

**ORDINANCE NO. 03**  
**(Series 2007)**

**AN ORDINANCE AMENDING TITLE 17 OF THE GEORGETOWN MUNICIPAL CODE BY THE ADDITION OF A NEW CHAPTER 17.48 CONCERNING OUTDOOR LIGHTING REGULATIONS.**

**BE IT ORDAINED BY THE BOARD OF SELECTMEN OF THE TOWN OF GEORGETOWN, COLORADO:**

**Section 1.** Title 17 of the Georgetown Municipal Code (Land Use Code) is hereby amended by the addition of a new Chapter 17.48 to read as follows:

<b>Chapter 17.48</b>	<b>Outdoor Lighting Regulations</b>
	17.48.010 Purpose
	17.48.020 Definitions
	17.48.030 Scope and applicability
	17.48.040 Exemptions and exceptions
	17.48.050 Nonconforming fixtures
	17.48.060 Approved materials and methods of installation
	17.48.070 Submittals
	17.48.080 General standards
	17.48.090 Prohibited lighting
	17.48.100 Appeals
	17.48.110 Penalty for violation

**17.48.010 Purpose.**

The purpose of this Chapter is to regulate outdoor lighting in order to reduce or prevent light pollution. This means to the extent reasonably possible the reduction or prevention of glare and light trespass, the conservation of energy, and promotion of safety and security. In addition, the intent of this Chapter is to curtail degradation of the nighttime visual environment.

**17.48.020 Definitions**

The "IES" (Illuminating Engineering Society of North America) Lighting Handbook, most recent edition, the Town of Georgetown Code, and the Design Review Commission Regulations, shall be used for the definition of terms used in this Chapter but not defined herein. Where the definition of a term set forth in this Section is found to conflict with the definition of such term in any other Chapter, "IES" handbook or regulation, the more restrictive definition will apply.

*Area light* is light that produces over 2050 lumens. Area lights include, but are not limited to, street lights, parking lot lights, and yard lights.

*Automatic timing device* is a device that automatically controls the operation of a light fixture or fixtures, circuit, or circuits. Photocells and light or motion sensors shall be considered automatic timing devices.

*Average footcandle* is the level of light measured at an average point of illumination between the brightest and darkest areas. The measurement can be made at the ground surface or at four to five feet above ground.

*Bulb* means the source of electric light, as distinguished from the whole assembly. (See Luminaire).

*Candela (cd)* is a unit of luminous intensity.

*Eighty-five (85) degree full cut-off type fixtures* are fixtures that do not allow light to escape above an 85-degree angle measured from a vertical line from the center of the lamp extended to the ground.

*Exterior lighting* means temporary or permanent lighting that is installed, located or used in such a manner as to cause light rays to shine outside. Fixtures installed indoors that are intended to light something outside are considered exterior lighting for the purpose of this Chapter.

*Fixture* is the assembly that holds the lamp in a lighting system. It includes the elements designed to give light output control, such as a reflector (mirror) or refractor (lens), the ballast, housing, and attachment parts.

*Flood light* is a light that produces up to 1800 lumens and is designed to “flood” a well-defined area with light. Generally, flood lights produce from 1000 to 1800 lumens.

*Foot-candle* is illuminance produced on a surface one foot from a uniform point source of one candela as measured by a light meter.

*Full cutoff fixture* is a fixture which, as installed, gives no emission of light above a horizontal plane.

*Glare* is intense light that results in discomfort and/or reduction of visual performance and visibility.

*Holiday lighting* is festoon type lights, limited to small individual bulbs on a string, where the output per bulb is no greater than 15 lumens.

*IESNA-Illuminating Engineering Society of North America (IES or IESNA)* is the professional society of lighting engineers, including those from manufacturing companies, and other professionals involved in lighting.

*Illuminance* is the density of luminous flux incident on a surface. Unit is foot-candle or lux.

*Illuminating Devices:*

(a) Light fixture types:

(1) Full cutoff fixture types- A fixture which, as installed, gives no emission of light above a horizontal plane.

(2) Floodlights and Spotlights- Fixtures defined as having a full beam width or beam spread of less than 110 degrees.

