

6.6 EXTERIOR LIGHTING

6.6.1 APPLICABILITY

A. GENERALLY

The standards in this section shall apply to lighting for principal buildings submitted for permitting after January 7, 2019 on zoning lots that are adjacent to a public street or to residential zoning, or lighting for outdoor recreation uses and stadiums as described in **Section 6.6.3, Lighting for Outdoor Recreation Uses and Stadiums**, below.

B. EXEMPTIONS

This section shall not apply to:

1. The uses residential building, single family; residential building, duplex; residential building, twin home; and residential building townhouse;
2. Street lights in the public right-of-way;
3. Airport runway and aviation safety lights required by the FAA; or
4. Temporary lighting.

C. CONFLICT

Where these standards conflict with the standards of the H (Historic) or HO (Historic Overlay) zoning districts, the standards for those districts shall take precedence.

6.6.2 GENERAL REQUIREMENTS

A. LIGHTING PLAN

1. A lighting plan prepared by a lighting certified (LC) lighting professional or a professional engineer licensed in the State of North Carolina shall demonstrate that all exterior lighting is designed, located, and installed in such a manner that light levels measured at the residential property line and the public right-of-way do not exceed one-half (1/2) footcandle.
2. Prior to the issuance of a certificate of occupancy, the LC lighting professional or professional engineer shall certify in writing that that lighting was installed per the approved plans.

B. LIGHT LEVEL MEASUREMENT

1. Light levels are specified, calculated, and measured in footcandles.
2. All values are initial footcandles.
3. Measurements shall be made at ground level with the light-registering portion of the meter held horizontally pointing up.

C. PARKING LOT LIGHTING

1. Parking lot lighting shall utilize fixtures certified as full cutoff or LED BUG-rated fixtures with an upright rating of U0 and a maximum glare rating of G3.
2. Lights mounted on poles shall have a maximum pole height of thirty (30) feet and shall not be mounted greater than thirty-two feet (32) feet above grade including any base or mounting structure.
3. Non-shielded wall packs and high-intensity light beams, such as outdoor searchlights, lasers, or strobe lights are prohibited.
4. Routine maintenance of existing lighting, including changing the lamp, ballast, starter, photo control, fixture housing, lens, and other required components is allowed for all existing fixtures. A lighting plan is not required for such changes.

6.6.3 LIGHTING FOR OUTDOOR RECREATION USES AND STADIUMS

- A.** In addition to the standards above, the following shall apply to the following uses:

1. Entertainment facility, large;
 2. Fishing, fee charged;
 3. Golf driving range;
 4. Recreation services, outdoor;
 5. Recreation facility, public;
 6. Stadium, coliseum, or exhibition building;
 7. New accessory athletic fields and courts submitted for permitting after January 7, 2019; and
 8. Lighting added to existing outdoor recreation uses, stadiums, and accessory athletic fields and courts that did not have lighting before January 7, 2019.
- B.** *Fixtures shall be fitted with the manufacturer's glare control package. If the manufacturer does not have a glare control package, the fixture specification shall be changed to a manufacturer that offers a glare control package.*
- Fixtures shall be fitted with the manufacturer's glare control package, except where the Planning Board determines the absence of glare control elements will not have a negative impact on surrounding property through the site plan review process (Planning Board Review). Where such a determination is made, the requirements of subsection (E) below shall not apply.
- C.** Fixtures shall be designed with a sharp cutoff and aimed so that their beams fall within the primary playing area and immediate surroundings, so that off-site direct illumination and glare are significantly restricted.
- D.** *The maximum pole height for a new outdoor recreation lighting source shall be eighty (80) feet unless approved by the Assistant City Manager or Public Works or a designee after being determined that the lighting will have no significant adverse effect on surrounding property. Existing poles for outdoor recreation lighting sources with a height greater than eighty (80) feet may be used for new lighting if approved by the Assistant City Manager for Public Works or a designee after being determined that the lighting will have no significant adverse effect on surrounding property.*
- The maximum pole height for a new outdoor recreation lighting source shall be eighty (80) feet unless approved by the Planning Board after being determined that the lighting will have no significant adverse effect on surrounding property. Existing poles for outdoor recreation lighting sources with a height greater than eighty (80) feet may be used for new lighting if approved by the Planning Board through the site plan review process (Planning Board Review) after being determined that the lighting will have no significant adverse effect on surrounding property.
- E.** The lighting plan shall demonstrate that the maximum candela per fixture does not exceed 7,500 candela at a distance of 150 feet from the edge of the playing field.
- F.** *Except as authorized by Assistant City Manager or Public Works or a designee, new lighting fixtures for existing outdoor recreation uses, stadiums, and accessory athletic fields and courts installed after January 7, 2019 shall follow the standards above only if they change from conventional lighting fixtures to LED fixtures.*
- Except as otherwise approved by the Planning Board as set forth in subsection (D) above, new lighting fixtures for existing outdoor recreation uses, stadiums, and accessory athletic fields and courts installed after February 14, 2019 shall follow the standards above only if they change from conventional lighting fixtures to LED fixtures.