### TOWN OF HIGHLAND BEACH ORDINANCE NO

AN ORDINANCE OF THE TOWN OF HIGHLAND BEACH, 4-8 FLORIDA, **AMENDING SECTION** "LIGHTING RESTRICTIONS FOR PROTECTION OF SEA TURTLES" OF CHAPTER 4, "ANIMALS," AND **SECTION 30-85 "COASTAL** OF CHAPTER 30, "ZONING," OF THE TOWN LIGHTING" CODE OF ORDINANCES TO INCORPORATE LIGHTING REGULATIONS FOR NEW AND EXISTING COASTAL STRUCTURES IN ORDER TO MINIMIZE THE EFFECT OF ARTIFICIAL LIGHT ON SEA TURTLE **POPULATIONS:** PROVIDING FOR THE REPEAL OF ALL ORDINANCES IN **CONFLICT: PROVIDING** FOR **SEVERABILITY** CODIFICATION; AND PROVIDING AN EFFECTIVE DATE.

**WHEREAS**, the Town of Highland Beach, Florida, is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

**WHEREAS**, the Town of Highland Beach recognizes that light pollution of beaches is a serious threat to sea turtles inhabiting its beaches; and

WHEREAS, the Town of Highland Beach recognizes that nesting adult and hatchling sea turtles are negatively affected by light pollution created by artificial light visible from any portion of the beach; and

WHEREAS, the Town of Highland Beach recognizes that sea turtles are protected by federal and state law; and

**WHEREAS**, the Town of Highland Beach recognizes that the quality of life of its residents is enriched by a healthy sea turtle population; and

WHEREAS, the Town of Highland Beach desires to minimize the detrimental effects on nesting sea turtle populations by implementing regulations that reduce the amount of artificial light, intentionally or unintentionally visible from beaches, emanating from new or existing residences;

**WHEREAS**, the Town Commission has determined that the amendment to the Code of Ordinances is in the best interest of the Town of Highland Beach.

## NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COMMISSION OF THE TOWN OF HIGHLAND BEACH, FLORIDA, AS FOLLOWS:

<u>Section 1</u>. The foregoing facts and recitations contained in the preamble to this Ordinance are hereby adopted and incorporated by reference as if fully set forth herein.

<u>Section 2</u>. The Town of Highland Beach Code of Ordinances is hereby amended by amending Chapter 4 "Animals" to read as follows (deleting is stricken through and adding is underlined):

#### Sec. 4-8. – Lighting restrictions for protection of sea turtles.

- (a) Purpose <u>and intent</u>. The purpose of this section is to protect the threatened and endangered sea turtles which nest along the beaches of the town from light sources that disrupt their nesting and hatching. The intent is for the appropriate design and implementation of coastal lighting to ensure that light pollution does not interfere with sea turtle nesting and hatching events while at the same time protecting public safety.
- (b) Definitions.

Artificial light means the light emanating from any human-made device.

The "Bbeach" means the zone of unconsolidated material that extends landward from the mean low water line to the place where there is a marked change in material or physiographic form or to the line of permanent vegetation.

<u>Certified wildlife lighting means lighting fixtures and bulbs reviewed and approved with conditions of use through the Florida Fish and Wildlife Conservation Commission's Wildlife Lighting Certification Process.</u>

<u>Cumulatively visible</u> means light from numerous artificial light sources that as a group can be seen by an observer standing anywhere on the beach.

Directly visible means when glowing element(s), lamp(s), globe(s), or reflector(s) of an artificial light source can be seen by an observer standing anywhere on the beach.

Foot-Candle means the English unit for measuring illuminance; the a unit of illumination equal to that given by a source of one candela at a distance of one foot (equivalent to one lumen per square foot or 10.764 lux). uniform illumination of a surface one foot away from a point source of one candela; one lumen per square foot; equal to 10.76 lux.

Frontal dune means the first natural or man-made mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.

Full cutoff means a lighting fixture constructed in such a manner that no 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, is projected at or above 90 degrees as determined by photometric test or certified by the fixture manufacturer.

Fully shielded means a lighting fixture constructed in such a manner that the glowing elements, lamps, globes, or reflectors of the fixture are completely covered by an opaque material to prevent them from being directly visible from the beach. Any structural part of the light fixture providing this shielding must be permanently affixed.

Indirectly visible means light reflected from glowing element(s), lamp(s), globe(s), or reflector(s) of an artificial light source that can be seen by an observer standing anywhere on the beach without the light source being directly visible.

Long wavelength means a lamp or light source (which is amber, orange, or red) emitting light wavelengths of 560 nanometers or greater and absent wavelengths below 560 nanometers.

New construction means all new construction of or additions and alterations to buildings, pools, pavement, other structures, landscape areas or lighting systems. The most protective lighting standards apply to new construction visible from the beach.

