

## **ARTICLE 10**

### **EXTERIOR LIGHTING**

#### **Section 10.01 Purpose.**

The purpose of this Article is to preserve the lawful nighttime use and enjoyment of all properties in the Township through the establishment and enforcement of reasonable and consistent exterior lighting standards. Exterior lighting shall be designed, installed, and maintained to control glare and light trespass; conserve energy and resources; and prevent the degradation of the nighttime visual environment.

The standards of this Article are intended to protect the general welfare by allowing sufficient but not excessive lighting for parking areas, walkways, driveways, building entrances, loading areas, and common areas; to minimize the adverse effects of inappropriate lighting; and to provide for the safety and security of people and property in the Township.

#### **Section 10.02 Scope.**

The standards of this Article shall apply to all exterior lighting sources, and to all light sources visible from any road right-of-way or adjacent lot, except as follows:

1. Exterior lighting accessory to farms, greenhouses, private riding stables, and single- and two-family (duplex) dwellings shall be exempt from the requirements of this Article.
2. Holiday decorations displayed for temporary periods not to exceed 90 calendar days shall be exempt from the requirements of this Article.
3. Lighting for a permitted temporary circus, fair, carnival, or civic use shall be exempt from the requirements of this Article, except that the Planning Commission or Zoning Inspector may impose reasonable restrictions on the use of such lighting where necessary to protect the public health, safety and welfare.
4. Shielded pedestrian walkway lighting shall be exempt from the requirements of this Article.
5. This Article shall not apply to circumstances where federal or state laws, rules or regulations take precedence over the provisions of this Article; or where fire, police, emergency, or repair personnel need light for temporary or emergency situations.
6. This Article shall not apply to fossil fuel light produced directly or indirectly from the combustion of natural gas or other utility-type fossil fuels (e.g., gas lamps).

### Section 10.03 General Provisions.

The following general standards shall apply to all light sources regulated by this Article:

**A. Fully-Shielded.**

Exterior lighting shall be fully shielded, using concealed source fixtures directed downward and away from adjacent lots and road rights-of-way. All exterior light fixtures shall utilize full cutoff housings, louvers, glare shields, optics, reflectors or other measures to prevent off-site glare and minimize light pollution (see illustration).

**B. Glare and Light Trespass.**

Exterior lighting shall be designed, constructed, and maintained in a manner that minimizes off-site glare, light trespass on neighboring lots, and traffic hazards for motorists.

**C. Lamp Wattage.**

Lamp wattages and types shall be consistent with fixture’s style and function, as follows:

1. Fixtures in parking lots and high traffic areas shall use low or high-pressure sodium, metal halide or similar lamp types with a maximum lamp wattage of 250 watts per fixture up to 20 feet in height above grade. A maximum of 400 watts per fixture shall be permitted for fixtures exceeding 20 feet in height above grade.
2. Decorative exterior light fixtures shall be limited to lamps with a maximum wattage of 100 watts per fixture.

**D. Intensity.**

The maximum intensity of light within any site shall not exceed the following standards:

Light Intensity	Maximum (footcandles)
At any point within the site	10.0
At any lot boundary or road right-of-way line	1.0

1. **Outdoor dealership sales area lighting.** A maximum lighting intensity of 20.0 footcandles shall be permitted for any point within a dealership outdoor sales lot, provided that all site lighting is otherwise in compliance with this Ordinance.
2. **Pump island canopy lighting.** A maximum lighting intensity of 20.0 footcandles shall be permitted for any point under a motor vehicle fueling station’s pump island canopy, provided that all light fixtures under the canopy shall be fully recessed into the canopy structure, and all site lighting is otherwise in compliance with this Ordinance (see illustration).

**E. Measurements.**

Measurements of exterior lighting height and intensity shall be made in accordance with the following:

1. Light intensity levels shall be measured on the horizontal plane at grade level within the site.
2. Light intensity levels shall be measured on the vertical plane of the lot or road right-of-way boundaries at a height of five (5) feet above grade.
3. Fixture height shall be measured from grade level to the highest point of the light source (see illustration).

