

## Chapter 113 GOOD NEIGHBOR RESIDENTIAL OUTDOOR LIGHTING

### 113 - 1 Declaration.

The Borough council declares as follows:

Properly designed and installed outdoor night lighting can benefit everyone by increasing safety, enhancing the nighttime character and providing security. These benefits must be balanced with the fact that outdoor lighting that is improperly designed and/or installed can create problems of excessive glare, light trespass, and higher energy use. Excessive glare can be annoying and may cause safety problems. Light trespass can reduce a sense of privacy. Higher energy use increases utility costs and contributes to climate change. There is a need for a lighting ordinance that recognizes the benefits of outdoor lighting and provides clear guidelines to minimize any negative effects. Appropriately regulated and properly installed, outdoor lighting contributes to the safety and welfare of the residents, business and visitors of the Borough.

**Commented [KA1]:** 113 is available if we are going in alphabetical order.

**Commented [KA2]:** I am not sure if we typically do a "declaration" section.

### **113 - 2 Purpose.**

The purpose of this chapter is to regulate outdoor lighting in order to reduce or prevent light pollution, to reduce or prevent glare and light trespass, to promote the conservation of energy, and to preserve and enhance neighborhood character and night-sky beauty of the Borough of Pennington, while also respecting the need for safety and security.

### **113 – 3 Definitions.**

As used in this chapter:

“Accent lighting” means any directional lighting that emphasizes a particular object or draws attention to a particular area.

“Floodlight” means a lamp that spreads light over a wide area.

“Full cut-off” means a luminaire that allows no direct light emissions above the horizontal plane (see definition of horizontal plane).

“Fully shielded” means light fixtures shielded or constructed so that no direct light emissions occur above the horizontal plane (see definition of horizontal plane).

“Glare” means stray, unshielded light striking the eye that results in discomfort glare, such as bright light causing squinting of the eyes; and/or disabling glare, such as bright light that reduces the ability to see into shadows.

“Horizontal plane” means a ninety degree angle measured from a vertical line from the bottom of the lamp or bulb extended to the ground.

“Kelvin” means the measure of the color temperature of a light source.

“Lamp or bulb” means the light-producing source installed in the socket portion of a luminaire.

“Light pollution” means general night sky glow caused by scattering artificial light in the atmosphere and resulting in a decreased ability to see the natural night sky.

“Light trespass” means light emitted by a fixture that directly illuminates beyond the property on which the fixture is installed.

“Lumen” means a measurement of light energy generated by a light source.

“Luminaire or fixture” means a complete lighting unit, including the lamps or bulbs, together with the parts required to distribute the light, to position and protect the lamps, and to connect the lamps to the power supply.

“Lux” means one lumen per square meter, a unit of luminance.

“Shielding” means a method to control light rays so as to avoid light trespass or glare.

“Spotlight” means any lamp that incorporates a reflector or a refractor to concentrate the light output into a directed beam in a particular direction.

“Watt” means a unit of electric power consumed by a lamp or bulb. (Ord. 1552 § 1, 2011).

#### **113 - 4 Applicability and good neighbor information process.**

(a) Any luminaire or fixture that does not conform to this chapter, but which lawfully existed as of the date of the enactment of the ordinance codified in this chapter, shall be abated or made to conform within ninety days of the property owner or business owner receiving written notice that the luminaire or fixture is nonconforming.

(b) Any person or business may submit an application to the XXX for an administrative exemption from, or a delay in completing corrective action, pursuant to the requirement of Section 25.05.020. The request shall state fully:

(1) The circumstances and conditions that justify an administrative exemption; and

(2) The circumstances and conditions that would result in a financial hardship or deprive the applicant of reasonable use of the land or building; and

(3) How granting an administrative exemption will not be injurious to the neighborhood or otherwise detrimental to the public health, safety, or welfare.

(c) Compliance with this chapter shall be administered and enforced by the Borough of Pennington XX department pursuant to the provisions of XX. Any adjacent neighboring property owner affected by glare or trespass shall first discuss the concern with the owner of the light fixture prior to filing a service request with the city. The filing of service requests shall be limited to adjacent neighboring property owners directly impacted by light trespass.

(d) The provisions of this chapter shall be applicable to all federal, state, and local governmental agencies to the maximum extent permitted by law.

(e) In the event of a conflict between the provisions of the chapter and any other section of the Municipal Code, the more restrictive requirement shall apply.