Non-egress Llighting means exterior lighting that is not being used to light a distinct route or meet minimum requirements for emergency access to or from a building, including but not limited to decorative lights (e.g. strobe lights, string lights, etc.), balcony lights, landscape lights, and uplights.

Outdoor Aarea means any portion of a property that could have an artificial light source not attached to a permanent structure, including but not limited to pathway lighting, landscape lighting, pool lighting.

Sea **T**turtle means any turtle, including all life stages from egg to adult, of these species: Green (Chelonia mydas), Leatherback (Dermochelys coriacea), Loggerhead (Caretta caretta), Hawksbill (Eretmochelys imbricata), and Kemp's ridley (Lepidochelys kempii). For the purposes of this ordinance, the term sea turtle is synonymous with marine turtle.

Sea **T**turtle **N**nesting **H**habitat means all sandy beach and unvegetated or sparsely vegetated dunes immediately adjacent to the sandy beach and accessible to nesting female turtles.

Temporary lighting means any non-permanent light source that may be hand-held or portable including but not limited to tiki torches, lanterns, flashlights (including cell phone flashlights and screens), candles, flash photography, etc.

Tinted glass means any glass treated to achieve an industry-approved, inside-to-outside light transmittance value of 45 percent or less. Such transmittance is limited to the visible spectrum (400 to 700 nanometers) and is measured as the percentage of light that is transmitted through the glass.

- (c) Applicability. This section shall apply to all beachfront properties and to all exterior lighting of properties located on the westside of State Road A1A within the Town that may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach regardless of whether those properties are beachfront properties. The provisions of this section are not intended to prevent the use of any design, materials or method of installation or operation not specifically prescribed herein, provided any such alternate has been approved. The Building Official may approve any such proposed alternate provided it:
  - (1) Provides at least approximate equivalence to the applicable specific requirements of this section, and;
  - (2) Is otherwise satisfactory or complies with the intent of this section, and;
  - (3) Has been designed or approved by a registered lighting or electrical engineer and is supported by calculations showing that the design submitted meets that intent of the section, and;
  - (4) Has been determined to meet requirements for Certified Wildlife Lighting and/or lights that meet FWC's Wildlife Lighting Guidelines, including long wavelength light sources (without the use of filters), full cut-off, and fully shielded fixtures.
- (de) Lighting restrictions along beach. No artificial light shall illuminate any area of the beach which may be used for turtle nesting and hatching during the period from March 1 to October 31 of each year, from dusk to dawn.

- (e) Standards for exterior and interior lighting affixed to new structures, new construction and improvements to existing structures that require a building permit.
  - (1) All lighting affixed to the exterior of new permanent structures, construction or new additions shall be long wavelength, downward directed, full cutoff, fully shielded and mounted as close to the ground or finished floor surface as possible.
  - (2) As an exception to (e)(1) above, non-egress lighting may be affixed to the landward exterior of permanent structures provided that the fixtures are fitted with a long wavelength source and are not directly, indirectly, or cumulatively visible from any portion of the beach.
  - (3) Lighting at egress points shall be limited to the minimum number of fixtures and footcandles necessary to meet federal, state, and local safety requirements.
  - (4) Locations including but not limited to stairwells, elevators, parking garages, or courtyards shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach. Light screens, shades or curtains shall be used to block visibility of interior lights from the beach. Light screens shall be used on open or enclosed staircases on the seaward or shore-perpendicular side of a building or for parking garages to limit visibility of lights from the nesting beach.
  - (5) All glass windows, walls, railings, and doors, or similar glass features on the seaward and shore-perpendicular sides of any new construction shall use tinted glass with an inside to outside light transmittance value of 45 percent or less.
  - (6) Emergency lights are not subject to the above standards if on a separate circuit and activated only during power outages or other situations in which emergency lighting is necessary for public safety.

#### (f) *Outdoor areas*.

- (1) All lighting of outdoor areas shall be long wavelength, downward directed, full cutoff, fully shielded and mounted as close to the ground or finished floor surface as possible.
- (2) Lighting of paths, walks and routes of building access shall use low level fixtures such as step, paver, path, recessed wall or bollard lights. Bollard lights are not to exceed 42 inches in height and other low level fixtures are to meet the height requirements of FWC's Wildlife Lighting Guidelines. Fixtures shall be downward

- directed and utilize long wavelength lamps and beachside shields.
- (3) As an exception to (f)(1) above, non-egress outdoor lighting may be installed landward of buildings or other opaque structures provided that they are fitted with long wavelength light sources and are not directly, indirectly, or cumulatively visible from any portion of the beach.
- (4) Internally or externally lighted signs shall not be located on the seaward and shoreperpendicular sides of any structures, and shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach.
- (5) Ponds and fountains on the seaward and shore-perpendicular sides of any structures shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach.
- (6) Fire pits located on the seaward and shore-perpendicular sides of any structure shall be shielded with an opaque structure or partition, and positioned such that the flame is not directly, indirectly, or cumulatively visible from any portion of the beach. Bonfires and bonfire pits are prohibited within seaturtle nesting habitat during sea turtle nesting season.
- (7) Televisions or other illuminated screens shall be located landward of the dune and shall be shielded or positioned such that they are not directly, indirectly, or cumulatively visible from the beach.

