

VIA EMAIL

August 26, 2024

**The Gazette
Post Office Box 810
Croton-on-Hudson, New York 10520**

**RE: Legal Notice: Local Law No. 8-2024 “A Local Law REGULATING THE
INSTALLATION OF OUTDOOR LIGHTING WITHIN THE TOWN OF
CORTLANDT.”**

Dear Gary:

**Please publish the attached Legal Notice in the Thursday, August 9, 2024 issue of the
Gazette, and return three (3) Affidavits of Publication of each notice to the undersigned as
soon as possible.**

If you have any questions, please do not hesitate to contact me.

Thank you for your assistance.

Very truly yours,

**Laroue Shatzkin
Town Clerk**

Cc: Legal File

Local Law No. 8 of 2024

(A LOCAL LAW REGULATING THE INSTALLATION OF OUTDOOR LIGHTING WITHIN THE TOWN OF CORTLANDT)

Section 1. Legislative Intent

The Supervisor and Town Board have noted the receipt of complaints regarding some Outdoor Lighting installations in the Town of Cortlandt, and in understanding recent changes in technology that have led to an almost complete adoption of LED lighting technologies for both residential and non-residential lighting installations, along with the pros and cons of LED lighting, the Town seeks to adopt these Outdoor Lighting Standards to protect and promote the public health, safety and welfare of the residents of Cortlandt, as well as preserve the quality of life, retain community character and afford the public the ability to view the night sky. This Local Law is enacted for the purpose of creating regulations for the installation and use of Outdoor Lighting within the Town of Cortlandt.

Section 2. Amendments to Chapter 307-4 Definitions of the Town Code

Chapter 307-4 of the Town of Cortlandt Town Code, entitled “ZONING” shall be amended to include the following Definitions:

§307-4 Definitions.

BUG RATING

A luminaire classification system that classifies backlight (B), uplight (U) and glare (G) ratings for an LED lighting fixture. See Figure IV-1.

COLOR RENDERING INDEX (CRI)

A number ranging from 0-100 that rates a light source for how closely it renders the color of objects as “natural,” with a higher number corresponding to a color rendering that is closer to the natural color.

CORRELATED COLOR TEMPERATURE (CCT)

A rating of the warmth or coolness of light output as expressed in degrees Kelvin (K).

DARKSKY

Formerly known as the International Dark-Sky Association (IDA), DarkSky International (DarkSky) is a US-based non-profit organization that provides leadership, tools, and resources for individuals, policymakers, and industry, in order to reduce light pollution and promote responsible outdoor lighting that is beautiful, healthy, and functional.

DARKSKY APPROVED

A program by DarkSky that provides objective, third-party certification for lighting products, lighting designs, and installed lighting projects that minimize glare, reduce light trespass, and reduce light pollution.

FIXTURE, FULLY-RECESSED CANOPY

An outdoor lighting fixture recessed into a ceiling so that the bottom of the fixture is flush with the ceiling, eliminating any potential for side glare.

FIXTURE, FULLY-SHIELDED

An outdoor lighting fixture that, by design of the housing, does not allow any light to be emitted above a ninety-degree, horizontal plane from the base of the fixture. Fully shielded fixtures must be installed in a horizontal position as designed, or the purpose of the design is defeated, and direct glare will result. A fully-shielded fixture has a maximum BUG upright rating of U0 (uplight zero). See Figure IV-2.

FIXTURE, LIGHTING

A complete lighting unit, consisting of one or more lamps (light sources), together with the parts designed to distribute the light (reflector, lens, diffuser), to position and protect the lamps, and to connect the lamps to the power supply, but not including the support assembly (pole, mounting bracket, etc.). Also referred to as a “luminaire”. See Figure IV-3.

FIXTURE, WALLPACK

A lighting fixture designed for direct mounting on building walls whose primary function is to light the area adjacent to a structure.

FOOTCANDLE (FC)

The unit of measure expressing the quantity of light received on a surface. One footcandle is the illuminance produced by a candle on a surface one-foot square from a distance of one foot. One footcandle is equal to one lumen per square foot, or 10.76 lux.

