

Chapter 4

Buildings

Part 1

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Part 1**Outdoor Lighting Regulations****A. General Provisions****§4-101. Title.**

This Part shall be known, and may be cited, as the "Township of Ferguson Outdoor Lighting Ordinance."

(*Ord. 803, 10/7/2002, §101*)

§4-102. Purposes.

This Part is enacted for the following purposes:

A. To establish requirements for outdoor lighting installations which promote public safety and welfare during the nighttime while minimizing the adverse effects of glare and light trespass often associated with outdoor lighting.

B. To protect the privacy of property owners by limiting the potential for glare and light trespass from outdoor lighting installations located on adjacent properties and roadways.

C. To prohibit outdoor lighting installations which are of excessive intensity and/or are deficient of photometric control such that the resulting glare and light trespass create a nuisance or hazard to pedestrians, cyclists, or motorists on neighboring properties and roadways.

D. To promote outdoor lighting installations which serve to enhance the nighttime safety and enjoyment of pedestrians, cyclists, and motorists throughout the community.

E. To set forth outdoor lighting requirements which are consistent with lighting industry standards and practices, available technologies, and the lighting sciences.

(*Ord. 803, 10/7/2002, §102*)

§4-103. Applicability.

The requirements of this Part shall apply to all outdoor lighting installations as follows:

A. Outdoor lighting installations which are newly designed, constructed, erected, or otherwise placed into operation after the effective date of this Part.

B. Alterations, rehabilitations, or renovations to existing outdoor lighting installations, which are commenced after the effective date of this Part, and which involve the complete replacement of an existing lighting system with a new lighting system.

(*Ord. 803, 10/7/2002, §103*)

§4-104. Non-Applicability.

The requirements of this Part shall not apply to, nor be retroactive to, existing outdoor lighting installations which began operation before the effective date of this Part. Routine maintenance of said existing outdoor lighting installations shall not be required to comply with the requirements of this Part. Routine maintenance activities include the following:

A. Replacement of lamps that are burned-out or inoperative.

B. Replacement/repair of damaged or inoperative luminaire components such as ballasts, ignitors, lenses, reflectors, refractors, sockets, or photocell controls.

(Ord. 803, 10/7/2002, §104)

§4-105. Exemptions.

The requirements of this Part shall not apply where superseded by County, State or Federal law.

(Ord. 803, 10/7/2002, §105)

B. Adoptions by Reference**§4-111. Adoption of the IES Lighting Handbook.**

The publication, a copy of which is on file in the Planning and Zoning Office of the Township of Ferguson, Centre County, Pennsylvania, being marked and designated as "Lighting Handbook," most recent edition, as published by the Illuminating Engineering Society of North America (IESNA), and referred to in this Part as the "IES Lighting Handbook," is hereby adopted by reference and made a part hereof as if fully set out in this Part.

(Ord. 803, 10/7/2002, §111)

§4-112. Adoption of the ANSI/IES Lighting Definitions.

The publication, a copy of which is on file in the Planning and Zoning Office of the Township of Ferguson, Centre County, Pennsylvania, being marked and designated as "American National Standard, Nomenclature and Definitions for Illuminating Engineering," most recent edition, as published by the Illuminating Engineering Society of North America (IESNA) and approved by the American National Standards Institute, Inc. (ANSI), and referred to in this Part as the "ANSI/IES Lighting Definitions," is hereby adopted by reference and made a part hereof as if fully set out in this Part.

(Ord. 803, 10/7/2002, §112)

C. Definitions

§4-115. Language Interpretations.

For the purposes of this Part, certain terms and words used herein shall be interpreted as follows:

A. The word "shall" denotes a mandatory requirement; the word "should" denotes an advised or recommended provision that is desirable but not mandatory.

B. The word "includes" or "including" shall not limit the term to the specific example, but is intended to extend its meaning to all other instances of like kind and character.

C. Words used in the present tense include the future; words used in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural the singular.

(Ord. 803, 10/7/2002, §115)

§4-116. Zoning Definitions.

The meaning and applicability of words and terms in this Part which are related to zoning, zoning districts, lots, lot usage, yards, and the like, shall be in accordance with the Ferguson Township Zoning Ordinance [Chapter 27].

(Ord. 803, 10/7/2002, §116)

§4-117. Selected Lighting Definitions.

The following lighting definitions are selected from the ANSI/IES Lighting Definitions and the IES Lighting Handbook for ready reference within the text of this Part:

Candela - The SI unit of luminous intensity. One candela is one lumen per steradian (lm/sr).

