

Chapter 124. Lighting, Outdoor

[HISTORY: Adopted by the Board of Supervisors of the Township of Union 1-19-2009 by Ord. No. 2009-01.^[1] Amendments noted where applicable.]

GENERAL REFERENCES

Code enforcement — See Ch. **79**.

Streets and sidewalks — See Ch. **168**.

Subdivision and land development — See Ch. **172**.

Zoning — See Ch. **200**.

[1] *Editor's Note: This ordinance also repealed former Ch. 124, Outdoor Lighting, adopted 8-18-2003 by Ord. No. 2003-2.*

§ 124-1. Short title.

This chapter shall be known as, and may be cited as the "Union Township Outdoor Lighting Ordinance of 2009."

§ 124-2. Purpose.

The purpose of this chapter is to require and set minimum standards for outdoor lighting to:

- A. Provide for and control lighting in outdoor public places where public health, safety and welfare are potential concerns.
- B. Protect drivers and pedestrians from the disabling glare of nonvehicular light sources.
- C. Protect neighbors and the night sky from nuisance glare and light trespass from improperly selected or poorly aimed, placed, applied, maintained or shielded light sources.
- D. Promote energy-efficient lighting design and operation.
- E. Protect and retain the rural character of Union Township.
- F. Provide for variations in permitted lighting and lighting levels commensurate with designated lighting zones.

§ 124-3. Applicability.

- A. This chapter shall regulate uses that are proposed to operate during hours of darkness.

§ 124-4. Exemptions.

The following shall be exempt from the requirements of this chapter:

- A. Lighting required for agricultural uses.
- B. Lighting employed in the performance of emergency services.
- C. Seasonal decorative lighting during the months of December and January.

§ 124-5. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

BILLBOARD

A sign that directs attention to a business, commodity, service or entertainment conducted, sold or offered at a location other than the premises on which the sign is located - an off-site advertising sign.

[Added 7-16-2018 by Ord. No. 2018-02]

FOOTCANDLE

A unit of light quantity stated in lumens per square foot and measurable with an illuminance meter, aka "footcandle or light meter."

FULL CUTOFF

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.

GLARE

The sensation produced by lighting that causes an annoyance, discomfort or loss in visual performance and visibility to the eye.

ILLUMINANCE

A measure of the amount of light falling onto a surface with light coming from an external light source(s). Illuminance, or illumination, is measured in units of footcandles or lux.

[Amended 7-16-2018 by Ord. No. 2018-02]

LIGHT METER

An instrument called an illuminance meter or light meter which measures the amount of light (illuminance) being received at a location.

[Added 7-16-2018 by Ord. No. 2018-02]

LIGHT TRESPASS

The level of illumination (illuminance) which the light source on one property shines onto another property. This is measured in footcandles (or lux), generally at the property line of the property receiving the light.

[Amended 7-16-2018 by Ord. No. 2018-02]

LUMEN

The light-output rating of a lamp (light bulb), as used in the context of this chapter.

LUMINANCE

A measure of brightness of a source emitting light such as a backlit, digital or LED sign or billboard or a surface reflecting light. Luminance, or surface brightness, is most often measured in nits, or candelas per square meter (cd/m^2) which are equivalent.

[Added 7-16-2018 by Ord. No. 2018-02]

NIT

A nit is a measurement of luminance whose standard is the amount of light that one candle gives off in one square meter of area. A nit measures light force given off from a curved surface such as a light bulb or an LED. The nit is a unit of measurement that is used for "brightness" given by such sources as digital signs, displays, lighted billboards, etc.

[Added 7-16-2018 by Ord. No. 2018-02]

SIGN

Any structure, building, wall, or other outdoor surface, or any device or part thereof, which displays or includes any letter, word, model, banner, flag, pennant, insignia, device, or other representations used for announcement, direction or advertisement. The word "sign" includes the word "billboard" but does not include the flag, pennant, or insignia or any nation, state, city or other political unit nor public traffic or directional signs.

