

PUBLIC HEARING: DRAFT CITY OF MOAB ORDINANCE #2023-14, AN ORDINANCE AMENDING THE APPROVED MOAB CITY ORDINANCE 2019-03, TO INCLUDE ADDITIONAL REGULATIONS REQUIRED THROUGH THE INTERNATIONAL DARK SKY ASSOCIATION CERTIFICATION AND RESOLVE OUTSTANDING DISCREPANCIES WITHIN THE EXISTING REGULATIONS.

**CITY OF MOAB
PLANNING COMMISSION
PUBLIC HEARING
CITY OF MOAB ORDINANCE #2023-14**

An Ordinance amending the approved Moab Outdoor Lighting Ordinance (MOLO) 2019-03, to include additional regulations required through the International Dark Sky Association Certification and resolve outstanding discrepancies within the existing regulations.

The City of Moab will hold a Public Hearing on **Thursday, November 9, 2023, at approximately 6:00 p.m.** The purpose of this hearing is to solicit public input on Proposed Ordinance #2023-14, an ordinance amending the approved Moab Outdoor Lighting Ordinance (MOLO) 2019-03, to include additional regulations required through the International Dark Sky Association Certification and resolve outstanding discrepancies within the existing regulations.

The proposed draft Ordinance is available for public review at the Moab City Planning Office located at 217 East Center Street and will be posted on the website at www.moabcity.org. Written public comment may be directed to the Planning Department at planner@moabcity.org, planning@moacity.org or cshurtleff@moabcity.org. To ensure that the Planning Commission has the opportunity to review written comments prior to the meeting, written comments will only be accepted until 5 pm the day prior to the public hearing.

To submit written comments prior to the meeting, please fill out the form found here: <https://bit.ly/MoabPCPublicComment>. Information to make comments during the meeting can be found on the agenda at: <https://moabcity.org/AgendaCenter/Planning-Commission-2>.

In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this meeting should notify the Recorder's Office at 217 East Center Street, Moab, Utah 84532; or phone (435) 259-5121 at least three (3) working days prior to the meeting.

Cory Shurtleff

Planning Director

cshurtleff@moabcity.org

CITY OF MOAB ORDINANCE #2023-14

AN ORDINANCE AMENDING THE APPROVED MOAB OUTDOOR LIGHTING ORDINANCE (MOLO) 2019-03, TO INCLUDE ADDITIONAL REGULATIONS REQUIRED THROUGH THE INTERNATIONAL DARK SKY ASSOCIATION CERTIFICATION AND RESOLVE OUTSTANDING DISCREPANCIES WITHIN THE EXISTING REGULATIONS.

WHEREAS, the Moab City Council adopted Ordinance #2019-03, an ordinance enacting sections of the Moab Municipal Code establishing Outdoor Lighting and Sign Illumination Standards and repealed inconsistent lighting provisions, August 13, 2019; and

WHEREAS, from time to time the City undertakes revisions in its zoning ordinances to improve the quality of land development and align the Code with state law and contemporary planning concepts; and

WHEREAS, the City desires to encourage outdoor lighting practices that will minimize light pollution, glare, light trespass, and sky glow to curtail the degradation of the night-time visual environment; and

WHEREAS, lighting practices that promote energy conservation are to be encouraged; and

WHEREAS, revisions to existing ordinance are necessary to improve night-time safety and security; and

WHEREAS, lighting practices are an important component for developing and attractive nighttime appearance in the City; and

WHEREAS, it is in the interest of the City that it establish lighting standards, requirements, and processes that are substantially consistent throughout the Moab Municipal Code and substantially with those established by Grand County; and

WHEREAS, the City finds that this ordinance updating the approved ordinance #2019-03 is necessary and appropriate for executing clear and consistent development regulations, as well as aligning requirements required through the International Dark Sky Association Certification; and

WHEREAS, The City of Moab has the authority to adopt this ordinance pursuant to Utah Code Annotated (2010) § 10-3-702, and hereby exercises its legislative powers in doing so.

NOW, THEREFORE BE IT ORDAINED that the Moab City Council hereby approve Moab City Ordinance #2023-14, approving amendments to the Moab Municipal Code as follows:

PASSED AND APPROVED in open Council by a majority vote of the Governing Body of Moab

City Council this

14th day of November 2023

17.03.010 Title, intent and purpose.

Commented [KJ1]: This is the very beginning of zoning code. Included just to add lighting stuff under F

This title shall be known as, and shall be entitled “the zoning ordinance of Moab City, Utah,” and may be so cited and pleaded. It is the intent and purpose of the City Council to promote the health, safety, morals, convenience, order, prosperity, and general welfare of the present and future inhabitants of the City of guiding development within the City in accordance with a comprehensive plan, which plan has been designed:

- A. To encourage and facilitate orderly growth and development in the area;
- B. To promote safety from fires, floods, traffic hazards and other dangers;
- C. To promote sanitation and health of the inhabitants;
- D. To discourage undue scattering of population and unnecessary expenditures of moneys for excessive streets, water and sewer lines, and other public requirements;
- E. To stabilize and improve property values;
- F. To protect the residents from objectionable noise, odor, dust, fumes, light trespass and glare, and other deleterious substances or conditions;
- G. To promote a more attractive and wholesome environment. (Prior code § 27-1-1)

17.09.060 Outdoor lighting – ~~Scope and applicability~~General provisions.

A. Title. Sections 17.09.060 – 17.09.069 shall be known and may be cited as the Moab Outdoor Lighting Ordinance (MOLO).

B. Purposes. The general purpose of the MOLO is to protect and promote the public health, safety and welfare, the quality of life, and the ability to view the night sky by establishing regulations and a process of review for outdoor lighting. This chapter establishes standards for outdoor lighting in order to accomplish the following:

1. To protect against direct glare and excessive lighting;
2. To provide safe roadways for motorists, cyclists and pedestrians;

Commented [KJ2]: Copied from Ketchum

Commented [JL3R2]: This is good. I like MOLO

3. To protect and reclaim the ability to view the night sky, and help preserve the resident quality of life and the tourist experience;
4. To prevent light trespass in all areas of the City;
5. To promote efficient and cost-effective lighting;
6. To ensure that sufficient lighting can be provided where needed to promote safety and security;
7. To allow for flexibility in the style of lighting fixtures;
8. To provide lighting guidelines;
9. To provide assistance to property owners and occupants in bringing nonconforming lighting into conformance with this chapter; and
10. To work with other jurisdictions within Grand County to meet the purposes of this chapter.

