



**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:** January 21, 2021

**SUBJECT:** Ordinance 2021-5. Amending Chapter 72 of the Code of Ordinances establishing section 72-623, Illumination Standards.

---

The attached ordinance establishes uniform site illumination standards and lighting plan submittal requirements for nonresidential developments.

## **I. BACKGROUND**

The county land development regulations include site illumination standards pertaining to sea turtle protection, and to single-family and two-family development, but do not address lighting standards for nonresidential development. Within the last ten or so years, lighting standards have been included in nonresidential Planned Unit Development (PUD) development agreements, but they vary significantly from the early PUDs to the more recent PUDs. Commercial developments in standard zoning classifications are not held to any illumination standards. As an example, a gas station/convenience store governed by a recent PUD development agreement may be required to fully shield their light fixtures, ensure minimal light spillage on to adjacent properties, be held to a maximum pole height and a maximum lumen standard, whereas the same type of development, if within a standard zoning classification, has no enforceable standards. Therefore, in order to create more equitable application of development regulations, and to ensure reasonable illumination standards that minimize light pollution and foster practical site lighting practices, staff has drafted the attached ordinance for inclusion in the Land Development Code. These standards have been derived from the Illuminating Engineering Society of North America (IESNA) handbook, 9<sup>th</sup> addition, which is a comprehensive reference manual detailing accepted industry standards for site lighting design.

## **II. ORDINANCE SUMMARY**

The proposed ordinance amends Chapter 72, section 72-623, of the Land Development Code. This section provides the scope and applicability of the illumination standards. It will apply to all new nonresidential site lighting. Existing site lighting may remain unless there is an expansion of square footage, replacement of outdoor lighting fixtures, or an increase in parking of 25 percent or greater. These regulations will not preempt the lighting standards associated with Sea Turtle Protection or residential illumination standards.

Certain types of lighting shall not be subject to these regulations, such as temporary security lighting, emergency lighting, lighting for special events, traffic control signals and street lighting, and the like. Prohibited lighting includes searchlights, non-shielded landscape lighting exceeding a specified lumen cap, flashing lights and fixtures not classified as 'cut-off'.

A lighting plan shall be required at the time of site plan application. It must be certified by a professional engineer, landscape architect or professional architect registered in the State of Florida. The lighting plan shall indicate foot-candle levels in 10-foot-by-10-foot grids at grade to a distance of 30 feet on either side of a lot line and include the types and locations of all light fixtures. The plan shall conform to the following requirements:

1. Illumination shall not exceed one-half (0.5) foot candles at the property lines;
2. Illumination shall not exceed 70,000 lumens per acre;
3. All light fixtures shall be cutoff or full cutoff as classified by the IESNA;
4. Light fixtures shall not exceed the height of the adjacent structure, or 25 feet, whichever is less; and,
5. All external lighting shall be reduced by 50% between 11:00 p.m., or 1 hour after close of business, whichever is later, and sunrise, unless a greater level of illumination is required by Chapter 26, Article II of this Code for *Late Night Businesses*.

Requiring all nonresidential development to adhere to the same illumination standards will provide a more equitable application of development regulations. Furthermore, these regulations provide for adequate light levels to ensure public safety, while controlling excessive lighting that may create a nuisance or be detrimental to the public and the environment.

### **III. STAFF RECOMMENDATIONS**

Staff recommends that the commission find Ordinance 2021-5 consistent with the comprehensive plan and forward it to the county council for final action with a recommendation of approval.

### **IV. ATTACHMENTS**

Ordinance 2021-5

ORDINANCE 2021-5

AN ORDINANCE OF THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, AMENDING THE CODE OF ORDINANCES OF THE COUNTY OF VOLUSIA RELATED TO ILLUMINATION STANDARDS; AMENDING CHAPTER 72, ARTICLE III, DIVISION 4, SECTION 72-623 OF THE CODE TO CREATE ILLUMINATION STANDARDS FOR NON-RESIDENTIAL DEVELOPMENT; AMENDING CHAPTER 72, ARTICLE III, DIVISION 3, SECTION 72-577 TO REQUIRE A LIGHTING PLAN MEETING ILLUMINATION STANDARDS FOR FINAL SITE PLAN APPLICATION; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICTING ORDINANCES; AUTHORIZING INCLUSION IN CODE; AND PROVIDING AN EFFECTIVE DATE.

