffer widths to require more green space between non-residential and residential uses to help mitigate the visual impacts of non-residential development and enhance compatibility. In addition, staff recognizes that density, lot size, and building scale can create visual impacts between residential uses. Therefore, staff finds increased landscape buffers are needed between residential uses to maximize visual compatibility protection between varying residential intensities.
- In no case shall the required landscape buffer be less than 25 feet between a nonresidential and residential use.
- Increased landscape buffer widths, from five feet to ten feet, for abutting commercial and industrial zoning classifications. This increase accommodates the appropriate space needed to allow the required plantings to fully mature in proper form, and reduce degradation of building foundations by structural roots and building façades by limb and trunk growth.
- Decreased landscape buffer widths, from 30 feet to 25 feet, for commercial and industrial zoning classifications abutting single-family, multifamily, and

mobile home zoning classifications. This decrease provides usable space to accommodate the commercial infrastructure improvements and can assist in infill redevelopment.

 The addition of the conservation zoning classification to the landscape buffer table.

## Plant Type and Location

- New plantings do not have to be equally spaced, but may be grouped to provide areas of visibility from the proposed site to the adjoining road.
- Allows the use of large grasses and wildflowers as required plant material.
- Landscape buffer widths may be increased on specific sites to include existing native trees and their associated driplines. These trees will count toward the required plantings within the buffer.
- New plantings and invasive irrigation may not be within the driplines of existing specimen and historic trees to remain on-site.
- Only mid-story trees are permitted within landscape islands and row ends. Canopy trees can be utilized if these interior landscape areas are equal to or exceed 500 square feet in area. Shade trees required per the Nonresidential Development Design Standards (Section 72-303), may be mid-story trees.
- At least 50 percent of the required landscaping within each planting group canopy, mid-story, understory trees and shrubs, and groundcovers, large grasses and wildflowers, must be native drought-tolerant species.
- At least 25-percent of the project area outside of any landscape buffer, offstreet parking areas, and stormwater management areas, must be planted and maintained with drought-tolerant ground covers.

### Site Screening

- When screens are required, they must include a maintenance gate every 100 lineal feet or half the length of the screen, whichever is less, to provide access to the planted landscape materials.
- Clarifies required screening for solid waste containers.
- Specific screen types have been clarified to buffer incompatible uses.
   Included in these modifications is the requirement for a three-foot screen in property street frontages adjacent to parking areas.

## Landscape Plan Specific

- Clarifies the items required on a submitted landscape plan.
- All landscape row ends and islands must be depicted on the site plan with dimensions measured from inside of curb to inside of curb and total area.
- o Landscape island minimum sizes are now the same as landscape row ends.
- A minimum five-foot-wide foundation planting area is required adjacent to all building façades designed for public view or access.
- Modifies the requirement for a landscape island from every 15 to ten contiguous parking spaces.
- Greater buffer widths can be required by the Zoning Enforcement Official (ZEO) or County Council due to specific site conditions in conjunction with the existing character of the surrounding area.
- Buffer widths, quantity, and type of plantings may be determined by the ZEO or County Council, for special exception uses not listed in the provided tables.
- An affidavit of completion, verifying that all landscaping and irrigation has been installed according to the approved plan(s), is required.

### Other

- Specifically lists the different areas of the code, which provide additional or different landscape requirements.
- Removal of all vegetation categorized as an invasive exotic in the Florida Exotic Pest Plant Council's List of Invasive Species and debris is required in all landscape buffers. Continual maintenance of invasive species and debris is also required.
- The Zoning Enforcement Official (ZEO) has the ability to waive/modify landscaping requirements or approve alternatives:
  - o In order to facilitate the redevelopment of existing improved sites, or where environmental constraints (i.e. preservation of existing wetlands, trees, or topography) limit the available area to reasonably develop, or if literal interpretation creates a hardship.

- Where canopy trees are required in a coastal environment, but appropriate salt-tolerant species are not available, the required canopy trees can be substituted for salt-tolerant mid-story trees at a ratio of 2:1.
- Allows alternative non-mountable curbing materials along the edge of landscape areas.
- Allows alternative designs utilizing decorative architectural planters in lieu
  of interior landscaped areas, in order to facilitate the redevelopment of
  existing sites or where environmental constraints limit the available area to
  develop.
- The reduction or elimination of foundation plantings in order to facilitate the redevelopment of existing sites or where environmental constraints limit the available area to develop.
- When a temporary irrigation system primarily serves native drought-tolerant species, it will remain for a minimum of two years. Once the native landscape materials have been firmly established, the temporary irrigation system may be removed.
- Allow the substitution of understory trees or shrubs for required canopy and/or mid-story trees when overhead electrical utilities impact the ability to plant.

The main purpose of a landscape buffer is to provide visual buffering for the separation of uses. During review of landscape buffer width requirements, it was noted that in some zoning classifications, this buffer requirement and associated building setback to separate incompatible uses was non-existent. Therefore, proposed changes to Section 72-284 are for clarification and to provide a separation from incompatible uses.

The following table provides a comparison of the existing and proposed language within the affected zoning classifications:

Zoning Classifications	Existing Regulations	Proposed Regulations
Conservation (C)	No dimensional requirements	Language added to clarify that landscape buffer requirements apply
B-1, B-2, B-4, B-5, B-6, and B-9	35-foot side and rear yard setback abutting agricultural, residential or mobile home zoned property	Conservation zoned property added to 35-foot side and rear yard setback requirements

	<u> </u>	
B-3	100-foot side and rear yard setback abutting agricultural, residential, or mobile home zoned property	Conservation zoned property added to 100-foot side and rear yard setback requirements
B-7	35-foot side yard setback abutting residential or mobile home zoned property	Agricultural and Conservation zoned property added to 35-foot side yard setback requirements
	35-foot rear yard setback abutting agricultural, residential or mobile home zoned property	Conservation zoned property added to 35-foot rear yard setback requirements
B-8	35-foot side yard setback abutting residential or mobile home zoned property	Agricultural and Conservation zoned property added to 35-foot side yard setback requirements
	35-foot rear yard setback abutting agricultural, residential or mobile home zoned property	Conservation zoned property added to 35-foot rear yard setback requirements
I-1, I-2 and I-3	35-foot side and rear yard setback abutting agricultural, residential or mobile home zoned property	Conservation zoned property added to 35-foot side and rear yard setback requirements
1-4	35-foot side and rear yard setback abutting agricultural, residential or mobile home zoned property	Conservation zoned property added to 35-foot side and rear yard setback requirements

The adoption of the revised landscaping requirements and associated revisions to certain zoning classifications in Section 72-241 streamlines procedural requirements and updates unused or antiquated ordinance provisions, as directed by County Council. More specifically, it includes innovative practices that enhance the environment while providing flexibility for the customer when developing constrained sites.

