

PROPOSED ORDINANCE NO. 2017-21
ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF PEMBROKE PINES, FLORIDA AMENDING TITLE XI, ENTITLED “BUSINESS REGULATIONS,” CHAPTER 116, ENTITLED “LIGHTING STANDARDS” OF THE CITY OF PEMBROKE PINES CODE OF ORDINANCES; AMENDING SECTION 116.01 ENTITLED “PURPOSE AND INTENT” TO PROVIDE FOR GUIDING PRINCIPLES; AMENDING SECTION 116.02 ENTITLED “DEFINITIONS” TO PROVIDE FOR ADDITIONAL DEFINITIONS; AMENDING SECTION 116.03 ENTITLED “GENERAL STANDARDS” TO PROVIDE FOR ADDITIONAL STANDARDS; AMENDING SECTION 116.04 TO PROVIDE FOR ADDITIONAL STANDARDS; AMENDING SECTION 116.06 ENTITLED “LIGHTING OF RESIDENTIAL COMMON AREAS” TO PROVIDE FOR ADDITIONAL STANDARDS; CREATING SECTION 116.07, TO BE ENTITLED “PRESERVES, NATURAL AREAS AND ENVIRONMENTAL SENSITIVE LANDS”; PROVIDING FOR DEFINITIONS; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Article VIII of the State Constitution and Chapter 166 of the Florida Statutes provide that municipalities shall have the governmental, corporate, and proprietary powers to enable them to conduct municipal government, perform municipal functions, and render municipal services, and may exercise any power for municipal purposes, except when expressly prohibited by law; and

WHEREAS, lighting is an important aspect to the City of Pembroke Pines residents and visitors for safety, security, livability, and enjoyment; and

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WHEREAS, well-coordinated and designed lighting systems are an effective way to enhance the feeling of security and comfort throughout the City; and

WHEREAS, City Staff has reviewed the City's Code of Ordinances and finds it in the best interests of the City to update the standards provided in Chapter 116; and

WHEREAS, the City Commission has considered the proposed recommendations to update the lighting standards and finds that it is in the best interests of the City to adopt this ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF PEMBROKE PINES, FLORIDA, THAT:

Section 1. The foregoing "WHEREAS" clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance.

Section 2. Chapter 116 of the City's Code of Ordinances entitled "Lighting Standards" is amended as follows:

Sec. 116.01 Purpose and Intent.

- (A) The purpose and intent of this chapter is to ensure that exterior (outdoor) lighting positively enhances the visual impact of a building or project on surrounding properties and uses. To that end, exterior lighting at a building or project should be designed, operated, and installed in a consistent and coordinated fashion to provide safe, convenient and

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efficient lighting for customers, pedestrians and vehicles, ~~while and to~~ avoiding the creation of hot spots, glare, obtrusive light, light pollution, light trespass, and visual nuisance. Also, exterior lighting should accentuate key architectural elements of ~~a the~~ building or project, and highlight or otherwise emphasize landscape features.

(B) Guiding Principles:

Lighting designs shall be of a consistent design within each respective site, and should minimize light trespass/pollution and impact on neighboring properties and natural habitats, while ensuring safety, security, utility, productivity, commerce, livability, and enjoyment.

Lighting equipment should be responsibly selected and sourced through careful consideration of the short and long-term financial, environmental, and social costs incurred through lighting.

Energy and resource should be conserved to the greatest extent possible.

Designs should be practical as well as financially and technologically feasible, based on industry-acceptable best practices. Energy efficient practices and lighting is encouraged.

Lighting systems should be properly implemented, maintained, and managed.

Sec. 116.02 Definitions.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

BULB OR LAMP. The component of a luminaire that produces the actual light. To be distinguished from the whole assembly (see luminaire).

CORRELATED COLOR TEMPERATURE (CCT). Defines the color appearance of a white LED. CCT is defined in degrees of Kelvin (K).

DIMMER. Dimmers can reduce the input power requirements and the rated lumen output levels of lights.

FIXTURE. The assembly that houses the lamp or lamps, and may include all or some of the following parts: reflector (mirror), refractor (lens), ballast, housing, and other attachment parts.

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FOOTCANDLE (F.C.). A measure of light noted as a unit of illuminance amounting to one lumen per square foot.

FULL CUTOFF FIXTURE. A lighting fixture manufactured and installed so that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire (excepting only incidental reflections from supporting brackets or arms) is projected below the horizontal as determined by photometric test or certified by the manufacturer. Any structural part of the light fixture providing this shielding must be permanently affixed.

