

## ORDINANCE NO. O2009-001

**AN ORDINANCE** of the City Council of the City of Tumwater, Washington, amending Chapter 18.40 to add exterior lighting regulations in the Tumwater Municipal Code, as more particularly set forth herein.

**WHEREAS**, the use of ineffective and inefficient exterior lighting generates unnecessary light pollution and is wasteful energy consumption.

**WHEREAS**, light pollution may be greatly reduced by using properly designed fully shielded light fixtures that direct light downwards and are properly installed to avoid glare and light trespass.

**WHEREAS**, application of the amendments will help to reduce energy consumption, improve safety through the reduction of glare and light trespass, reduce sky glow, and protect the nighttime environment.

**WHEREAS**, with improved optical control and reflector design, modern fully shielded luminaires deliver the same amount of light to the ground as older wasteful designs but use less power, thus reducing the amount of energy used, which saves money and reduces the quantity of greenhouse gases released into the environment.

**WHEREAS**, the City of Tumwater has adopted a Comprehensive Plan, in accordance with the State Growth Management Act (GMA); and,

**WHEREAS**, the proposed amendments meet GMA requirements for consistency with the Comprehensive Plan and County-wide Planning Policies; and,

**WHEREAS**, the City of Tumwater has adopted a Comprehensive Plan that includes all elements required by the Growth Management Act, Chapter 36.70A RCW; and

**WHEREAS**, the Growth Management Act requires that the City of Tumwater adopt development regulations, including zoning, that are consistent with and implement its Comprehensive Plan; and

**WHEREAS**, the City of Tumwater has prepared the amendments to the Tumwater Municipal Code that are included in this ordinance, in accordance with the City of Tumwater Citizen Participation and Intergovernmental Coordination Policy (Resolution No. 418); and

**WHEREAS**, these amendments meet the intent of and are consistent with the State Environmental Policy Act, the Washington State Growth Management Act, County-Wide Planning Policies, and internal goals and policies of the Tumwater Comprehensive Plan; and

**WHEREAS**, a Determination of Nonsignificance was issued on March 3, 2009, in accordance with the State Environmental Policy Act (SEPA) (chapter 43.21C RCW) and in compliance with Chapter 16.04 of the Tumwater Municipal Code; and

**WHEREAS**, the Tumwater Planning Commission held a public hearing on February 24, 2009, and considered all testimony and evidence before making a recommendation to City Council; and

**WHEREAS**, the Tumwater City Council held a public hearing on the recommendation on April 21, 2009, to accept public testimony relating to this matter;

**WHEREAS**, the Tumwater City Council, after considering all of the testimony and evidence, finds the amendments support the health, safety, and welfare and are in the best interests of the residents of the City of Tumwater;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF TUMWATER, STATE OF WASHINGTON, DOES ORDAIN AS FOLLOWS:**

**Section 1.** Chapter 18.40 of the Tumwater Municipal Code is hereby amended to add a new section 18.40.035, Exterior Illumination, as follows:

**18.40.035 Exterior illumination.**

These regulations apply to outdoor artificial light sources, including lights on the exterior of buildings or other structures, installed underneath canopies, pole mounted, freestanding and ground lights, as well as non-residential interior lights.

A. For the purposes of regulating lighting in this section and elsewhere in this title, the following terms shall be defined as stated:

1. "Business zoned property" means any property zoned NC, CS, MU, GC, TC (TC Mixed Use, Professional Office and Civic subdistricts), CD, BP, HC, GB, OS, LI, HI, and ARI.

2. "Foot Candle" means a measure of illuminance (or light intensity) on a surface equal to one lumen per square foot.

3. "Fully shielded fixture" means exterior lighting that is shielded or constructed so that all light emitted is projected below a horizontal plane running through the lowest part of the fixture as determined by a photometric test or certified by the manufacturer.

4. "Glare" means an intensity of light that due to the brightness of the light source diminishes the observer's ability to see, and in extreme cases may cause visual discomfort or momentary blindness.

5. "Light trespass" means the light emanating from one property (measured at the property line) intruding onto an adjacent property or public right-of-way.

6. "Lumen" means a unit of classification used to quantify the amount of light energy produced by a lamp. Lumen output of most lamps is listed on the packaging. For example, a 60-watt incandescent lamp produces approximately 850 lumens while a 55-watt low-pressure sodium lamp produces approximately 8,000 lumens.

7. "Opaque" means not allowing light to pass through; not transparent or translucent.

8. "Partially Shielded" means the luminaire incorporates a translucent barrier, the "partial shield" around the lamp that allows some light to pass through the barrier while concealing the lamp from the viewer.

9. "Residential zoned property" means any property zoned RSR, SFL, SFM, MFM, MFH and TC (TC Residential subdistrict).

10. "Translucent" means allowing light to pass, but diffusing it such that the light source cannot be distinguished.

B. Exterior Lighting Standards. Exterior artificial light sources shall conform to the following requirements:

1. Light fixtures shall be used in a manner such that light is directed downward, and not outward or upward.

2. Light fixtures shall be fully shielded.

a. Fixtures on business zoned properties that are mounted to the underside of structures such as canopies, awnings, etc. (such as those found at gas stations, drive thru facilities, service stations, and parking structures) shall be flush mounted to the canopy so that the lens does not protrude below the surface to which it is mounted. In instances where the canopy is not thick enough to accommodate a flush mount fixture a fully shielded fixture may be utilized and mounted to the surface.

