CITY OF LAKE ELMO WASHINGTON COUNTY, MINNESOTA

ORDINANCE 97-17

AN ORDINANCE AMENDING SECTION 1350 OF THE 1997 MUNICIPAL CODE REALTING TO LIGHTING, GLARE CONTROL AND EXTERIOR LIGHTING STANDARDS

Section 1. Amendment: Section 1350 of the Lake Elmo Municipal Code is hereby amended and shall read as follows:

Section 1350 - Lighting, Glare Control, and Exterior Lighting Standards.

1350.01 Purpose:

The purpose of this section is to regulate the spillover of light and glare on rural areas of the community, pedestrians, and land uses in the proximity of the light source. With respect to motor vehicles in particular, safety considerations form the basis of the regulations contained herein.

1350.02 Definitions:

As used in this section, unless the context otherwise indicates, the following terms have the following meanings:

A.	Direct Light	Direct Light means light emitted directly from a lamp, off a reflector or through a refractor of a luminaire.
В.	Fixture	Fixture means the assembly that holds the lamp. It may include an assembly housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector, or mirror, and a refractor or lens.
C.	Foot – Candle	Foot-Candle means an illuminance equal to one lumen per square foot.
D.	Full Cutoff Luminaire	Full Cutoff luminate means a luminare that allows no direct light emissions higher than fifteen (15) degrees below a horizontal plane through the luminaire's lowest light-emitting part.
E.	Glare	Glare means direct light emitted from a luminare that causes reduced vision or momentary blindness.
F.	Illuminance	Illuminance means the level of light measured at a surface.

G.	Lamp	Lamp means the component of a luminare that produces the light.
H.	Light Trespass	Light trespass means light emitted by a luminaire that shines beyond the boundaries of the property on which the luminaire is located.
I.	Lumen	Lumen means a unit of measurement of the light emitted from a source.
J.	Luminaire	Luminaire means the complete lighting system, including the lamp and the fixture.
K.	Permanent Outdoor Luminaire	Permanent Outdoor Luminaire means any luminaire or system of luminaires that is outdoors and that is intended to be used for seven (7) days or longer.
L.	State Funds	State Funds means any bond revenues or any money appropriated or allocated by the Legislature.

1350.03 Exterior Lighting Plan

At the time any exterior light is installed or modified for projects, an exterior lighting plan shall be submitted to the City in order to determine whether the purpose and requirements of this Section have been met. This plan will be prepared by a certified architect, landscape architect, or lighting designer.

Subd. 1. Submittal Requirements.

The applicant must provide a plan that identifies the location, size and type of luminaire, and show how the applicant intends to comply with this section. A photometric plan of the site and fixture data sheet must be submitted with a site plan for office, commercial, or any type of industrial project in order to determine the effect of the luminaire on surrounding properties. The applicant shall provide the fixture data sheet for residential lighting proposals.

1350.04 Prohibited Lighting

Subd. 1. Public Roadway or Street

No Lights shall be placed in view of any public roadway or street so that its beams or rays are directed at any portion of the roadway when light is of such brilliance and so positioned as to impair the vision of the driver of any motor vehicle.

Subd 2. Luminaires

Except for "full cutoff luminaries" as defined in this section, no luminaires are allowed which do not meet the standards outlined in this section

Illustration

Subd 3. Lighting in All Zoning Districts

No direct or sky-reflected glare, whether from floodlights or from high temperature processes such as combustion or welding shall be directed into any adjoining property.

Subd 4. Bare Light Bulbs

Bare light bulbs shall not be permitted in view of adjacent property or public right-of-way.

Subd. 5. Light Cast

No light or combination of lights, which cast light on a public street, shall exceed one (1) foot-candle meter reading as measured from the centerline of the street, nor shall any light or combination of lights, which cast light on residential property, exceed four-tenths (0.4) foot-candles.

1350.05 Minimum Standards.

Subd. 1. Minimum Standards for Lighting with a Total Cutoff Angle of Greater than 90 Degrees.

When a luminaire has a total cutoff of an angle greater than ninety (90) degrees (see illustration below), the maximum illumination and the maximum permitted luminaire height is designated below. This standard is designed to ensure that no light is emitted above a horizontal plane parallel to the ground. In order to achieve a total cutoff at ninety (90) degrees, such a luminaire will emit maximum (peak) candle power at an angle not exceeding seventy-five (75) degrees. This angel is formed by the line at which maximum candlepower is emitted for the light source and a line perpendicular to the ground from the light source.

Use and District	Maximum Permitted Illumination at a Point Six Feet Above the Ground (in foot candles)	Maximum Permitted Height
All Residential Districts	.30	Fifteen (15) feet
All Non-Residential Districts	1.50	Twenty (20) feet

Illustration

Subd. 2. Minimum Standards for Lighting with a Total Cutoff Angle of Less than 90 Degrees.

When a luminaire has a total cutoff of light at an angle less than ninety (90) degrees and is located so that the bare light bulb, lamp, or light source is completely shielded from the direct view of an observer five (5) feet above the ground at the point where the cutoff angle intersects the ground, the maximum permitted illumination and the maximum permitted height is illustrated below. This type of light fixture may be taller and provide greater illumination at the property line than the one specified above, because the design of this fixture ensures that its light source will not be directly visible off-site.

Use and District	Maximum Permitted Illumination at a Point Six Feet Above the Ground (in foot candles)	Maximum Permitted Height
All Residential Districts	1.00	Fifteen (15) feet
All Non-Residential Districts	3.00	Thirty (30) feet

Illustration

Subd. 3. Minimum Standards for Lighting on Agricultural Lands.

When a permanent outdoor luminare is placed on agricultural land, only Mercury lamps shall be permitted.

Subd. 4. Attachments:

Attachment entitled "Good Neighbor Outdoor Lighting" is on file in the Building Official's office, and can be found in Appendix A of this Code. This is the guide to be used for residential lighting.

Section 2. Effective Date: This ordinance shall become effective upon its passage and publication according to law.
Wyn John, Mayor
Attest Mary Kuck gnuc Mary Kueffner, City Clerk/Administrator
Published in the Stillwater Gazette on the 16 day of Dec., 1997.