## IV. STAFF RECOMMENDATIONS

Staff recommends that the commission find Ordinance 2022-01 consistent with the Comprehensive Plan and forward it to the County Council for final action with a recommendation of approval.

## V. ATTACHMENTS

- Ordinance 2022-01
- Exhibit A Section 72-241
- Exhibit B Section 72-284

2

1

# 3

20

26 27 28

29 30 31

32 33

> 34 35 36

37 38

> 39 40

41 42

43 44

45 46

### **ORDINANCE 2022-1**

AN ORDINANCE OF THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, AMENDING THE CODE OF ORDINANCES OF THE COUNTY OF VOLUSIA RELATING LANDSCAPING. BUFFERING. AND REQUIREMENTS; AMENDING SECTION 72-241 MINIMUM REQUIRED SETBACKS WHEN ADJACENT TO CERTAIN ZONING CLASSIFICATIONS; REPEALING SECTION 72-284 LANDSCAPING REQUIREMENTS AND REPLACING WITH A NEW SECTION 72-284 MINIMUM LANDSCAPING REQUIREMENTS: **PROVIDING** FOR REQUIRED LANDSCAPING AND A PLANT MATERIAL LIST: PROVIDING FOR LANDSCAPE BUFFER REQUIREMENTS TABLES; PROVIDING FOR\* SCREENING AND STANDARDS: PROVIDING FOR REQUIREMENTS IN A SEPARATE PLATTED TRACT IF CERTAIN CONDITIONS MET; PROVIDING FOR MODIFICATION ALTERNATE LANDSCAPE REQUIREMENTS; PROVIDING FOR PROHIBITIONS IN THE LANDSCAPE BUFFER; PROVIDING FOR LANDSCAPING REQUIREMENTS FOR PARKING AREAS; OFF-STREET PROVIDING FOUNDATION REQUIREMENTS FOR PLANTINGS: PROVIDING FOR REFERENCE TO OTHER LANDSCAPING REQUIREMENTS OF THE CODE; PROVIDING FOR IRRIGATION LANDSCAPING REQUIREMENTS: PROVIDING FOR REQUIREMENTS IN A LANDSCAPE PLAN; PROVIDING FOR LANDSCAPE INSTALLATION STANDARDS: **PROVIDING** FOR REQUIRED MAINTENANCE: USE OF REQUIRING DROUGHT-RESISTANCE PLANTS: PROVIDING FOR SCREENING STANDARDS FOR SOLID WASTE CONTAINERS; PROVIDING FOR STANDARDS IN OR NEAR OVERHEAD ELECTRICAL UTILITIES: PROVIDING FOR PROVIDING FOR SEVERABILITY: PROVIDING FOR CONFLICTING ORDINANCES: AUTHORIZING INCLUSION IN CODE: AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, AS FOLLOWS:

(Words in strike through type are deletions; words in underscore type are additions.)

1 2	SECTION I: Section 72-241 of Chapter 72 of the Code of Ordinances of the County of
3	Volusia is hereby amended as provided in <b>EXHIBIT A</b> , attached hereto and incorporated
4	herein.
5	SECTION II: Section 72-284 of Chapter 72 of the Code of Ordinances of the County of
6	Volusia is hereby repealed in its entirety and replaced with a new Section 72-284 Minimum
7	Landscaping Requirements as provided in <b>EXHIBIT B</b> , attached hereto and incorporated
8	herein.
9	SECTION III: SEVERABILITY - Should any word, phrase, sentence, subsection of
10	section be held by a court of competent jurisdiction to be illegal, void, unenforceable, o
11	unconstitutional, then that word, phrase, sentence, subsection or section so held shall be
12	severed from this ordinance and all other words, phrases, sentences, subsections, or sections
13	shall remain in full force and effect.
14	SECTION IV: CONFLICTING ORDINANCES - All ordinances, or part thereof, in conflic
15	herewith are, to the extent of such conflict, repealed.
16	SECTION V: AUTHORIZING INCLUSION IN CODE. The provisions of this ordinance
17	shall be included and incorporated into the Code of Ordinances of the County of Volusia, as
18	additions or amendments thereto, and shall be appropriately renumbered to conform to the
19	uniform numbering system of the Code.
20	SECTION VI: EFFECTIVE DATE. This ordinance shall take effect upor
21	electronic filing of a certified copy with the Department of State.
22 23 24 25	ADOPTED BY THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, IN OPEN MEETING DULY ASSEMBLED IN THE COUNTY COUNCIL CHAMBERS AT THE THOMAS C KELLY ADMINISTRATION CENTER, 123 WEST INDIANA AVENUE, DELAND, FLORIDA THIS DAY OF A.D., 2022.

26 27

1 2	ATTEST:	COUNTY COUNCIL VOLUSIA COUNTY, FLORIDA
3	ATTEOT.	VOLOGIA GOGIVI I, I LONIDA
4		
5		
6	Coorea Doolstonwold	Leffrey C. Drewer
7 8	George Recktenwald County Manager	Jeffrey S. Brower County Chair
9	County Manager	County Chair
10		
11		
12		
13		
14 15		
16		
17		
18		
19		
20 21 22 23 24		
21 22		
23		
24		
	<b>X</b> *	
	OPAY.	

### **EXHIBIT "A"**

Sec. 72-241. - Classifications. C CONSERVATION CLASSIFICATION . . . Dimensional requirements: None, unless landscape buffer requirements apply. B-1 GENERAL OFFICE, HOSPITAL-MEDICAL **CLASSIFICATION** Dimensional requirements: Minimum project size: Area: One acre. Width: 150 feet. Minimum yard size: Front yard: 35 feet. Rear yard: 20 feet, unless abutting an agricultural, conservation, residential or mobile home zoned property, then 35 feet. Side yard: Ten feet, unless abutting an agricultural, conservation, residential or mobile home zoned property, then 35 feet. **B-2 NEIGHBORHOOD COMMERCIAL** CLASSIFICATION Dimensional requirements: Minimum project size:

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Front yard: 35 feet.

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Side yard: Ten feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 81-39, § XXIII, 11-19-81; Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

. . .

### **B-3 SHOPPING CENTER CLASSIFICATION**

...

