

NORTH COVENTRY TOWNSHIP
ZONING ORDINANCE

LIGHTING

Section 1106 – OUTDOOR LIGHTING

- A. Purpose – To Require and set minimum standards for outdoor lighting to:
1. Provide for and control lighting in outdoor public places where public health, safety and welfare are potential concerns
 2. Protect drivers and pedestrians from the glare of non-vehicular light sources
 3. Protect neighbors and the night sky from nuisance glare and light trespass from improperly selected or poorly placed, aimed, applied, maintained or shielded light sources
 4. Promote energy efficient lighting design and operation
 5. Protect and retain the intended visual character of the various Township venues
- B. Applicability
1. All uses within the Township where there is outdoor lighting, including, but not limited to, residential, multi-family residential, commercial, industrial, public and private recreational/sports, institutional uses, and sign, billboard, architectural and landscape lighting.
 2. Temporary seasonal decorative lighting and emergency lighting are exempt from all but the glare-control requirements of this Ordinance.
- C. Definitions
1. Footcandle – Unit of light intensity stated in lumens per square foot and measurable with an illuminance meter, a.k.a. light meter
 2. Full Cutoff – Attribute of a lighting fixture from which no light is emitted at or above a horizontal plane drawn through the bottom of the fixture and no more than 10% of the lamp’s intensity is emitted at or above an angle 10° below that horizontal plane, at all lateral angles around the fixture
 3. Glare – Excessive brightness in the field of view that causes loss in visual performance or annoyance, to jeopardize health, safety or welfare
 4. Illuminance – Quantity of light, measured in footcandles
 5. Light Trespass – Light emitted by a lighting fixture or installation, which is cast beyond the boundaries of the property on which the lighting installation is sited.
 6. Lumen – The light-output rating of a lamp (light bulb), as used in the context of this Ordinance.
- D. Criteria
1. Illumination Levels – Lighting, where required by this Ordinance, or otherwise required by the Township, or proposed by Applicant, shall have intensities and uniformities in accordance with the recommended practices of the Illuminating Engineering Society of North America (IESNA), unless otherwise directed by the Township.
 2. Lighting Fixture Design
 - a. Fixtures shall be of a type and design appropriate to the lighting application and aesthetically acceptable to the Township.
 - b. For the lighting of predominantly horizontal surfaces such as, but not limited to, roadways, vehicular and pedestrian passage areas, merchandising and storage areas, automotive-fuel dispensing facilities, automotive sales areas, loading docks, cul-de-sacs, active and passive recreational areas, building entrances, sidewalks, paths, site entrances and parking areas, fixtures shall be aimed straight down and shall meet IESNA full-cutoff criteria. Fixtures with an aggregate wattage per-fixture that does not exceed the output of a standard 60-watt incandescent lamp, i.e. 1,000 lumens, are exempt from the requirements of this paragraph.
 - c. For the lighting of non-horizontal surfaces such as, but not limited to, facades, landscaping, signs, billboards, fountains, displays, flags and statuary, the use of lighting fixtures that are

installed and aimed so as to project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward or onto a public roadway shall not be permitted. Fixtures with an aggregate wattage per-fixture that does not exceed the output of a standard 60-watt incandescent lamp, i.e. 1,000 lumens, are exempt from the requirements of this paragraph.

- d. Barn lights,” aka “dusk-to-dawn lights,” shall not be permitted where they are visible from other uses unless fitted with a reflector to render them full cutoff.