Candlepower - luminous intensity expressed in candelas.

Cutoff Angle (of a Luminaire) - the angle, measured up from nadir, between the vertical axis and the first line of sight at which the bare source is not visible.

Footcandle - a unit of illuminance. One footcandle is one lumen per square foot (lm/ft²).

Glare - the sensation produced by luminances within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance or visibility.

Blinding Glare - glare that is so intense that for an appreciable length of time after it has been removed, no object can be seen.

Direct Glare - glare resulting from high luminances or insufficiently shielded light sources in the field of view.

Disability Glare - the effect of stray light in the eye whereby visibility and visual performance are reduced.

Discomfort Glare - glare that produces discomfort. It does not necessarily interfere with visual performance or visibility.

Reflected Glare - glare resulting from reflections of high luminances in polished or glossy surfaces in the field of view.

Illuminance - the areal density of the luminous flux incident at a point on a surface.

Illumination - an alternative term for illuminance. Commonly used in a qualitative or general sense to designate the act of illuminating or the state of being illuminated.

Lamp - a generic term for a man-made source of light.

Light - radiant energy that is capable of exciting the retina and producing a visual sensation. The visible portion of the electromagnetic spectrum extends from about 380 to 770 nanometers.

Light Loss Factor (LLF) - the ratio of illuminance for a given area to the value that would occur if lamps operated at their initial rated lumen output and if no system variation or depreciation had occurred.

Light Trespass - a subjective perception of undesirable illumination including the following examples:

- (1) The classic "light shining in a window."
- (2) Unwanted light on an adjacent property.
- (3) Excessive brightness in the normal field of vision (nuisance glare).

Lumen - SI unit of luminous flux. Photometrically, it is the luminous flux emitted within a unit solid angle (one steradian) by a point source having a uniform luminous intensity of one candela.

Luminaire - a complete lighting unit consisting of one or more lamps (light sources) together with the parts designed to control the light distribution, and other mechanical and electrical components.

Cutoff Luminaire - a luminaire light distribution is designated as cutoff when the candlepower per 1000 lamp lumens does not numerically exceed 25 (2.5%) at an angle of 90° above nadir (horizontal), and 100 (10%) at a vertical angle of 80° above nadir.

Luminance - the emitted or reflected light from a surface; relates directly to perceived "brightness." The unit of luminance is the candela per square meter (cd/m²).

Luminous Flux - radiant flux (radiant power); the time rate of flow of radiant energy evaluated in terms of a standardized visual response.

Luminous Intensity - the luminous flux per unit solid angle in the direction in question. May be expressed in candelas or lumens per steradian (lm/sr).

Lux - the SI unit of illuminance. One lux is one lumen per square meter (lm/m²).

Nighttime - the hours between the end of evening civil twilight and the beginning of morning civil twilight. Civil twilight ends in the evening when the center of the sun's disk is 6° below the horizon, and begins in the morning when the center of the sun's disk is 6° below the horizon.

Spill Light - light shining beyond a facility that may annoy occupants of the

adjacent property.
(*Ord. 803, 10/7/2002, §117*)

D. General Design Requirements**§4-121. Design Calculations in Accordance With the IES Lighting Handbook.**

In addition to the specific requirements established in this Part, the design calculations for outdoor lighting installations shall be in accordance with the IES Lighting Handbook. This includes, but is not limited to, technical definitions, terminology, calculation methods and procedures, photometric classifications, and photometric testing procedures. Illuminance selection should be based on the usage of the area to be illuminated, the level of activity and nighttime security requirements.

(Ord. 803, 10/7/2002, §121)

E. Requirements for Outdoor Area and Roadway Lighting Installations

§4-125. Applicability of Requirements.

The requirements of this Part 1E apply to all outdoor lighting installations as follows:

A. Outdoor lighting installations which are employed for nighttime area illumination of parking lots, car sales lots, yards, roadways, streets, driveways, walkways, bikeways, cartways, entryways, and similar areas or lots.

B. Outdoor lighting installations which are located on any property in any zoning district within the Township of Ferguson except for the following:

- (1) A lot which is comprised of one (1) single or two family dwelling.
- (2) A lot which is being used as a farm.

(Ord. 803, 10/7/2002, §125)

§4-126. Use of Cutoff Luminaries Required.

All luminaries employed in outdoor area and roadway lighting installations shall be the cutoff luminaire type.