Dimensional requirements:

Minimum project size:

Area: Ten acres. (Ord. No. 90-34, § 32, 9-27-90)

Width: 300 feet. (Ord. No. 90-34, § 32, 9-27-90)

Minimum lot size for out-parcels within a project:

Area: 15,000 square feet. (Ord. No. 92-6, § XXXV, 6-4-92)

Width: 75 feet. (Ord. No. 92-6, § XXXV, 6-4-92)

Minimum yard size for project, excluding out-parcels: (Ord. No. 92-6, § XXXV, 6-4-92)

Front yard: 100 feet.

Rear yard: 50 feet.

Side yard: 50 feet. (Ord. No. 81-39, § XXIV, 11-19-81; Ord. No. 98-25, § VII, 12-17-98)

Waterfront yard: 50 feet. (Ord. No. 82-20, § XIII, 12-9-82; Ord. No. 90-34, § 32, 9-27-90; Ord. No. 94-4, § XXXVII, 5-5-94)

(The minimum required side or rear yards shall be 100 feet where they abut an agricultural, <u>conservation</u>, residential or mobile home zoned property.) (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size for out-parcels within a project:

Front yard: 35 feet.

Side and rear yard:

Ten feet, if abutting the B-3 classified project;

50 feet if abutting nonresidentially classified land outside the B-3 project; and

100 feet if abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

. . .

## B-4 GENERAL COMMERCIAL CLASSIFICATION

. . .

Dimensional requirements:

Minimum lot size:

Area: One acre. (Ord. No. 90-34, § 33, 9-27-90; Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 90-34, § 33, 9-27-90; Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 35 feet.

Side and rear yard: Ten feet unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98)

. . .

**B-5 HEAVY COMMERCIAL CLASSIFICATION** 

...

Dimensional requirements:

Minimum lot size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 35 feet.

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Side yard: Ten feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

٠..

# B-6 HIGHWAY INTERCHANGE COMMERCIAL CLASSIFICATION

٠..

Dimensional requirements:

Minimum lot size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 40 feet.

Rear yard: 25 feet unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Side yard: Ten feet unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

. . .

### **B-7 COMMERCIAL MARINA CLASSIFICATION**

. . .

Dimensional requirements:

Minimum lot size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 35 feet.

Rear yard: Ten feet, unless abutting any <u>agricultural, conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Side yard: Ten feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

..

### **B-8 TOURIST CLASSIFICATION**

. . .

Dimensional requirements:

(a) Nonresidential structures and multifamily dwellings:

Minimum lot size:

Area: 20,000 square feet.

Width: 100 feet.

Maximum density:

Hotels or other tourist accommodations: 20 dwelling units per net acre of land.

Multifamily dwelling units: 20 dwelling units per net acre of land.

Minimum floor area (multifamily only):

Studio or efficiency: 480 square feet.

One or more bedrooms: 575 square feet.

Minimum yard size:

Front yard: 25 feet.

Side yard: 15 feet, unless abutting any <u>agricultural</u>, <u>conservation</u>, residential or mobile home zoned property, then 35 feet.

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet.

. . .

### **B-9 GENERAL OFFICE CLASSIFICATION**

. . .

Dimensional requirements:

Minimum project size:

Area: 20,000 square feet.

Width: 100 feet.

Minimum yard size:

Front yard: 35 feet.

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98)

Side yard: Ten feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98)

. . .

### I-1 LIGHT INDUSTRIAL CLASSIFICATION

. . .

Dimensional requirements:

Minimum lot size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 30 feet.

Side yard: Ten feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 81-39, § XXVII, 11-19-81; Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

...

### I-2 HEAVY INDUSTRIAL CLASSIFICATION

...

Dimensional requirements:

Minimum lot size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 30 feet.

Side yard: Ten feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 81-39, § XXVIII, 11-19-81; Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 2004-20, § V, 12-16-04)

. . .

# I-3 WATERFRONT INDUSTRIAL CLASSIFICATION

. . .

Dimensional requirements:

Minimum lot size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 30 feet.

Side yard: Ten feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 81-39, § XXXI, 11-19-81; Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

### I-4 INDUSTRIAL PARK CLASSIFICATION

. . .

Dimensional requirements:

Minimum park size: Ten acres.

Minimum lot size:

Area: One acre. (Ord. No. 2004-20, § V, 12-16-04)

Width: 150 feet. (Ord. No. 2004-20, § V, 12-16-04)

Minimum yard size:

Front yard: 30 feet.

Side yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

Rear yard: 20 feet, unless abutting an agricultural, <u>conservation</u>, residential or mobile home zoned property, then 35 feet. (Ord. No. 81-39, § XXXIII, 11-19-81; Ord. No. 98-25, § VII, 12-17-98; Ord. No. 2004-20, § V, 12-16-04)

. . .

### **EXHIBIT "B"**

Sec. 72-284. – Minimum landscaping requirements.

The purpose and intent of this section is to encourage the preservation of existing trees and vegetation; to identify landscape standards and plant classifications; to reduce radiant heat from surfaces and conserve energy; to provide shade; to reduce wind and air turbulence; to minimize potential nuisances such as the transmission of noise, dust, odor, litter and glare of automobile headlights; to provide visual buffering and for the separation of spaces; to enhance the beautification of the county; to reduce the amount of impervious surface and stormwater runoff; to safeguard and enhance property values and protect public and private investment; and to protect the public health, safety and general welfare.

The following regulations shall apply where landscaped buffer or off-street parking areas are required:

- (1) All plant materials shall be Florida No. 1 or better grade, according to the current Grades and Standards for Nursery Plants, State of Florida, Florida Department of Agriculture and Consumer Services, and selected from the "Plant Material List" available from the growth and resource management department. All plant materials shall be chosen, spaced and planted according to the current Grades and Standards for Nursery Plants, Florida-friendly best management practices, the Volusia County Environmental Management Division's Habitat Planting Guidelines, and "right plant, right place" principles, to protect and preserve Volusia County's water resources, at least 50 percent of the required landscaping specified in subsections a and b, shall individually be of a native drought tolerant species chosen from the plant material list. The Zoning Enforcement Official (ZEO) has the authority to allow existing native vegetation to provide the necessary visual screening. Existing upland native vegetation shall be incorporated, where appropriate, into off-street parking areas and landscape buffers of a proposed development.
  - a. Specific Requirements:
    - 1. Canopy Trees (Group A). Canopy tree species shall be a minimum of 1-½-inch caliper and six feet in overall height immediately after planting. Trees required along county thoroughfares shall be a minimum of two-inch caliper and eight feet in overall height immediately after planting, and planted a minimum of ten feet back from the right-of-way line
    - 2. Mid-Story Trees (Group B). Mid-story tree species shall be a minimum of 1-½-inch caliper and six feet in overall height immediately after planting. Trees required along county thoroughfares shall be a minimum of two-inch caliper and eight feet in overall height immediately after planting, and planted along a line ten feet back from the right-of-way line.
    - 3. *Understory Trees and Shrubs(Group C)*. Understory trees shall be a minimum 1-½-inch caliper and four feet in overall height and shrubs shall be a minimum of two feet in overall height, immediately after planting.
    - 4. Groundcovers, Large Grasses and Wildflowers (Group D). Large grasses shall be a minimum 18 inches in overall height immediately after planting. Ground covers and wildflowers do not have a minimum height requirement, as maximum height is dependent upon the specific plant species. At least 25 percent of the project area outside of any landscape buffers, off-street parking areas, and stormwater management areas, shall be planted and maintained with a drought tolerant ground cover(s). . Ground covers must present a finished appearance and provide reasonably complete coverage at time of planting.

