VILLAGE OF CHENEQUA ORDINANCE NO. 2023-03-13-01

AN ORDINANCE TO REPEAL AND RE-CREATE SECTION 5.24 OF THE VILLAGE CODE ADOPTING REVISED REGULATIONS ON OUTDOOR LIGHTING

WHEREAS, Section 5.24 of the Village Code sets forth regulations to limit light trespass and glare throughout the Village; and

WHEREAS, the Village Board desires to repeal and re-create Section 5.24 to supplement such regulations and clarify the permissible design, placement and characteristics of outdoor light fixtures on private properties in the Village in order to achieve the Village Code's goal of limiting light trespass and glare throughout the Village;

NOW, THEREFORE, The Village Board of the Village of Chenequa, Waukesha County, Wisconsin, does hereby ordain and adopt a repealed and re-created Section 5.24 of the Village Code as follows:

SECTION 1

Section 5.24 of the Village of Chenequa Code entitled, "OUTDOOR LIGHTING" is hereby repealed and re-created as follows:

5.24 OUTDOOR LIGHTING.

- (1) PURPOSE. The purpose of this Section is to perpetuate and preserve the rural character of the Village, limit light pollution, and improve the health, safety and general welfare of the Village by restricting Light Trespass and unnecessary Glare to adjacent properties.
- (2) INTENT. The intent of this Section is to have Outdoor Lighting Fixtures designed, located and specified so that light emitted therefrom does not create Light Trespass to adjacent properties.
- (3) APPLICABILITY. The provisions of this Section shall apply to all Outdoor Lighting Fixtures used, installed, replaced, altered, moved or repaired except as such applicability is specifically expanded or reduced herein.
- (4) DEFINITIONS. For the purposes of this Section certain terms and words are hereby defined as follows:
- (a) Foot-Candle: The illuminance of one (1) Lumen on a one- (1-) square foot surface with a uniform distribution.
- (b) Glare: A light ray emanating directly from an Outdoor Lighting Fixture, reflector or lens such that it falls directly upon the eye of an observer.
- (c) Holiday Lighting: Seasonal decorations in place from November 10 through January 30 that does not exceed, as applicable, sixty (60) watts in incandescent or the equivalent for other types of lighting, and, for string light sets: (i) seven (7) watts per bulb for incandescent C9 string light sets; or (ii) one (1) watt per bulb for all other types of string light sets.

- (d) Landscape and Architectural Lighting: Lighting to accentuate and illuminate gardens, landscapes or certain building aesthetics.
- (e) Light Shield: Any attachment which interrupts and blocks the path of light emitted from an Outdoor Lighting Fixture.
- (f) Light Source: A light emitting portion of the luminaire and any diffusing elements and surfaces intended to reflect or refract light emitted from an Outdoor Lighting Fixture.
- (g) Light Trespass: Light emitted by a luminaire that shines beyond the boundaries of the property on which the luminaire is located.
- (h) Lumen: A unit of luminous flux derived by the International System of Units, which measures the total quantity of visible light emitted by a source per unit of time. For avoidance of doubt, a lumens to watts comparison table is below.

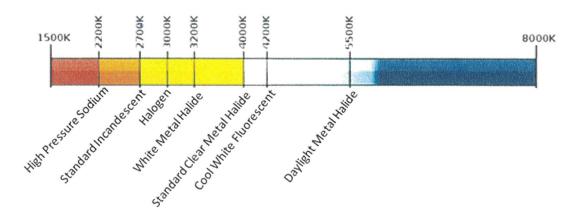
Lumens	Incandescent Watts	Fluorescent/LED Watts
375 lm	25 W	6.23 W
600 lm	40 W	10 W
900 lm	60 W	15 W
1125 lm	75 W	18.75 W
1500 lm	100 W	25 W
2250 lm	150 W	37.5 W
3000 lm	200 W	50 W

- (i) Outdoor Lighting Fixture: An outdoor illuminating device, luminaire, outdoor lighting lamp or similar device, permanently installed or portable. Such devices shall include, but are not limited to lights used for:
 - (i) Private roadway and driveway lighting;
 - (ii) Buildings and structures;
 - (iii) Recreational areas;
 - (iv) Landscapes and gardens; and
 - (v) Building overhangs and open canopies.
- (j) Shielding: A lighting fixture constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is shielded from view from adjacent properties. Any structural part of the light fixture providing this shielding must be permanently affixed.
- (5) GENERAL RULES. All Outdoor Lighting Fixtures, except governmental owned street lights, within the Village shall be designed, located, and specified with Shielding and shall create cut off of Light Source so that no Glare, or illumination is cast outside the boundaries of the property where the Light Source is located so as to constitute Light Trespass. Further, the light level of all Outdoor Lighting Fixtures shall be no greater than one-half (1/2) of a Foot-Candle measured at a height of five (5) feet above grade at the property line on which the luminaire is located and, if applicable, no greater than one-half (1/2) of a

Foot-Candle measured at a height of five (5) feet above the surface of the ordinary high water mark of Pine Lake, North Lake or Beaver Lake, as applicable, except as otherwise set forth herein. Outdoor Lighting Fixtures shall not be aimed toward or directed at a neighboring property, and, as applicable, Pine Lake, North Lake or Beaver Lake. Outdoor Lighting Fixtures shall utilize light bulbs with a Kelvin temperature between 2200K and 3000K. For reference, below is a Kelvin temperature scale.

