Ordinance No. 00-01

AN ORDINANCE PROVIDING FOR THE REGULATION OF OUTDOOR LIGHTING IN THE CITY OF MARFA, TEXAS.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MARFA, TEXAS THAT THIS ORDINANCE REFLECTS THE CITY OF MARFA'S DESIRE TO PRESERVE AND OPTIMIZE THE DARK SKIES OF WEST TEXAS AND TO PROTECT THE MCDONALD OBSERVATORY'S ABILITY TO FULFILL ITS PURPOSE OF ASTRONOMICAL OBSERVATIONS. THIS ORDINANCE IS INTENDED TO ELIMINATE PROBLEMS OF GLARE, MINIMIZE LIGHT TRESPASS AND HELP REDUCE THE ENERGY AND FINANCIAL COSTS OF OUTDOOR LIGHTING BY ESTABLISHING REGULATIONS WHICH LIMIT THE AREA THAT CERTAIN KINDS OF OUTDOOR-LIGHTING FIXTURES CAN ILLUMINATE AND BY LIMITING THE TOTAL ALLOWABLE ILLUMINATION OF TRACTS OR PARCELS LOCATED IN THE CITY OF MARFA AND WITHIN ITS EXTRA TERRITORIAL JURISDICTION. ALL PUBLIC AND PRIVATE OUTDOOR LIGHTING INSTALLED IN THE CITY OF MARFA AND WITHIN ITS EXTRA TERRITORIAL JURISDICTION SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS ESTABLISHED BY THIS ORDINANCE.

SECTION 1: Title, Purpose, and Scope

- A. This ordinance shall be known and cited as the Marfa Outdoor Lighting Ordinance.
- B. The Purpose of this ordinance is:
 - (1) to provide safer, more efficient and attractive outdoor lighting;
 - (2) to conserve energy;
 - (3) to make our community a better place to live and work and a more inviting place to visit; and
 - (4) and to preserve the darkness and clarity of the night sky, mindful of the needs of McDonald Observatory.
- C. This ordinance shall apply within the City of Marfa, hereinafter referred to as "City", and within the surrounding areas where the City asserts powers of extraterritoriality.

SECTION 2: Definitions

The following definitions are hereby adopted for the purposes of this Ordinance:

- (1) axis of illumination—the midline of the beam emitted by a light fixture;
- (2) beam of a light fixture—the spatial distribution of the emitted light;

- (3) candela (cd)—the unit of measurement of the intensity of a point source of light (approximately equal to 1 candlepower);
- (4) floodlight—a light fixture having a wide beam;
- (5) foot candle (fc)—the illuminance measured 1 foot from a 1 candle source;
- (6) full cutoff—a shielded light fixture that emits no light above a horizontal plane touching the lowest part of the fixture;
- (7) glare—visual discomfort or impairment caused by a bright source of light in a direction near one's line of sight;
- (8) horizontal and vertical foot candles—the illuminance measured by a light meter in those position (illuminance may also be measured in other specified positions or directions); or passing through an area of 1 square foot, each point of which is 1 foot from a 1-candela source, yielding an illuminance of 1 foot candle at that distance (the output of lamps and bulbs is customarily measured in lumers, a common 100 watt incandescent light bulb, for example, having an output less than 1, 700 lumens);
- (9) illuminance—the intensity of light in a specified direction measured at a specified point;
- (10) lamp or bulb -a source of light;
- (11) light fixture -the assembly that holds or contains a lamp or bulb;
- (12) light pollution—the sky glow caused by scattered light emitted upward from unshielded or poorly aimed light fixtures;
- (13) light trespass—unwanted light falling on public or private property from an external location;
- (14) outdoor lighting—means any type of lighting, fixed or movable, designed or used for outdoor illumination of buildings or homes, including lighting for billboards, streetlights, searchlights used for advertising purposes, externally or internally illuminated on or off-site advertising signs, and area-type lighting. It does not include lighting equipment required by law to be installed on motor vehicles or lighting required for the safe take-off and landing of aircraft.
- (15) public lighting—outdoor light fixtures located on property owned, leased, or controlled by the City or other governmental entity or entities, including but not limited to streets, highways, alleys, easements, parking lots, parks
- (16) sag-lens or drop-lens—a clear or prismatic refracting lens that extends below the lowest opaque portion of a light fixture;
- (17) searchlight—a light fixture having a narrow beam intended to be seen in the sky;
- (18) spotlight—a light fixture having a narrow beam;
- (19) wallpack—a floodlight mounted on the wall of a building or other structure;

SECTION 3: Existing Outdoor Light Fixtures

- A. To reduce glare, safety hazards for drivers and pedestrians, light trespass and light pollution, all existing spotlights, floodlights and wallpack shall be adjusted in accordance with the following provisions, excepting the lights at existing sports facilities:
 - (1) For spotlights and floodlights mounted overhead on poles and used for area lighting, the axis of illumination shall be adjusted to an angle not

- more than 20 degrees from the vertical line between the fixture and the ground (see Exhibits 1 and 2).
- (2) For spotlights and floodlights mounted at or near ground level and used to light a building, billboard or other structure, the axis of illumination shall be adjusted to minimize the amount of light escaping above, below and to the sides of the illuminated object.
- (3) Wallpacks shall be adjusted where possible to minimize the amount of light emitted above the horizontal.
- B. It shall be the responsibility of the City to publish this ordinance in the newspaper of record and to disseminate the ordinance by other appropriate means; to identify those spotlights, floodlights, and wallpacks requiring adjustment; and to inform their owners of these provision.
 - (1) Any required adjustments shall be completed within six (6) months from the date of this ordinance.
- C. Existing light fixtures, other than spotlights, floodlights and wallpacks, already installed at the time this ordinance is enacted may continue in service without adjustment or modification through the remainder of their useful lives.