(b) Lamp types:

(1) Incandescent lamps-Lamps which produce light via an electrically heated metallic filament.

(2) Fluorescent lamps- Lamps that use fluorescence of a phosphor to produce visible light.

(3) High Intensity Discharge (HID) Lamps-Lamps, which produce visible light directly by the electrical heating or excitation of a gas. Examples of such lighting include, but are not limited to, Metal Halide, High Pressure Sodium, Low Pressure Sodium, and Mercury Vapor. For purposes of this Chapter, fluorescent lights are not considered HID lighting.

*Induction lighting* utilizes induction lamps which are electrodeless fluorescents. Without electrodes, these lamps rely on the fundamental principles of electromagnetic induction and gas discharge to create light.

*Lamp* or *bulb* is the light-producing source installed in the socket portion of a luminaire.

*Light pollution* is any adverse effect of manmade light including, but not limited to, light trespass, uplighting, the uncomfortable distraction to the eye, or any manmade light that diminishes the ability to view the night sky. Often used to denote urban sky glow.

*Light trespass* is light emitted by a luminaire falls where it is not wanted or needed or that shines beyond the property on which the luminaire is installed.

*Lighting* means any or all parts of a luminaire that function to produce light.

*Lumen* is a unit of luminous flux; the flux emitted within a unit solid angle by a point source with a uniform luminous intensity of one candela. One foot-candle is one lumen per square foot. One lux is one lumen per square meter.

*Luminaire* is the complete lighting unit, including the lamp, the fixture, and other parts.

*Luminance* is at a point and in a given direction, the luminous intensity in the given direction produced by an element of the surface surrounding the point divided by the area of the projection of the element on a plane perpendicular to the given direction. Units: candelas per unit area. The luminance is perceived brightness, the visual effect of the illuminance, reflected, emitted or transmitted from a surface.

### *Measurement*

#### (a) Lamp Output:

(1) Total Output: Measurement of total output is in lumens. This should be understood to be the initial lumen value for the lamp.

(2) Illuminance: Measurements of illuminance are expressed in initial lumens per square foot. (A desktop illuminance of twenty (20) initial lumens per square foot is adequate for most purposes.

(b) In measuring illuminance, the light detector should be pointed directly at the light source or sources. The intervening light path should be free of obstruction.

*Outdoor light fixture* is an outdoor illuminating device, outdoor lighting or reflective surface, luminous tube, lamp or similar device, permanently installed or portable, used for illumination, decoration, or advertisement. Such devices shall include, but are not limited to, lights used for:

- (a) parking lot lighting;
- (b) roadway lighting;
- (c) buildings and structures;
- (d) recreational areas;
- (e) landscape lighting;
- (f) billboards and other signs (advertising or other);
- (g) product display area lighting;
- (h) building or structure decoration;
- (i) building overhangs and open canopies;

*Recessed* is a light that is built into a structure or portion of a structure such that the light is fully cut-off and no part of the light extends or protrudes beyond the underside of a structure or portion of a structure.

*Partially shielded* means the bulb of the fixture is shielded by a translucent siding and the bulb is not visible at all. Light may be emitted at the horizontal level of the bulb.

*Shielded* is when the light emitted from the fixture is projected below a horizontal plane running through the lowest point of the fixture where light is emitted. The bulb is not visible with a shielded light fixture, and no light is emitted from the sides of the fixture. Also considered a full cut-off fixture.

*Spotlight or flood light* is any lamp that incorporates a reflector or refractor to concentrate the light output into a directed beam in a particular direction (see definition for flood light).

*Temporary lighting* is lighting that is intended to be used for a special event for seven (7) days or less.

*Uplighting* is lighting that is directed in such a manner as to shine light rays above the horizontal plane.

*Wall washer light* is a fixture or luminaire which accentuates a vertical wall surface by casting light upon that surface; a wall washer serves no functional purpose other than casting light upon a wall surface.

**17.48.030 Scope and applicability.**

(a) New Lighting: All exterior outdoor lighting installed after the effective date of this Chapter in all zoning districts in the Town shall conform with the requirements established by this Chapter and other applicable Chapters, unless otherwise exempted. Preliminary review of new lighting plans by the Town's Building Official, prior to the submittal of building plans to the Design Review Commission, is highly recommended to ensure conformance with this Ordinance. This Chapter does not apply to indoor lighting.