C. Scope. All exterior lighting installed after the effective date hereof in all zoning districts in the City shall be in conformance with the requirements established by the MOLO. All existing lighting installed prior to the effective date hereof in all zoning districts in the City shall be addressed as follows:

1. All ~~otherwise lawful~~ outdoor lighting that does not meet the requirements of this chapter and is not otherwise exempted shall be considered a legal nonconforming use or part of a legal nonconforming structure subject to an amortization schedule outlined in Section 17.09.069.
2. All existing lighting that does not meet the requirement of section 17.124.060 of this title, which states that "any parking, yard or building illumination in (any) zoning (district) shall be so directed as to protect adjacent properties from glare and direct lighting", is required to be brought into conformance with this chapter.
3. In the event of any conflict between the provisions of the MOLO Sections 17.09.060 through 17.09.069 and 17.93.075 and any other provision of the Moab Municipal Code, these sections shall control. (Ord. 19-03 Att. 1 (part), 2019)

Commented [KJ4]: I'm not sure why this phrase was substituted by Richard for "all existing", it seems to confuse the interpretation

Commented [JL5R4]: It should be consistent

Commented [KJ6]: update reference

A. All lighting should be purpose driven.

Commented [KJ7]: A-D moved under C Scope

B. All outdoor lighting installed after October 1, 2019, in all zoning districts within the City shall conform to the requirements established by Sections ~~17.09.060~~ through ~~17.09.069~~, as well as Section ~~17.93.075~~. These sections do not apply to indoor lighting.

~~C. All existing outdoor lighting that does not meet the requirements of this chapter and is not otherwise exempted shall be considered a nonconforming use or part of a nonconforming structure subject to an amortization schedule outlined in Section 17.09.069.~~

~~D. In the event of any conflict between the provisions of Sections 17.09.060 through 17.09.069 and 17.93.075 and any other provision of the Moab Municipal Code, these sections shall control. (Ord. 19-03 Att. 1 (part), 2019)~~

17.09.061 Outdoor lighting - Exemptions

- A. Traffic control signals and traffic safety devices.
- B. Emergency and safety lighting by Emergency Services. Searchlights, floodlights, laser source lights, strobe or flashing lights, or any similar high intensity lights are permitted when used in emergencies by police, fire, medical, and/or utility personnel or at their direction.
- C. Temporary outdoor lighting intended as holiday or seasonal decorations displayed between October 15th and the following January 15th may remain on until 10pm. They may remain on all night provided that they do not create nuisance glare.
- ~~D. Lighting required by the Federal Aviation Administration or the Federal Communications Commission.~~
- ~~E. Special events that have been issued a permit pursuant to Section XXX, , shall be allowed temporary lighting for the duration of the event, provided such lighting does not create glare to motorists or result in light trespass onto adjacent properties.~~
- ~~D. Pathway lights less than eighteen inches in height, if the total light output from each pathway light is less than three hundred lumens. The fixture shall have a top that is completely opaque.~~
- ~~E. Temporary lighting, unless fully shielded, shall adhere to the lighting hours stated in 17.09.065.~~

17.09.062 Outdoor lighting – Definitions.

- A. For the purpose of Sections 17.09.060 through 17.09.069 and 17.93.075, the following definitions apply:

“Accent or architectural lighting” means lighting of building surfaces, landscape features, statues, and similar items for the purpose of decoration, ornamentation, creation of visual hierarchy, sense of liveliness, or other purpose unrelated to safety, business operation, or essential lighting function.

The Moab Municipal Code is current through Ordinance 23-11, passed July 25, 2023.

Commented [8]: This section was created by Richard to house general exemptions. Previously exemption to fully shielded were under the Shielded section. Seems fine, but might swap so definitions are first

Commented [JL9R8]: Agreed - definitions first

Commented [10]: some other codes use "exterior" instead of "outdoor", but this code seems to use outdoor.

Commented [11]: how permissive ? Previously 11/15-1/15. Richard suggested starting at 10/15 for halloween decorations. I'm inclined to agree, as long as curfew/nuisance glare included

Commented [JL12R11]: I am not sure I agree with leaving holiday lights on all night however, that would be hard to enforce and some lights are solar and go out when it starts getting light outside.

Commented [13]: Richard suggested removing the curfew, with exception for non-excessive lighting. I have reinserted a simplified version

Commented [KJ14]: From Sedona; adjust to align with our trespass and glare language

Commented [JL15R14]: good

Commented [KJ16]: seems like this can just be accommodated under standard unshielded budget, if max lumens is dropped to about this level

Commented [17]: It appears that this could still be a partial cutoff fixture, and some light directed upward. I considered replacing "no light" with "little light", but that's vague. So we can set a quantitative standard which would be difficult to evaluate with many cheap pathway lights, or just say the top is opaque and leave it at that.

Commented [JL18R17]: Agreed

Commented [19]: Seems to have lost context, so deleted

Commented [JL20R19]: agreed

"Backlight" means all the light emanating behind a luminaire.

"BUG rating" means backlight, uplight, and glare rating, which exists on a scale of zero to five and may be used to describe luminaire optical performance in regards to light trespass, sky glow, and high angle brightness control.describes the light output of a luminaire.

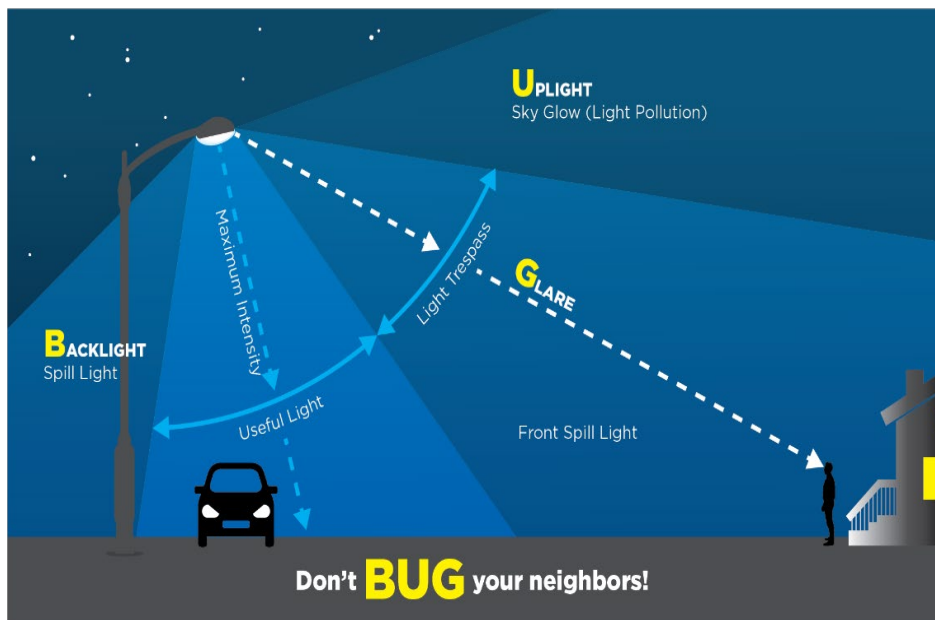


Image by City of Ft. Collins, Colorado, and used here with permission.