A. The candlepower distribution classification of the luminaire as a cutoff type shall be in accordance with the ANSI/IES Lighting Definitions and the IES Lighting Handbook. The manufacturer of the luminaire shall provide certification of the cutoff classification based on photometric testing performed in accordance with the IES Lighting Handbook and the applicable testing procedures referenced therein. The requirement for the use of cutoff luminaire types shall include, but is not limited to, the following outdoor area and roadway lighting configurations:

- (1) Pole-mounted luminaries.
- (2) Luminaries mounted on the exterior of buildings and structures.
- (3) Luminaries mounted on or within exterior canopies of buildings and structures.
- (4) Pedestal- or bollard-mounted luminaries.

B. Cutoff luminaries shall be mounted plumb and level in accordance with the intended application of their design. For the purposes of this requirement, the photometric nadir of the luminaire (zero degree vertical angle of the candlepower distribution) shall be oriented plumb and the vertical angle of 90 degrees above nadir (horizontal) shall be oriented level. Cutoff luminaries shall not be installed in a canted or tilted position which permits candlepower distribution above the horizontal.

C. *Exception.* Luminaries which do not meet the strict definition for cutoff luminaries, yet employ advanced or alternative technology which causes the photometric performance to approach that of cutoff luminaries, may be approved by the Township of Ferguson on a case-by-case basis. Such luminaries include, but are not limited to, period-style luminaries with refractive globes and internal cutoff reflectors. Wal-paks are not included in this exception.

D. *Exception.* Luminaries with a total initial lumen output of 10,000 lumens or less shall be permitted for decorative, accent, or supplementary lighting

applications provided that glare shields are incorporated which cut off the candlepower distribution at and above the horizontal level.

E. With the exception of outdoor sports and recreational lighting, no pole mounted luminaire shall exceed a maximum height of 25 feet.

(Ord. 803, 10/7/2002, §126)

§4-127. Maximum Maintained Illuminance Levels Permitted at Property Lines Produced by Outdoor Area Lighting Installations.

The maximum maintained illuminance levels permitted at the property line(s) during the nighttime, produced by the sum of all outdoor area lighting installations on said property, shall be as measured at grade in horizontal footcandles or horizontal lux according to Table 127.

A. *Exception.* By written agreement between the respective property owners, an outdoor lighting installation on one property may illuminate areas or roadways on adjacent properties beyond the property line.

B. *Exception.* This requirement does not apply to outdoor roadway lighting installations intended for the nighttime illumination of public roadways, streets, highways, alleys, cartways, and the like.

C. *Exception.* At designated vehicular, cyclist, and pedestrian entries/exits between properties and public roadways, streets, highways, alleys, cartways, and the like; provided that the excepted area of illumination (maintained illuminance levels at grade) higher than permitted in Table 127 is limited to the said property and the adjoining pavement and right-of-way of public roadways, streets, highways, alleys, cartways, and the like. The excepted area of illumination shall not extend beyond 50 feet from the centerline of the designated entry/exit in any direction along the property line(s) of the said property.

TABLE 127
 MAXIMUM MAINTAINED ILLUMINANCE LEVELS
 PERMITTED AT PROPERTY LINES
 PRODUCED BY OUTDOOR AREA LIGHTING INSTALLATIONS

For outdoor area lighting installations to which the requirements of Part 1E apply:	Maximum maintained illuminance level permitted at property line measured at grade in horizontal footcandles	Maximum maintained illuminance level permitted at property line measured at grade in horizontal lux
Outdoor area lighting installation is located on said property and property line adjoins a public roadway or public right-of-way	0.5	5.4

TABLE 127
 MAXIMUM MAINTAINED ILLUMINANCE LEVELS
 PERMITTED AT PROPERTY LINES
 PRODUCED BY OUTDOOR AREA LIGHTING INSTALLATIONS

Outdoor area lighting installation is located on said property and property line adjoins a non-residential property	0.2	2.2
Outdoor area lighting installation is located on said property and property line adjoins a residential property	0.1	1.1

(Ord. 803, 10/7/2002, §127)

§4-128. Illumination Under Outdoor Canopies.

All outdoor lighting installations which illuminate the area under outdoor canopies shall comply with §§4-126 and 4-127. In accordance with the Sign Ordinance [Chapter 19], canopies may not be illuminated, with the exception of the portion which is classified as a sign.

- A. Outdoor canopies include, but are not limited to, the following applications:
 - (1) Fuel island canopies associated with service stations and convenience stores.
 - (2) Exterior canopies above storefronts in shopping centers and malls.
 - (3) Exterior canopies above driveways and building entrances.
 - (4) Pavilions and gazebos.