**F. Submittal Requirements.**

The following exterior lighting information may be required by the Planning Commission or Zoning Inspector with any site plan, site condominium plan, subdivision plat or zoning permit application where exterior lighting is proposed to be altered or installed:

1. The location, type and height of all existing and proposed light fixtures.
2. A photometric grid measuring the overall light intensity within the site in footcandles.
3. Manufacturer’s specifications and details for each type of light fixture, including the total lumen output, type of lamp, and method of shielding.

**Section 10.04 Standards by Type of Fixture.**

The following additional standards shall apply to specific types of exterior light fixtures and any light sources visible through a window from the road right-of-way or abutting lot, in addition to the provisions of Section 10.03 (General Standards):

**A. Freestanding Pole Lighting.**

The following standards shall apply to all freestanding, pole-mounted light fixtures:

1. **Maximum overall height.** The maximum height of pole-mounted fixtures shall be directly proportional to the fixture’s proximity to the boundary of a lot or parcel in a residential zoning district or occupied by any RURAL USES or RESIDENTIAL USES, as follows:

<b>Fixture Location</b>	<b>Maximum Fixture Height</b>
Less than 50 feet	15 feet
50 feet to 300 feet	20 feet
More than 300 feet	25 feet

2. **Hours of operation.** All private exterior lighting systems accessory to non-residential uses shall incorporate automatic timers.
  - a. Exterior light fixtures shall not be illuminated after 11:00 p.m. or one-half (1/2) hour following the close of the business day, whichever is later.
  - b. Such fixtures shall not be illuminated before sunrise or one-half (1/2) hour prior to the beginning of the business day, whichever is earlier.
  - c. Necessary illumination for security purposes shall be permitted between these hours.

**B. Architectural Lighting.**

Architectural lighting shall be subject to the following:

1. **Facade illumination.** Exterior illumination of building facades shall be limited to fully shielded fixtures directed towards the facade. All light from such fixtures shall be concentrated on the wall surface.
2. **Accent lighting.** Unshielded luminous tube (neon) or fluorescent lighting shall be prohibited as an architectural detail on the exterior of any structure; including but not limited to rooflines, cornices, eaves, windows, and door openings. The Planning Commission may approve internally illuminated architectural bands or similar shielded lighting accents as part of a site plan, upon determining that such lighting accents would enhance the aesthetics of the site, and would not cause off-site glare or light pollution.

**C. Window Lighting.**

All interior light fixtures visible through a window from a road right-of-way or abutting lot shall be shielded to prevent glare impacts at the lot boundary or within the right-of-way. Unshielded luminous tube (neon) and fluorescent light fixtures shall be prohibited where the light source would be visible from an abutting lot or road right-of-way.

**D. Illuminated Signs.**

Sign illumination shall conform to the provisions of Article 9 (Signs).

**Section 10.05 Prohibited Lighting.**

The following types of exterior light sources and activities shall be prohibited:

1. **Mercury vapor lighting.** The installation of mercury vapor fixtures shall be prohibited.
2. **Animated lighting.** Lighting shall not be of a flashing, moving, animated or intermittent type (such as animated sign lighting on an electronic reader board).

## Section 10.06 Alternatives and Alterations.

Specific lighting design alternatives or fixture substitutions may be permitted in accordance with the purpose of this Article and the following:

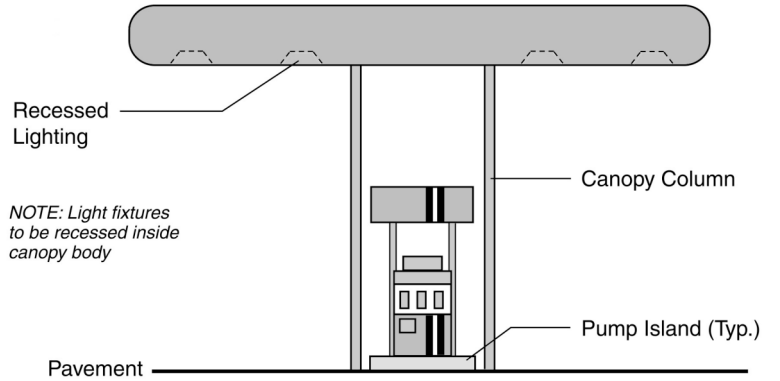
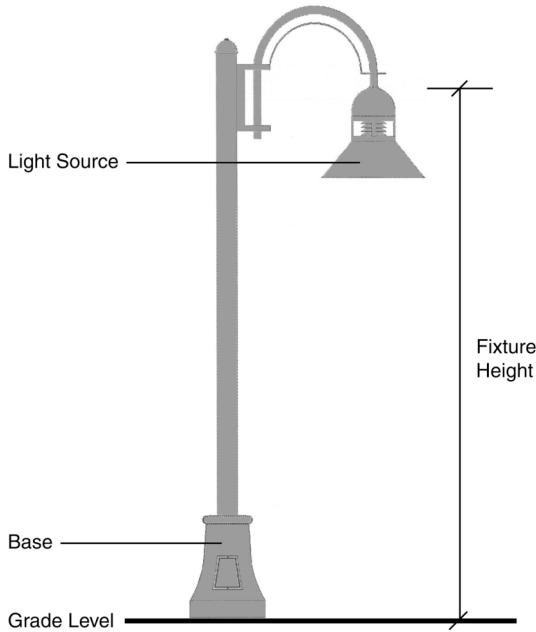
1. **Decorative light fixtures.** The Planning Commission may approve the use of decorative light fixtures as an alternative to fully shielded fixtures, where such fixtures would enhance the aesthetics of the site without causing off-site glare or light pollution.
2. **Fixture alteration or replacement.** Light fixtures regulated by this Article shall not be altered or replaced after approval has been granted, except where the Township Planner or Zoning Inspector has verified that the alteration or substitute fixture conforms to the requirements of this Article.

## Section 10.07 Exceptions.

It is recognized by the Township that certain uses or circumstances may have special exterior lighting requirements not otherwise addressed by this Article. The Zoning Board of Appeals (ZBA) may grant an exception to waive or modify provisions of this Article for a particular use or circumstance, upon determining that all of the following conditions have been satisfied:

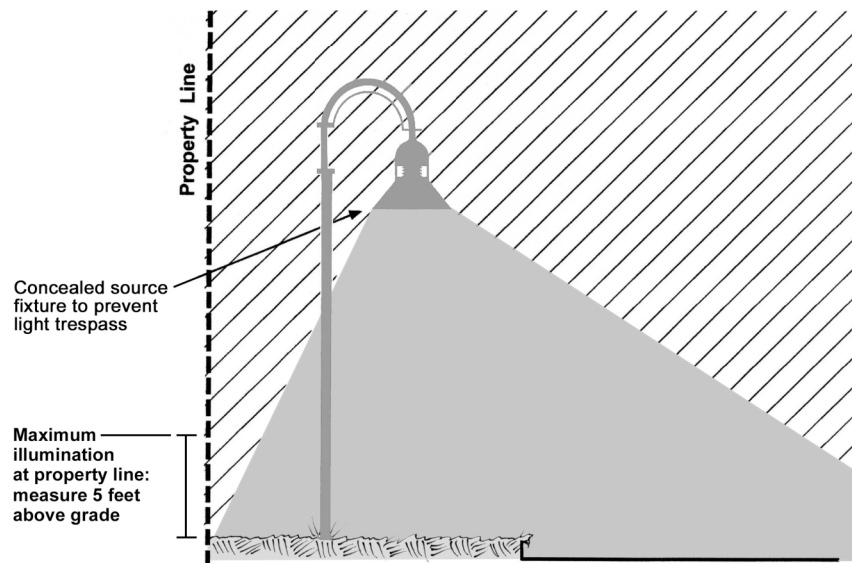
1. A public hearing shall be held for all lighting exception requests in accordance with the procedures set forth in Section 12.03 (Public Hearing Procedures).
2. The waiver or modification is necessary because of safety or design factors unique to the use, circumstance or site.
3. The minimum possible light intensity is proposed that would be adequate for the intended purpose. Consideration shall be given to maximizing safety and energy conservation; and to minimizing light pollution, off-site glare, and light trespass on to neighboring properties or road rights-of-way.
4. For lighting related to roads or other vehicle access areas, a determination is made that the purpose of the lighting cannot be achieved by installation of reflectorized markers, lines, informational signs, or other passive means.
5. Additional conditions or limitations may be imposed by the ZBA to protect the public health, safety or welfare, or to fulfill the spirit and purpose of this Article.

# ILLUSTRATIONS



**Pump Island Canopy Lighting**

**Light Fixture Height**



**Lighting Fixture Orientation and Shielding**