"Correlated color temperature" (CCT) is a specification of the color appearance of the light emitted by a lamp, relating its color to the color of light from a reference source when heated to a particular temperature, measured in degrees Kelvin (K). The CCT rating for a lamp is a general "warmth" or "coolness" measure of its appearance. Lamps with a CCT rating below three thousand K are usually considered "warm" sources, while those with a CCT above three thousand K are usually considered "cool" in appearance.

"Direct illumination" means illumination resulting from light emitted directly from a bulb, luminary, or reflector. This does not include light reflected from other surfaces such as the ground or building faces.

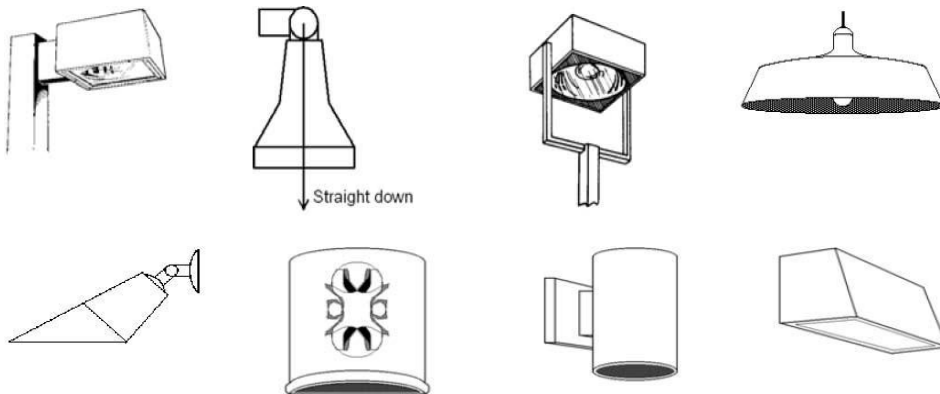
The Moab Municipal Code is current through Ordinance 23-11, passed July 25, 2023.

"Floodlight" means a fixture or bulb designed to "flood" an area with light. A specific form of bulb or fixture designed to direct its output in a specific direction. Such bulbs are often designated by the manufacturer and are commonly used in residential outdoor lighting.

"Fully shielded fixture" means an outdoor light fixture constructed and mounted so that the installed fixture emits no light above the horizontal plane. Where a light manufacturer provides a BUG rating, the uplight rating (U) must equal zero. Fully shielded light fixtures must be shielded in and of themselves; a light fixture must have the top and sides made of completely opaque material such that light only escapes through the bottom of the fixture. Fixtures with translucent or transparent sides, or sides with perforations or slits, do not qualify as fully shielded. Any glass or diffuser on the bottom of the fixture must be flush with the fixture (no drop lenses). Surrounding structures, like canopies, eaves, and patio covers, are not to be considered when determining if the fixture is fully shielded, unless specifically allowed. Fully shielded fixtures must be appropriately mounted so that the shielding prevents light from escaping above the horizontal plane and all light is directed downward.

Commented [KJ21]: The definition was repeated, sort of, in the requirements. Seemed cleaner to consolidate in definitions.

Commented [JL22R21]: I still have an issue with light fixtures that have perforations or slits as not qualifying as fully shielded. My porch lights have designs that do not produce any glare or off property trespass. Again that will be hard to enforce especially if other outdoor lights on in compliance or if they are the only source outdoor lighting



Examples of fully shielded light fixtures.

"Glare" means the visual sensation caused by excessive brightness and which causes annoyance, discomfort, or a disability loss in visual performance or visibility.

"Internally illuminated," as it relates to signs, means any sign which has a light source entirely enclosed within the sign and not directly visible to the eye.

"Light pollution" means any adverse effect of manmade light. Often used to denote "skyglow" from developed areas, but also includes glare, light trespass, visual clutter and other adverse effects of lighting.

"Light source" means the part of a lighting fixture that produces light, e.g., the bulb, lamp, or chips on board.

"Light trespass" means ~~any light spill falling over property lines that illuminates other grounds or buildings in an objectionable manner, light that falls beyond the legal boundaries of the property it is intended to illuminate.~~

"Lumen" means a unit of luminous flux equal to the light emitted by a uniform point source of one candle intensity. Lumens refers to the amount of light emitted by a bulb (more lumens equates to brighter light).

Common Relationships between Bulb Types, Wattages and Lumen Levels

Brightness in Lumens	220+	400+	700+	900+	1300+
Standard	25W	40W	60W	75W	100W
Halogen	18W	28W	42W	53W	70W
CFL	6W	9W	12W	15W	20W
LED	4W	6W	10W	13W	18W

Commented [KJ23]: Richard deleted. I think describing a range rather than single numbers makes sense. Or, move it to supplementary literature?

Commented [JL24R23]: agreed

"Manufacturer's catalog cuts" means a publication or other printed material of a bulb or lighting manufacturer offering visual and technical information about a lighting fixture or bulb.

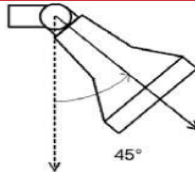
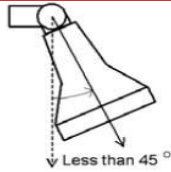
"Net acre" means a gross acre excluding: public rights-of-way, lands with natural slopes greater than thirty percent, jurisdictional wetlands, lands in the one-hundred-year floodplain, public drinking water supply water sources (recharge areas for the aquifer in the Glen Canyon Formation), lands affected by immitigable geohazards, riparian habitats, archeological sites, and required open space.

"Outdoor light fixture" means a complete lighting unit consisting of a lamp(s) and ballast(s) (when applicable), together with the parts designed to distribute the light, to position and

protect the lamps, and to connect the lamps to the power supply. Also known as a luminaire, or simply as a fixture.