(Ord. 803, 10/7/2002, §128)

§4-129. Design Submittal and Approval Requirements.

The design for all outdoor area and roadway lighting installations, to which the requirements of this Part 1E apply, shall be submitted for review and approval by the Township of Ferguson in accordance with §4-167 of this Part.

(Ord. 803, 10/7/2002, §129)

F. Requirements for Outdoor Sports and Recreational Lighting

§4-131. Applicability of Requirements.

The requirements of this Part 1F apply to all outdoor lighting installations as follows:

A. Outdoor lighting installations which are employed for nighttime area illumination of sports and recreational facilities including, but not limited to, ballfields, ballparks, stadiums, tennis courts, soccer fields, golf courses, driving ranges, recreation fields, and the like.

B. Recreational facilities, such as ballfields, tennis courts, driving ranges and basketball courts, located on single-family, two (2) family or farm lots.

C. Outdoor lighting installations which are located on any property in any zoning district within the Township of Ferguson except for the following:

- (1) A lot which is comprised of one single or two-family dwelling.
- (2) A lot which is being used as a farm.

(Ord. 803, 10/7/2002, §131)

§4-132. Use of Glare Shields Required For Non-Cutoff Luminaire Types.

Where non-cutoff luminaries, such as floodlights, are used to meet the lighting design objectives for outdoor sports and recreational lighting, the luminaries shall be equipped with glare shields, visors, barndoors and other similar shielding accessories as required to meet the following criteria:

A. The candlepower distribution from all lighting installations shall be cut off at and above the horizontal (level).

B. To the extent practicable, the candlepower distribution from all lighting installations shall be further cut off at angles below the horizontal (level) to restrict direct illumination to within the functional area being illuminated for sports and recreation purposes.

(Ord. 803, 10/7/2002, §132)

§4-133. Maximum Maintained Illuminance Levels Permitted at Property Lines Produced by Outdoor Sports and Recreational Lighting Installations.

The maximum maintained illuminance levels permitted at the property line(s) during the nighttime, produced by the sum of all outdoor sports and recreation lighting installations on said property, shall be as measured at grade in horizontal footcandles or horizontal lux according to Table 127 in Part 1E (for outdoor area lighting installations).

(Ord. 803, 10/7/2002, §133)

§4-134. Design Submittal and Approval Requirements.

The design for all outdoor sports and recreation lighting installations, to which the requirements of this Part 1F apply, shall be submitted for review and approval by the Township of Ferguson in accordance with §4-167 of this Part.

(Ord. 803, 10/7/2002, §134)

G. Requirements for Outdoor Sign Lighting

§4-141. Applicability of Requirements.

The requirements of this Part 1G apply to all outdoor lighting installations employed for nighttime illumination of signs and billboards which are defined in the Ferguson Township Signs and Billboards Ordinance [Chapter 19]. In all cases, the lighting for externally illuminated signs shall be adjusted so as not to affect opposing traffic.

(Ord. 803, 10/7/2002, §141)

§4-142. Use of Glare Shields Required For Non-Cutoff Luminaire Types.

Where non-cutoff luminaries such as floodlights are used to meet the lighting design objectives for outdoor sign and billboard lighting, the luminaries shall be equipped with glare shields, visors, barndoors, and other similar shielding accessories as required to meet the following criteria:

- A. The candlepower distribution from all lighting installations shall be cut off at all angles beyond those required to achieve direct illumination within the perimeter of the sign or billboard being illuminated.

(Ord. 803, 10/7/2002, §142)

§4-143. Design Submittal and Approval Requirements.

The design for all outdoor sign lighting, to which the requirements of this Part 1G apply, shall be submitted for review and approval by the Township of Ferguson in accordance with §4-168 of this Part.

(Ord. 803, 10/7/2002, §143)

H. Requirements for Outdoor Lighting of Facades of Buildings and Structures

§4-145. Applicability of Requirements.

The requirements of this Part 1H apply to all outdoor lighting installations employed for nighttime illumination of the facades of buildings and structures.

(Ord. 803, 10/7/2002, §145)

§4-146. Use of Glare Shields Required For Non-Cutoff Luminaire Types.

Where non-cutoff luminaires, such as floodlights, are used to meet the lighting design objectives for outdoor illumination of building and structure facades, the luminaires shall be equipped with glare shields, visors, barndoors, and other similar shielding accessories as required to meet the following criteria:

- A. The candlepower distribution from all lighting installations shall be cut off at all angles beyond those required to achieve direct illumination within the perimeter of the facade being illuminated.