[Added 7-16-2018 by Ord. No. 2018-02]

§ 124-6. Lighting zones.

The Township has been divided into lighting zones in which lighting is allowed or restricted commensurate with the need to control light trespass, glare and the need for more or less illumination. In addition to the other requirements in this chapter, the following supplementary restrictions shall be imposed:

- A. LZ1: Illumination levels shall not exceed 1.0 footcandle at any point on the property. Sign and billboard lighting shall not be permitted.
[Amended 7-16-2018 by Ord. No. 2018-02]
- B. LZ2: Illumination levels shall not exceed 2.0 footcandles at any point on the property. Billboard lighting shall not be permitted. Sign lighting, whether off or on premises, shall only be illuminated while the business or facility is actually open to receive customers or patrons, and for an additional period of 1/2 hour thereafter.
[Amended 7-16-2018 by Ord. No. 2018-02]
- C. LZ3: Illumination levels shall not exceed 3.0 footcandles at any point on the property, except that high-activity facilities such as petroleum dispensing and fast-food operations shall be permitted to have illumination levels not to exceed 10 footcandles. Sign and billboard lighting as permitted by zoning shall be in compliance with the standards set forth in § 124-9 of this chapter.
[Amended 7-16-2018 by Ord. No. 2018-02]

§ 124-7. Lighting criteria.

A. Illumination levels.

- (1) Lighting, where required by this chapter or otherwise required by the Board of Supervisors, shall have illuminances and uniformity ratios in accordance with the current recommended practices of the Illuminating Engineering Society of North America (IESNA) as contained in the current issue of:
 - (a) IESNA RP-33 Lighting for Exterior Environments;
 - (b) IESNA RP-6 Sports and Recreational Area Lighting;
 - (c) IESNA RP-8 Roadway Lighting; and
 - (d) IESNA RP-20 Lighting for Parking Facilities.
- (2) These recommended practices are hereby incorporated by reference as though more fully set forth herein. Copies of the recommended practices are available for use at the Township Municipal Building.

B. Lighting fixture design.

- (1) Fixtures shall be of a type and design appropriate to the lighting application and aesthetically acceptable to the Township.
- (2) For the lighting of predominantly horizontal surfaces such as, but not limited to, roadways, areas of vehicular and pedestrian passage, merchandising and storage areas, automotive-fuel-dispensing facilities, automotive sales areas, loading docks, culs-de-sac, 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, unless the aggregate wattage per fixture does not exceed the output of a standard forty-watt incandescent lamp, i.e., 500 lumens, in which case noncutoff fixtures shall be permitted.
- (3) For the lighting of nonhorizontal surfaces such as, but not limited to, facades, landscaping, signs, fountains, displays, flags and statuary, the use of lighting not meeting IESNA full-cutoff criteria shall be permitted only with the approval of the Board of Supervisors, or its designee, based upon acceptable glare control. (Approval shall not be required if the aggregate wattage per fixture does not exceed the output of a standard forty-watt incandescent lamp, i.e., 500 lumens.)
- (4) 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.

C. Control of nuisance and disabling glare, i.e., excessive brightness or hot spots in the field of view.

- (1) 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 public roadway or neighboring use or property.
- (2) Floodlights and spotlights, when their use is specifically approved by the Township, shall be so installed and aimed that they do not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward or onto a public roadway.