Kelvin Temperature Scale

Higher color temperatures mean bluer light, the kind that should be avoided after dusk



- (6) HOURS OF OPERATION. All Outdoor Lighting Fixtures shall be turned off between 11:00 p.m. and sunrise, except:
- (a) Outdoor Lighting Fixtures necessary for security purposes and which are equipped with motion or proximity sensors; provided, however:
 - (i) the sensors for such lighting shall not be triggered by activity located off the property where the Outdoor Lighting Fixture is located; and
 - (ii) such lighting shall not remain on for more than fifteen (15) minutes beyond the triggering event.
 - (b) Outdoor Lighting Fixtures necessary to illuminate walkways or stairways; and
- (c) Outdoor Lighting Fixtures for non-residential establishments, if authorized by a conditional use permit.
- (7) SHORELAND LIGHTING. The purpose of this Section is to minimize Glare and Light Trespass in the shoreland environment without significantly inhibiting safety and security.
- (a) This subsection applies to all Outdoor Lighting Fixtures located on berthing structures, piers or docks or designed to illuminate such structures.
 - (b) The following requirements shall apply:
 - (i) Flashing and rotating lights are prohibited.

- (ii) Outdoor Lighting Fixtures located on the exteriors of berthing structures, piers or docks shall have Shielding or be fitted with an opaque Light Shield to limit the upward and outward projection of light to an angle no greater than forty five (45) degrees below the horizon to prevent direct visibility of the lamp to persons on public waters or adjacent lands. Such Outdoor Light Fixtures shall be limited to a maximum of one (1) Foot-Candle measured at the ordinary high water mark.
- (iii) Outdoor Lighting Fixtures not mounted on berthing structures, piers or docks but designed to illuminate such a structure or its immediate vicinity shall comply with subparagraph (ii) above.
- (iv) Outdoor Lighting Fixtures installed on or intended to illuminate, berthing structures, piers or docks shall be turned off when not required for safety or security.
- (8) EXEMPTIONS. The following are exempt from the requirements of this Section:
- (a) Temporary Exemption. A request for temporary exemption from the provisions of this Section may be submitted to the Village Administrator in written form describing the reasons for the request and the nature of the request. If approved and granted in writing by the Village Administrator, such exemption shall be in force for not more than thirty (30) days. A request for a maximum of one (1) thirty (30) day renewal may be made in similar manner. The Village Administrator may terminate any temporary exemption for any reasonable cause, including but not limited to concerns about safety or Light Trespass.
- (b) Landscape and Architectural Lighting and Holiday Lighting. Landscape and Architectural Lighting and Holiday Lighting are exempt from the requirements of this Section, except for the hours of operation requirements of subsection (6). Landscape and Architectural Lighting shall also be subject to the limitations set forth in subsection (8)(d).
- (c) Pool and Fountain. Underwater lighting for the illumination of swimming pools and fountains, where light emitted therefrom does not create Light Trespass.
- (d) Elevated Objects. Uplighting for State and national flags, provided, however, property owners shall endeavor to utilize downlighting for flag poles with a height of twenty feet (20') or more. Upward directed lighting may be used only in the form of one or two narrowcone spotlights (both singly or together constituting a single Light Source of upward directed lighting) which confines not less than ninety percent (90%) of the illumination to the object of interest; provided however that the lighting must be restricted to an angle of not less than seventy-five (75) degrees up from horizontal. Each Light Source of upward directed lighting shall have 2,250 lumens or less.
- (e) Public Right-of-Way and Facilities. Outdoor Lighting Fixtures located within the public right-of-way or which serve or are located upon public facilities.
- (9) NEW CONSTRUCTION LIGHTING PLANS. An outdoor lighting plan must accompany original submissions of building plans for all new construction. The submission shall contain, but shall not necessarily be limited to, the following:
 - (a) Plans indicating the location on the premises of each Outdoor Light Fixture, both proposed and any already existing on the property;

- (b) Descriptions of all Outdoor Light Fixtures, both proposed and existing. The description may include, but is not limited to catalog cuts and illustrations by manufacturers; and
- (c) Photometric data, such as that furnished by manufacturers or similar showing the angle of cut off of light emissions.

SECTION 2. SEVERABILITY

The several sections of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful or unenforceable, such decision shall apply only to the specific section or portion thereof directly specified in the decision, and shall not affect the validity of any other provisions, sections or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms that conflict.

SECTION 3. EFFECTIVE DATE

This ordinance shall take effect and be in force from and after its passage and publication as provided by law.

Dated: March 13, 2023.

VILLAGE OF CHENEQUA

Jo Ann F. Villavicencio
Village President

Attest:

By: <u>Llamna Llaum</u>och Deanna Braunschweig Village Clerk-Treasurer

Date Adopted: March 13, 2023 Date Published: April 11, 2023 Effective Date: April 11, 2023