SECTION 4: New Light Fixtures Installed after the Effective Date of the Ordinance, Including Replacements for Existing Fixtures

- A. Lighting at public or private outdoor sports facilities, including but not limited to playing fields, arenas, tracks and swimming pools shall be shielded as well as is practicable to reduce glare, safety hazards, light trespass and light pollution; and shall provide levels of illuminance consistent with nationally recognized standards.
- B. Strobe lights on communication towers and other hazards to aerial navigation, required by the Federal Aviation Administration during the daytime and required at night may be used at night. Other lights used at night on such structures shall not be brighter than the minimum required by the FAA.
- C. All other outdoors lighting fixtures using lamps or bulbs having outputs greater than 1,800 lumens must be full cutoff fixtures.
 - (1) New streetlights shall be full cutoff fixtures using high or low-pressure sodium lamps of a minimum output consistent with the safety of drivers and pedestrians.
 - (2) Sag-lens or drop-lens fixtures are prohibited.
 - (3) Streetlights and private lighting shall be allowed to shine on adjacent property in the absence of a complaint of light trespass from an owner or occupant.
 - (4) Upon receiving a complaint of light trespass from an owner or occupant, the City shall evaluate the complaint. Where light trespass is found to occur, the city shall take appropriate steps to eliminate or minimize the unwanted light emanating from a light on City property, or from private lighting.
- D. In the interest of conserving energy, mercury vapor fixtures are prohibited.

E. Each flag shall be lighted by one (1) spotlight emitting no more that 1,800 lumens.

SECTION 5: Levels of Illuminance required or permitted at Specific Facilities

- A. Maximum, average and minimum levels of illuminance for different facilities are listed below in horizontal foot-candles. Unless otherwise specified, minimum levels shall be the lowest consistent with safety and security.
 - (1) Parking lots and parking areas: average 2.0 fc; minimum 0.5.
 - (2) Entry areas near building: maximum 5.0 fc.
 - (3) Service stations and other fueling facilities: maximum 10 fc in the area surrounding pump islands; parking areas and entry areas shall be lighted as required in Sections 5 A (1) and 5 A (2), above; drop-lens fixtures are prohibited, whether mounted under canopies or on poles.
 - (4) Sales lots where merchandise, including automobiles are displayed at night: maximum 20 fc.
- B. For locations and facilities not specified herein, the board shall set acceptable levels of illuminance upon request.
- C. The use of searchlights is prohibited for advertising, attracting attention to any event and for any other use except for emergency purposes.

SECTION 6: Large Outdoor Lighting Projects

- A. An outdoor lighting project reasonably expected to utilize 100,000 lumens or more in the aggregate shall file a Lighting Plan with the Zoning Board; hereinaster called the "Board". A Lighting Plan shall be filed at the same time as any other plans required by the City shall specify the following:
 - (1) number and type of light fixtures to be used;
 - (2) their output in lumens; and
 - (3) photometric data from the manufacturer(s) showing the spatial distribution of the output of the proposed fixtures.
- B. The Board shall review the Lighting Plan, taking into account factors including but not limited to levels of illuminance, glare, safety hazards, light trespass, and light pollution. The Board shall approve or reject the Plan, within thirty (30) days of submission, returning it to the applicant with an explanation. The applicant shall not move forward with the outdoor lighting project until the Lighting Plan is approved.

SECTION 7: Exemptions, Amendments, and Variances

- A. This Ordinance shall not apply to the following:
 - (1) decorative holiday lighting from November 15 through the next January 15;
 - (2) lighting required bylaw to be installed on surface vehicles and aircraft;
 - (3) airport lighting required by law;
 - (4) temporary lighting at construction projects; and

- (5) Governmental facilities where compelling needs for safety and security are demonstrated.
 - A. This ordinance may be amended from time to time as local conditions change, and as changes occur in the recommendations of nationally recognized organizations such as the Illuminating Engineering Society of North America and the International Dark-Sky Association.
 - B. Nothing in this ordinance shall be construed as limiting the right of any person or entity to pursue legal action against any other person or entity under any applicable law, including the doctrine of light trespass.
 - C. The Zoning Board of the City of Marfa shall have the power to grant variances in the application of the provisions of this ordinance.
 - D. This ordinance shall become effective thirty (30) days after the date of its adoption.
 - E. The City of Marfa shall pass on the findings of the Zoning Board of this City after review by Council and its legal counsel. Approval of this ordinance shall occur only after proper procedures have been duly published and found to have been approved by Council action.