#### (g) Parking areas and roadways

- (1) All lighting of parking areas and roadways shall be long wavelength, downward directed, full cutoff, fully shielded, and mounted to the minimum level required to maintain compliance with federal, state and local law.
- (2) Parking area and roadway lighting shall be shielded from the beach via vegetation, natural features, or artificial structures rising from the ground. These shall prevent artificial light sources, including but not limited to vehicular headlights, from producing light that is directly, indirectly, or cumulatively visible from any portion of the beach.
- (3) Lighting of roadways and parking areas shall produce no more lighting than the minimum requirement as outlined by federal, state and local law.
- (4) Lighting of parking areas and roadways shall consist of:

- a. Ground-level downward-directed fixtures, equipped with interior dark-colored, non-reflective baffles or louvers, mounted either with a wall mount, on walls or piles, facing away from the beach, or
- b. Bollard-type fixtures, which do not extend more than 42 inches above the adjacent floor or deck, measured from the bottom of fixture, equipped with downward-directed louvers that completely hide the light source, and externally shielded on the side facing the beach, or
- c. Pole-mounted lights which shall only be used in parking areas and roadways when mounting the lights at lower elevations cannot practicably comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety. If required, pole-mounted lights shall be:
  - 1. Located on the landward sides of buildings and shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach,
  - 2. Mounted at the minimum height required to meet the minimum light level requirement, and
  - 3. Downward-directed onto non-reflective surfaces.
- (5) Equipment/storage areas, and temporary security lights shall also adhere to the lighting restrictions contained in this section.

#### (h) Pool <u>a4</u>reas.

- (1) Lighting of pool decks, pool facilities, swimming pools, and spas shall be long wavelength and fully shielded.
- (2) Lighting of the pool water surfaces and the pool wet deck surfaces shall comply with the minimum light levels set forth in applicable federal and state laws designed to protect public safety.
- (3) Above-water lighting of pool decks, pool facilities, swimming pools, and spas shall otherwise adhere to the applicable requirements for acceptable light fixtures contained in subsection (h)(1) and (2) above.
- (4) Underwater lighting of pools or spa light shall:
  - a. Be mounted horizontally in the wall, and
  - b. Not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach, and

c. Shall comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety.

#### (i) Beach <u>a4ccess</u> <u>p4oints</u> and <u>d</u> une <u>w</u>4alkovers.

- (1) Lighting of beach access points shall be located and configured to only illuminate areas landward of the beach and frontal dune. All lighting of beach access points shall be long wavelength, downward directed, full cutoff and fully shielded and shall not be directly, indirectly, or cumulatively visible from the beach.
- (2) Lights are allowable on dune walkovers or elevated boardwalks only as required for building code purposes and may only be installed landward of the frontal dune.

  Walkover lighting shall not be directly, indirectly or cumulatively visible from the beach.
- (j) Existing exterior lighting, and existing interior lighting, and new exterior lighting of properties located on the westside of State Road A1A. All existing exterior and interior lighting shall be subject to the following regulations:
  - (1) Upon replacement and only if a building permit is required, the reduction Reduce or elimination eliminate of the negative effects of existing exterior artificial lighting shall be required through the use of the following measures:
    - a. Reposition, modify or remove existing lighting fixtures so that the point source of light or any reflective surface of the light fixture is no longer directly, indirectly or cumulatively visible from the beach;
    - b. Replace fixtures having an exposed light source with fully shielded fixtures;
    - c. Replace any light source, light bulb or lamp that is not long wavelength (e.g. incandescent, fluorescent, or high intensity lighting) with the lowest wattage long wavelength (e.g. LED or low pressure sodium) light source or lamp available for the specific application;
    - d. Replace non-directional fixtures with directional fixtures that point down and away from the beach;
    - e. Provide shields for fixtures visible from the beach when it is not practical to immediately replace them. Beachside shields are to cover 270 degrees and extend