GLARE

The eye's line-of-sight contact with a direct light source that causes annoyance, discomfort, or loss in visual performance and ability. Note: As used in this section, this term is not synonymous with the term “glare” as used in the BUG rating defined above.

HEIGHT, MOUNTING

The vertical distance from the ground directly below the center line of the luminaire to the lowest direct-light-emitting part of the luminaire.

ILLUMINANCE

The amount of light falling on a surface area, measured in either footcandles (lumens per square foot) or lux (lumens per square meter). One footcandle equals 10.76 lux though, for convenience, 10 lux is commonly used as an equivalent.

ILLUMINATING ENGINEERING SOCIETY (IES)

The Illuminating Engineering Society (formerly the Illuminating Engineering Society of North America) is a nonprofit membership organization that provides professional development, publications, networking, and educational opportunities to their membership, which includes

engineers, designers, educators, manufacturers, distributors, scientists, and industry personnel. Through their American National Standards Institute (ANSI), they develop and publish technical standards regarding lighting.

KELVIN (K)

The measured correlated color temperature of light. In lighting applications, degrees Kelvin is used to specify the color appearance of the light source. The higher the Kelvin (K) rating, the more bluish-whiter light there is.

LIGHT TRESPASS

Light emitted by a lighting installation that falls outside the boundary of the property on which the installation is sited (also called spill light). See Figure IV-4.

LUMEN

A unit of measurement for quantifying the amount of light energy emitted by a light source (as distinct from “watt,” a measure of input power demand).

LUMINAIRE

See “FIXTURE, LIGHTING”.

LUX

One lumen per square meter; unit of illuminance. One lux equals approximately 0.092903 footcandle.

OUTDOOR LIGHTING

The illumination of an outside area or object by any man-made device located outdoors that produces light by any means.

SECURITY LIGHTING

The minimum amount of outdoor lighting necessary to illuminate points of entry into or exit from a structure, exterior walkways, or outdoor storage areas for purposes of nighttime safety. Security lighting shall not include any lighting that is primarily for aesthetic or advertising purposes and does not directly contribute to the safety or security of the premises, such as sign, parking lot, display, landscaping, or architectural lighting.

UNIFORMITY RATIO

A calculation used to assess whether the Outdoor Lighting levels provide uniform illumination distribution for a given area, calculated as the ratio of the minimum lighting level to the average lighting level (min/avg), as expressed in decimal form. A value of one (1) represents a completely uniform distribution.

UPLIGHTING

Any light source that distributes illumination above a ninety-degree horizontal plane. Uplight is quantified using the IES U-rating system, U0-U5.

Section 3. Addition of Section 307-12.3 of the Town Code

The following Section with a title of “Outdoor Lighting Standards” shall be added to the Town Code:

§307-12.3 Outdoor Lighting Standards.

A. Purpose. The general purpose of this Section is to protect and promote the public health, safety and welfare of the residents of Cortlandt, as well as preserve the quality of life, retain community character and afford the public the ability to view the night sky, by establishing regulations and a process for review of Outdoor Lighting. This Section establishes standards for Outdoor Lighting in order to accomplish the following:

1. To protect against light pollution, glare, light trespass, and dramatic contrasts between lit and unlit areas while ensuring that sufficient lighting can be provided where needed to promote safety and security;
2. To ensure that vehicle and pedestrian circulation areas, parking lots, public gathering spaces, approaches to buildings, and other areas have adequate, but not excessive, outdoor illumination to promote safety and utility at night;
3. To promote the conservation of energy and the reduction of greenhouse gas emissions from outdoor lighting, in accordance with the Town’s pledge to be a New York State Climate Smart Community;
4. To protect and reclaim the ability to view the night sky;
5. To reduce the impact of artificial lighting on human health, flora, fauna, and the environment.

