

ORDINANCE No. 809

An ordinance amending the Zoning Code of the City of Owasso, Oklahoma, by creating Chapter 18, by adopting new lighting standards for private projects in Owasso.

SECTION I. BE IT ORDAINED BY THE COUNCIL OF THE CITY OF OWASSO that Owasso Zoning Code is hereby amended by adding a new section to be codified as Chapter 18, which Section and subsections to read as follows:

Owasso Zoning Code Chapter 18: OUTDOOR LIGHTING STANDARDS;

A. - PURPOSE

Outdoor lighting shall be designed to provide the minimum lighting necessary to ensure adequate safety, night vision, and comfort; and maximum light levels so as not to create or cause glare onto nearby properties and public street rights of way; and to minimize uplight.

B. - DEFINITIONS

Cutoff Fixture – An outdoor light fixture shielded or constructed in such a manner that no more than two and one half (2.5) percent of the total light emitted by the fixture is projected above the horizontal plane of the fixture.

Flood Lamp – A form of lighting designed to direct its output in a specific direction with a reflector formed from the glass envelope of the lamp itself. Such lamps are so designated by the manufacturers and are typically used in residential outdoor area lighting.

Flood Light – A form of lighting designed to direct its output in a diffuse, more or less specific direction, with reflecting or refracting elements located external to the lamp.

Footcandle (FC) – A quantitative unit measuring the amount of light cast onto a given point, measured as one lumen per square foot.

Full Cutoff Fixture – An outdoor light fixture shielded or constructed in such a manner that it emits no light above the horizontal plane of the fixture.

Glare – The effect produced by a light source within the visual field that is sufficiently brighter than the level to which the eyes are adapted, to cause annoyance, discomfort, or loss of visual performance and ability.

Light Source – The element of a lighting fixture that is the point of origin of the lumens emitted by the fixture.

Lumen – A quantitative unit measuring the amount of light emitted by a light source.

Maintained Footcandles – Illuminance of lighting fixtures adjusted for a maintenance factor accounting for dirt build-up and lamp output depreciation.

Outdoor Sports Field – An area designed for active recreation, whether publicly or privately owned, including but not limited to baseball/softball diamonds, soccer fields, football fields, golf courses and ranges, tennis courts, racetracks, and swimming pools.

Outdoor Performance Area – An area permanently dedicated to the public presentation of music, dance, theater, media arts, storytelling, oratory, or other performing arts, whether publicly or privately owned, including but not limited to amphitheaters and similar open or semi-enclosed structures.

Right-of-way – An interest in land controlled by the City that provides for the perpetual right and privilege of the City, its agents, franchise holders, successors, and assigns to construct, install, improve, reconstruct, remove, replace, inspect, repair, maintain, and use a public street, including related and customary uses of street rights-of-way such as sidewalks, bike paths, landscaping, mass transit facilities, traffic control, traffic control devices and signage, sanitary sewer, stormwater drainage, water supply, cable television, electric power, gas, and telephone transmission and related purposes in upon, over, below, and across the rights-of-way.

Semi-Cutoff Fixture – An outdoor light fixture shielded or constructed in such a manner that it emits no more than five (5) percent of its light above the horizontal plane of the fixture, and no more than twenty (20) percent of its light ten (10) degrees below the horizontal plane of the fixture.

Spillover Light – The light that can be measured on a property, when that same light is generated from another property.

Uplight – Light that shines upward, above the horizontal plane, such as might be generated from a searchlight or spotlight.

Wall Pack – A type of light fixture typically flush-mounted on a vertical wall surface.

C. Light Measurement Technique

Light level measurements shall be made at the property line of the property upon which the light to be measured is being generated. If measurement on private property is not possible or practical, light level measurements may be made at the boundary of the public street right-of-way that adjoins the property. Measurements shall be made at finished grade (ground level), with the light-registering portion of the meter held parallel to the ground pointing up. Light levels are specified, calculated and measured in footcandles (FC).

D. - General Standards for Outdoor Lighting.

1. All Zoning Districts Except Residential and Agricultural

- 1) Unless otherwise specified in the following subsections, the maximum light level shall be 0.5 maintained footcandles at any property line adjacent to a residential district, and 2.0 maintained footcandles at any public, non-arterial street right-of-way, unless otherwise approved by the Planning Commission. During hours of operation, a minimum of 1.0 footcandles shall be maintained in parking lots.
- 2) Unless shielded, all flood lights shall be installed such that the fixture shall be aimed down at least forty-five (45) degrees from vertical, or the front of the fixture is shielded such that no portion of the light bulb extends below the bottom edge of an external shield. Flood lights and display lights shall be positioned such that any such fixture located within fifty feet (50') of a public street right-of-way is mounted and aimed perpendicular to the right-of-way, with a side-to-side horizontal aiming tolerance not to exceed fifteen (15) degrees from perpendicular to the right-of-way (see Exhibit 1).

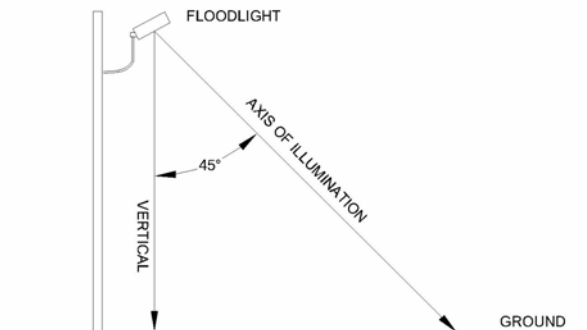


Exhibit 1.