- below the bottom edge of the fixture on the seaward side so that the light source or any reflective surface of the light fixture is not visible from the beach;
- f. Replace pole lamps with low-profile, low-level luminaries so that the light source or any reflective surface of the light fixture is not visible from the beach;
- g. Plant or improve vegetation buffers between the light source and the beach to screen light from the beach;
- h. Construct a ground level barrier landward of the beach and frontal dune to shield light sources from the beach. Ground-level barriers are to be considered a last resort when no other remediation of the light source is feasible. Ground level barriers may be subject to state coastal construction control line regulations under section 161.053, Florida Statutes, and must not interfere with sea turtle nesting or hatchling emergence, or cause short- or long- term damage to the beach and dune system;
- i. Permanently remove or permanently disable any fixture which cannot be brought into compliance with the provisions of these standards.
- (2) Existing structures <u>require compliance with</u> <u>shall implement</u> one or more of the <u>following suggested</u> remedial measures <u>in order</u> to minimize interior light emanating <u>from</u> <u>doors and windows</u> within line-of-sight of the beach:
  - a. Apply window tint or film that meets the light transmittance standards for tinted glass;
  - b. Rearrange lamps, televisions, and other moveable fixtures away from windows;
  - c. Use opaque shades or room darkening window treatments (e.g., blinds, curtains, screens) to shield interior lights from the beach

# d. Other remedial measures not provided for herein may be approved by the Building Official.

- (k) Special <u>e</u><u>E</u>vents, <u>m</u><u>M</u>otor <u>v</u><u>Y</u>ehicles, and <u>t</u><u>T</u>emporary <u>l</u><u>L</u>ighting.
- (1) Lighting associated with a special event that may directly, indirectly, or cumulatively be visible from any portion of the beach shall not be authorized at nighttime during sea turtle nesting season.
- (2) The operation of all motorized vehicles as provided in section 5-4, shall be prohibited on the beach at nighttime during sea turtle nesting season.
- (3) Within sea turtle nesting season, temporary work zone lighting for roadway construction and during declared emergencies shall be directed away from the beach to avoid

illumination of or direct visibility from the beach. Work zone luminaires shall be shielded to avoid lighting areas outside of the immediate construction area.

- (4) All other temporary construction lighting shall be:
  - a. Inclusive of all the standards of this section, including using fixtures that are long wavelength, downward directed, full cutoff, and fully shielded so light is not directly or indirectly visible from the beach, and
  - b. Mounted less than eight feet above the adjacent floor or deck, measured from the bottom of fixture, and
- (5) Handheld and other portable temporary lighting shall not be directed toward or used in a manner that disturbs sea turtles.
- (ld) Enforcement, penalty. Anyone violating any provisions of this section shall be punished in accordance with all provisions of this Code including but not limited to reference of the violation to the code enforcement board.
- <u>Section 3.</u> The Town of Highland Beach Code of Ordinances, is hereby amended by amending Chapter 30 "Zoning," Article V "Natural Resources," Section 30-85 "Coastal lighting" to read as follows (deleting is <u>stricken through</u> and adding is <u>underlined</u>):

#### Sec. 30-85. – Coastal Lighting

All lighting of all <u>beachfront</u> properties <u>and all exterior lighting of properties located on the</u> <u>westside of State Road A1A</u> within the Town that may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach, <u>regardless of whether those</u> <u>properties are beachfront properties</u> structures east of SR A1A shall comply with the "sea turtle protection" lighting standards as provided in section 4-8 of this Code <u>adopted by the town</u>.

<u>Section 4.</u> <u>Severability</u>. The provisions of this Ordinance are declared to be severable and if any section, sentence, clause or phrase of this Ordinance shall for any reason be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance but they shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

<u>Section 5.</u> <u>Repeal of Laws in Conflict.</u> All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

<u>Section 6.</u> <u>Codification.</u> Section 2 and Section 3 of the Ordinance may be made a part of the Town Code of Ordinances and may be re-numbered or re-lettered to accomplish such, and the word "ordinance" may be changed to "section," "division," or any other appropriate word.

Section 7. Effective Date. This Ordinance shall be effective immediately upon adoption at second reading. \_\_\_\_\_, seconded by The foregoing Ordinance was moved by and upon being put to the vote, the vote was as follows: AYE NAY Mayor Natasha Moore Vice Mayor David Stern Commissioner Evalyn David Commissioner Judith Goldberg Commissioner Don Peters PASSED on first reading at the Regular Commission meeting held on this day of \_\_\_\_\_, 2023. The foregoing Ordinance was moved by \_\_\_\_\_, seconded by and upon being put to the vote, the vote was as follows: AYE NAY Mayor Natasha Moore Vice Mayor David Stern Commissioner Evelyn David Commissioner Judith Goldberg Commissioner Don Peters PASSED AND ADOPTED on second and final reading at the Regular Commission meeting held on this \_\_\_\_\_, 2024. ATTEST: Lanelda Gaskins, MMC Town Clerk APPROVED AS TO FORM AND LEGALITY: Glen J. Torcivia, Town Attorney