“Partially shielded light fixture” means an outdoor light fixture constructed and mounted so that the installed fixture emits most of its light above the horizontal plane. Where a light manufacturer provides a BUG rating, the uplight (U) and backlight (B) ratings are greater than zero. Light emitted at or above the horizontal plane (sideways or upwards) shall arise solely from incidental decorative elements or strongly colored or diffusing materials such as colored glass or plastic. Fixtures using spot or flood lamps are considered partially shielded if the lamps are aimed no higher than forty-five degrees above the vertical plane beneath the fixture.

Commented [KJ25]: Most other lighting codes don't use this category. It seems hard to clearly differentiate from unshielded, and the primary purpose seems to be to provide a more nuanced exception to shielding, which may be counter-productive. Sedona more clearly defines partially shielded, and only allows exceptions for those, rather than unshielded.



Examples of partially-shielded lighting fixtures.

“Recreational lighting” means lighting used to illuminate sports fields, ball courts, playgrounds, or similar outdoor recreational facilities.

“Safety lighting” means any lighting required by the Building Official or Zoning Administrator for the purpose of safety. Examples include lighting for doorways, pathways, and driveways.

“Skyglow” means the brightening of the nighttime sky resulting from the scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Skyglow is caused by light directed or reflected upwards or sideways and reduces one’s ability to view the nighttime sky.

"Spotlight" means a fixture or bulb designed to light a small area very brightly. See definition of "Floodlight."

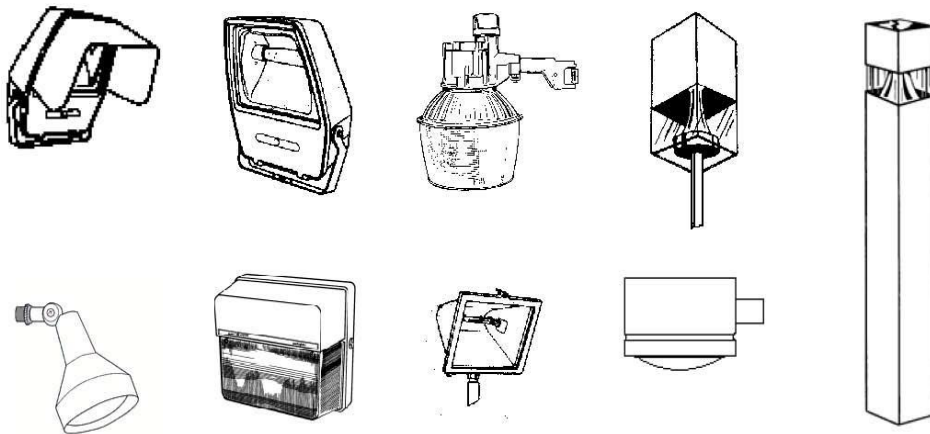
"Temporary lighting" means lighting that plugs into an outlet and is not hard wired.

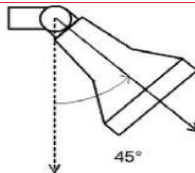
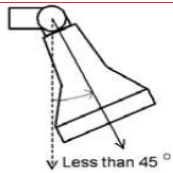
"Total" means the sum of shielded and unshielded light.

"Total outdoor light output" means the total amount of light measured in lumens from all bulbs installed in outdoor lighting fixtures. For bulb types that vary in light output as they age (such as fluorescent and high intensity discharge (HID) bulbs), the initial lumen output as defined by the manufacturer shall be the lumen value used.

"Tower" means any monopole, antenna, or the like that exceeds eighteen feet in height.

"Unshielded fixture" means a fixture that has no shielding ~~at all~~ that ~~would otherwise specifically~~ prevents light emission above the horizontal.



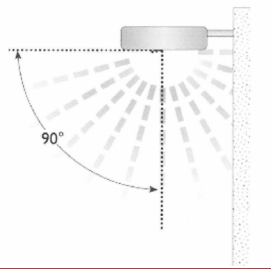


Examples of unshielded light fixtures.

"Uplight" means all the light emanating above the horizontal plane of a luminaire. (Ord. 19-03 Att. 1 (part), 2019)

17.09.063 Outdoor lighting – ~~Fully shielded fixture~~Shielding and trespass requirements.

- A. Unless specifically exempted by this section, all permanent and temporary outdoor lighting shall use fully shielded fixtures and shall be installed so light is directed downward with no light emitted above the horizontal plane of the fixture. Where a light manufacturer provides a BUG rating, the uplight rating (U) must equal zero.



~~B. In order to qualify as a "fully shielded" fixture, a light fixture must have the top and sides made of completely opaque material such that light only escapes through the bottom of the~~

~~fixture. Fixtures with translucent or transparent sides, or sides with perforations or slits, do not qualify as fully shielded. Any glass or diffuser on the bottom of the fixture must be flush with the fixture (no drop lenses). Merely placing a light fixture under an eave, canopy, patio cover, or other similar cover does not qualify as fully shielded.~~

~~B. All light fixtures shall be aimed and shielded so that the direct illumination shall be confined to the property boundaries of the source. Lighting shall not be aimed onto adjacent properties, except in cases of shared parking, shared pedestrian pathways, or for coordinated development sites spanning multiple parcels.~~

~~C. Light trespass onto adjacent public rights-of-way may be allowed subject to approval of the Planning Director.~~

~~B. Fixtures must not be placed at a location, angle, or height that emits directed illumination outside the property boundaries where the light fixtures are located.~~

~~C. Notwithstanding the exemptions in subsection (E) of this section, all residential and commercial luminaires shall be fully shielded when installed within twenty-five feet of adjacent residential property lines.~~

~~D. Lights controlled by motion sensors shall not be triggered by movement or activity located off the property on which the light is located.~~

~~D.E. Exemptions to fully shielded fixture requirements:~~

~~1. All lights exempted by this section shall be included in the calculation of total light output.~~

~~2. In zones RA-1, R-1, R-2, R-3, and R-4 individual unshielded fixtures with no more than 250 lumens are permitted.~~

~~3. In zones C1, C2, C3, C4, C5, and I1 individual unshielded fixtures with no more than 1,000 lumens are permitted.~~

~~4. Fixtures having a total light output less than one thousand lumens are exempted from the fully shielded requirement provided the following criteria are met:~~

~~a. The fixture has a top that is completely opaque such that no light is directed upwards.~~