(Ord. 803, 10/7/2002, §146)

§4-147. Design Submittal and Approval Requirements.

The design for all outdoor lighting of facades of buildings and structures, to which the requirements of this subpart apply, shall be submitted for review and approval by the Township of Ferguson in accordance with §4-168 of this Part.

(Ord. 803, 10/7/2002, §147)

I. Requirements for Residential Outdoor Lighting

§4-151. Applicability of Requirements.

The requirements of this Part 1I apply to all outdoor lighting installations located on a lot which is comprised of one single or two-family dwelling or farm.

(Ord. 803, 10/7/2002, §151)

§4-152. Use of Glare Shields Recommended for Non-cutoff Luminaire Types.

It is recommended that non-cutoff luminaries, such as floodlights, shall be equipped with glare shields, visors, barndoors and other similar shielding accessories as required to meet the following criteria:

A. For area lighting applications, the candlepower distribution from all lighting installations is recommended to be cut off at and above the horizontal (level).

B. For a spotlight or floodlight application, the candlepower distribution from all lighting installations shall be cut off at all angles beyond those required to achieve direct illumination within the area or surface being illuminated and within the property boundaries.

(Ord. 803, 10/7/2002, §152)

§4-153. Design Submittal and Approval Requirements.

No lighting plan submission is required to be made to the Township. However, the homeowner is required to meet the criteria outlined above.

(Ord. 803, 10/7/2002, §153)

J. Requirements for Outdoor Landscape Lighting**§4-155. Applicability of Requirements.**

The requirements of this Part 1 J apply to all outdoor lighting installations employed for nighttime illumination of trees, shrubs, vegetation, and the like.

(Ord. 803, 10/7/2002, §155)

§4-156. Use of Glare Shields Required For Non-Cutoff Luminaire Types.

All non-cutoff luminaires, such as floodlights, shall be equipped with glare shields, visors, barndoors and other similar shielding accessories as required to meet the following criteria:

- A. The candlepower distribution from all lighting installations shall be cut off at all angles beyond those required to achieve direct illumination within the perimeter of the landscape feature being illuminated.

(Ord. 803, 10/7/2002, §156)

§4-157. Design Submittal and Approval Requirements.

The design for all outdoor landscape lighting, to which the requirements of this Part 1J apply, shall be submitted for review and approval by the Township of Ferguson in accordance with §4-167 of this Part.

(Ord. 803, 10/7/2002, §157)

K. Temporary Outdoor Lighting**§4-161. Applicability of Requirements.**

The requirements of this Part 1K apply to all outdoor lighting installations which are employed on a temporary basis not exceeding 30 days in duration. Temporary lighting installations include, but are not limited to, seasonal or holiday displays, carnivals, community fairs, traveling circuses, sales/promotional displays and the like. (*Ord. 803, 10/7/2002, §161*)

§4-162. Use of Glare-shields Required for Non-cutoff Luminaire Types.

All non-cutoff luminaries such as floodlights shall be equipped with glare shields, visors, barndoors and other similar shielding accessories as required to meet the following criteria:

- A. The candlepower distribution from all lighting installations shall be cut off at all angles beyond those required to achieve direct illumination within the perimeter of the area, surface, object or feature being illuminated.

(*Ord. 803, 10/7/2002, §162*)

§4-163. Design Submittal and Approval Requirements.

The design for all temporary outdoor lighting to which the requirements of this Part 1K apply shall be submitted for review and approval by the Township of Ferguson in accordance with §4-168 of this Part.

(*Ord. 803, 10/7/2002, §163*)

L. Administration and Enforcement

§4-165. General Provisions.

The Zoning Administrator shall have the duty and authority for the administration and general enforcement of the provisions of this Part, as specified herein. Permits required for the installation of lighting facilities shall not be issued by any municipal official unless in accordance with the procedures specified herein.

(*Ord. 803, 10/7/2002, §165; as amended by Ord. 820, 12/8/2003*)

§4-166. Measurement Instrument.

The light meter used for verification of illuminance levels shall be the light meter owned by the Township. The light meter shall be calibrated on a yearly basis to ensure accuracy.

(*Ord. 803, 10/7/2002, §166*)

§4-167. Design Submittal and Approval Requirements - Major Applications.