GLARE. Intense and somewhat blinding light, or the sensation produced by a brightness within the visual field that is sufficiently greater than the intensity of light to which human eyes are accustomed or adapted, thereby causing annoyance, discomfort, visual impairment, or loss or reduction of visibility.

HOT SPOT. An area of very high illumination above normal footcandle levels, typically found in an area underneath a luminaire, making normal f.c. levels appear relatively dark.

ILLUMINANCE. The quantity of light arriving at a surface divided by the area of the lighted surface, measured in footcandles.

ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IES OR IESNA). The professional society of lighting engineers, including those from manufacturing companies, and others professionally involved in lighting.

LANDSCAPE LIGHTING. Lighting of trees, shrubs, or other plant material as well as ponds and other landscape features.

LED. Light emitting diode.

LIGHT POLLUTION. Any adverse effect of manmade light, often used to denote a brightness of the night sky, commonly known as urban sky glow.

LIGHT TRESPASS. Light falling where it is not desired, wanted or needed.

LUMEN. A quantitative unit measuring the amount of light emitted by a lamp or luminaire.

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LUMINAIRE. A complete lighting unit consisting of the lamp, the fixture and other parts designed to distribute the light.

MOUNTING HEIGHT. The height of the photometric center of a luminaire above grade level.

OBTRUSIVE LIGHT. Light which causes annoyance, discomfort, visual impairment, or loss or reduction of visibility.

SAG LENS, CONVEX LENS OR DROP-LENS. A clear or prismatic refracting lens that extends below the lowest opaque portion of a light fixture.

SEASONAL LIGHTING. Temporary lighting installed and operated in connection with holidays or traditions.

SHIELDING: An opaque material that blocks the transmission of light.

SPILL LIGHT. Light which falls outside the property where the luminaire is sited.

Sec. 116.03 GENERAL STANDARDS

(A) Lighting, shall at a minimum meet all applicable local, state, and federal codes and regulations.

(B) *Exterior lighting plan.* An exterior lighting plan, including a photometric plan (which covers the parcel which is the site of the building or project in question), appropriate pole, fixture, and lamp cut sheets, and descriptions of lenses and appropriate data tables, shall be submitted for site plan review.

(1) The exterior lighting plan shall be prepared by a licensed professional engineer, who shall certify that the exterior lighting plan complies with this chapter.

(2) The photometric plan shall be prepared in a scale that is easily legible. The current edition of the "IES Lighting Handbook," published by the Illumination Engineers Society, ~~345 East 47 Street, New York, NY 10017,~~ is the standard to be used by the engineer as a guide for the design and testing of lighting plans.

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- (3) The standards contained therein shall apply unless standards developed and adopted by this section or subsequent amendments are more restrictive, in which case the more restrictive standards shall apply.
- (4) Lighting equipment must be of commercial quality and listed with a Nationally Recognized Testing Laboratory (NRTL) such as Underwriters Laboratories (U.L.) or Electrical Testing Labs (ETL).
- (C) *Pole lighting height standard.* All private, pole mounted, outdoor surface lot lighting shall be limited to 30 feet in height above grade. Non-vehicular pedestrian areas shall incorporate pedestrian scale lighting where appropriate.
- (D) *Illumination levels.* The maximum illumination for a project shall be 12 f.c. with the minimum average illumination, at grade, to be not less than two footcandles, average maintained over the site. The illumination level at the property line of any project shall be 0 f.c. To avoid glare or spill light from encroaching onto adjacent properties, illumination shall be installed with house side shields and reflectors, and shall be maintained in such a manner as to confine light rays to the premises of the building or project.
- (E) *Installation.* The lighting installation shall not be placed in permanent use until a letter of compliance from a registered engineer or architect has been provided stating that installation has been field checked and meets the requirements of this chapter.
- (F) *Architectural and landscape lighting.*
- (1) Lighting should be designed, installed, and controlled to ensure that the lights only illuminate the intended object(s).
- (2) The placement of light poles shall consider existing and proposed ultimate growth of all landscaping and tree canopies to minimize or prevent conflicts between landscaping and lighting systems.
- (3) To the extent practical and where possible, lighting fixtures shall be directed downward rather than upward. Directional shielding shall be implemented to minimize or prevent glare, light trespass, and light pollution.
- (4) When uplighting is required, lighting systems should be low in intensity and incorporate full shielding.

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(G) Construction lighting.