- (3) Unless otherwise permitted by the Board of Supervisors, e.g., for safety or security or all-night commercial/industrial operations, lighting for commercial, industrial and public recreational and institutional applications shall be controlled by automatic switching devices such as time clocks or combination motion detectors and photocells to permit extinguishing sources between 11:00 p.m. and dawn.
- (4) Security lighting proposed for use after 11:00 p.m., or after the normal hours of operation for commercial, industrial, institutional or municipal applications, shall be reduced by 75% from the levels normally permitted by this chapter from then until dawn.
- (5) 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.
- (6) The intensity of illumination projected onto a residential use from another property shall not exceed 0.1 footcandle, measured vertically, line-of-sight, from any location on the receiving property.
- (7) Except as provided for below under recreational uses, fixtures meeting IESNA full-cutoff criteria shall not be mounted in excess of 20 feet above finished grade of the surface being illuminated and fixtures not meeting IESNA full-cutoff criteria, when their use is specifically approved by the Township, shall not be mounted in excess of 16 feet above grade.
- (8) Directional fixtures for such applications as facade, fountain, feature and landscape illumination shall be aimed so as not to project their output beyond the objects intended to be illuminated and shall be extinguished between the hours of 11:00 p.m. and dawn.
- (9) Only the United States and the Pennsylvania state flag shall be permitted to be illuminated from dusk to dawn, and each flagpole shall be illuminated by a single source with a beam spread no greater than necessary to illuminate the flag(s). Flag lighting sources shall not exceed 7,000 lumens per flagpole.
- (10) The use of white strobe lighting for tall structures such as smokestacks, chimneys and radio/communications/television towers is prohibited during hours of darkness, except as specifically required by Federal Aviation Administration.
- (11) Canopy lighting, for such applications as gas/service stations and bank and fast-food drive-throughs, 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 level with or below the light source.
- (12) Uses that require the projection of light out at 45° or higher shall not be illuminated.

D. Installation.

- (1) For new installations, electrical feeds for pole-mounted fixtures shall be run underground, not overhead.
- (2) Poles supporting lighting fixtures for the illumination of parking areas and located directly behind parking spaces or where they could be hit by snowplows or wide-swinging vehicles shall be placed a minimum of four feet outside paved areas or tire stops, or on concrete pedestals at least 30 inches high above the pavement, or suitably protected by other Township-approved means.
- (3) Pole-mounted fixtures shall be aimed straight down.
- (4) Electrical installation of streetlighting shall be in accordance with prevailing regulations and specifications established by the Metropolitan Edison Company. It shall be the responsibility of the installing contractor, or his agent, to have final construction

inspected by an electrical inspection agency and a written report attesting to this fact submitted to the Metropolitan Edison Company, thereby allowing the utility to provide pole illumination.

- E. Post-installation inspection. The Township reserves the right to conduct post-installation nighttime inspections to verify compliance with the requirements of this chapter and if appropriate, to require remedial action at no expense to the Township.

§ 124-8. Streetlighting.

A. Residential subdivision streets.

- (1) Illumination of residential subdivisions shall be in accordance with the Subdivision and Land Development Ordinance, Chapter **172** of the Union Township Code.
- (2) For concentrated residential developments where lot sizes are on average less than 20,000 square feet (1/2 acre), streetlighting shall be provided as follows:
 - (a) At the intersection of public roads with entrance roads to the development.
 - (b) At the intersection of roads within the development.
 - (c) At cul-de-sac bulb radii.
 - (d) At terminal ends of center median islands having concrete structure curbing, trees, signs or other fixed objects, and at cul-de-sac center islands with curbing.
 - (e) At defined pedestrian crossings located within the development.
 - (f) At other locations along the street as deemed necessary by the Board of Supervisors.
 - (g) In residential developments where lot sizes are too small to accommodate the parking of two vehicles on the lot, thereby necessitating on-street parking, streetlighting shall be provided along the length of the street, in accordance with the illuminance requirements contained in this chapter.
 - (h) In multifamily developments, common parking areas shall be illuminated in accordance with the illuminance requirements contained in this chapter.
- (3) In residential developments with lesser density, where lot sizes are on average over 20,000 square feet (1/2 acre), streetlighting may be required as deemed necessary by the Board of Supervisors.
- (4) In residential developments where six or more off-street contiguous parking spaces are proposed for common use by several residences, such spaces shall be illuminated in accordance with the illuminance requirements contained in § **124-7** above.