The design for all outdoor lighting installations, to which the requirements of this Part 1L apply, shall be reviewed by the Township of Ferguson, or its duly appointed representative, for conformance with this Part. When applicable, the required design submittal items shall be included with the land development or site plan submittal pursuant to the issuance of a zoning permit. In all cases, the outdoor lighting design shall be approved by the Township of Ferguson prior to issuance of a zoning permit and prior to construction of the outdoor lighting installation. The required design submittal items are as follows:

A. Site plan, drawn to scale of 1 inch equal to 50 feet (maximum), indicating the following:

- (1) The zoning district and use of the property.
- (2) The property lines of the property.
- (3) The zoning district(s) and uses of the adjoining properties.
- (4) Public roadways and right-of-ways on or adjoining the property.
- (5) The principal buildings and structures on the property.
- (6) The areas or elements to be illuminated on the property.

(7) The proposed layout of the outdoor lighting installation on the property including, but not limited to, all pole-mounted luminaries, bollard- or pedestal-mounted luminaries, canopy-mounted luminaries, and luminaries mounted on the exterior of buildings and structures. Identify each luminaire by a type designation.

(8) The results of the lighting design superimposed on the site plan. This shall be in the form of isofotcandle diagrams, drawn to scale with the value of contours labeled. The information presented shall be of sufficient quantity and detail to determine compliance with the requirements of this Part.

(9) The lighting design information required in subsection .B, below.

B. *Required Lighting Design Information.*

(1) The total light loss factor(s) used in the calculations to determine maintained illuminance values.

(2) The maximum maintained illuminance value at grade within the area being illuminated (in horizontal footcandles or horizontal lux).

(3) The average maintained illuminance value at grade of the functional area being illuminated (in horizontal footcandles or horizontal lux).

(4) The maximum maintained illuminance values at grade along all property lines (in horizontal footcandles or horizontal lux).

C. Required Luminaire Information.

(1) A luminaire (light fixture) schedule of all luminaires used for the outdoor lighting installation. Each luminaire type shall be indicated by a type designation which correlates with those indicated on the site plan. The luminaire schedule may be indicated on the site plan or submitted separately. The luminaire schedule shall include the following information for each luminaire type: description of luminaire, mounting configuration and height, IES candlepower distribution classification (cutoff, semi-cutoff, or non-cutoff), IES lateral light distribution if applicable (Type I, Type II, Type III, Type IV, or Type V), lamp type, lamp wattage, and lamp initial lumens.

(2) Manufacturer's product data sheets (catalog cuts) for each luminaire type.

(3) Manufacturer's photometric report (certified to IES standards) for each luminaire type. The photometric report shall clearly indicate the cutoff classification of the luminaire. This information is mandatory in order to be able to independently verify the lighting design results.

(Ord. 803, 10/7/2002, §167)

§4-168. Design Submittal and Approval Requirements - Minor Applications.

The design for all outdoor lighting installations, to which the requirements of this Part 1L apply shall be reviewed by the Township of Ferguson, or its duly appointed representative, for conformance with this Part. When applicable, the required design submittal items shall be included with the land development or site plan submittal pursuant to the issuance of a zoning permit. In all cases, the outdoor lighting design shall be approved by the Township of Ferguson prior to issuance of a zoning permit and prior to construction of the outdoor lighting installation. The required design submittal items are as follows:

A. Basic site plan information indicating the following:

- (1) The proposed feature being illuminated.
- (2) The boundary lines of the property.
- (3) Public roadways and right-of-ways on or adjoining the property.
- (4) Location of proposed lighting fixtures.
- (5) The areas or elements to be illuminated on the property.

B. Required luminaire information:

- (1) Manufacturer's product data sheets (catalog cuts) for each luminaire

type.

(2) Manufacturer's photometric report (certified to IES standards) for each luminaire type. The photometric report shall clearly indicate the cutoff classification of the luminaire.

(3) If the proposed fixtures are not IES cutoff fixtures, the manufacturer's product data must clearly illustrate the proposed method of glare containment (glare shield or visors).

(Ord. 803, 10/7/2002, §168)

§4-169. Veracity of Design Submittal Information.

The lighting design information and luminaire information submitted for approval shall correlate with the actual lighting equipment installed in the field. Installation of lighting equipment in the field, which is not the same as that approved in the design submittal, is prohibited. Where the actual lighting equipment to be installed cannot be verified during the design phase of a project (such as with a competitively-bid, publicly funded project), preliminary approvals may be obtained for the outdoor lighting design based on performance specifications. However, once the actual equipment to be installed is determined, the design submittal requirements of this Part shall apply.

(Ord. 803, 10/7/2002, §169)

§4-170. Design Light Loss Factor(s) and Initial Illuminance Levels.