- (1) All construction site lighting fixtures must be full cut-off or directionally shielded fixtures that are aimed and controlled so the directed light is substantially confined to the object intended to be illuminated and not directly visible outside of the property.
- (2) Interior construction lights shall be extinguished after the work has been completed for the day unless needed to ensure safety, security, or legal compliance.
- (3) A building is no longer considered under construction once exterior walls and windows are installed and permanent lighting replaces temporary lighting as the primary source of light for the building.

~~(EH)~~ *Nonconforming lighting.*

- (1) When 50% or more of any component (e.g., luminaires, poles) of the exterior lighting system at a building or project is upgraded, changed, or replaced (not including regular maintenance), such component for the remainder of the exterior lighting shall be brought in ~~into~~ ~~substantial~~ compliance with all applicable ~~the~~ requirements of this chapter.
- (2) In the event less than 50% of the exterior lighting system is being replaced and the Planning and Economic Development Director or his/her designee determine that an equivalent replacement is no longer obtainable, due to obsolescence or lack of supply, such component for the remainder of exterior light shall be brought in compliance with all applicable requirements of this chapter.

~~(F)~~ *Prohibited lighting.*

- (1) High intensity, special purpose lighting such as aerial lasers and "searchlight" style lights.
- (2) Low pressure sodium lighting.

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- (3) Search lights, laser source lights, strobe or flashing lights, motion or illusion lights or any similar high-intensity light shall not be permitted, except in emergencies by police and fire at their direction.
- (4) Mercury vapor lamps.
- (5) Lighting that can be confused for a traffic control device.
- (6) Blinking, flashing, moving, flickering, changing intensity, changing color lights not otherwise permitted in this ordinance as determined by Planning Staff.
- (7) Any exposed lamp or bulb visible from the property boundary of parcel on which the light is located.
- (8) Unshielded accent building mounted luminous tube.
- (9) Lighting used to illuminate and awning of a building.
- (10) Sag lenses, convex lenses, and drop lenses.

(GJ) *Exceptions to general lighting requirements.*

- (1) Public facilities including but not limited to parks; lighted recreation and athletic areas, courts and fields; and water and wastewater treatment facilities shall be exempted from these standards.
- (2) Lighting for airports is subject to regulations set forth by the Federal Aviation Administration.
- (3) Lighting for public streets, roads, and right-of-way.
- (4) Emergency lighting for non-structural/temporary purposes including but not limited to:
 - (a) State of emergency
 - (b) Law enforcement
 - (c) Fire services

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- (d) Emergency medical services
- (5) Exterior seasonal lights are exempt from the standards provided they meet the following conditions:
 - (a) Are installed properly and in compliance with all applicable codes and regulations;
 - (b) Do not pose a threat to the safety and security of occupants, visitors, motorists or passersby;
 - (c) Are not a nuisance to those in the surrounding area or motorists;
 - (d) Suspended in a way which poses a safety or fire hazard.
- (6) Traffic signs or lights as part of road work and maintenance activities (i.e. repairs, setup, and tear-down) may supersede the lighting restrictions to ensure the safety and security of maintenance staff.
- (7) Automated Teller Machines must meet the requirements set forth in FS&S 655.962 and as amended.
- (8) Other Federal or State properties and or use which may have regulations which supersede municipal requirements.
- (9) Municipal signage.

Sec. 116.04 Non-Residential Standards.

(A) *Light fixtures; types.*

- (1) Pole mounted light fixtures on non-residential properties shall be full cutoff fixtures, and shall be incorporated as an integral design element that complements the design of the building or project through style, material or color. Exception - non-cutoff fixtures for pedestrian scale lighting for walkways may be utilized for non-residential projects upon review and approval of the Planning and Zoning Board. Planning and Zoning Board consideration may be with restrictions and shall be within

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the bounds of sound zoning practice and planning and in harmony with the general purpose and intent of the chapter.

- (2) Lighting of buildings shall be limited to wall washer type fixtures or up-lights, which do not produce spill light or glare. Sag lenses, convex lenses, and drop lenses shall be prohibited.
- (3) Security lighting. Attached building fixtures, utilized for parking lot security purposes only, may be aimed no higher than 45 degrees above straight down.
- (4) Correlated color temperature (CCT) shall measure no more than 4,000°K in the following zoning districts: B – 3, C – 1, M – 1, M – 2, M – 3, M – 4, M – 5. All other non-residential zoning districts shall have a maximum correlated color temperature of 3,000°K.

(B) *Time controls and dimmers*. Non-residential lighting shall be installed with time controls and dimmers which will assure that the required illumination is provided at dusk and that light levels are reduced no later than one hour by a minimum of 25% after the close of operations to the minimum levels needed to ensure safety and security.