B. Applicability.

1. Single-Family and Two-Family Dwellings.

- a. Existing Installations. All existing Outdoor Lighting on a structure and /or property devoted exclusively to single- or two-family residential use, installed prior to the effective date of this ordinance, shall be exempt from the provisions of this ordinance provided the existing lighting does not result in any Light Trespass and/or Glare to neighboring properties. Any lighting resulting in such must be shielded or replaced to prevent Light Trespass and/or Glare, or mitigated with landscaping and/or fencing or other visual buffering.
- b. Installation, Replacement, Modification, or Refurbishment of Existing Installations. All new and existing Outdoor Lighting on a structure and/or property devoted exclusively to single- or two-family residential use which is installed, replaced, modified, refurbished, and/or retrofitted after the effective date of this ordinance, shall be the minimum necessary, in both number of Luminaires and intensity of light, to achieve the intended purpose of the lighting, shall not result in Light Trespass and/or

Glare onto neighboring properties, and should meet the standards as provided in Section 307-12.3-F to the greatest extent practicable.

2. **All Uses Other than Single-Family and Two-Family Dwellings.**

- a. Addition, Replacement, Modification, Alteration, and Refurbishment of Existing Installations, Including Bulb Replacement or Improvements. All existing and proposed Outdoor Lighting for uses other than single and two-family residential uses and/or property, which is replaced, modified, refurbished, retrofitted, installed, added, improved, and/or altered after the effective date of this Section, shall meet the standards as provided in this Section.
- b. Properties Undergoing Substantial Improvement. Any repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure, before the improvement or repair is started, shall comply with this §307-12.3 Outdoor Lighting Standards. The does not, however, apply to either of the following:
 - (i) Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that is the minimum necessary to ensure safe conditions.
 - (ii) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.
- c. Municipal Lighting.
 - (i) LED lighting must be installed for all Outdoor Lighting purposes in connection with every municipal major renovation or new construction project that involves the expenditure of municipal capital dollars except as follows:
 - I. Where LED lighting is not technically feasible in connection with a specific lighting situation, as determined by the project architect or other associated design professional;
 - II. Where the use of LED lighting in a specific situation presents an undue cost burden, as determined by the Department of Environmental Services, Department of Technical Services, or other Town staff or consultants; or
 - III. Where the Town or its consultants determines that an alternative lighting proposal is more energy efficient.
 - (ii) This requirement shall apply to all projects funded by the Town's annual capital budget ordinance, unless in any particular fiscal year the ordinance contains specific contrary language, and shall apply in addition to any other restrictions placed on the expenditure of capital dollars contained in such an ordinance.

C. Exempt outdoor lighting.

1. Lighting that is required by federal or state laws or regulations;

2. Emergency lighting, as needed by police, fire, medical, utility or other emergency service;
3. Temporary lighting for construction sites, provided that such lighting is discontinued immediately upon completion of the construction work necessitating said lighting, and provided that such lighting is the minimum lighting needed, does not create Glare or extend beyond the property line;
4. Lighting of a single-family or two-family dwelling lot that is not part of a site plan or outdoor lighting plan for any other common or public area, provided that such lighting is directed downward, and does not create Light Trespass and Glare on adjacent properties;
5. Low voltage seasonal holiday lighting and decorations that are displayed for not more than 60 consecutive days nor more than 60 total days in any one year, provided the lighting does not result in negative health or safety impacts.
6. Low voltage decorative string/rope lights on a building as long as such lights are not prohibited in subsections 307-12.3-D.6 or 307-12.3-D.7 herein.
7. Solar-powered lights of five watts or less per fixture used in residential landscaping applications and to illuminate walkways;
8. Temporary lighting for theatrical or performance areas;
9. Underwater lighting in swimming pools and other water features;
10. Lighting of public art, monuments, and statuary that has been permitted or otherwise approved by the Town, provided lighting is properly aimed and shielded to minimize uplight and contain light to the art feature and not create Glare onto any public right-of-way or adjacent or nearby properties;
11. Other Town, county, or state lighting installed for the benefit of public health, safety, and welfare;

D. Prohibited outdoor lighting.

1. Uplighting is prohibited. Externally lit signs, displays, buildings, structures, streets, parking areas, recreational areas, landscaping, and other objects lit for aesthetic or other purposes shall be illuminated only with steady, stationary, Fully-Shielded Fixtures without causing Glare or Light Trespass beyond the property line.
2. Roof-mounted area lighting is prohibited.
3. The use of search lights, strobe lights, klieg lights, laser lighting, or any similar high-intensity light is prohibited, except for use in emergencies by police, fire, or medical personnel or at their direction.
4. The use of mercury vapor and metal halide lamps are prohibited.
5. Unshielded fixtures are prohibited.
6. Neon/LED tube or rope lighting used to outline or highlight a building or a building's features is prohibited.