- B. General streetlighting. The Township shall designate where lighting shall be provided for public roads. Such lighting shall be subject to the following criteria:

- (1) Electrical installations shall be in accordance with prevailing regulations and specifications established by the Metropolitan Edison Company (Met Ed). It shall be the responsibility of the installer or his agent to have final construction by an electrical inspection agency and a written report attesting to that fact submitted to Met Ed, thereby allowing the utility to provide pole illumination.
- (2) Streetlighting luminaires shall be full-cutoff and shall not be mounted higher than 20 feet above finished ground.

§ 124-9. Sign and billboard lighting.

[Amended 7-16-2018 by Ord. No. 2018-02]

- A. Billboards. The illumination of billboards shall be allowed only by permit (See Ch. **200**, Zoning, of the Union Township Code) and proposed lighting shall conform to the following requirements:
- (1) Externally illuminated billboards.
 - (a) Externally illuminated billboards shall be lighted by fixtures mounted at the top of the billboard or sign and aimed downward. They shall be designed, aimed and fitted to limit the light pattern to the billboard and not beyond and so as not to project their output into the windows of neighboring residences, adjacent uses, past the face of the billboard, skyward or onto public roadways.
 - (b) The maximum initial illuminance on the face of an externally illuminated billboard shall not exceed 10 vertical footcandles anywhere on the face of the billboard.
 - (c) The illumination of billboards shall be limited to LZ3.
 - (d) The illumination of a billboard within 400 feet of a residential zoning district shall not be permitted.
 - (e) Off-premises billboards shall be automatically extinguished by 11:00 p.m. until dawn. On-premises billboards shall be extinguished by 11:00 p.m. each evening except that for businesses that remain open past 11:00 p.m., the lighting may remain on no later than 1/2 hour past the close of business.
 - (f) Rotating, pulsing or oscillating lighting sources, lasers, beacons or strobe lighting shall not be permitted.
 - (g) The use of highly reflective material creating a glare hazard shall not be permitted.
 - (h) Applications for billboard lighting shall be accompanied by catalog cuts of proposed fixtures and any glare reduction devices and a description of lamps, mounting locations, aiming angles, proposed method of automatically extinguishing the lighting by the required time and a point-by-point plot of initial vertical illuminances on the billboard face.
 - (2) Internally illuminated (digital/LED) billboards.
 - (a) The underlying principle by which digital/LED billboards are considered within Union Township is that the luminance level for digital signage should be similar to what the luminance of an identical sign would be if it was printed out and installed on a static sign face. In short, new digital signs should not operate at a higher surface brightness than would be expected from the static technology that they are replacing. As such, new digital billboards shall be permitted, and conforming static billboards may be converted to digital billboards, in zoning districts where off-premise advertising signs are permitted, subject to all applicable regulations in this chapter.