### b. Additional Requirements:

1. *Palms*. Palms shall constitute no more than 25 percent of the required canopy trees and shall have a minimum of six feet of clear wood at planting.

- 2. Lawn grass. Grassed areas shall be planted with any species of grass common to Central Florida. They may be sodded, plugged, sprigged or seeded; except that sod is required in swales or other areas subject to soil erosion. Unless sod or grass seed is used, nursegrass seed shall be sown for immediate effect and protection until coverage is otherwise achieved. Grass sod shall be clean and shall be reasonably free of weeds, noxious pests or diseases.
- (2) Landscaped buffer area. Where a landscaped buffer area is required, the following regulations shall apply:
  - a. A landscaped buffer area complying with the requirements of the landscape buffer tables (Table I, Table II, Table III, and Table IV), shall be established along the entire length of, and contiguous to, any property line. The width of the area, plant and tree quantities, and type of plant materials shall be determined from the landscape buffer requirements within Table I, Table II and Table III, and landscaped with the required mix of plant species, as determined in Table IV. A driveway or entranceway shall not be considered part of the landscape buffer for the purpose of calculating the required amount of plant material. Landscape buffer widths may be increased to include existing native trees and their associated drip line, and to provide aesthetically pleasing façades to proposed establishments. Compliance with Tables I through IV are achieved through the following steps:
    - 1. Determine the zoning classification of the premises and the adjoining properties.
    - 2. Utilize Table I to determine which Landscape Buffer Zoning Classification or Special Exception Use Group the zoning classification or use of the premises and the adjoining properties fall into.
    - 3. Determine the buffer type and screening requirements required between the subject group (subject premises) and adjoining groups (adjoining properties) in Table II. Required screen types are listed immediately after Table II.
    - 4. Determine the specific requirements (i.e. width and required plantings) for each buffer type in Table III by corresponding the required buffer types required by Table II.
    - 5. Determine the required number of plant species by utilizing Table IV.
    - 6. Example: The subject premises is within the B-4 General Commercial zoning classification, abuts a property within the R-4 Single-Family Residential zoning classification along its 200 lineal-foot boundary. Pursuant to Table I, the subject premises is within the Commercial Group and the abutting property is within the One and two-family residential Group. Table II states that a subject group of Commercial adjoining the One and two-family residential Group require Buffer Type 4 and Screen Type 2. Screen Type 2 is listed immediately after Table II, with additional screening requirements referenced in subsection 72-284(2)d. Table III states that Buffer Type 4 has a minimum 25-foot width and requires 3 Group A Canopy Trees, 5 Group B Midstory Trees and 25 Group C Understory Trees/Shrubs per 100 lineal feet. A 200 lineal-foot buffer length would then require a minimum of 6 Group A Canopy Trees, 10 Group B Midstory Trees and 50 Group C Understory Trees/Shrubs. Table IV would determine that 2 species are required for Group A plantings, 2 species are required for Group B plantings, and 7 species are required for Group C plantings.
  - b. The landscaped buffer area shall contain existing native vegetation, which is not dependent on irrigation because of the possibility of water use restrictions which could adversely affect the survival of introduced or exotic plant species. Existing native trees that are situated within the required buffer can be used to satisfy the perimeter tree requirement. The area(s) within the drip line(s) of the existing native trees must be included within the landscaped buffer area.
  - c. New trees in required landscape buffers do not have to be equally spaced, but may be grouped to provide areas of visibility from the proposed site to an adjoining road and shall be located out of the driplines of existing specimen and historic trees. New shrubs in required

landscape buffers shall also be located to minimize root zone encroachment, if applicable visual screening requirements of subsection 72-284(2)(d) are met.

- d. Required screening specified by Table III shall comply with the following standards:
  - 1. Brick or masonry walls and vinyl or wood fences utilized as visual screens must be opaque and finished to enhance site aesthetics.
  - 2. Wood fences shall meet the following requirements: Minimum ½-inch thick pressure treated boards, minimum three 2-inch by 4-inch pressure treated horizontal stringers, and minimum four-inch by four-inch thick pressure treated support posts at eight-foot maximum spacing. Alternate fence materials may be used with the approval of the ZEO.
  - 3. Hedges, utilized as visual screens, shall be planted at a minimum four feet in overall height and separated at a distance of 30 inches or less. These hedges shall be planted and maintained to provide a six-foot high continuous, unbroken, solid, visual screen within a maximum of one year after date of planting.
  - 4. A new landscaped earthen berm may only be used in landscaped buffers 50 feet wide or larger. These berms shall be planted in accordance with the requirements of landscape buffer Tables I through IV. Landscaped earthen berms shall have a maximum slope of four feet horizontal to one-foot vertical (4:1) and shall include natural ground covers that provide at least ninety percent coverage of the entire berm area.
  - 5. When a wall, fence, or hedge is used for screening, existing native vegetation should be retained, or planted in accordance with the requirements of the landscape buffer tables (Table I, II, III and IV). At least 50 percent of the required plant materials shall be planted along the exterior side of the screen. The screen shall include an opaque maintenance gate every 100 lineal feet or half the length of the screen, whichever is less. The remaining plant materials shall be planted on the interior side of the screen to enhance the site's interior.
- e. A minimum of 50 percent of the required landscape buffer shall remain at natural grade or 6:1 slope, while the remaining buffer area shall not exceed a 4:1 slope.
- f. When a recorded subdivision consists of 10 lots or more, the required landscape buffer area shall be platted as a separate tract of land and maintained by a homeowners or property owners association to ensure adequate maintenance of the buffer.
- g. Where canopy trees are required in a coastal environment, but appropriate salt tolerant species are not available, the required canopy trees can be substituted with mid-story trees at a ratio of two mid-story trees for every canopy tree, with approval of the zoning enforcement official (ZEO).
- h. Removal of vegetation categorized as an invasive exotic in the Florida Exotic Pest Plant Council's List of Invasive Species and debris is required within all landscaped buffers. Care shall be taken not to damage, destroy, or otherwise remove healthy, beneficial, native vegetation within these areas.
- i. The ZEO or the county council may require a greater buffer area than those listed in Tables II and III for a permitted principal or special exception use, due to specific site conditions in conjunction with the existing character of the surrounding area. The ZEO or county council shall determine the appropriate buffer width, required plantings and screening requirements, if applicable, for special exception uses not listed in the aforementioned tables. In no case shall the required landscaped buffer be less than 25 feet between a nonresidential and residential use.
- j. The ZEO may waive or modify the requirements of subsection 72-284(2), in order to facilitate the redevelopment of existing sites or where environmental constraints (i.e. preservation of existing wetlands, trees or topography) limit the available area to reasonably develop, or if literal interpretation of subsection 72-284(2) creates a hardship. The following items are prohibited within the required perimeter landscaped buffers:

- 1. A public or private right-of-way, easement, structure, or impervious surface other than a sign, an entrance or a driveway, or a site specific water or sanitary sewer service line which traverses the landscaped buffer.
- 2. Stormwater management areas, and any associated easements and appurtenances.
- 3. Private or public utility easements, structures or above-ground and underground improvements, except as stated above.

TABLE I				
Landscape Buffer Zoning Classification Groups				
Group Specific Zoning Classifications or Special Exception Uses				
Agricultural and Conservation	C, FR, RC, A-1 through A-4, and MH-3			
Airport and Public	AP and P			
Commercial	B-1 through B-9, BPUD, MPUD (commercial areas)			
Industrial	I-1 through I-4, IPUD and MPUD (industrial area)			
One and two-family residential	RR, RA, R-1 through R-9, RPUD, and MPUD (residential area)			
Mobile home	MH-4 through MH-6, MH-8, RPUD, and MPUD (residential area)			
Mobile home park	MH-1, MH-2 and MH-7			
Multifamily residential	R-6 (with multifamily special exception), R-7, R-8, RPUD, and MPUD (residential area)			

TABLE I			
Landscape Buffer Zoning Classification Groups			
Special Exception Use Group 1			
	Asphalt/Cement batching plant - permanent or temporary		
	Construction and demolition debris disposal facility		
	Hazardous waste transporter facility		
	Junkyard		
	Landfill		
	Materials recovery facility		
	Nonexempt excavation		
	Off-site disposal of land clearing debris facility		
	Private utility uses and services		
	Public utility uses and services		
	Solid waste transfer station		
	Recovered materials facility		
	Rock crusher		
Special Exception Use Group 2	Animal hospital		
	Animal shelters		
	Dogs and cats boarded for personal pets exceeding the number		
	permitted in subsection 72-306(a)		
	Kennel		
	Veterinary clinic		
Special Exception Use Group 3	Fixed-wing aircraft landing fields and helipads		
	Heliports and helipads accessory to a principal use		
	Recreational areas and similar uses (residential and commercial)		
	Speedways, racetracks and motorized vehicle motocross courses		
Special Exception Use Group 4	Mini-warehouse		
	Flea market		
	Off-street parking areas		
	Parking garages Processing, packaging, storage, retail or wholesale sales of		
	agricultural products not raised on the premises		

TABLE I			
Landscape Buffer Zoning Classification Groups			
Special Exception Use Group 5 Boarding house			
	Cemetery		
	Day care center		
Group home			
Home Occupations Class B			
Nursing home			
Private clubs			
Schools - parochial, private, professional or trade			
Rural Event Special Exception Use Rural Event Center			

TABLE II				
Landscape Buffer Requirements				
Subject Group	Adjoining Group	Buffer Type	Screening Required*	
Agricultural and Conservation	Agricultural and Conservation	2	Yes – Screen Type 1 if subdivision is over 10 lots	
	Airport and Public	5	Yes – Screen Type 2 if subdivision is over 10 lots	
	Commercial	4	Yes – Screen Type 2 if subdivision is over 10 lots	
	Industrial	4	Yes – Screen Type 2 if subdivision is over 10 lots	
	One and two- family residential	3	Yes – Screen Type 1 if subdivision is over 10 lots	

	Mobile home	3	Yes – Screen Type 1 if subdivision is over 10 lots
	Mobile home park	3	Yes – Screen Type 1 if subdivision is over 10 lots
	Multifamily residential	3	Yes – Screen Type 1 if subdivision is over 10 lots
Airport and Public**	Agricultural and Conservation	5	Yes – Screen Type 2
	Airport and Public	1	No
	Commercial	1	No
	Industrial	1	No
	One and two- family residential	6	Yes – Screen Type 3
	Mobile home	6	Yes – Screen Type 3
	Mobile home park	6	Yes – Screen Type 3
	Multifamily residential	6	Yes – Screen Type 3
Commercial	Agricultural and Conservation	4	Yes – Screen Type 2
	Airport and Public	1	No
	Commercial	1	Optional – Screen Type 2 if required by ZEO or county council
	Industrial	1	Yes – Screen Type 2
	One and two- family residential	4	Yes – Screen Type 2
	Mobile home	4	Yes – Screen Type 2

	Mobile home park	4	Yes – Screen Type 2
	Multifamily residential	4	Yes – Screen Type 2
Industrial	Agricultural and Conservation	4	Yes – Screen Type 2
	Airport and Public	1	Yes – Screen Type 2
	Commercial	1	Yes – Screen Type 2
	Industrial	1	Optional – Screen Type 2 if required by ZEO or county council
	One and two- family residential	5	Yes – Screen Type 3
	Mobile home	5	Yes – Screen Type 3
	Mobile home park	5	Yes – Screen Type 3
	Multifamily residential	5	Yes – Screen Type 3
One and two-family residential	Agricultural and Conservation	3	Yes – Screen Type 1 if subdivision is over 10 lots
	Airport and Public	6	Yes – Screen Type 2
	Commercial	4	Yes – Screen Type 2
	Industrial	5	Yes – Screen Type 2
	One and two- family residential	2	Yes – Screen Type 1 if subdivision is over 10 lots
	Mobile home	2	Yes – Screen Type 2 if subdivision is over 10 lots
	Mobile home park	3	Yes – Screen Type 2