7. Any lighting that flashes, blinks, scintillates, revolves, rotates, flickers, fades, fluctuates, moves, runs, or that uses electrical pulsation, or that does not maintain a stationary and constant intensity, color, or direction at all times is prohibited, with the exception of motion-activated security lighting.

E. Permit Requirements. A permit is required for Outdoor Lighting associated with any project other than Single- or Two-Family Dwellings. The following information is required to be submitted as part of the permit application:

1. A Luminaire schedule indicating the number, location, Mounting Height, arm or tenon structure information, orientation, type of illuminating device, and lighting levels of all proposed and existing outdoor Lighting Fixtures;
2. A photometric lighting plan, such as that furnished by manufacturers, showing lighting levels in Footcandles at ground level;
3. Manufacturer's cut sheets of all proposed Lighting Fixtures clearly indicating the selected BUG Rating (or cut-off classification if no BUG Rating is available), Correlated Color Temperature (CCT) in Kelvin (K), Color Rendering Index (CRI), Glare reduction/control devices, selected mounting structure, and motion-activated control devices for each fixture type;
4. For the areas of the site that will be illuminated, as determined by the Director of Code Enforcement and/or Planning Board, a calculation of average, maximum, and minimum lighting levels, and the Uniformity Ratio. Unlit areas beyond the boundaries of the lighting installation shall not be included in the calculations for average, maximum, and minimum lighting levels.
5. Location and use of adjacent properties;
6. Additional information that the Planning Board or Director of Code Enforcement determines is necessary, including but not limited to a statement of the proposed hours and days of the week when the Lighting Fixture(s) will be on and when they will be extinguished;

F. General Outdoor Lighting Requirements.

1. **Illuminance and Uniformity.** Outdoor Lighting levels shall comply with the following:
 - a. Unless otherwise stated in this section, parking lots, pedestrian walkways, main building entrances, and other areas of a site to be lit shall have a maximum average lighting level of one (1.0) Footcandle.
 - b. Areas beneath gasoline station canopies shall have a maximum average lighting level of five (5.0) Footcandles.
 - c. The Uniformity Ratio (calculated by dividing minimum/average) shall not be less uniform than 1:3 (0.33) for all parking and traffic areas, or 1:4 (0.25) for pedestrian areas. Uniformity ratios closer to one (1.0) are preferred.
 - d. Design should establish a hierarchy of lighting to assure a smooth transition from bright areas to those with subdued lighting.

- e. An exception to the maximum permitted lighting levels shall be made for ATM machines. Lighting levels for ATM machines shall be in accordance with the New York State ATM Safety Act, and shall not exceed the standards set forth therein.

2. Fixture Design and Shielding.

- a. All outdoor Lighting Fixtures shall have a maximum BUG uplighting rating of zero (U0) to prevent Glare, Light Trespass, and sky glow. Fixtures that do not have a BUG Rating shall be classified by the IES as Fully-Shielded Fixtures or shall have the “DarkSky Approved” seal of approval.



Figure IV-1: (Image credit: City of Fort Collins, CO)

- b. All outdoor Lighting Fixtures installed under canopies, building overhangs, roof eaves, or similar structure, including those beneath gasoline service station canopies, shall be fully-recessed so that the bottom of the fixture is flush with the plane of the ceiling.
- c. All outdoor Lighting Fixtures installed adjacent to wooded or other natural habitats shall have a maximum CCT of 2200K and a BUG backlighting rating of zero (B0) to reduce potential negative impacts of artificial lighting on wildlife.
- d. All Lighting Fixtures shall be installed and maintained with fixed arms. The lighting shall be installed to prevent direct Glare and Light Trespass at the property line.