~~b. The fixture has sides that completely cover the light source and are made of opaque or semi-opaque material. Fixtures with opaque sides may have incidental decorative perforations that emit small amounts of light. Semi-opaque material such as dark tinted glass or translucent plastic may be used if the light source is not discernable behind the material. Completely~~

~~transparent materials, such as clear or lightly tinted colored glass, are not allowed.~~

~~c. The light source must not be visible from any point outside the property on which the fixture is located.~~

2.4. Spotlights controlled by motion sensors having a light output less than one thousand lumens per lamp are exempted from the fully shielded requirement provided:

a. The fixture is a spotlight or other type of directed light that shall be directed straight down;

b. The fixture must not be placed in such a manner that results in direct illumination ~~being directed~~falling outside the property boundaries where the light fixtures are located; and

~~c. Lights controlled by motion sensors shall not be triggered by movement or activity located off the property on which the light is located.~~

~~3. Pathway lights less than eighteen inches in height are exempted from the fully shielded fixture requirement, if the total light output from each pathway light is less than three hundred lumens.~~

~~5. Temporary exterior lighting intended as holiday or seasonal decorations displayed between November 15th and the following January 15th; provided, that individual lamps do not exceed seventy lumens and neither cause light trespass nor interfere with the reasonable use and enjoyment of any other property.~~

~~6. Traffic control signals and traffic safety devices.~~

~~7. Temporary emergency lighting in use by law enforcement or government agencies or at their direction.~~

4.5. The lighting of Federal or State flags; provided, that the light is a top-down and narrow beam aimed and shielded to illuminate only the flag.

5.6. An applicant requesting approval for lighting that does not conform to these standards shall follow the procedures and findings requirements set forth in Chapter 17.72 – Administration and Enforcement. (Ord. 19-03 Att. 1 (part), 2019)

17.09.064 Outdoor lighting – Total light output.

- A. ~~Commercial.~~ On commercial developments in Zones C-1, C-2, C-3, C-4, and R-C, total outdoor light output shall not exceed fifty thousand lumens per developed acre. ~~Streetlights used for illumination of public rights-of-way are excluded from this calculation.~~ Commercial developments Such developments shall be permitted a minimum of five thousand lumens of lighting regardless of parcel size.
1. ~~In nonresidential zoning districts, partially shielded and unshielded~~ Unshielded lighting on a property ~~shall not exceed~~ may be up to five thousand lumens per developed acre, and shall be included in the total outdoor light output calculation.
- B. ~~Residential.~~ On residential single household, two-household, and ADU sites in all zones, total outdoor light output shall not exceed ten thousand lumens of lighting for parcels one-half acre, or larger, in size. Parcels smaller than one-half acre shall be permitted five thousand lumens of lighting regardless of parcel size. Unshielded lighting on a property may be up to one thousand lumens per lot, and shall be included in the total outdoor light output calculation.
- C. ~~On commercial developments in Zones A-2, C-5, SAR, and I-1, and mixed-use and multi-household development in all zones with shared parking lots.~~ Total total outdoor light output of any ~~such apartment~~ development shall not exceed twenty thousand lumens of lighting per net acre.
- B.D. ~~Residential units used for overnight accommodations or other commercial uses shall comply with the residential standards for total light output.~~
1. ~~In residential zones, partially shielded and unshielded lighting on a property shall not exceed one thousand lumens per lot, and shall be included in the total outdoor light output calculation.~~
- E. ~~Residential units used for overnight accommodations or other commercial uses shall comply with the residential standards for total light output.~~ Total light output exceptions:
1. A site may exceed total light output limits if all installed lighting is required safety lighting, fixture lumens are the minimum required to meet illuminance standards, and is fully shielded.
2. ~~Streetlights used for illumination of public rights-of-way are excluded from this calculation.~~ total light limitation.
3. Outdoor String Lighting (Ambience Lighting)
- a. Temporary and permanent non-conforming ambience/string lighting is prohibited, except as allowed in subsection 17.09.063(6)b

Commented [KJ26]: This is from Sedona (although they disallow entirely, along with other fully unshielded lights). Much string lighting can be accommodated with the unshielded lumen budget, and I'm disinclined to be more permissive for homes/lodging. I think staff wanted some accommodation.

Commented [JL27R26]: Staff discussed this with me and at the time I thought it would be ok as long as there is a shutoff time associated with the use of string lights. But agree that we should not be more permissive for homes and lodging.

- b. Residences shall be permitted one string light, which shall be counted as one fixture, and subject to the per fixture unshielded lumen limits of 17.09.063.E.2.
- c. Ambience/string lighting in excess of site lumen limits for outdoor dining/bar areas, interior courtyards, and/or event venues that are part of a licensed business, may be allowed in consideration of limited lumen budgets for small sites, complimentary provision for temporary or permanent task lighting at tables/bars, and low illuminance levels needed for ambience, and with approval by the (authority) on a case-by-case basis.
- d. In reviewing proposals for such lighting, the (authority) shall avoid direct lighting of off-site residential uses, and consider lighting types, locations, and time of use.
- e. Ambience/string lighting shall not flash, blink, fade, or strobe.

—(Ord. 19-03 Att. 1 (part), 2019)

Commented [KJ28]: Added on 10/12/23

Commented [KJ29]: Modified on 10/12/23

17.09.065 Outdoor lighting – Lighting hours.

A. Commercial establishments shall turn off all outdoor lighting, except ~~that those~~ listed below, by ten p.m. and the lighting shall remain off until business open:

1. Businesses located in zones C-3, C-4 and RC may leave all compliant outdoor lighting on until ten p.m. or until one hour after the close of business.
 2. All Businesses open to the public after ten p.m. may leave all compliant outdoor lighting on until one hour after the close of business.
 3. Compliant lighting to illuminate the entrance to the commercial establishment.
 4. Compliant parking lot and pathway lighting required for the safety of guests or customers.
- ~~1. Businesses open to the public after ten p.m. may leave all outdoor lighting on until one hour after the close of business.~~
- ~~2. Lighting to illuminate the entrance to the commercial establishment.~~
- ~~3. Parking lot and pathway lighting required for the safety of guests or customers.~~

Commented [30]: why is this permitted after close?

Commented [JL31R30]: I don't think that was the intent. Hotels never close - I think that may be what he is referring too.

Commented [KJ32]: This is mostly Richard's language, which seems good to me.

Commented [JL33R32]: This addresses the string lighting issue above

B. Recreational lighting (residential and commercial) shall be turned off by ten p.m. except to conclude a specific sporting event that is underway.