**Commented [KA3]:** Let's discuss how to make this less bureaucratic. Perhaps a Declaration of Exemption that the Borough can agree or disagree?

**113 – 5 General standards.**

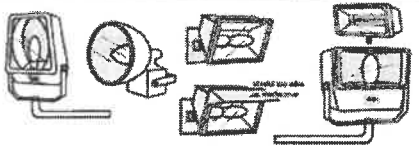
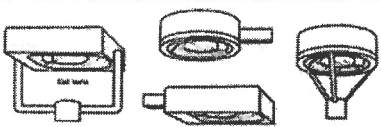
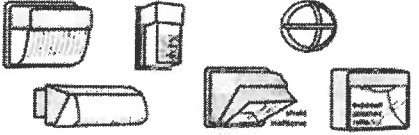
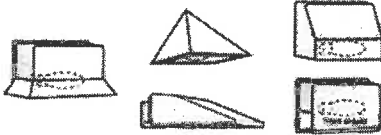
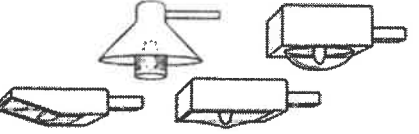
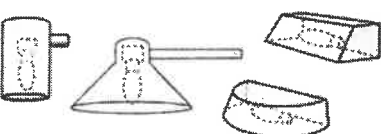
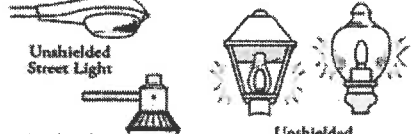
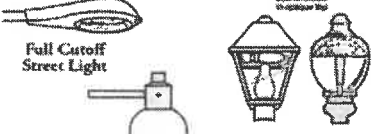


The following general standards shall apply to all outdoor lighting installed after the effective date of the ordinance codified in this chapter:

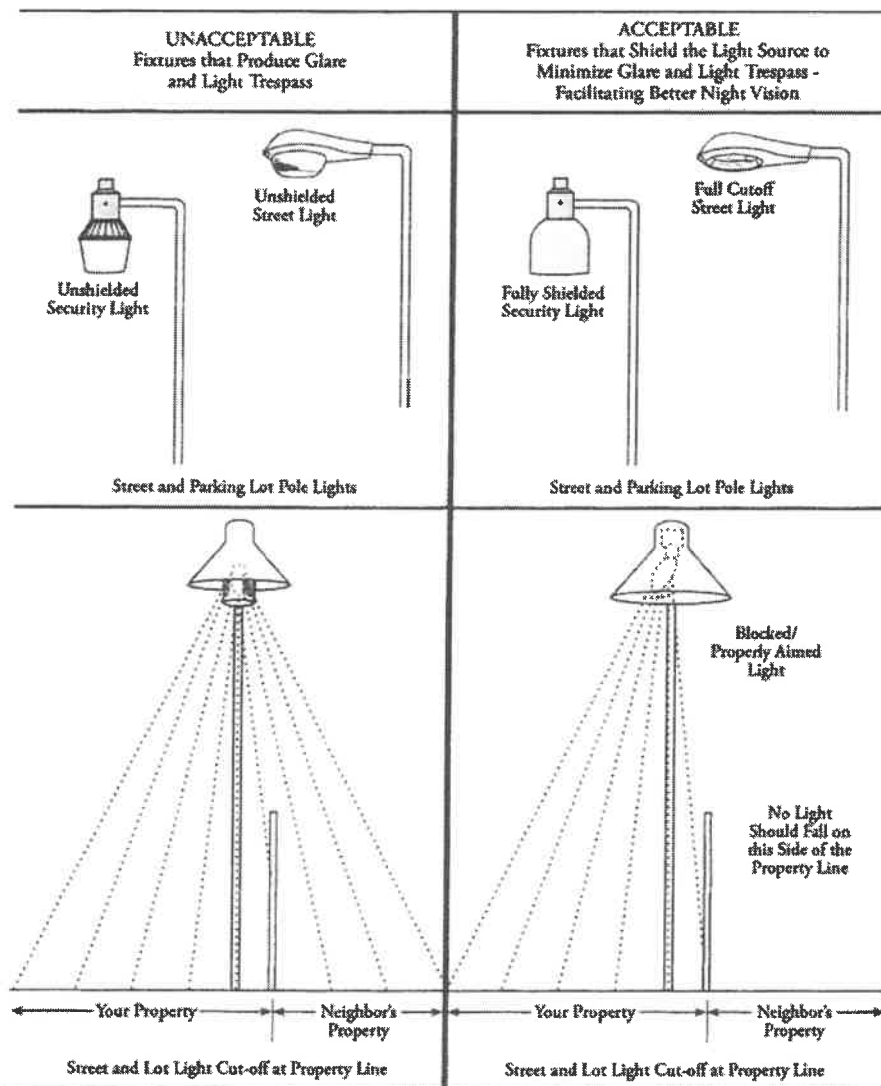
- (a) Light trespass that results in glare is prohibited.
- (b) Outdoor lighting must be hooded, fully shielded, and aimed downward. Examples of acceptable and unacceptable light shielding and hooding are shown in Table A.
- (c) Mercury vapor and low pressure sodium lighting are not permitted for street lighting and commercial applications.