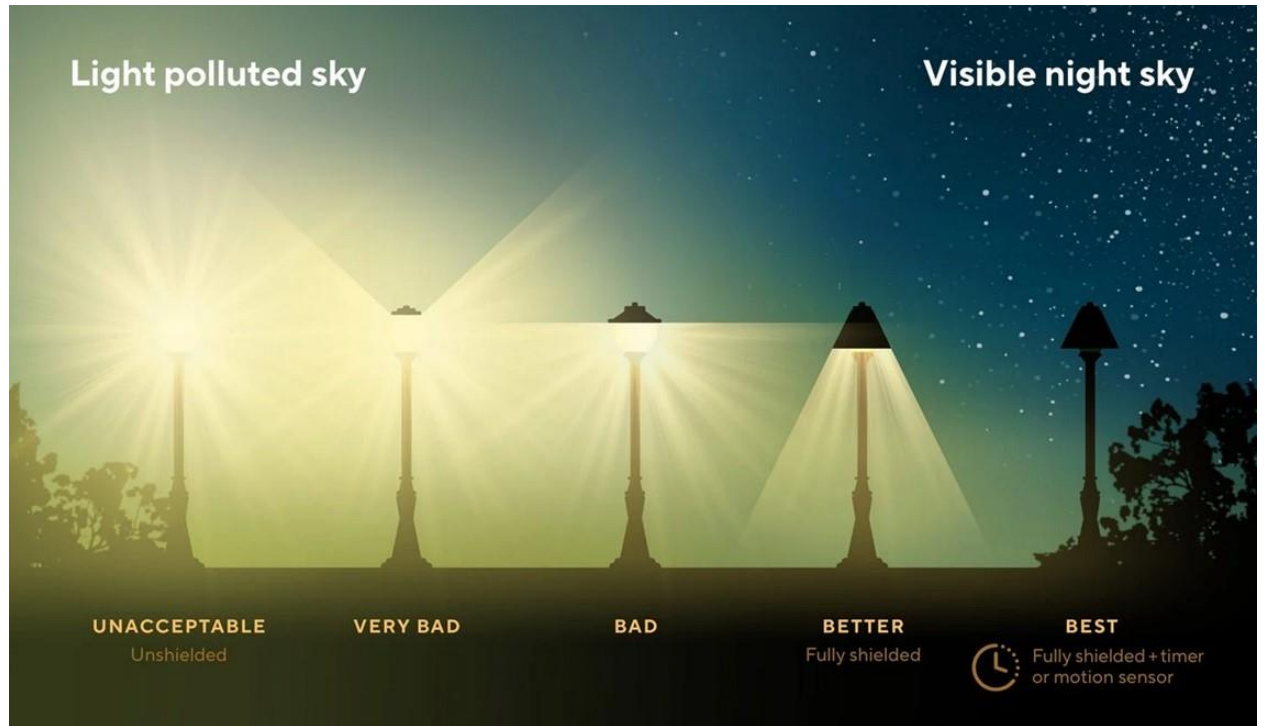


Figure IV-2. (Image credit: DarkSky)

- e. Floodlighting is discouraged but, if used, must be (1) shielded to prevent Glare for drivers and pedestrians; (2) must not permit Light Trespass beyond the property line, and (3) must not emit light above a seventy-five-degree (75°) horizontal plane.
- f. All Outdoor Lighting shall be designed, located, installed, fitted, shielded, and directed so as not to present a hazard to drivers or pedestrians by impairing their ability to safely traverse the area, and so as not to create a nuisance by projecting or reflecting objectionable light onto an adjacent use or property.

Unacceptable / Discouraged

Fixtures that produce glare and light trespass



Acceptable

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night



Rendered for the Town of East Hampton, NY by Bob Crelin ©2008

Figure IV-3. (Image credit: Dark Sky Society, illustrations by Bob Crelin)

3. **Correlated Color Temperature (CCT).** All LED light sources shall have a maximum Correlated Color Temperature of 2,700K. Products with color tuning capabilities above 2700 K are prohibited.

4. **Color Rendering Index (CRI).** All LED light sources shall have a minimum Color Rendering Index (CRI) rating of 70.
5. **Light Trespass.** All outdoor lights and externally illuminated signs shall be designed, located, installed, and directed in such manner as to prevent Light Trespass at and across the property lines, to prevent direct Glare at any location off the property, and to be shielded to confine the light within the property, as follows:
 - a. In all residential districts, and wherever a nonresidential use abuts a residential use, lighting levels at the property line shall not exceed zero (0.0) Footcandle. In addition, no direct light source shall be visible at the property line at ground level or above.