RECITALS

**WHEREAS**, the orderly development of Volusia County (the County) requires reasonable illumination standards that minimizes light pollution, fosters practical site lighting practices utilizing adequate and energy-efficient lighting techniques and mechanisms, and providing illumination that will not be detrimental to either humans or wildlife;

**WHEREAS**, the County finds that it is in the best interest to set illumination standards for all development in the unincorporated areas of Volusia County;

**WHEREAS**, the County seeks to amend Chapter 72, Article III of the Code of Ordinances, County of Volusia (the Code) to set objective minimum standards of illumination;

**WHEREAS**, these standards of illumination are superseded by any illumination standards of the Code pertaining to Sea Turtle Protection; and

**WHEREAS**, the notice and hearing procedures of section 125.66, Florida Statutes, have been met.

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.)

**SECTION I: INCORPORATION OF RECITALS** – The above recitals are adopted as legislative findings of fact and intent.

1           **SECTION II: CREATION OF ILLUMINATION STANDARDS** – Chapter 72, Article III,  
2 Section 72-623 of the Code is hereby amended as follows:

3           Sec. 72-623 – Illumination Standards.

4           (1) Scope – The provisions of this section are intended to promote development within  
5           the unincorporated Volusia County that will:

- 6           a. Minimize light pollution;
- 7           b. Foster practical site lighting practices that utilize adequate and energy efficient  
8           lighting techniques and mechanisms; and
- 9           c. Provide illumination in a manner that will not be detrimental to either humans  
10           or wildlife.

11           Nothing in this Section shall be interpreted to preempt Chapter 72, Article 3,  
12           Division 12 of this code pertaining to *Sea Turtle Protection*. In the event of a conflict  
13           with this Section, the provisions of Division 12, as amended, shall apply to the  
14           extent of such conflict.

15           Nothing in this Section shall be interpreted to preempt residential illumination  
16           standards in Section 50-480, of this code.

17           (2) Definitions – The definitions below shall only apply when used in this Section:

- 18           a. Cutoff – A type of luminaire which restricts illumination above horizontal and  
19           meets the Illuminating Engineering Society of North America (IESNA) definition  
20           for cutoff.
- 21           b. Flashing Light – A light or lights that turn on and off, vary in intensity, change  
22           color, or otherwise do not produce a solid, continuous light more than once per  
23           8 seconds, unless required by the FAA or other governmental agency.

- c. Full Cutoff – A type of luminaire which completely restricts illumination above horizontal and meets the IESNA definition for full cutoff.

(3) Applicability –All new site lighting shall be installed in accordance with the requirements of this Section unless otherwise authorized by a separate development order specifically waiving these requirements. Existing site lighting shall be allowed to remain in its current nonconforming state except that a site shall be required to fully comply with this Section should any of the following occur:

- a. Building addition or additions which cumulative increase the building square footage on site by more than 25%.
- b. The cumulative replacement of 25% or more of the total amount of outdoor lighting fixtures.
- c. A cumulative increase in off-street parking of 25% or more.

(4) Exceptions - the following types of lighting shall not be subject to this Section:

- a. Lighting regulated by Section 50-480;
- b. Lighting regulated by Chapter 72, Article III, Division 12, *Sea Turtle Protection*;
- c. Emergency lighting and emergency wall packs;
- d. Temporary security lighting;
- e. Temporary security lighting;
- f. Temporary lighting for authorized special events;
- g. Seasonal decorative lighting;
- h. Street lighting within a public road right-of way or private road;
- i. Traffic control signals and devices;
- j. Lighting used for a detention facility;

- 1 k. Lighting used for a public airport, as authorized by the FAA;
- 2 l. Lighting used to identify towers and masts for aviation purposes;
- 3 m. Up-lighting or landscape lighting not exceeding 1800 lumens per fixture and do
- 4 not direct light towards an adjacent property.

5 (5) Prohibited Lighting – The following types of lighting are prohibited:

- 6 a. Searchlights, beacons, spotlight and laser lights;
- 7 b. Non-shielded up-lighting or landscape lighting in excess of 100 watts or 1800
- 8 lumens;
- 9 c. Flashing lights, strobe lights or lights that flicker, blink, gyrate, change intensity
- 10 or change color, except for seasonal decorative lighting;
- 11 d. Any other fixture not classified as either cutoff or full cutoff by IESNA guidelines,
- 12 as amended.