- (b) All internally illuminated digital/LED billboards visible from roadways may not display animated images, shall contain static messages only, and shall not have movement nor flashing on any part of the sign or structure, nor shall the sign have varying light intensity during the display of any single message.
- (c) Each image to be displayed on an internally illuminated digital/LED billboard shall have a minimum dwell time of 10 seconds. There shall be no appearance of a visual dissolve or fading, in which any part of one electronic message/display appears simultaneously with any part of a second message.
- (d) There shall be no appearance of flashing or sudden bursts of light, and no appearance of animation of the message/display.
- (e) No fade, twinkle, scroll, dissolve or moving pictures or animation shall be permitted.
- (f) Contains a default design that freezes the message in one position if malfunction occurs.
- (g) The time interval used to change from one complete message/display to the next complete message/display shall be a maximum of three seconds.
- (h) Any illumination intensity or contrast of light level shall remain constant throughout the sign face.
- (i) Billboards may incorporate features to provide electronic message displays provided it does not disrupt or distract the operator of a motor vehicle.
- (j) Off-premises billboards shall be automatically extinguished from 11:00 p.m. until dawn. On-premises billboards shall be extinguished by 11:00 p.m. each evening except that for businesses that remain open past 11:00 p.m., the lighting may remain on no later than 1/2 hour past the close of business. During both daytime and nighttime periods of operation, digital/LED billboards shall be subject to surface luminosity limits.
- (k) The daytime surface luminance limit, based on normal daytime brightness shall be a maximum of 3,500 nits with board face in all-white mode.
- (l) For nighttime hours (when permitted to operate), a luminance limit of 300 nits maximum with board face in all-white mode is established. Nighttime shall be considered from 30 minutes after sunset to 30 minutes before sunrise.
- (m) Digital/LED billboards shall also be required to provide for a light sensing device that will adjust the brightness of the display as the natural ambient light conditions change. This will adjust the light output between sunny-day and night maximums to respond to overcast, foggy or dusk conditions.
- (n) The owner or operator of said digital/LED billboard shall provide for an initial certification of the light output documenting compliance with the standards of this chapter. The measurements shall be carried out by an independent contractor made with a calibrated luminance meter, following the instrument manufacturer's instructions and shall be taken from the area of the roadway where the billboard in question will be visible from, and which is closest to being directly in front of the billboard. The initial luminance measurement shall be undertaken by the sign owner after construction of the sign. Final approval of the sign permit shall be subject to compliance with the luminance limits set forth in this chapter.
- (o) Should the post-construction luminance measurements show luminance readings in excess of the maximum limits, the owner will be required to adjust the signs luminance to bring the billboard into compliance.

- (p) Digital billboards should be designed so that should the digital billboard malfunction, the message will automatically freeze.
- (q) The owner of said digital/LED billboard is encouraged to coordinate with the local authorities to display, when appropriate, emergency information to the traveling public, including, but not limited to, amber alerts or alerts concerning terrorist attacks or natural disasters. Emergency information messages shall remain in the advertising rotation according to the protocols of the agency that issues the information.
- (r) Union Township recognizes that it is a community that is rural in character and that the background light levels tend to be lower than many of its adjoining municipalities and that these background light levels may vary significantly in different portions of the Township. Therefore, the Township reserves the right to request additional adjustments to the luminosity levels below the limits set forth herein, when in the opinion of the Township and/or its Code Enforcement Officer the signs luminosity results in a negative environmental or safety impact due to perceived excessive brightness/glare concerns.
- (s) Should a written complaint be filed with the Township, concerning the issue of light intensity, glare or light trespass with respect to a digital/LED billboard, the Township will notify the owner of said billboard and the owner shall be responsible to have a luminance measurement conducted by an independent contractor made with a calibrated luminance meter, following the instrument manufacturer's instructions, taken from the area of the roadway where the billboard in question will be visible from, and which is closest to being directly in front of the billboard. The results shall be submitted to the Township within 15 days of receipt of notice from the Township. Any failure to comply shall be cured within 30 days. Results indicating compliance shall be retained on record by the Township and shall create a presumption of compliance for a period of one year from the date of the measurement certification.

B. Signs. Illuminated signs shall be allowed by permit only and proposed lighting shall conform to the following requirements:

(1) General.

- (a) The lighting or relighting of signs shall require a sign permit, which shall be granted only when Union Township is satisfied that excessive illumination, light pollution, glare and light trespass have been adequately mitigated.
- (b) All illuminated on-premises signs shall be automatically extinguished between the hours of 11:00 p.m. and dawn, except for those businesses that remain open past 11:00 p.m., the lighting may remain on no later than 1/2 hour past the close of business.
- (c) Professional home occupation signs, whose services are customarily considered essential in an emergency, may be illuminated after 11:00 p.m. provided that the illumination is white light and not exceeding the equivalent of a twenty-five-watt incandescent light source (maximum 250 lumens).
- (d) All sign lighting shall be designed, aimed and fitted to limit the light pattern to the sign and not beyond and so as not to project their output into the windows of neighboring residences, adjacent uses, past the face of the sign, skyward or onto public roadways creating a visibility hazard to drivers.
- (e) Lighting for the American Flag is permitted, but the light source beam angle must be aimed and restricted so as not to project the light at an angle greater than the travel of the flag or project onto another property.
- (f) The use of red, green or amber flashing lights on any sign within 200 feet of a street intersection shall be prohibited.
- (g) Union Township reserves the right to require post-installation reaiming, shielding, reduction of light intensity, or other remediation to mitigate off-site consequences.