C. Residential unshielded lighting shall be turned off by ten p.m.

D. Commercial establishments located in zones C3, C4 and RC shall turn off all illuminated signage by ten p.m., or one hour after close of business, and remain off until business open. All other commercial establishments shall turn off all illuminated signage one hour after business close, and remain off until business open.

Ord. 19-03 Att. 1 (part), 2019)

Commented [KJ34]: Richard said "C. All legal, nonconforming lighting on residential properties shall be turned off by ten p.m. unless included in the exemptions listed in 17.09.061.". I'm thinking that mine will provide path for enforcement / bulb lumen reduction sooner.

Commented [KJ35]: I'm not sure if there's a distraction between commercial establishment and business. In some cases I've changed the former to the latter.

Commented [KJ36]: Not sure if this is more properly in sign code, but it was in Richard's version as an addition, so I kept it

17.09.066 Outdoor lighting – Lighting color.

All exterior-outdoor lighting shall utilize light sources with correlated color temperature not to exceed three thousand2,700 K (two thousand and seven hundred Kelvin-(K).

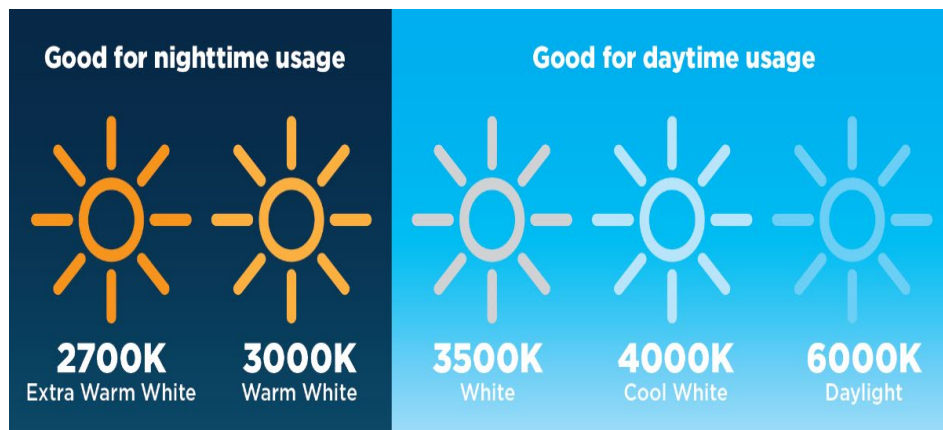


Image by City of Ft. Collins, Colorado, and used here with permission.

(Ord. 19-03 Att. 1 (part), 2019)

17.09.067 Outdoor lighting – Specialized outdoor lighting conditions and standards.

A. ~~Gas station canopies may be illuminated; provided, that all light fixtures are mounted on the undersurface of the canopy and all light fixtures are fully shielded. Merely placing the fixtures on the underside of the canopy does not qualify as fully shielding the light fixture.~~

Commented [KJ37]: Richard cut. Seems like it says they must comply, and so, unneeded. some other codes don't spell them out

A. Publically Owned Lighting

1. New publicly owned outdoor lighting, including street lighting shall be installed per the limitations of the MOLO
2. Adaptive controls and/or curfews shall be employed in all future installations of public outdoor lighting.

Commented [KJ38]: This added to meet the IDS Community Designation Guidelines

B. Roadway and streetlights are prohibited unless recommended by the City Engineer or required by UDOT to provide for the safety of the public. ~~When deemed necessary, streetlights shall utilize lamp types that are fully shielded luminaires that minimize skyglow, light trespass, and other unintended impacts of artificial lighting.~~ All streetlights shall utilize the lowest illuminance levels acceptable to the City Engineer and/or UDOT. All streetlights shall conform to 17.09.066 Lighting color, and 17.09.063 shielding and trespass. All new streetlights shall include adaptive controls.

Commented [KJ39]: Richard cut. Seems like if they are allowed they should ideally conform to the shielding and color of the code, and the old language slightly confuses that. Although the version he was working on significantly loosened the direct illumination standards. .

Commented [JL40R39]: What ever we agreed to with Alexi on replacing street lights is what this language should be geared to.

C. ~~Parking lots shall use fully shielded downward directed fixtures. Internal or external shields shall may be used to prevent the fixture being visible direct illumination from projecting outside the parking lot site. Parking lots may not utilize spot or flood lighting whether mounted on a post or exterior building wall. The overall height of any light post or tower used to illuminate parking lots in Zones C-1, C-2, C-3, C-4, and R-C commercial zones shall not exceed twenty-five feet. All post mounted parking lot lights shall be set back from property lines a distance equal to two and one-half times the height of the pole unless an internal or external shield prevents the fixture being visible from outside the property boundaries. The overall height of any light post used to illuminate parking lots in residential other zones shall not exceed twenty-five feet. All parking lot lighting shall use fully shielded downward directed fixtures. Internal or external shields shall prevent the fixture being visible from outside the parking lots.~~

Commented [KJ41]: Initially I considered that maybe this could be cut, since general lighting code would govern. But, it seems like disallowing use of the unshielded budget for parking lots is worthwhile.

Commented [KJ42]: Richard cut all this. I suggest cutting the first sentence; if a light is mounted on a 20' pole then it would be set back 50' from the property line. There are luminaires which have beam control and side shields that allow much closer mounting and control light trespass. I think having a light provide illumination from 2.5x MH away may make trespass harder to manage.

Commented [JL43R42]: agreed

Commented [KJ44]: Is this worthwhile, and practical? Seems like city's job is to protect health of all residents and visitors, even those in multifamily.

D. Multi-household and lodging development outdoor lighting, including parking lot lighting, shall not create direct illumination of windows of on-site residential or lodging units.

Commented [JL45R44]: Could this be related to the increase in density and height. Example is the MAPS housing where the parking lot lights shine into the windows of those on the 3rd floor.

~~D~~E. Outdoor recreation areas or athletic fields at publicly owned facilities may use illumination to light the surface of play and viewing stands and for the safety of the public, which is not in strict conformance with the shielding and light color provisions of the MOLO. The following standards shall apply to outdoor recreation area or athletic field lighting:

1. The recreational lighting shall not exceed illuminance levels for Class IV sports lighting, and shall follow -set by the Illuminating Engineering Society lighting guidelines (RP-6) of North America.

Commented [KJ46]: This added to meet the IDS Community Designation Guidelines

2. The recreational lighting provides illuminance for the surface of play and viewing stands, and not for any other areas or applications.