**Table A**

**Acceptable Shielding, Hooding and Aiming of  
Outdoor Light Fixtures**

The following schematics show what is acceptable and what is unacceptable in the Borough of Pennington:

<b>UNACCEPTABLE</b> Fixtures that Produce Glare and Light Trespass	<b>ACCEPTABLE</b> Fixtures that Shield the Light Source to Minimize Glare and Light Trespass - Facilitating Better Night Vision
 <p>Unshielded or Poorly-shielded Floodlights</p>	 <p>Full Cutoff Fixtures</p>
 <p>Unshielded Wallpacks &amp; Poorly-shielded Wall Mount Fixtures</p>	 <p>Fully-shielded Wallpack &amp; Wall Mount Fixtures</p>
 <p>Drop-lens &amp; Sag-lens Fixtures with Exposed Bulb/Refractor Lens</p>	 <p>Fully-shielded Fixtures</p>
 <p>Unshielded Street Light</p> <p>Unshielded Security Light</p> <p>Unshielded 'Period' Style Fixtures</p>	 <p>Full Cutoff Street Light</p> <p>Fully Shielded Security Light</p> <p>Fully Shielded 'Period' Style Fixtures</p>
 <p>Unshielded PAR Floodlights</p> <p>Drop-lens Canopy Fixtures</p>	 <p>Shielded/Property Aimed PAR Floodlights</p> <p>Flush Mounted Canopy Fixtures</p>



#### 113 - 6 Exemptions.

**Alert:** This item has been affected by: Ordinance 1650. See the CodeAlert page for details on recent amendments and newly-added provisions.

Commented [KA4]: Kati - look into this.

The following are exempt from the provisions of this chapter:

- (a) Fixtures not fully shielded shall be allowed only if less than three thousand Kelvin and/or seven hundred fifty lumens per fixture.
- (b) Traffic control signals and devices.
- (c) Street lights installed prior to the effective date of the ordinance codified in this chapter. New or replacement lighting shall comply with this chapter.
- (d) Temporary emergency lighting (e.g., for use by fire, police, or repair personnel).
- (e) Moving vehicle lights.
- (f) Residential holiday lighting between November 15th and January 15th and turned off no later than twelve a.m. Residential holiday lighting, as defined by city council resolution, between January 16th and November 14th limited to no more than seven consecutive days and turned off no later than twelve a.m.
- (g) Existing outdoor sports-field lights installed prior to the effective date of the ordinance codified in this chapter. New or replacement lighting shall comply with this chapter.
- (h) Special events approved by the city pursuant to a temporary use permit and emergency or Borough approved night-time construction.
- (i) Safety lights not exceeding two thousand four hundred lumens (one hundred fifty watts incandescent equivalent) per fixture and that are controlled by a motion sensor switch and do not remain on longer than five minutes after activation.
- (j) Low voltage landscape lighting that does not exceed four hundred lumens (thirty-five watts incandescent equivalent) per fixture or string of lights.
- (k) Approved lighting fixtures for any historic resource listed on the register. Nonconforming lighting fixtures consistent with the character of a historic resource on the register may be exempted, subject to the approval of the community development director. Approved fixtures shall be consistent with the architectural period and architecture style of the of the resource and shall not exceed seven hundred fifty lumens (sixty watt incandescent equivalent) and three thousand Kelvin.
- (l) Accent lighting for art located in public places subject to the approval of the community development director.
- (m) Lighting for U.S. flags.
- (n) Lighting required for the purpose of public safety or crime prevention and approved by the chief of police.

Commented [KA5]: above?

Commented [KA6]: seems a bit much. Many folks have garden lights.

Commented [KA7]: Requires discussion. This was supposed to be about residential.

Commented [KA8]: Need this?