	Multifamily residential	3	Yes – Screen Type 2
Mobile home	Agricultural and Conservation	3	Yes – Screen Type 1 if subdivision is over 10 lots
	Airport and Public	6	Yes – Screen Type 3
	Commercial	4	Yes – Screen Type 2
	Industrial	5	Yes – Screen Type 3
	One and two- family residential	2	Yes – Screen Type 2
	Mobile home	2	Yes – Screen Type 1 if subdivision is over 10 lots
	Mobile home park	3	Yes – Screen Type 1 if subdivision is over 10 lots
	Multifamily residential	3	Yes – Screen Type 3
Mobile home park	Agricultural and Conservation	3	Yes – Screen Type 3
	Airport and Public	6	Yes – Screen Type 3
	Commercial	4	Yes – Screen Type 3
	Industrial	5	Yes – Screen Type 3
	One and two- family residential	3	Yes – Screen Type 3
	Mobile home	3	Yes – Screen Type 3
	Mobile home park	2	Yes – Screen Type 1
	Multifamily residential	3	Yes – Screen Type 3

Multifamily	Agricultural and	3	Yes – Screen Type 2
residential	Conservation	3	res sereem type 2
	Airport and Public	6	Yes – Screen Type 3
	Commercial	4	Yes – Screen Type 2
	Industrial	5	Yes – Screen Type 3
	One and two- family residential	3	Yes – Screen Type 3
	Mobile home	3	Yes – Screen Type 3
	Mobile home park	3	Yes – Screen Type 2
	Multifamily	2	Optional – Screen Type 2
	residential		if required by ZEO or county council
Special Exception Use Group 1	All groups	6	Yes – Screen Type 4
Special Exception Use Group 2	Agricultural and Conservation	3	Yes – Screen Type 3
	Airport and Public	2	No
	Commercial	2	No
	Industrial	2	No
	One and two- family residential	4	Yes – Screen Type 3
	Mobile home	4	Yes – Screen Type 3
	Mobile home park	4	Yes – Screen Type 3
	Multifamily residential	4	Yes – Screen Type 3
Special Exception Use Group 3	Agricultural and Conservation	5	Yes – Screen Type 3
	Airport and Public	2	No

	Commercial	2	No
	Industrial	2	No
	One and two-	5	Yes – Screen Type 4
	family residential		
	Mobile home	5	Yes – Screen Type 4
	Mobile home park	5	Yes – Screen Type 4
	Multifamily	5	Yes – Screen Type 4
	residential		
Special Exception Use	Agricultural and	3	Yes – Screen Type 3
Group 4	Conservation		
	Airport and Public	1	No
	Commercial	1	No
	Industrial	1	No
	One and two-	4	Yes – Screen Type 3
	family residential		
	Mobile home	4	Yes – Screen Type 3
	Mobile home park	4	Yes – Screen Type 3
	Multifamily	4	Yes – Screen Type 3
	residential		
Special Exception Use	Agricultural and	5	Yes – Screen Type 2
Group 5	Conservation		
	Airport and Public	3	No
	Commercial	2	No
	Industrial	3	Yes – Screen Type 2
	One and two-	5	Yes – Screen Type 3
	family residential		
	Mobile home	5	Yes – Screen Type 3

	Mobile home park	5	Yes – Screen Type 3
	Multifamily residential	5	Yes – Screen Type 3
Rural Even Center Special Exception	All groups	Provide Buffer Type 3; 20-foot landscape buffers between any rural event center facility or any area use for an event, including, but not limited to, parking areas, street frontages and adjacent properties	Optional – Screen Type RE if required by the ZEO or county council
All groups	All public uses in all zoning classifications	3	Yes – Screen Type P
All groups	Houses of worship***	3	Yes – Screen Type 2
All groups	Thoroughfare road rights-of-way as identified in the Volusia County Comprehensive Plan	3	As identified in applicable screen requirements

All groups	Non-thoroughfare	2	As identified in
	road rights-of-way		applicable screen
			requirements
All groups	Railroad rights-of-	3	No
	way		

<sup>\*</sup>Screening shall meet the requirements of subsection 72-284(2)d.

Screen Type 1: Except for property street frontages, provide a continuous 4-foot-high visual screen of landscape planting hedge from Group C of the plant material list, or a <u>finished</u> brick or masonry wall, or wooden fence, or combination of the preceding <u>screens</u>, along and adjacent to all common boundaries.

Screen Type 2: Except for property street frontages, provide a continuous 6-foot-high visual screen of landscape planting hedge from Group C of the plant material list, or a <u>finished</u> brick or masonry wall, or wooden fence, or landscaped earth berm, or combination of the preceding <u>screens</u>, along and adjacent to all common boundaries. Landscaped earth berms are only permitted in <u>Buffer Type 6 pursuant to subsection 72-284(2)d</u>.

Screen Type 3: In property street frontages adjacent to parking areas, provide a continuous 3-foot high finished brick or masonry wall or landscaped earth berm or wooden fence or combination of the preceding screens. In addition, along all other common boundaries, provide a continuous 6-foot-high visual screen of landscape planting hedge from Group C of the plant material list, a <u>finished</u> brick or masonry wall, <u>or</u> wooden fence, or landscaped earth berm, or combination of the preceding <u>screens</u>. <u>Landscaped earth berms are only permitted in Buffer Type 6 pursuant to subsection 72-284(2)d</u>.

Screen Type 4: Adjacent to all property boundaries, including street frontages, provide a <u>continuous</u> 6-foot high <u>finished</u> brick or masonry wall or wooden fence or landscaped earth berm, or combination of the preceding unless existing vegetation serves as adequate screening within the required buffer.

Screen Type RE: Screens are optional. Screens if required, shall be provided in or adjacent to required landscape buffer(s) and located between any rural event center or any area used for an event, including but not limited to, parking areas, <u>street frontages</u> and adjacent properties. Screens, if required, shall consist of a continuous 6-foot-high visual screen of landscape planting hedge from Group C of the plant material list; or a finished brick or masonry wall, or wooden fence.

Screen Type P: In property street frontages adjacent to parking areas, provide a continuous 3-foot high finished brick or masonry wall or wooden fence or combination of the preceding screens. In

<sup>\*\*</sup>Landscaping shall not be required adjacent to airside operations.

<sup>\*\*\*</sup>Houses of worship shall meet Buffer Type 5 if adjoining the Airport/Public group.

addition, along other property boundaries, provide a continuous 6-foot-high visual screen of landscape planting hedge from Group C of the plant material list, a <u>finished</u> brick or masonry wall, <u>or</u> wooden fence, or combination of the preceding <u>screens</u>, <u>along and adjacent to all common boundaries</u>.