3. Illuminance levels must be adjustable based on the task (e.g., active play vs. field maintenance), and the lowest appropriate illuminance level shall be utilized based on the task.

Commented [KJ47]: This added to meet the IDS Community Designation Guidelines

~~4~~3. Off-site and sky glow impacts of the lighting will be limited to the greatest practical extent possible.

~~4~~5. The lighting for areas or applications outside the surface of play and viewing stands shall conform to all provisions in this chapter.

~~5~~6. The recreational or athletic facility shall extinguish lighting exempted by this chapter no later than ten p.m. or one-half hour after the end of play.

~~6~~7. The recreational lighting shall have timers that automatically extinguish lighting to ensure lights are not left on when the facilities are not in use.

E. Outdoor amphitheaters-event venues may use illumination to light the performance area ~~of the amphitheater and for the safety of the public~~which is not in strict conformance with the shielding and lighting color provisions of the MOLO. The following standards apply to all amphitheater-event lighting:

1. Lighting used to illuminate the performance area must be either directed spotlighting or fully shielded lighting. If directed spotlighting, the light source must be located and designed such that it is not visible to minimize its visibility beyond the property boundaries.

2. Lighting used to illuminate the performance area may only be turned on during performances or rehearsal events.

3. Lighting used to illuminate the seating areas, pathways, and other areas of the ~~amphitheater-venue~~ must meet all standards of this chapter.

F. All illuminated signs shall comply with the standards of Section [17.93.075](#). (Ord. 19-03 Att. 1 (part), 2019)

17.09.068 Outdoor lighting – Application and review procedures.

A. *Lighting Plan.* All sign permit applications, subdivision applications, site plan applications, building permit applications, and other development review applications within any zoning district shall include a lighting plan that shows evidence that the proposed lighting fixtures and light sources comply with this chapter. Lighting plans shall include the following:

1. Plans or drawings indicating the proposed location of lighting fixtures, height of lighting fixtures on the premises, and type of illumination devices, lamps, supports, shielding and reflectors used and installation and electrical details.
2. Illustrations, such as contained in a manufacturer's catalog cuts, of all proposed lighting fixtures. For commercial uses, photometric diagrams of proposed lighting fixtures are also required. In the event photometric diagrams are not available, the applicant must provide sufficient information regarding the light fixture, bulb wattage, and shielding mechanisms for the Planning Commission to be able to determine compliance with the provisions of this chapter.
3. A table showing the total amount of proposed exterior lights, by fixture type, wattage, lumens, and lamp type.

B. *Approval Procedure.*

1. The lighting plan for all new development shall be submitted for approval concurrent with the associated application process.

2. A certificate of occupancy shall not be issued until such time as the property is subject to a post-installation nighttime inspection by the City's Zoning Administrator. (Ord. 19-03 Att. 1 (part), 2019)

Commented [KJ48]: this was deleted by Richard. We should find out more about practicality of post construction verification

Commented [JL49R48]: This seems like an important step to ensuring compliance but agree to get more info.

17.09.069 Outdoor lighting - Amortization of nonconforming outdoor lighting.

- A. The City shall require the termination of use of all nonconforming outdoor lighting fixtures, structures, lamps, bulbs or other devices that emit or generate light which are not otherwise exempted by this chapter, pursuant to the amortization schedule contained in this section.
- B. All permitted outdoor lighting installed between October 1, 2019 and [effective date] in all zoning districts shall be considered a legal/permitted (?) use.
- C. All outdoor lighting legally existing and installed prior to the effective date of this chapter and which is not exempted shall be considered nonconforming and shall be brought into compliance by the property owner as follows:
1. Immediate compliance is required as a condition for approval when applying for a building permit, sign permit, new (nonrenewal) business license, site plan review or similar City permit or approval if site improvements, construction, reconstruction, expansion, alteration or modification of existing sites, structures, or uses individually or cumulatively equal or exceed one thousand five hundred square feet, or fifty percent of the existing site or structure, whichever is less. Projects of less than one thousand five hundred square feet in size, or fifty percent of an existing site or structure, will not be subject to immediate compliance. However, the square footage of the improved structure or site will count towards a cumulative total of projects on the same property. When the cumulative total equals or exceeds one thousand five hundred square feet, or fifty percent of the existing site or structure, compliance shall be required for approvals as cited above.
 2. All damaged or inoperative nonconforming lighting fixtures shall be replaced or repaired only with lighting equipment and fixtures compliant with this chapter.
 3. All outdoor lighting not previously scheduled for amortization or otherwise exempted shall be brought into conformance with the MOLO by January 1, 2029. this chapter within five-ten years from the effective date of this chapter.
 4. Whenever a nonconforming use, structure, or lot is abandoned for a period greater than one year and then changed to a new use according to the requirements of Chapter 17.12.060, all existing outdoor lighting shall be reviewed

Commented [KJ50]: Richard/staff's approach to this is significantly different. I'm unclear how it conforms with IDS community requirement for a 10 year amortization. Admittedly difficult, and, other recent codes include it.

Commented [KJ51]: IDS community lighting requirement: Affects an amortization period, applicable to ALL publicly AND privately owned lighting, to end not more than ten (10) years from the effective date of the outdoor lighting policy, after which all non-conforming lighting extant at the time of enactment must be brought into compliance with the policy

Commented [JL52R51]: The issue will be what will happen in 10 years when most lights will still be non-conforming and the Council will bring up "is this enforceable?". However, in order to be in meet the IDS community standards we should include it now and modify if necessary down the road. I don't agree with a shorter time frame because we know it will not be enforces.

Commented [KJ53]: Given the stacking effective dates of the MOLO, and that it isn't a discrete chapter, having a date listed may be cleaner.

Commented [KJ54R53]: Changed per 10/12/23 meeting

and brought into compliance as necessary for the entire building, structure, or site.

5. Nonconforming fixtures must be brought into compliance if they violate Moab Municipal Code Special provisions 17.20.040 C-1, 17.21.040 C-2, 17.24.040 C-3, 17.27.040 C-4, 17.30.040 C-5, 17.31.040 RC, 17.32.040 SAR, 17.35.060 MH/RV, 17.36.070 I-1, 17.42.060 R-1, 17.45.060 R-2, 17.48.060 R-3, 17.51.060 R-4 and 17.54.070 RA-1 Special Provisions as determined by the Zoning Administrator. The [abatement] of the [nuisance] shall be attempted first through non-costly means, such as redirection and relamping. New fixtures shall be required, if the [nuisance] can't be [abated].