(b) Existing Lighting: All existing lighting located on a subject property that is part of a Major Project, as defined by the Design Review Commission, or requires a Certificate of Appropriateness from the Georgetown Design Review Commission, as defined in Section 17.04.050(1) of the Georgetown Municipal Code, shall be brought into conformance with this Chapter, as follows:

(1) Residential Properties: all existing lighting on residential properties shall be brought into conformance with this Ordinance.

(2) Commercial Properties: all existing lighting located on the façade of the structure, where the Major Project work is proposed, shall be brought into conformance with this Ordinance.

(c) Conformity shall occur prior to the issuance of a Certificate of Occupancy (only when a Certificate of Appropriateness is required), Final Inspection, or Final Plat recordation, as applicable. For other permits, the applicant shall have a maximum of thirty (30) days from the date of permit issuance to bring lighting into conformance. When an existing fixture is replaced, the replacement fixture shall meet the requirements of this Chapter.

(d) Architectural design, site planning, landscaping, and lighting may be further restricted elsewhere in the Georgetown Municipal Code.

(e) All governmental agencies, federal, state, or county, which operate within the Town limits of Georgetown, are encouraged to meet the requirements of this Chapter and are encouraged by the Town to comply with its provisions.

(f) In the event of a conflict with any other chapter of the Georgetown Municipal Code, the more stringent requirement shall apply. If the terms and provisions of this Chapter overlay with any other provision of the Georgetown Municipal Code or the Uniform Electric Code, it is the intent of the Board of Selectmen that the more restrictive standard in terms of light pollution control shall prevail.

#### **17.48.040 Exemptions and exceptions.**

Provided that no dangerous glare is created on adjacent streets or properties, the following lighting is exempt from the regulations of this Chapter:

(a) **Holiday lighting**

(1) From November to January, illumination of holiday lighting shall be exempted and excepted without limitations.

(2) From February to October, illumination of holiday lighting shall be exempted and excepted for a period of one week only.

(b) Existing street lighting installed by the Town of Georgetown or other authorized government entity for the benefit of safety. However, as the Town of Georgetown's budget allows, existing street lighting shall be brought into conformance with this Chapter.

(c) Party Lighting (Temporary non-commercial lighting): illumination of party lighting shall be exempted and excepted for a period of 48 hours and shall be turned off by 10 p.m.

(d) Commercial lighting, such as the outlining of the structure, shall be exempted and excluded, however, this shall not include wall washer lights, floodlights, and neon signs.

(e) Low-voltage walkway or driveway lighting, with a maximum height of 18 inches, shall be exempted and excepted.

#### **17.48.050 Nonconforming fixtures.**

As of the effective date of this Chapter, all outdoor lighting that does not conform with this Chapter shall be legal nonconforming outdoor lighting. Nonconforming outdoor lighting shall be subject to the nonconforming use provisions of this Code.

**17.48.060 Approved materials and methods of installation.**

(a) The provisions of this section are not intended to prevent the use of any design, material or method of installation or operation not specifically prohibited by this Chapter, provided such alternative design, material, or method conforms with the intent of this Chapter and has been approved by the Building Official.

(b) The Building Official may approve an alternative design provided he or she finds that:

(1) It complies with the applicable specific requirements of this Chapter; or

(2) It has been designed or approved by a registered professional engineer and complies with the purpose and intent of this Chapter.

**17.48.070 Submittals.**

(a) All applications for building permits and/or land use planning review which include installation of outdoor lighting fixtures shall include lighting plans conforming to the provisions of this Chapter. The Building Official shall have the authority to request additional information in order to achieve the purposes of this Chapter.