TABLE III				
Required Landscape Buffer Types, Widths and Plantings				
Buffer Type	Minimum Buffer Width	Minimum Required Plantings*		
1	10 feet	5 Group B Mid-Story Trees and		
		15 Group C Understory Trees/Shrubs		
2	15 feet	1 Group A Canopy Tree,		
		3 Group B Mid-Story Trees and		
		20 Group C Understory Trees/Shrubs		
3	20 feet	2 Group A Canopy Trees,		
		4 Group B Mid-Story Trees and		
		25 Group C Understory Trees/Shrubs		
4	25 feet	3 Group A Canopy Trees,		
		5 Group B Mid-Story Trees and		
		25 Group C Understory Trees/Shrubs		
5	30 feet	4 Group A Canopy Trees,		
		6 Group B Mid-Story Trees and		
		25 Group C Understory Trees/Shrubs		
6	50 feet	5 Group A Canopy Trees,		
		7 Group B Mid-Story Trees and		
		25 Group C Understory Trees/Shrubs		

<sup>\*</sup>The required plantings are per 100 lineal feet, or fraction thereof.

TABLE IV			
Required Number of Minimum Plant Species			
Required number of plant materials (per Group A, B, and C plants)	Minimum number of species		
1 – 10	2		
11 – 15	3		
16 – 20	4		
21 - 25	5		
26 – 30	6		
Over 30	7		

### (3) Landscaping of off-street parking areas.

- a. Required vehicular use areas having off-street parking spaces for more than four vehicles shall have interior landscaped areas, excluding any required landscaped buffer areas. A minimum of 35 square feet of landscaping for each parking space shall be provided within the interior of an off-street parking area. A portion of the interior landscaped area shall be located at the ends of each row of interior parking spaces not abutting the perimeter of the parking area. Landscaped islands shall be dispersed within rows of contiguous parking spaces so that there is at least one landscaped island for every ten contiguous parking spaces within the row. Landscaped row ends and landscaped islands shall have a minimum area of 175 square feet with no width less than ten feet measured inside of curb and no length less than 17.5 feet if it abuts one parking space, or 35 feet if it abuts two parking spaces. All landscaped row ends and landscaped islands shall be depicted on the site plan with dimensions measured from inside of curb to inside of curb and total area. Two feet of these interior landscaped areas may be part of the required depth of each abutting parking space, provided curbs are used to protect them.
- b. Continuous non-mountable six-inch high concrete curbing shall be designed to standard specifications and installed along the edges of all landscape areas adjacent to vehicular use areas. The ZEO may approve an acceptable alternative material or method, such as the use of wheel stops, in order to facilitate the development of an alternative material off-street parking area.
- c. Each interior landscaped area shall include at least one mid-story tree. Canopy trees are only permitted in landscaped islands or row ends with a minimum 500 square feet in area. If shade trees are required for parked cars per subsection 72-303(g)(8), mid-story trees can be utilized. The remaining area shall be landscaped with at least 50 percent shrubs or a mix of suitable groundcovers, large grasses or wildflowers, which are less than four feet high at maturity. Other materials, such as stone, gravel or mulch may be used with the aforementioned plant materials.
- d. The ZEO may approve alternative designs utilizing decorative architectural planters in lieu of interior landscaped areas, in order to facilitate the redevelopment of existing sites or where environmental constraints (i.e. preservation of existing wetlands, trees or topography) limit

- the available area to develop. Such architectural planters shall contain a surface area of not less than 10 square feet and shall have a minimum interior width of 15 inches.
- e. Where the strict application of this subsection will seriously limit the function of the parking area, the required landscaping may be located near the perimeter of the paved area, with approval of the ZEO.

### (4) Foundation plantings.

- a. A minimum five-foot wide foundation planting area shall be provided and maintained adjacent to all building facades designed for public view or access. Foundation plantings shall include a combination of drought tolerant shrubs and large grasses. All landscape plant material type, size, and spacing, shall be consistent with the requirements of subsection 72-284(1). Each foundation planting area shall be landscaped as follows:
- 1. One understory tree shall be required for every 30 lineal feet of the exterior building façade.
- 2. One foundation plant shall be required for every one-lineal foot of the exterior building façade.
- 3. Groundcovers and wildflowers are required and shall be maintained along and adjacent to each on-site pedestrian walkway to enhance the site's aesthetics.
- b. The ZEO may approve the reduction or elimination of foundation plantings in order to facilitate the redevelopment of existing sites or where environmental constraints (i.e. preservation of existing wetlands, trees or topography) limit the available area to develop.
- (5) Additional requirements. Premises located in the following special planning areas must comply with additional landscaping requirements. In cases of conflict, the most stringent requirements apply.
  - 1. Thoroughfare Overlay Zone: Subsections 72-297(d) and (e).
  - 2. Nonresidential Development Design Standards: Subsections 72-303(g) and (i).
  - 3. Enterprise Community Overlay Zone: division 1, section 72-1301 and subsection 72-1303(11), Overlay Zones [article IV].
  - 4. Osteen Local Plan: division 2, section 72-1309, Overlay Zones [article IV].
  - 5. DeLeon Springs Business Corridor: division 3, section 72-1352, Overlay Zones [article IV].
  - 6. Southwest Activity Center: division 5, section 72-1369, Overlay Zones [article IV].

### (6) Irrigation system plan.

- a. A workable underground irrigation system shall be installed in any area required to be landscaped. An irrigation plan shall be submitted which specifies sprinkler head type, pipe size, radius of throw, valve and backflow preventer location, location of well or source of water and other relevant information for an irrigation system. If an automatic sprinkler system is used, a rain sensor device or switch that will override the irrigation cycle when adequate rainfall has been accrued shall be installed as required by F.S. § 373.62.
- b. The irrigation system shall be fully operational and shall be operated on a regular basis. In situations where drought-resistant plant materials have not been properly maintained primarily due to lack of sufficient watering, the ZEO may require the installation of a permanent irrigation system or other irrigation methods meeting the specifications of this section. Compliance with the standards of the Volusia County Water Wise Ordinance, as amended, is required.