Commented [55]: why brackets?

Commented [JL56R55]: Good question

- C. Violation and enforcement shall be processed as outlined in Chapter 17.78The City shall perform two audits of all outdoor lighting in the City. The first shall be two years and the other four years after the effective date hereof. These audits will identify all lighting that does not conform to the standards of this chapter. The results of these audits will be made available to the public.



The Moab Municipal Code is current through Ordinance 23-11, passed July 25, 2023.



(Ord. 19-03 Att. 1 (part), 2019)

1. Small Development Accommodation. Light fixtures installed on
 - a. multi-household townhome or condo of less than 4,000 sq ft gross area and average unit size of less than 1,000 sq. ft.
 - b. apartment development buildings of less than 6,000 sq ft gross area and average unit size of less than 900 sq. ft., or
 - c. commercial building of less than 3,000 sq. ft. gross area;
and
 - d. The fixtures are safety lighting for pedestrians, not vehicles,
 - e. The fixtures are lamped with the minimum lumens to provide required illumination,
 - f. The fixtures are installed no more than ten feet above the illuminated walking surface,
 - g. Luminaire and permanent opaque building elements are used as much as possible to reduce off-site direct illumination,

The Moab Municipal Code is current through Ordinance 23-11, passed July 25, 2023.

- h. Light fixtures are located as far from property boundaries adjacent to private parcels as practical, and
- i. The fixture is designed and installed such that no more than 20% of its light is emitted above 30° (measured from vertically downward) and no more than 5% of its light above 60°.

Commented [57]: if reused could be a defined thing like "low glare fixture"

With approval of permitting authority such fixtures are exempt from strict compliance with 17.09.063 B.

Section 2. Amendments to MMC Section 17.93.075 Signs - Permitted Illumination

17.93.075 Signs – Permitted illumination.

Signs may be unlighted, lighted externally, lighted internally, or backlit. All sign lighting must be designed, directed, and shielded in such a manner that the light source is not visible beyond the property boundaries where the sign is located. Lighting for signs must be directed such that only the sign face is illuminated. All lighted signs must have stationary and constant lighting. All sign lighting is included in the calculation of total light output for a property. All illuminated signs must conform to the lighting hours detailed in section 17.09.065.

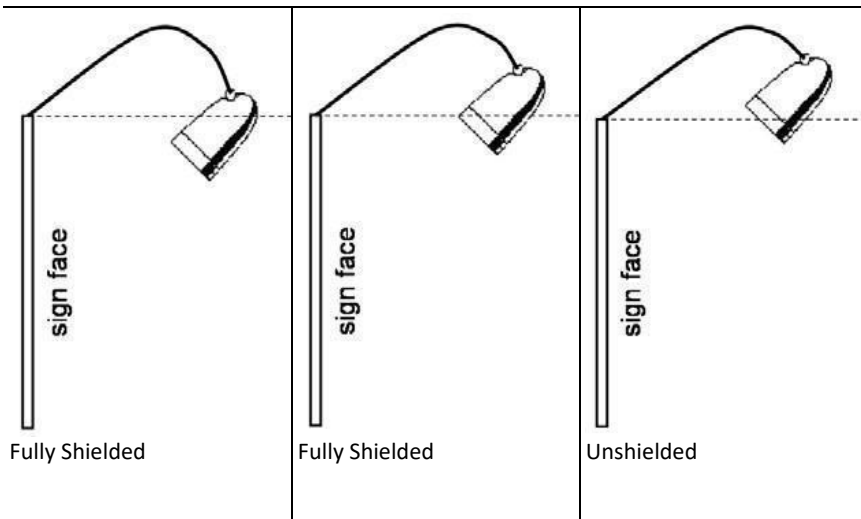
A. Standards for Externally Illuminated Signs.

1. Lighting for externally illuminated signs must be aimed and shielded so that light is directed only onto the sign face and does not trespass onto adjacent streets, roads or properties or into the night sky.
2. Lighting for externally illuminated signs must be mounted at the top of the sign (or within two feet of the top of a wall mounted sign) except for freestanding monument style signs which may be illuminated by ground mounted lighting.
3. Lighting shall consist of no more than four individual fixtures (or lamps) per sign face and produce a maximum of forty thousand lumens per fixture.
4. All sign lighting shall be included in the calculation of total light output.

Commented [KJ58]: Richard's suggestion; I can see the point, since top mounted lights on monuments would look awkward.

Allowed

Not Allowed



B. Standards for Internally Illuminated Signs.

1. Only sign text areas and logos may be illuminated on an internally illuminated sign.
2. Internally illuminated signs shall use semi-opaque materials for sign text and logos such that the light emanating from the sign is diffused. Transparent or clear materials are not allowed for sign text and logos. Nontext portions of the sign (e.g., background and graphics other than the logo) shall be made of completely opaque material.

C. Standards for Backlit Signs.

1. The light source shall not be visible.
2. Backlit signs shall only allow indirect illumination to emanate from the sign. For example, signs that create a “halo” effect around sign copy are allowed.

D. Standards for Illuminated Window Signs.

1. Businesses may display a maximum of two illuminated window signs positioned to be primarily visible outside the business structure.
2. Illuminated window signs shall not exceed four square feet in area.
3. Illuminated window signs shall not be illuminated when the business is closed.

(Ord. 22-07 § 3, 2022; Ord. 19-03 Att. 1 (part), 2019. Formerly 17.09.465)

Section 3. Amendments to MMC Sections 17.20.040 C-1, 17.21.040 C-2, 17.24.040 C-3 and 17.27.040 C-4 Special Provisions

B. No dust, odor, smoke, vibration, directed illumination or intermittent glare or noise shall be emitted which is discernible beyond the premises, except for normal traffic movements.

Commented [KJ59]: Richard’s addition, to process directed illumination as a nuisance immediately. I support this, but we’ll still need to work out staff’s version of “directed” versus direct.

Section 4. Addition to MMC Sections 17.30.040 C-5, 17.31.040 RC, 17.32.040 SAR, 17.35.060 MH/RV, 17.36.070 I-1, 17.42.060 R-1, 17.45.060 R-2, 17.48.060 R-3, 17.51.060 R-4 and 17.54.070 RA-1 Special Provisions

B. No dust, odor, smoke, vibration, directed illumination or intermittent glare or noise shall be emitted which is discernible beyond the premises, except for normal traffic movements.