3. Exterior lighting shall not blink, flash, fluctuate, be intermittent, or change color or intensity.

4. Illuminated signs and advertising devices shall also comply with provisions of 18.44.080 and 18.44.170. Where conflicts occurs, the more stringent standards shall apply.

5. Parking lot lighting shall also comply with provisions in 18.50.060. Where conflicts occurs, the more stringent standards shall apply.

6. Exterior lighting on business zoned properties shall be turned off at the close of business or ten o'clock p.m., which ever is later. However, lighting which is necessary for after business hours work by employees and lighting that is necessary for security systems to function properly may be utilized at any time provided the lighting is the minimum necessary and is turned off when it is no longer needed or

being used.

7. Light trespass shall comply with the provisions of subsection D., below.

8. Illumination of government flags is allowed provided the light fixtures are equipped with shields and louvers to control the beam spread and to prevent light trespass and glare.

9. Low voltage landscape lighting (30 volts or less) is allowed provided it is partially shielded (upward oriented spot/flood lights are not allowed) and does not violate the light trespass standards of subsection (D). Rope style lighting of any voltage is also allowed for residential properties provided it meets the light trespass standards of subsection (D).

#### C. Application Required.

1. A basic lighting plan shall be submitted to the Development Services Department along with building permit applications that involve the installation or replacement of exterior lighting. The basic lighting plan shall include, but not be limited to, descriptions, illustrations, or photos of the types of lighting fixtures to be installed, a statement or description of how the fixtures comply with the regulations, and descriptions or depictions of the locations of the proposed lighting fixtures. The basic lighting plan shall also include statements that the applicant will design their project to comply with the exterior lighting regulations, and the applicant will make any changes necessary to come into compliance with the regulations before their occupancy permit is issued. The basic lighting plan must be signed by the applicant(s) or their authorized agent(s).

2. For non-residential development proposals that are 4,000 square feet or larger the Development Services Director (or his/her designee) may require a photometric lighting plan instead of the basic lighting plan. The photometric plan, application, and a fee as specified by the most current fee resolution adopted by the Tumwater City Council shall be submitted along with a building permit application. The photometric lighting plan must specify how the project lighting, including both freestanding and building mounted lighting, complies with the applicable requirements of the Tumwater Municipal Code including this chapter. The photometric lighting plan shall also include the requirements listed for the basic lighting plan as shown in subsection (C)(1) above. Where requirements overlap or conflict, the more stringent shall apply.

D. Light trespass. All light fixtures used on a premise shall be installed and maintained to prevent light trespass, measured at the property line of the originating property (light source), that exceeds 0.1 foot-candle illuminating adjacent to residential zoned property or 0.5 foot-candle illuminating adjacent to business zoned property or public rights-of-way.

E. Exceptions. The restrictions on exterior lighting in subsections "B", "C", and "D" shall not apply to:

1. Light fixtures on structures listed in the Tumwater, or Washington State, or National Historic Registers (as defined in TMC 2.62) that are important in defining the overall historic character of the structure or building.
2. Projection equipment for outdoor movie theatres and outdoor movie events.
3. Security floodlights with motion detectors and daytime cutoffs that comply with the light trespass standards of subsection D., above; provided that, the duration of activation by the motion sensor does not exceed 60 seconds. Light trespass at the property line may be diminished to acceptable levels by using lower wattage bulbs, downward and inward orientation, opaque or translucent shielding, or combinations thereof.
4. Seasonal decorations illuminated no longer than 60 days.
5. Lights on moving vehicles.
6. Sports field lighting.
7. Navigation lights (such as airports, heliports, or tower lighting required by the Federal Aviation Administration).
8. Temporary emergency lighting (such as fire, police, repair workers).
9. Traffic control signals and devices.
10. Exterior lighting approved by the Development Services Director for temporary or periodic events (e.g., special events, nighttime construction, etc.). Search lights, lighting displays lasting longer than seven (7) days in any calendar year, and any lighting displays that cause any direct glare into or upon any building other than the building to which the display may be related are all prohibited.
11. Light sources lawfully installed prior to the effective date of these regulations.
12. Public streetlights are exempt only from the light trespass standards of subsection "D" above.

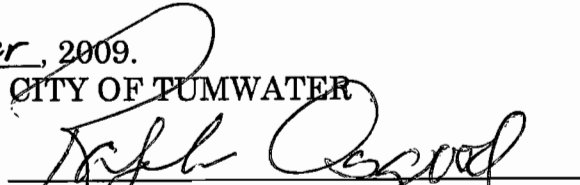
**Section 2. Ratification.** Any act consistent with the authority and prior to the effective date of this ordinance is hereby ratified and affirmed.

**Section 3. Severability.** The provisions of this ordinance are declared separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section, or portion of this ordinance or the invalidity of the application thereof to any person or circumstance, shall not affect the validity of the remainder of the ordinance, or the validity of its application to other persons or circumstances.

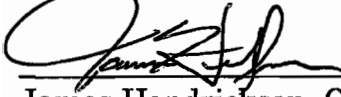
**Section 4. Effective Date.** This ordinance shall become effective January 15, 2010.

ADOPTED this 2<sup>nd</sup> day of November, 2009.

CITY OF TUMWATER

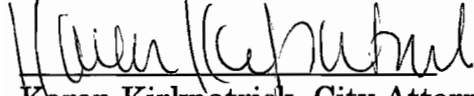
  
Ralph C. Osgood, Mayor

ATTEST:



James Hendrickson, City Clerk

APPROVED AS TO FORM:



Karen Kirkpatrick, City Attorney

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Effective Date: January 15, 2010