(2) Externally illuminated signage.

- (a) It is recommended that externally illuminated signs be illuminated by fixtures mounted at the top of the sign and aimed downward.
- (b) Ground-mounted lighting, if used, shall be shielded and suitably protected to prevent misaiming by lawn maintenance personnel. Signs using ground mounting shall be so designed to have their base extend to the ground so that no open area shall be established between the ground and the base of the sign through which ground-mounted lighting would be visible from the opposite side of the sign, thus resulting in a potential glare problem.
- (c) Rotating, pulsing or oscillating light sources, lasers, beacons or strobe lighting shall not be permitted as a lighting source for signs.
- (d) Applications for sign lighting shall be accompanied by catalog cuts of proposed fixtures and any glare reduction devices and a description of lamps, mounting locations, aiming angles, brightness adjusting controls and proposed method of automatically extinguishing the lighting by the required time.

(3) Internally illuminated signage.

- (a) The message/background arrangement for internally illuminated signage shall utilize a dark field with a light message.
- (b) The intensity of the internal light source for the illuminated sign shall be such that it shall not create off-site glare, light trespass or a visibility hazard to drivers. Control of intensity can be through reduction in wattage or shielding of the light bulbs.

(4) Digital (LED) illuminated on-premises signage.

- (a) The underlying principle by which digital signs are considered within Union Township is that the luminance level for digital signage should be similar to what the luminance of an identical sign would be if it was printed out and installed on a static sign face. In short, new digital signs should not operate at a higher surface brightness than would be expected from the static technology that they are replacing.
- (b) The message/background arrangement for digitally illuminated signage shall utilize a dark field with a light message.
- (c) Digital signs may incorporate features to provide electronic message displays provided it does not disrupt or distract the operator of a motor vehicle.
- (d) Digital signs may incorporate a timed or electronic display change, where the display of the sign may change to another sign within a specified period of time. All such signs may be considered, provided the message (except for time and weather information) does not change more than three times per minute (minimum twenty-second dwell time), and does not disrupt or distract the operator of a motor vehicle.
- (e) All digital signs shall be subject to surface luminance limits, during both daytime and nighttime hours. The daytime luminance limit, based on normal daytime brightness shall be a maximum of 3,000 nits with board face in all-white mode. For nighttime hours (when permitted to operate), a luminance limit of 250 nits with board face in all-white mode is established. Nighttime shall be considered from 30 minutes after sunset to 30 minutes before sunrise.
- (f) Digital signs should be designed so that should the digital sign malfunction, the message will automatically freeze.

- (g) Digital signs shall also be required to provide for a light sensing device that will adjust the brightness of the display as the natural ambient light conditions change. This will adjust the light output between sunny-day and night maximums to respond to overcast, foggy or dusk conditions.
- (h) As part of the approval process for a newly installed digital sign, the applicant or applicant's agent shall be responsible for submitting to the Township Code Officer a certified post-installation test report certifying daytime and nighttime sign face luminance values. Township shall be given the opportunity to witness the test. Readings shall be taken at a distance of 150 feet from the sign face with the sign in all-white mode (no color images). The luminance meter shall have been NIST calibrated within the past year. Final approval of the sign permit shall be conditioned on compliance with luminance values.
- (i) Should a written complaint be submitted to the Township, subsequent to installation, about luminance issues of any digital sign, the owner of the sign shall be responsible for submitting a test report certifying actual luminance values. The results shall be submitted to the Township within 15 days of receipt of notice from the Township. Any failure to comply shall be cured within 30 days. Results indicating compliance shall be retained on record by the Township and shall create a presumption of compliance for a period of one year from the date of the measurement certification.