(b) The submittal shall contain the following information and shall be submitted as part of the site plan to the Design Review Commission and the Building Official for approval:

(1) Plans indicating the location, type, intensity, and height of luminaries including both building and ground-mounted fixtures;

(2) A description of the luminaries, including lamps, poles or other supports and shielding devices, which may be provided as catalogue illustrations from the manufacturer;

(3) Additional information as may be required by the Town in order to determine compliance with this Chapter shall be submitted by the applicant. For Commercial applications, photometric data, such as that furnished by the manufacturer, showing the angle of light emission and the foot-candles on the ground, may be required.



**17.48.080 General standards.**

(a) Preferred Source: Metal Halide (MH) lamps are the preferred illumination source throughout the Town and their use is encouraged. However, comparable lighting and comparable new technology lighting shall be allowed, such as but not limited to induction lighting.

(b) Area Lights: All area lights, including street lights and parking area lighting, shall be full cut-off fixtures and are encouraged to be eighty-five (85) degree full cut-off fixtures. Street lights shall be high-pressure sodium, low-pressure sodium, or metal halide, unless otherwise determined by the Town that another type is more efficient. Street lights along residential streets shall be limited to a 70-watt metal halide light. Street lights along nonresidential streets or at intersections shall be limited to 100 watts (hps), except that lights at major intersections on state highways shall be limited to 200 watts (hps). If the Town permits a light type other than metal halide, then the equivalent output shall be the limit for the other light type.

(c) Canopy Lights: All lighting shall be recessed sufficiently so as to ensure that no light source is visible from or causes glare on public rights-of-way or adjacent property.

(d) Illumination Levels: Illumination levels and uniformity shall be in accordance with current recommended practices of the Illuminating Engineering Society. Recommended standards of the Illuminating Engineering Society shall not be exceeded.

(e) All outdoor lighting systems shall be designed and operated so that area ten (10) feet beyond the property line of the premises receives no more than one quarter (0.25) of a foot-candle of light from the premises lighting system.

(f) Temporary Lighting: Temporary lighting that conforms to the requirements of this Chapter shall be allowed. Nonconforming temporary exterior lighting may be permitted by the Building Inspector only after considering: (1) the public and/or private benefits of the temporary lighting; (2) any annoyance or safety problems that may result from the use of the temporary lighting; (3) the duration of the temporary nonconforming lighting. The applicant shall submit a detailed description of the proposed temporary nonconforming lighting to the Building Inspector.

(g) Towers: All radio, communication, and navigation towers that require lights shall have dual lighting capabilities. For daytime, the white strobe light may be used, and for nighttime, only red lights shall be used.

(h) Residential Lighting Regulations: The following residential lighting regulations apply to exterior lighting on all property located within the following zoning districts of the Town: Millsite Residential District, Meadows Residential District, Hillside Residential District, Historic Residential District, the Parks and Open Space Districts, and those portions of Planned Unit Developments that contain single-family, duplex, and multiple-family residential development.

(1) All exterior lighting shall be provided by full-cutoff fixtures.

(2) All exterior lighting that does not illuminate doorways, decks, driveways, walkways, or other occupied areas shall be turned off by 10:00 p.m.

(3) Blinking, flashing, rotating, or moving lights are prohibited.

(4) Exterior lighting fixtures shall be mounted no higher than ten (10) feet above the doorway, deck, walkway, driveway, or other occupied area, or highest grade point immediately adjacent to the light fixture.

(5) Driveways shall have only one freestanding illuminating fixture per 100 feet of driveway length, and the fixtures shall comply with all other criteria in this Chapter. However, this shall not apply to low-voltage walkway or driveway lighting, with a maximum height of 18 inches, as exempted and excepted in Section 17.48.040(e) of this Ordinance.

(6) Wall washer lights are prohibited.

(i) Commercial Lighting Regulations: The following commercial lighting regulations apply to exterior lighting on all property located within the following zoning districts of the Town: Historic Commercial District, Historic Mixed-Use District, Gateway Mixed-Use District, Mining District, Gateway Commercial District, Gateway Mountainside Industrial District, and those areas of Planned Unit Developments utilized for commercial purposes:

(1) All exterior lighting shall be provided by full-cutoff fixtures.

(2) All exterior lighting that does not illuminate doorways, decks, driveways, walkways, or other occupied areas, or signs or flags, shall be turned off by 10:00 p.m., or the close of business, whichever is later.