Sec. 116.05 Outdoor Retail Lighting.

Exterior retail areas, including but not limited to car dealerships, gas stations, outdoor markets, and drive-through facilities, require lighting necessary to allow customers to comfortably review outdoor merchandise for extended times, and create safe pedestrian passage.

(A) *Canopied areas*. At a canopied area, such as those found at drive-through facilities at banks, service stations, convenience centers, and car-washes, lighting under the canopied area shall be either recessed or cut-off fixtures. The maximum, footcandle level (under such canopied area) shall be 24 f.c., with a maximum to minimum ratio of 2:1. The remainder of the site shall be subject to illumination levels required per general standards.

(B) *Car dealerships*. Car dealerships shall meet the following requirements:

(1) Display areas at dealerships for new and used products, including automobiles, trucks, recreational vehicles, motorcycles, and boats, shall have a maximum footcandle level of 24 f.c. for any row of display that is adjacent to an external road or street.

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(2) The remainder of the site shall be subject to illumination levels required per general standards.

Sec. 116.06 Lighting of Residential Common Areas.

(A) Residential common areas (clubhouses, guardhouses, entry features, pool areas, private residential parks, tot lots, etc.) shall require the following light design standards. Lighting shall not exceed a CCT of 3,000°K in residential zoning districts.

(B) Full cutoff fixtures are required for any lamp type with an initial output of greater than or equal to 2,000 lumens.

(a) Examples of lamp types of 2,000 lumens include the following:

- i. 100watt Standard Incandescent
- ii. 15 Watt Cool White Fluorescent; and
- iii. 15 Watt Compact Fluorescent.
- iv. 18 Watt LED Fluorescent
- v. 20 Watt Warm White LED light bulb

(C) All fixture types will be allowed for any lamp types below 2,000 lumens. Shielding of fixtures is not required but recommended.

(D) Featured up lighting for landscaping, buildings, and water features may be allowed, provided light sources are completely shielded from public view.

~~(D) Examples of lamp types of 2,000 lumens and below are:~~

- ~~(1) 100 Watt Standard Incandescent;~~
- ~~(2) 15 Watt Cool White Fluorescent; and~~
- ~~(3) 15 Watt Compact Fluorescent.~~

Sec. 116.07 Natural Areas, Preserves & Environmentally Sensitive Areas.

(A) Lighting systems in natural areas, preserves & environmentally sensitive areas shall employ adaptive lighting techniques such as dimmers, shielding, anti-glare filters, and time controls in order to minimize the effect on the natural habitat and wildlife in the area.

(B) Color Correlated Temperature (CCT)

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- (1) CCT installed within or around natural areas, preserves, and environmentally sensitive areas shall be a maximum of 3,000K however, amber colored LEDs are encouraged where possible in the design.

Section 3. It is the intention of the City Commission of the City of Pembroke Pines that the provisions of this Ordinance shall become and be made a part of the Code of Ordinances of the City of Pembroke Pines, Florida, and that the Sections of this ordinance may be renumbered, re-lettered and the word "Ordinance" may be changed to "Section", "Article" or such other word or phrase in order to accomplish such intention.

Section 4. All Ordinances or parts of Ordinances, Resolutions or parts of Resolutions in conflict herewith be and the same are hereby repealed to the extent of such conflict.

Section 5. If any clause, section, or other part or application of this Ordinance shall be held by any court of competent jurisdiction to be unconstitutional or invalid, such unconstitutional or invalid part or application shall be considered as eliminated and so not affecting the remaining portions or applications remaining in full force and effect.

Section 6. This Ordinance shall become effective upon passage and adoption.

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PASSED AND ADOPTED BY THE CITY COMMISSION OF THE CITY OF
PEMBROKE PINES, FLORIDA, ON THE FIRST READING, THIS ____ DAY OF
_____, 2018.

PASSED ADOPTED BY THE CITY COMMISSION OF THE CITY OF
PEMBROKE PINES, FLORIDA, ON THE SECOND AND FINAL READING,
THIS ____ DAY OF _____, 2018.

CITY OF PEMBROKE PINES, FLORIDA

ATTEST:

By: _____
MAYOR FRANK C. ORTIS

MARLENE D. GRAHAM
CITY CLERK

ORTIS _____

CASTILLO _____

MONROIG _____

SCHWARTZ _____

APPROVED AS TO FORM:

SIPLE _____

OFFICE OF THE
CITY ATTORNEY

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