13 (6) General Requirements – The following general requirements apply to all properties

14 subject to this Division:

- 15 a. Lighting Plan – a lighting plan shall be submitted with the Final Site Plan
- 16 application and prior to the installation or replacement of a lighting system. The
- 17 plan shall, at a minimum:
  - 18 i. Indicate initial foot-candle levels in 10-foot by 10-foot grids at grade to a
  - 19 distance of 30 feet on either side of a lot line;
  - 20 ii. Include type and location of all luminaires;
  - 21 iii. Be certified by a professional engineer, landscape architect, or
  - 22 professional architect registered in the State of Florida.

- 1           b. Lighting shall follow the below requirements:
- 2                   i. In no case shall illumination from the property exceed one-half (0.5) foot
- 3                           candles as measured from the property lines;
- 4                   ii. Illumination shall not exceed 70,000 lumens per acre;
- 5                   iii. All luminaires shall be cutoff or full cutoff as classified by the Illuminating
- 6                           Engineering Society of North America (IESNA);
- 7                   iv. The height of luminaires shall not exceed the height of the adjacent
- 8                           structure, or 25 feet, whichever is less;
- 9                   v. All external lighting shall be reduced by 50% between 11:00 p.m., or 1
- 10                           hour after close of business, whichever is later, and sunrise, unless a
- 11                           greater level of illumination is required by Chapter 26, Article II of this
- 12                           Code for *Late Night Businesses*.

13           **SECTION III: LIGHTING PLAN INCLUDED IN FINAL SITE PLAN APPLICATION -**

14           Chapter 72, Article III, Division 3, Section 72-577(c)(2) of the Code is amended as follows:

15           (2) *Final site plan application.* After receiving the written results of the CPN review

16                   an FSP application may be submitted pursuant to Sections 72-503 and 72-504 of

17                   this article and shall include the following information and exhibits drawn to a

18                   scale of not less than one inch equals 50 feet:

- 19                   a. Statement of ownership of the proposed development, and the names,
- 20                           addresses and telephone numbers of the developer and any project
- 21                           engineers, architects or planners;
- 22
- 23
- 24

1 \* \* \* \*

2 oo. Lighting Plan meeting the requirements of Section 72-623.

3  
4 One or more of the above items of information may be waived by the LDM at the  
5 time of application if deemed unnecessary in a particular case. The waived item  
6 may still be subsequently required by any reviewing department or agency if they  
7 deem it necessary.

8  
9 **SECTION IV: SEVERABILITY** - Should any word, phrase, sentence, subsection or  
10 section be held by a court of competent jurisdiction to be illegal, void, unenforceable, or  
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  
15 **SECTION V: CONFLICTING ORDINANCES** - All ordinances, or part thereof, in conflict  
16 herewith are, to the extent of such conflict, repealed.

17  
18 **SECTION VI: AUTHORIZING INCLUSION IN CODE.** The provisions of this ordinance  
19 shall be included and incorporated into the Code of Ordinances of the County of Volusia, as  
20 additions or amendments thereto, and shall be appropriately renumbered to conform to the  
21 uniform numbering system of the Code.



1           **SECTION VII: EFFECTIVE DATE.** This ordinance shall take effect upon electronic filing  
2 of a certified copy with the Department of State.

3           ADOPTED BY THE COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA, IN OPEN  
4 MEETING DULY ASSEMBLED IN THE COUNTY COUNCIL CHAMBERS AT THE THOMAS C.  
5 KELLY ADMINISTRATION CENTER, 123 WEST INDIANA AVENUE, DELAND, FLORIDA,  
6 THIS \_\_\_\_ DAY OF \_\_\_\_\_ A.D., 2021.

7  
8  
9 ATTEST:

COUNTY COUNCIL  
VOLUSIA COUNTY, FLORIDA

10  
11  
12 \_\_\_\_\_  
13 George Recktenwald  
14 County Manager

\_\_\_\_\_  
Jeffrey S. Bower  
County Chair

DRAFT - PLDRC HEARING