(3) Blinking, flashing, rotating, or moving lights are prohibited.

(4) Exterior lighting fixtures shall be mounted no higher than ten (10) feet above the doorway, deck, walkway, driveway, or other occupied area, or highest grade point immediately adjacent to the light fixture.

(5) Illumination of signs is permitted, provided that the luminaire meets the requirements of other exterior lighting as set forth in this section. Lighting of signs shall be shielded so as to concentrate the illumination upon the area of the sign and to prevent glare upon the street, adjacent property, or both. Lighting of signs shall not be directed upward into the night sky, and shall not interfere with the vision of drivers or pedestrians, either on the property or adjacent thereto.

(6) Illumination of the United States Flag and/or the State of Colorado Flag is permitted, provided that such lighting occurs from the top of the flagpole and shines downward, has a maximum lumen output of one thousand three hundred (1,300) lumens, is shielded, directed on the flag and is without significant impact to the dark sky. Such lighting shall not interfere with the vision of drivers or pedestrians, either on the property or adjacent thereto. Flags may be taken down at sunset to eliminate the need for lighting.

(7) Wall washer lights are prohibited.

(j) Street, Parking, and Security Lights Regulations: The requirements for street, parking, and security lights set forth in this section apply to all zoning district classifications within the Town.

(1) All street, parking, and security lights shall utilize full cut-off type fixtures.

(2) Street light fixtures shall be mounted no higher than 25 feet above the street surface.

(3) Parking lot fixtures shall be mounted no higher than 20 feet above the parking surface.

(k) Special Zones: In order to preserve the natural amenities and atmosphere of certain areas of Town, the following special lighting zones and standards are established:

(1) Georgetown Lake and Lagoon Area: For all shorelines and properties adjacent to the Georgetown Lake and Lagoon areas, the following lighting standards shall apply:

a. Within 200 yards of the shoreline, all exterior light sources shall be fully shielded (totally concealed) from shoreline viewing, except as required for safety.

b. All exterior lighting shall exist at the minimum wattage necessary for its intended purpose.

c. All exterior lighting shall be extinguished when not necessary for safety or security reasons.

(2) Open Space: Lighting is prohibited on undeveloped open space lands, including publicly owned and privately owned lands. Any lighting installed on open space lands for recreational purposes shall be in compliance with this Chapter.

**17.48.090 Prohibited lighting.**

(a) Blinking and flashing lights, except for holiday lighting.

(b) Exposed strip lighting used to illuminate building facades or outline buildings on residential structures in residential areas, except for holiday lighting.

(c) Neon tubing, except as otherwise permitted under the Sign Code.

**17.48.100 Appeals.**

If an application is denied by the Building Official, an individual shall have the right of appeal to the Board of Selectmen by filing with the Town Clerk within thirty (30) days of the Building Official's determination a written request for an appeal hearing.

**17.48.110 Penalty for violation.**

Violations shall be subject to the enforcement and penalty provisions set forth in 17.04.070 of this Code.

**Section 2.** Section 17.20.040 of the Georgetown Municipal Code is hereby repealed.

**Section 3.** If any article, section, paragraph, sentence, clause, or phrase of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this ordinance. The Board of Selectmen hereby declares that it would have passed this ordinance and each part or parts hereof irrespective of the fact that any one part or parts be declared unconstitutional or invalid.

**Section 4.** All other ordinances or portions thereof inconsistent or conflicting with this ordinance or any portion hereof are hereby repealed to the extent of such inconsistency or conflict.

**INTRODUCED, READ, APPROVED AND ORDERED PUBLISHED AND POSTED IN FULL ON FIRST READING on the 10th day of July, 2007.**

**INTRODUCED ON SECOND READING, FINALLY ADOPTED AND ORDERED PUBLISHED AND POSTED AFTER PUBLIC HEARING on the 14th day of August, 2007.**

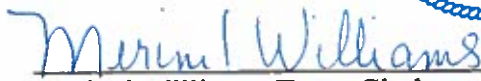
TOWN OF GEORGETOWN

By: 

Thomas A. Bennhoff, Police Judge



ATTEST:

  
Merinel Williams, Town Clerk