SECTION 8: Conflict with Other Laws

Nothing in this Ordinance shall be construed to violate any provision of the United States or State Constitutions, and all acts done under this act shall be in such manner as will conform thereto whether expressly provided or not. In case of conflict between these orders and any other applicable law, statute or order, the most restrictive shall govern.

SECTION 9: Enforcement

Enforcement of this Ordinance shall be made by the City of Marfa.

SECTION 10: Notice of Violation

If, after investigation, the City of Marfa finds that any provision of this Ordinance is being violated, the City of Marfa shall give notice by hand delivery or certified mail, return receipt requested, of such violation to the owner and/or to the occupant of the premises having lighting which is not in compliance with this Ordinance. Such notice shall state that such owner's and/or occupant's lighting is not in compliance with this Ordinance, demanding that the violation be abated within thirty (30) days after the date of hand delivery or the date of mailing of the notice.

SECTION 11: Penalties for Violation

Any lighting structure erected, constructed, enlarged, altered, replaced, moved, improved or converted contrary to the provisions of the Ordinance shall be, and the same is hereby declared to be, unlawful and a public nuisance and, thus, subject to abatement in the manner provided by law. Any failure, refusal or neglect to obtain a permit as required by this Ordinance shall be prima facie evidence of the fact that a public nuisance has been

committed. If the violation is not abated within such thirty- (30) day period the City of Marfa may institute and collect a penalty not to exceed \$200.00 for such violation.

SECTION 12: Cost of City Abatement Constitutes Lien

Cumulative of the City's remedy by fine, as set forth in the preceding section hereof, the City may do such work or cause the same to be done to remedy such condition to correct such lighting violation on such owner's premises at the City's expense and may charge the same to the account of the owners of such property and assess the same against the real estate or lot or lots upon which such expense is incurred. The lien statement must state the name of the owner, if known, and the legal description of the property. Upon filing with the County Clerk of Presidio County, Texas, of a statement by the City Administrator or Police Chief of such expenses, the City shall have a privileged lien upon said real estate or lot or lots, second only to tax liens and liens for street improvements, to secure the expenditure so made and ten (10) percent interest on the amount from the date of such payment so made by the City. The city may institute suit and recover such expenses and foreclose such lien in any court of competent jurisdiction, and the statement so filed with the County Clerk or a certified copy thereof shall be prima facie proof of the amount expended in any such work or improvements to remedy the condition.

SECTION 13: Compliance with Open Meeting Act

That it is hereby officially found and determined that the meeting which this Ordinance was passed was open to the public as required by law and that the public notice of the time, place, and purpose of said meeting was given as required by the Open Meetings Act; Chapter 551, Texas Local Government Code.

This Ordinance was originally passed and approved on the 25th day of January, 2000

This Ordinance was amended and approved on the 11th day of July, 2000

City of Marfa, Texas

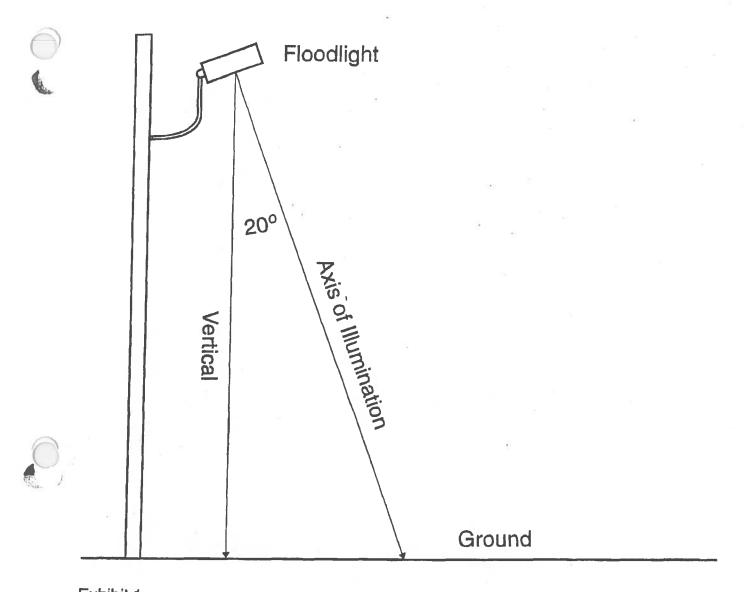
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C. M. "Fritz" Kahl

Mayor

M. A. "Miguel" Sandoval City Administrator



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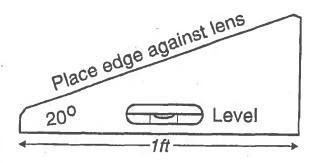


Exhibit 2. A tool for aiming lights as in Exhibit 1, above. Place the .upper edge of the tool against the lens, and adjust the fixture so the bubble shows level.

City of Marfa Public Notice

An amendment to Ordinance #00-01 providing for the regulation of Outdoor Lighting in the City of Marfa, Texas. The amended ordinance carries a penalty not to exceed \$200.00 for non-compliance.

The ordinance shall be on display at city hall during normal business hours.

Then One Time - Mark Newspaper