- 3) All wall fixtures, including wall packs, shall be cutoff fixtures.
- 4) Service connections for all freestanding fixtures shall be installed underground. The applicability of this provision may be reviewed on an individual basis for developments with structures totaling less than 4,000 square feet of floor area.
- 5) All light fixtures installed by public agencies, their agents, or contractors for the purpose of illuminating public streets shall use the current standards

provided by the IES or AASHTO for road lighting, and are otherwise exempt from these regulations.

- 6) No wood poles may be used for any freestanding fixtures. The applicability of this provision may be reviewed on an individual basis for developments with structures totaling less than 4,000 square feet of gross floor area.

2. RM Zoning Districts

- 1) Unless otherwise specified in the following subsections, the maximum light level shall be 0.5 maintained footcandle at any property line adjacent to a single-family district, , and 2.0 maintained footcandles at any public, non-arterial street right-of-way, unless otherwise approved by the Planning Commission. A minimum of 0.7 footcandles shall be maintained in parking lots in RM districts.
- 2) Unless fully shielded, all flood lights shall be installed such that the fixture shall be aimed down at least forty-five (45) degrees from vertical, or the front of the fixture is shielded such that no portion of the light bulb extends below the bottom edge of an external shield. Flood lights and display lights shall be positioned such that any such fixture located within fifty feet (50') of a public street right-of-way is mounted and aimed perpendicular to the right-of-way, with a side-to-side horizontal aiming tolerance not to exceed fifteen (15) degrees from perpendicular to the right-of-way. Nothing in this section shall be construed so as to allow any fixture that cause excessive glare to be visible from any right-of-way (see Exhibit 1).
- 3) All wall fixtures, including wall packs, shall be cutoff fixtures.
- 4) Service connections for all freestanding fixtures in non-single-family areas shall be installed underground. The applicability of this provision may be reviewed on an individual basis.
- 5) All light fixtures installed by public agencies, their agents, or contractors for the purpose of illuminating public streets shall use the standard provided by the IES for road lighting, and are otherwise exempt from these regulations.
- 6) No wood poles may be used for any freestanding fixtures. The applicability of this provision may be reviewed on an individual basis.

3. Agricultural and Other Residential Districts

The provisions of Section D of these regulations do not apply to properties located within AG, RE, RS, RD, and RTH zoning districts.

E. – Parking Lot Lighting

- 1) Other than flood lights and flood lamps, all outdoor area and parking lot lighting fixtures of more than 2,000 lumens shall be cutoff fixtures, or comply with subsection (3) below, and shall be subject to the requirements of Section D.
- 2) The mounting height of all parking lot lighting shall not exceed thirty (30) feet above finished grade. The applicability of this provision may be reviewed on an individual basis.
- 3) All non-cutoff fixture open-bottom lights shall be equipped with full cutoff fixture shields that reduce glare and limit uplight.

F. - Outdoor Sports Field/Outdoor Performance Area Lighting

The hours of operation for the lighting system for any game or event shall not exceed two hours after the end of the event.

G. - Sign Lighting

Lighting fixtures illuminating signs shall be aimed and shielded so that direct illumination is focused exclusively on the sign. The lighting of any signs must also comply with the Owasso Sign Ordinance.

H. - Lighting of Commercial Buildings and Landscaping

Lighting fixtures shall be selected, located, aimed, and shielded so that direct illumination is focused exclusively on the building façade, plantings, and other intended site features and away from adjoining properties and the public street right-of-way. Ornamental and decorative accent lighting fixtures will be considered on an individual basis.

I. – Site Plans

The applicant for any site plan approval required for work involving outdoor lighting shall submit documentation at time of site plan submission that the proposed lighting plan complies with the provisions of this Code. The site plan must include a point-by-point footcandle array in a printout format indicating the location and aiming of illuminating devices. The printout shall indicate compliance with the maximum maintained footcandles required by this Code.

The Community Development Director or his/her designee may require a photometric plan for the development, that shall contain, but not be limited to the following, all or part of which may be part of or in addition to the information required elsewhere in this Code:

Description of the illuminating devices, fixtures, lamps, supports, reflectors, poles, raised foundations and other devices (including but not limited to manufacturers or electric

utility catalog specification sheets and/or drawings, and photometric report indicating fixture classification [cutoff fixture, wall pack, flood light, etc.]).

J. – Searchlights

Searchlights shall require a separate permit. If granted, such permit shall not be valid for duration longer than 48 hours on a specific property, and such permit shall not be granted more than two times in one year. Searchlights shall not be permitted inside residential areas.

K. - Nonconformities

Any lights existing prior to the adoption of this ordinance are considered legal and non-conforming. Any new outside light fixtures placed upon properties within Owasso must meet the requirements of this ordinance.

L. - Severability

All laws and clauses of laws in conflict herewith are hereby repealed to the extent of said conflict. If this ordinance or application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the ordinance that can be given separate effect and to this end the provisions of this ordinance are declared to be severable. In addition, all lighting fixtures will conform to all other applicable codes and regulations of the City of Owasso.

M. – Penalty

Violation of this ordinance shall be considered a Class “C” violation of the Owasso Code of Ordinances, provided for in Part 1 (General Provisions), Section 1-108C. Unless after the date hereof a different penalty is provided, any person convicted of violating this ordinance shall be punished by a fine of not more than Two Hundred Dollars (\$200.00) excluding costs.

SECTION 2. That all ordinances or parts of ordinances in conflict herewith be, and the same are hereby expressly repealed.

APPROVED this 19th day of April, 2005.

ATTEST:

City of Owasso, Oklahoma

Sherry Bishop, City Clerk

Susan Kimball, Mayor

APPROVED AS TO FORM:

City Attorney