§ 124-10. Sports/recreation lighting.

The nighttime illumination of outdoor recreational facilities for such aerial sports as baseball, basketball, soccer, tennis, track and field, and football typically necessitate fixture mounting heights and aiming angles that are higher than normally allowed, utilize lamps of very high wattage and potentially produce unacceptable levels of light trespass and glare when located near residential properties. Permission to illuminate such facilities shall be granted only when the Township is satisfied that the health, safety and welfare rights of nearby property owners and the municipality as a whole have been properly protected. When recreational uses are specifically permitted by the Township for operation during hours of darkness, the following requirements shall apply:

- A. Recreational venues that necessitate the horizontal or near horizontal projection of illumination shall not be permitted to be artificially illuminated.
- B. Recreational facilities for basketball, baseball, football, soccer, miniature golf, tennis or track shall not be illuminated if located within 300 feet of a property containing a residential use.
- C. Sporting events shall be timed to end at such time that all lighting in the sports facility, other than lighting for safe exit of patrons, shall be extinguished by 11:00 p.m., regardless of such occurrences as extra innings or overtimes.
- D. Maximum mounting heights for recreational lighting shall be in accordance with the following:
 - (1) Basketball: 20 feet.
 - (2) Football: 70 feet.
 - (3) High school baseball: 70 feet.
 - (4) Lacrosse: 70 feet.
 - (5) Little League Baseball:

- (a) Radius of 200 feet: 60 feet.
 - (b) Radius of 300 feet: 70 feet.
 - (6) Miniature golf: 20 feet.
 - (7) Soccer: 70 feet.
 - (8) Swimming pool aprons: 20 feet.
 - (9) Tennis: 20 feet.
 - (10) Track and field: 20 feet.
- E. When recreational facility lighting is proposed, illuminance levels shall be in accordance with IESNA recommended practices.
- (1) High school recreational facilities shall have illuminances based on Class III play.
 - (2) All other recreational facilities shall have illuminances based on Class IV play.
- F. To assist the Township in determining whether the potential impacts of proposed lighting have been suitably managed, applications for illuminating recreational facilities shall be accompanied not only with the information required under § 124-11 below, but also by a visual impact plan that contains the following:
- (1) Plan views containing a layout of the recreational facility and showing pole locations and the location of residences on adjoining properties.
 - (2) Elevations containing pole and fixture mounting heights, horizontal and vertical aiming angles and fixture arrays for each pole location.
 - (3) Elevations containing initial vertical illuminance plots at the boundary of the site, taken at a height of five feet line-of-sight.
 - (4) Elevations containing initial vertical illuminance plots on the windowed facades of all residences facing and adjacent to the recreational facility. Such plots shall demonstrate compliance with the light trespass and glare control requirements of this chapter.
 - (5) Proposed frequency of use of the facility during hours of darkness on a month-by-month basis and proposed time when the sports lighting will be extinguished.
 - (6) A narrative describing the measures proposed to achieve minimum off-site disturbance.

§ 124-11. Plan submission requirements.

- A. For subdivision and land development applications where outdoor site lighting is proposed by the applicant or required by this chapter, lighting plans shall be submitted to the Township for review and approval with any preliminary or final subdivision/land development plan application. Where public health, safety and welfare are at issue, the Township may also require that lighting plans be submitted for building permit applications, conditional use applications, special exception applications and variance applications. Lighting plans shall include:

- (1) A site plan, complete with all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), vegetation that might interfere with lighting, and adjacent uses that might be adversely impacted by the lighting, containing a layout of all proposed fixtures by location, mounting height and type. The submission shall include, in addition to area lighting, exterior architectural, building entrance, landscape lighting, etc.
 - (2) A ten-foot-by-ten-foot illuminance-grid (point-by-point) plot of maintained footcandles overlaid on the site plan, plotted out to 0.0 footcandles, which demonstrates compliance with the light trespass, intensity and uniformity requirements as set forth in this chapter or as otherwise required by the Township.
 - (3) The lamp lumen ratings and types, maintenance (light-loss) factors and IES file names used in calculating the illuminance levels.
 - (4) Description of the proposed equipment, including fixture catalog cuts, photometries, glare reduction devices, lamps, on/off control devices, mounting heights, pole foundation details and mounting methods.
 - (5) Landscaping plans shall contain lighting fixture locations and shall demonstrate that the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- B. For applications presenting unique lighting issues, a visual impact plan may be required of the applicant to demonstrate appropriate steps have been taken to mitigate on-site and off-site glare.
- C. Plan notes: The following notes shall appear on the lighting plan:
- (1) Post-approval alterations to lighting plans or intended substitutions for approved lighting equipment shall be submitted to the Township for review and approval.
 - (2) The Township reserves the right to conduct post-installation nighttime inspections to verify compliance with the requirements of this chapter and as otherwise agreed upon by the Township and, if appropriate, to require remedial action at no expense to the Township.
 - (3) All site lighting shall meet IESNA full-cutoff criteria.

§ 124-12. Compliance monitoring; notice of violation.

- A. Safety hazards.
- (1) If the Township Code Enforcement Officer determines that a lighting installation creates a safety or personal security hazard, the person(s) responsible for the lighting shall be notified, in writing, and required to take remedial action.
 - (2) If appropriate corrective action has not been effected and if no appeal of the determination has been filed with the Board of Supervisors within 30 days of written notification, the violation shall be deemed a strict liability offense, and the Township may commence legal action as provided in this chapter.
- B. Nuisance glare and inadequate illumination levels.
- (1) When the Township Code Enforcement Officer determines an installation produces unacceptable levels of nuisance glare, skyward light, excessive or insufficient illumination levels or otherwise varies from this chapter, the Township may cause written notification of the person(s) responsible for the lighting and require appropriate remedial action.

- (2) If appropriate corrective action has not been effected and if no appeal of the determination has been filed with the Union Township Board of Supervisors within 30 days of written notification, the violation shall be deemed a strict liability offense, and the Township may commence legal action as provided in this chapter.

§ 124-13. Nonconforming lighting.

Any lighting fixture or lighting installation existing on the effective date of this chapter that does not conform with the requirements of this chapter shall be brought into conformance when:

- A. Minor corrective action, such as reaiming or shielding can bring conformity with the applicable requirements of the chapter.
- B. It is deemed by the Township Code Enforcement Officer to create a safety hazard or other health and welfare concerns.
- C. It is replaced with another fixture or fixtures, abandoned or relocated.
- D. There is a change in use.

§ 124-14. Violations and penalties; enforcement.

- A. Any person who is found to have violated an order of the Township or who willfully or negligently failed to comply with the provisions of this chapter and the orders, rules, regulations and permits issued hereunder shall be prosecuted by action brought before a District Justice in the same manner provided for the enforcement of summary offenses under the Pennsylvania Rules of Criminal Procedure. The Municipal Solicitor or the Code Enforcement Officer may assume charge of prosecution without the consent of the District Attorney as required by Pa. R.Crim.P. No. 83 (relating to trial in summary cases). The Board shall prescribe criminal fines not to exceed \$1,000 for the violation of this chapter and shall prescribe imprisonment to the extent allowed by law for the punishment of summary offenses. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense, and each section of this chapter that is violated shall also constitute a separate offense.
- B. The Union Township Board of Supervisors may take any appropriate action at law or in equity, civil or criminal, to enforce the provisions of this chapter, and this chapter shall in no way restrict any remedies or otherwise available and provided by law.
- C. In all actions instituted and successfully prosecuted by the Township, it shall have a further right to reimbursement from the violator for attorney's fees and costs related to the action.