- c. Where an effluent re-use system is available to serve the premises, and sufficient capacity exists, then reclaimed water from said system shall be used to irrigate any area required to be landscaped in lieu of using potable water.
- d. In the interest of conserving the public's diminishing water resources and the promotion of Florida-friendly landscaping principles, the ZEO may waive the automatic irrigation system requirement, in lieu of an acceptable alternative, such as the use of a low-volume drip emitter, porous pipe or similar means based on the review of the landscape plan. Landscaped areas containing primarily native drought tolerant species may provide a temporary irrigation system for a minimum of two years after initial installation, with approval of the ZEO. Once the native landscape materials have been firmly established, the temporary irrigation system may be removed.
- (7) Landscape plan. When landscaped areas are required by this article, a scaled and labeled landscape plan prepared by and signed and sealed by a Florida-registered professional, including by not limited to a Florida licensed landscape architect, shall be submitted. The plan shall indicate the type, size, species, quantity, quality grades, common names, and scientific names of all existing and proposed plant materials in a written plant schedule. The location of all plant materials shall be identified on the plan with graphic symbols and callouts. The landscape plan shall identify all landscape buffer areas, vehicular use areas, dimensions, the driplines of existing native trees to be preserved, and scaled, dimensioned and labeled property lines. The proposed and total number(s) of all plant materials in each buffer, each required landscape area, and in each vehicular use area shall be provided. A written statement of how these numbers were calculated is also required. The plan shall be reviewed by the growth and resource management department, and no development order shall be issued until the plan is approved. Any person aggrieved by a determination of the ZEO under this section may appeal that determination as provided in section 72-378.
- (8) Landscape installation. A Florida licensed landscape architect shall submit to the county a dated, signed and sealed affidavit of completion that verifies the landscaping has been installed according to the approved plan(s). The affidavit shall specifically indicate that the required plantings were installed as specified by the approved landscape plan and per Florida Grades and Standards, that all invasive or exotic species and debris were removed, that required site irrigation was installed as designed, and that an on-site irrigation audit has been performed. A final inspection shall not be passed for any site development projects until the landscape affidavit of completion is received, accepted and a site inspection occurs confirming compliance with all approved plans, as determined by the ZEO. (9) Maintenance. Where landscaped areas are required by this article, the owner, tenant or agent, of said entity will be responsible for maintenance of all required landscape and irrigation improvements, including the removal of invasive and exotic species and debris, as originally approved, in perpetuity.

Landscape areas and site improvements shall be maintained in good condition for a healthy, neat and orderly appearance and shall be kept free from weeds and debris. All plant materials shall be maintained in a healthy and vigorous condition through proper irrigation, fertilization, pruning, weeding, mowing, and other standard horticultural practices. Plant material should grow to their normal shape, color and height, to fulfill the required functions of screening, shading, buffering and aesthetic appeal. The hatracking of trees is prohibited. All dead plants shall be replaced. This requirement includes, but is not limited to, the replacement of plants damaged by insects, diseases, vehicular traffic, acts of God and vandalism. The county shall notify the property owner in writing of any maintenance violations.

(10) Use of drought-resistant plants. All new or replacement plantings required for any off-street parking area or landscape buffer shall use, to the fullest extent possible, native plant material or other species with equivalent drought-resistant properties. Salt tolerant plants and trees as identified on the plant material list are required to be used on-sites within the coastal environment. It is the intent of this requirement to promote the conservation of the county's water resources to be consistent with the Florida-friendly principles of F.S. § 125.568.

- (11) Solid waste containers.
  - a. All solid waste containers, except approved recycling containers, shall be enclosed on at least three sides with a six-foot high screen, and include an opaque access gate. The screen shall consist of an opaque brick or finished masonry wall, vinyl or pressure treated wood fence. The ZEO may require that a hedge or similar landscaping material be provided and maintained along the enclosure walls.
  - b. The container shall be enclosed in such a manner so that said container will be screened from public streets and adjoining properties. A concrete or asphalt pad of appropriate size and construction shall be provided as a base for the container. The container pad shall be at the approximate level of the service vehicle approach area so that the truck's loading mechanism can align with the container's sleeves.
  - c. The screened enclosure shall not be located within any street right-of-way or required yard area. Containers and enclosures shall be located to allow ease of access for collection trucks and direct access to drive areas. Straight-in or circular drives are encourage to reduce truck maneuvering problems. No parking or other obstructions shall be permitted in the access area for enclosures.

**Editor's note**— Prior to its reenactment by § 59 of Ord. No. 90-24, adopted Sept. 27, 1990, subsection 808.07, "Guarantee of Installation of Improvements," was repealed by Ord. No. 88-2, § IX, adopted Jan. 19, 1988.

- (12) Overhead electrical utilities. If the buffer area contains or will contain overhead electrical wires, or if existing or proposed overhead electrical wires are within 30 feet of the buffer area, tree selection shall be limited to those trees that will not, at mature height, conflict with overhead utilities. Canopy trees (height at maturity of > 30 feet) shall be planted no closer than a horizontal distance of 30 feet from the nearest existing or proposed overhead conductor. Mid-story trees (height at maturity between 20 and 30 feet) shall be offset at least 20 feet and understory trees (height at maturity of < 20 feet) require no offset. Palms shall be planted no closer than a horizontal distance equal to the average mature frond length plus two feet from the nearest existing or proposed conductor. Climbing vines shall not be planted adjacent to utility poles, transformers, or guy wires. Plantings near pad-mounted transformers shall not restrict access to, or the maintenance of, the transformer.
  - a. If overhead electrical utilities impact the ability to utilize the required number of canopy or mid-story tree plantings, as stated within Tables I, II and III, the ZEO may allow substitution of understory trees or shrubs for required canopy and/or mid-story trees.

(Ord. No. 81-39, § XL, 11-19-81; Ord. No. 84-1, § 6, 3-8-84; Ord. No. 85-24, §§ XIV, XV, 10-10-85; Ord. No. 86-16, §§ XVII—XIX, 10-23-86; Ord. No. 87-14, §§ XI—XIV, 6-18-87; Ord. No. 89-20, §§ XXVI—XXVIII, 6-20-89; Ord. No. 90-34, §§ 54—60, 9-27-90; Ord. No. 91-11, § XIV, 5-16-91; Ord. No. 92-6, § XLIX, 6-4-92; Ord. No. 94-4, §§ LXII, LIX—LXI, LXIV, LXV, 5-5-94; Ord. No. 98-25, §§ XIX—XXIV, 12-17-98; Ord. No. 2004-20, § V, 12-16-04; Ord. No. 2005-02, § III, 4-21-05; Ord. No. 2008-25, § II, 12-4-08; Ord. No. 2013-08, § III, 5-2-13; Ord. No. 2018-05, § XXIV, 1-18-18)