For purposes of enforcement, initial illuminance levels (measured at grade in horizontal footcandles or horizontal lux) produced by outdoor lighting installations shall be the maintained illuminance levels indicated by the approved design submittal divided by the light loss factor (LLF) indicated by the approved design submittal. To account for variations in illuminance levels, the initial illuminance level may deviate upwards from the approved design, including the light loss factor, by a factor of 10%.

(Ord. 803, 10/7/2002, §170)

§4-171. Administration and Enforcement.

1. *Enforcement Officer.* The Zoning Administrator is hereby designated as the enforcement officer for this Part. In furtherance of his/her authority as such enforcement officer, the Zoning Administrator shall have the following duties and powers: [Ord. 820]

A. *Review and Issue Permits.* Review all applications for lighting permits. Issue permits for those lighting installations found to be in compliance with the provisions of this Part.

B. *Issue Notices of Violations.* Issue Notices of violation to owner, agent or person having the beneficial interest in the building or the premises on which a lighting installation is located which is found to be in violation of this Part.

C. *Cause Removal of Certain Lights.* After due notice, cause the removal of certain lights which are found to be in non-compliance with one or more of the provisions of this Part.

D. *Administrative Interpretations.* Render, when called to do so, administrative interpretations regarding the provisions of this Part and their effect on the

display of any lighting located or to be located in the Township of Ferguson.

E. *Maintenance of Records.* Maintain all records necessary to the appropriate administration and enforcement of this Part, including applications for variances and appeals.

F. *Public Information.* Provide and maintain a source of public information relative to all matters arising out of this Part.

2. *Zoning Hearing Board of Ferguson Township.*

A. *Jurisdiction.* The Zoning Hearing Board is hereby vested with the following jurisdiction and authority:

(1) *Appeals.* Hear all appeals from any order, requirement, decision, determination, or interpretation of the Zoning Administrator or lighting consultants acting with the authority vested by this Part and make written decisions for the disposition of such appeals. [Ord. 820]

(2) *Variances.* Hear all requests for variances from the provisions of this Part and make written decisions for the granting or denial of such requests.

3. *Appeals.* An appeal may be taken to the Zoning Hearing Board by any person aggrieved by an order, requirement, decision, determination, or interpretation by the Zoning Administrator acting within the authority of this Part. [Ord. 820]

A. *Petition for Appeal.*

(1) *Standing.* An appeal shall be filed within 30 days after the alleged erroneous order, requirement, decision, determination or interpretation.

(2) *Filing.* An appeal shall be filed in writing with the Zoning Administrator and shall include the following information: [Ord. 820]

(a) The names, addresses and telephone number(s) of the petitioner(s), the owner(s) or the property on which the light is to be erected or affixed, the owner(s) of the lighting, and the person affixing the lighting.

(b) A description of the appeal.

(c) Justification of the appeal.

(d) The location of the building structure, or zoning lot on which the light(s) is to be erected or affixed.

(e) A site plan on the property involved, showing accurate placement thereon of the proposed light(s).

(f) The written consent of the owner of the building, structure, or property on which the light(s) is to be erected or affixed.

(g) Such other information as the Zoning Administrator may require to determine full compliance with this and other applicable ordinances of the Township of Ferguson. [Ord. 820]

(3) Each appeal to the Zoning Hearing Board shall be accompanied by a fee in an amount as set by resolution of the Ferguson Township Board of Supervisors.

C. *Effect of Appeal.* An appeal shall stay all proceedings in furtherance of the action appealed from, unless the Zoning Administrator certifies to the Zoning Hearing Board, after the appeal has been filed with the Zoning Administrator, that

by reason of the facts stated in the application, a stay would in her/her opinion cause imminent peril to life or property. In such case, the proceeding shall not be stayed unless a restraining order is issued by a court of record, and then only if due cause can be conclusively shown. [Ord. 820]

D. *Zoning Hearing Board Public Hearing.*

(1) *Timing.* The Zoning Hearing Board shall hold a public hearing on an appeal within 60 days of its receipt of a completed, written petition for appeal.

(2) *Attendance.* The petitioner and Zoning Administrator and/or their authorized representatives shall attend those meetings of the Zoning Hearing Board at which an appeal is to be heard. [Ord. 820]

E. *Zoning Hearing Board Decision.* Within 45 days after the close of the required public hearing on an appeal, the Zoning Hearing Board shall prepare and submit written findings of fact and conclusions of law to grant, deny, wholly or in part, or to modify said appeal.