3. Control of Glare

- a. All lighting shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property.
- b. Parking facility and vehicular and pedestrian way lighting (except for safety and security applications), for commercial, industrial and institutional uses shall be automatically extinguished no later than one hour after the close of business or facility operation. When safety or security lighting is proposed by Applicant for after-hours illumination, it shall not be in excess of thirty-three (33) percent of the illumination levels normally required or permitted during business hours.
- c. Illumination for signs, billboards, building facades and/or surrounding landscapes for decorative, advertising or aesthetic purposes is prohibited between 11:00 p.m. and dawn, except that such lighting situated on the premises for a commercial establishment may remain illuminated while the establishment is actually open for business, and until one hour after closing.
- d. Vegetation screens shall not be employed to serve as the primary means for controlling glare. Rather, glare control shall be achieved primarily through the use of such means as cutoff fixtures, shields and baffles, and appropriate application of fixture mounting height, wattage, aiming angle and fixture placement.
- e. The intensity of illumination projected from any use onto a residential use shall not exceed 0.1 initial vertical footcandle, measured line of sight from any point on the receiving residential property.
- f. Externally illuminated billboards and signs shall be lighted by fixtures mounted at the top of the billboard or sign and aimed downward. The fixtures shall be designed, fitted and aimed to place the light output on and not beyond the sign or billboard.
- g. Fixtures not meeting IESNA full-cutoff criteria shall not be mounted in excess of sixteen (16) feet above finished grade. Fixtures meeting IESNA full-cutoff criteria shall not be mounted in excess of twenty (20) feet above finished grade. For recreational lighting maximum mounting height requirements, refer to Subdivision & Land Development Ordinance, Section 628, under “Recreational Uses.”
- h. Fixtures not aimed straight down, for such applications as façade, fountain, feature and landscape illumination shall be aimed so as not to project their output beyond the objects intended to be illuminated, shall be extinguished between the hours of 11 p.m. and dawn and shall not be in conflict with the Township’s aim to maintain its rural character.
- i. Only the United States and the state flag shall be permitted to be illuminated from dusk till dawn and each flagpole shall be illuminated by a single source with a beam spread no greater than necessary to illuminate the flag. Flag lighting sources shall not exceed 10,000 lumens per flagpole.
- j. Under-canopy lighting, for such applications as a gas/service station, hotel/theater marquee, fast-food/bank/drugstore drive thru, shall be accomplished using flat-lens full-cutoff fixtures aimed straight down and shielded in such a manner that the lowest opaque edge of the fixture shall be below the light source. The average illumination intensity in

the area directly below the canopy shall not exceed 20 maintained footcandles and the maximum intensity shall not exceed 40 maintained footcandles.

4. Installation
 - a. Electrical feeds for lighting standards shall be run underground, not overhead.
 - b. Poles supporting lighting fixtures for the illumination of parking areas and located directly behind parking spaces, or where they could be hit by snow plows, shall be placed a minimum of five (5) feet outside paved area or tire stops, or placed on concrete pedestals at least thirty (30) inches high above the pavement, or suitably protected by other Township-approved means.
 - c. Pole mounted fixtures for lighting horizontal tasks shall be aimed straight down.
 5. Maintenance – Lighting fixtures and ancillary equipment shall be maintained so as to always meet the requirements of this Ordinance.
- E. Plan Submission – Lighting plans, when requested by the Township, shall be submitted for variance, building permit and special exception applications for review and approval, in accordance with the plan-submission information requirements specified in Subdivision & Land Development Ordinance Section 628, - Lighting Requirements and Design Standards.
- F. Compliance Monitoring
1. Safety Hazards
 - a. If the Township judges a lighting installation creates a safety hazard, the person(s) responsible for the lighting shall be notified and required to take remedial action.
 - b. If appropriate corrective action has not been effected within fifteen (15) days of notification, the Township may take appropriate legal action.
 2. Nuisance Glare and Inadequate Illumination Levels
 - a. When the Township judges an installation produces unacceptable levels of nuisance glare, skyward light, excessive or insufficient illumination levels or otherwise varies from this Ordinance, the Township may cause notification of the person(s) responsible for the lighting and require appropriate remedial action.
 - b. If the infraction so warrants, the Township may act to have the problem corrected as in E.1.b. above.
- G. Nonconforming Lighting – Any lighting fixture or lighting installation existing on the effective date of this Ordinance that does not conform with the requirements of this Ordinance, shall be considered as a lawful nonconformance. A nonconforming lighting fixture or lighting installation shall be made to conform with the requirements of this Ordinance when:
1. Minor corrective action, such as reaiming or shielding can achieve conformity with the applicable requirements of this Ordinance
 2. It is deemed by the Township to create a safety hazard
 3. It is replaced by another fixture or fixtures, abandoned or relocated
 4. There is a change in use

Approved 6/23/03