Figure IV-4. (Image credit: City of Fort Collins, CO)

- b. For all other nonresidential uses in a nonresidential zoning district, lighting levels may be allowed up to 0.1 Footcandle at the property line with the exception of public highways and rights-of-way as per 307-12.3(F)(5)(c), though no Light Trespass is preferred.
 - c. Light Trespass onto a public highway or right-of-way shall not exceed zero (0.0) Footcandle.
6. **Mounting Height.** Unless specified elsewhere herein and except for public/commercial recreational facilities, such as baseball and other field sports, the maximum allowable Mounting Height of a freestanding or wall-mounted Luminaire shall be 15 feet above the average finished grade:
 - a. In the CC, CD, HC, and HC-9A zones, the maximum Mounting Height shall be 18 feet above the average finished grade;
 - b. In the Conditional M-1, M-1A, and MD zones, the maximum Mounting Height shall be 20 feet above the average finished grade.

7. **Lighting Controls.** For all nonresidential uses, all Outdoor Lighting except Security Lighting shall comply with the following:
 - a. Be turned off no later than one (1) hour after the close of business and shall remain off until no earlier than one (1) hour before the business reopens;
 - b. Security Lighting that meets the lighting standards outlined in this Section shall be controlled by motion-sensors, dimmers, photocells, or other technology to allow reduction of lighting levels during off hours as deemed appropriate;
 - c. Outdoor Lighting associated with all uses other than Single- and Two-Family Dwellings shall include dimmer or other technologies that allows for the lighting to be reduced it, upon installation, it is determined to be brighter than permitted.
8. **Recreational Facilities, Public or Private.** Lighting Fixtures for outdoor recreational facilities shall be Fully-Shielded Fixtures and DarkSky Approved, as defined in this Section. Certification of sports field lighting by the DarkSky Approved Outdoor Sports Lighting program is preferred but not required.

G. Construction and Maintenance. Outdoor Lighting Fixtures shall be installed and maintained so as to always meet the requirements of this section, in addition to the following:

1. **Verification of Installation.** Prior to issuance of a certificate of occupancy, the developer or property owner must be able to verify to the Director of Code Enforcement, in writing, that all outdoor Lighting Fixtures were installed as described on the approved plans. The Town retains the right to field-inspect the installation to confirm accuracy via a light meter.
2. **Lamp or Fixture Substitution.** Should any outdoor Lighting Fixture or the type of light source therein be changed after a lighting permit and/or site plan approval has been issued, a change request must be submitted to the Director of Code Enforcement for revised approval. The Director of Code Enforcement, in consultation with the Planning Department and the Engineer for the Town, shall review the change request to assure compliance with this Section. If the change request is not substantial, the Director of Code Enforcement may approve it. If the change request is substantial, the Director of Code Enforcement shall forward such request to the Planning Board for an amended lighting permit and/or site plan approval, as applicable, which must be received prior to substitution.
3. **Approved Materials and Methods of Construction or Installation/Operation.** The provisions of this Section are not intended to prevent the use of any design, material, or methods of installation or operation not specifically prescribed by this Section, provided any such alternate has been approved by the Director of Code Enforcement upon confirmation that it:
 - a. Provides at least approximate equivalence to the applicable specific requirement of this Section, and
 - b. Is otherwise satisfactory and complies with the purpose of this Section.

Section 4. Amendments to Section 307-71(C)(15) of the Town Code

The existing language in Section **307-71(C)(15)** shall be removed and replaced with the following:

All site development plans that involve Outdoor Lighting shall submit the materials required as per §307-12.3(E) Permit Requirements.

Section 5. Severability

If any provisions of this local law are held to be unconstitutional or otherwise invalid by any court of competent jurisdiction, the remaining provisions of the local law shall remain in effect.

Section 6. Effective Date

This local law shall take effect immediately upon filing with the Secretary of State.

**BY ORDER OF THE TOWN BOARD
OF THE TOWN OF CORTLANDT
LAROUÉ ROSE SHATZKIN
TOWN CLERK**

**Adopted August 13, 2024
At a Regular Meeting
Held at Town Hall**