F. *Effect of Zoning Hearing Board Denial.* No appeal which has been denied wholly or in part by the Zoning Hearing Board in accordance with the provisions established herein may be resubmitted for a period of 1 year from date of said denial, except on grounds of new evidence or proof of changed conditions found to be valid by the Zoning Hearing Board.

G. *Maintenance of Records.* The Zoning Administrator shall maintain complete records of all findings of fact and conclusions of law of the Zoning Hearing Board relative to an appeal. All such records shall be open to the public for inspection. [Ord. 820]

4. *Variances.* It is the intent of this Part to use variances only to relieve hardship. Specifically, variances are to be used to overcome some exceptional condition which poses practical difficulty or particular hardship in such a way as to prevent an owner from displaying his/her lighting as intended by this Part. Such practical difficulty must be clearly exhibited and must be a result of an external influence; it may not be self-imposed.

A. *Petition for Variance.*

(1) *Standing.* A petition for a variance from any provisions of this Part may be made by any person having a proprietary interest in the light(s) for which such variance is requested.

(2) *Filing.* A variance request shall be filed in writing with the Zoning Administrator and shall include the following information: [Ord. 820]

(a) The name, addresses and telephone number(s) of the petitioner(s), the owner(s) of the property on which the light(s) is to be erected or affixed, the owner(s) of the light, and the person affixing the light(s).

(b) A description of the requested variance.

(c) Justification of the requested variance.

(d) The location of the building, structure, or zoning lot on which the light(s) is to be erected or affixed.

(e) A site plan of the property involved, showing accurate placement thereon of the proposed light(s).

(f) The written consent of the owner of the building, structure, or property on which the light(s) is to be erected or affixed.

(g) Such other information as the Zoning Administrator may require to determine full compliance with this and other applicable ordinances of the Township of Ferguson. [Ord. 820]

B. *Fees.* Each variance request to the Zoning Hearing Board shall be accompanied by a fee in an amount as set by the Board of Supervisors, which fee is to be paid at the time of filing of the variance request.

C. *Zoning Hearing Board Public Hearing.*

(1) *Timing.* The Zoning Hearing Board shall hold a public hearing on a variance request within 60 days of its receipt of a completed, written petition for variance.

(2) *Attendance.* The petitioner and Zoning Administrator and/or their authorized representative(s) shall attend those meetings of the Zoning Hearing Board at which a variance is to be heard.[Ord. 820]

D. *Standards for Variances.* The Zoning Hearing Board may determine that a variance be granted when it shall be determined from evidence presented to the Zoning Hearing Board that the variance will not merely serve as a convenience to the petitioner, but is necessary to alleviate some demonstrable hardship or unusual practical difficulty and that the granting of the variance will not in any way be inconsistent with the intent, purpose and objectives of this Part.

E. *Zoning Hearing Board's Decision.* Within 30 days after the close of the required public hearing of a requested variance from one or more of the provisions of this Part, the Zoning Hearing Board shall prepare and submit written findings of fact and conclusions of law to grant, deny, wholly or in part, or to modify said variance request .

(Ord. 803, 10/7/2002, §171; as amended by Ord. 820, 12/8/2003)

§4-172. Penalties.

1. *Failure to Obtain or Renew Lighting Permit.* Any person who erects, alters, or relocates within the Township of Ferguson any light(s) without first obtaining a light permit shall , upon conviction thereof in a proceeding commenced before a district justice in accordance with the Pennsylvania Rules of Criminal Procedure, be sentenced to pay a fine of not less than \$300 nor more than \$1,000 plus costs and, in default of payment of said fine and costs, to a term of imprisonment not to exceed 90 days, provided that each day's continuation of a violation shall constitute a separate offense. [Ord. 820]

2. *Display of Illegal Lights.* Any person who displays a light or lights in the Township of Ferguson found to be in violation of one more of the provisions of this Part shall, following receipt of a written notice of such violation(s) and, upon conviction thereof in a proceeding commenced before a district justice in accordance with the Pennsylvania Rules of Criminal Procedure, be sentenced to pay a fine of not more than \$1,000 plus costs and, in default of payment of said fine and costs, to a term of imprisonment not to exceed 90 days, provided that each day's continuation of a violation shall constitute a separate offense. [Ord. 820]

3. *Other Remedies.* In addition to all other remedies, the Township of Ferguson may institute any appropriate action or proceeding to prevent, restrain, correct or abate any violation of this Part.

(*Ord. 803*, 10/7/2002, §172; as amended by *Ord. 820*, 12/8/2003)

