

Midway City Council
2 August 2022
Regular Meeting

Ordinance 2022-12 /
Dark Sky Preservation



Midway

CITY COUNCIL MEETING STAFF REPORT

DATE OF MEETING: August 2, 2022

NAME OF APPLICANT: Midway City

AGENDA ITEM: Code Text Amendment to Section 5.02.080 – Outdoor Lighting and Glare

ITEM: 11

Midway City is proposing an amendment to Chapter 5.02.080: Outdoor Lighting and Glare. The proposed amendment would modify regulations for outdoor lighting.

BACKGROUND:

The purpose of this item is to modify the current Outdoor Lighting and Glare ordinance in title 5 to address current concerns with outdoor lighting. In the January planning commission meeting, planning staff presented a comprehensive overhaul of this section, but the item was continued with a request that staff engage an electrical engineer with experience in lighting and dark sky ordinances. Since then, the City Council has enacted a pending ordinance which means that any subdivision applications or building permits that are submitted after the date the pending ordinance was adopted, will need to comply with the new provisions adopted in section 5.02.080 – Outdoor Lighting and Glare. This includes both development and building permit applications.

Staff anticipates proposing a more comprehensive revision of the code in the future once the general plan update has been completed and staff has the time to engage an electrical engineer with outdoor lighting regulation experience. In the short term, in the hope of addressing some of the immediate concerns with outdoor lighting, we are proposing a simpler update of the current code.

Within Midway City there is an increasing desire to keep our skies dark by minimizing the light pollution generated by the ongoing development in the community. The increasing light pollution generated by unnecessary and excess outdoor lighting reduces the ability of residents and visitors to view the night skies, something that many appreciate about our community.

Various communities in the state have adopted “dark sky” ordinances to help address the ever-increasing light pollution that is impacting both urban and rural areas of the state. The International Dark-sky Association defines light pollution as “any adverse or unintended effect of the use of artificial light at night, including sky glow, glare, light trespass, light clutter, decreased visibility at night, and energy waste.”

The immediate concern of staff is outdoor lighting on residential structures and residential properties. Recent housing trends include the installation of soffit and landscaping lights that significantly increase the amount of light pollution within the city. These trends, while not new, appear to have accelerated in recent years. Our intent is that the proposed amendments will help address some of these concerns by doing the following:

- With very few exceptions, require all lighting to be fully shielded.
- Soffit lighting is prohibited except above porches and decks
- Eliminate existing lumen limits
- Provide guidelines for using permanent and temporary holiday lighting
- Require a lighting plan as part of development and building permit applications
- Remove some criteria allowing for temporary exemptions

All permits or applications that are received after the adoption of the pending ordinance will be subject to any adopted modifications, which may include the removal or modification to any lighting that is installed.

Following is the modified code language. We have included a redlined version of the ordinance as exhibit 1 so that you can see what specifically was removed and what has been added.

Section 5.02.080 Outdoor Lighting and Glare

A. Purpose. The purpose of this Section is to restrict the use of outdoor artificial illuminating devices emitting undesirable light rays that:

- 1. Have a detrimental effect on astronomical observations.*
- 2. Create a public nuisance.*

B. General Regulations.

1. The provisions of this Section shall apply to all outdoor artificial illuminating devices, outdoor fixtures, lamps and other devices, permanent or portable, used for illumination or advertisement. Such devices shall include, but are not limited to search, spot, or flood lights, and other fixtures used to illuminate:

- a. buildings and structures*
- b. recreational areas*

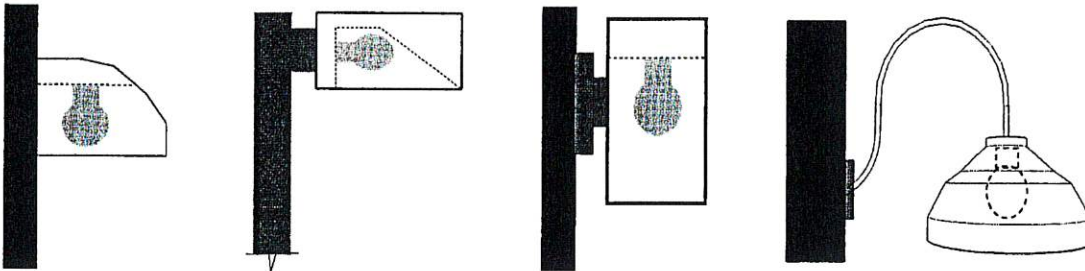
- c. *parking lot lighting*
 - d. *billboards and other signs (advertising or other)*
 - e. *street lighting*
 - f. *lighting for gas station canopies and other similar uses*
 - g. *general area and yard lighting (including security lighting and lighting for the convenience of customers, patrols, visitors, and so forth)*
2. *Every outdoor light source shall be operated so that it does not emit a beam or intense glare beyond the property boundary. Such lighting shall be operated in a way that it is directed away from and shielded from any adjacent property and shall not detract from driver visibility on adjacent streets. Compliance is achieved with fixture shielding, directional control designed into the fixture, fixture location, fixture height, fixture aim, or a combination of these factors.*
3. *All outdoor artificial illuminating devices, except those devices exempted in 5.02.080 (E), shall be fully shielded as required in this Chapter.*
4. *Service Station Canopy Lighting. The following requirements shall apply to service station canopies:*
- a. *All luminaries mounted on the under surface of service station canopies shall be fully shielded and utilize flat glass or flat plastic (acrylic or polycarbonate) covers.*
 - b. *The total light output used for illuminating service station canopies, defined as the sum of all under-canopy initial bare-lamp outputs in lumens, shall not exceed 100 lumens per square foot of canopy in all lighting mounted under the canopy, including but not limited to luminaries mounted on the lower surface of the canopy and auxiliary lighting within signage or panels over the pumps, is to be included toward the total.*
5. *The provisions of this Section are not intended to prevent the use of any material or method of installation that is not specifically prohibited by this Section, if any such alternative has been approved by the Planning Director. The Planning Director may approve any such alternate as long as the proposed design, material or method:*
- a. *Provides approximate equivalence to those specific requirements of this Section; or*
 - b. *Is otherwise satisfactory and complies with the intent of this Section.*
6. *All outdoor illuminating devices shall be installed in conformance with the provisions of this Section as well as with all other provisions of the Midway City Land Use and Building Codes, as these are later amended and as applicable. Any language contained in this Section that conflicts with other Sections of the Midway City Municipal Code shall be construed consistent with this Section.*
7. *All illuminated signs shall comply with the standards of Section 16.21.*

C. Definitions

1. *Fully Shielded. (full cut off) Fixtures shall be shielded in such a manner that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, are below a horizontal plane running through the lowest point on the fixture where light is emitted, thus preventing the emission of light above the horizontal. This fixture has a solid housing with a flat lens or bottom and the bulb is fully within the housing. This type of fixture provides optimum light control. See figure 1 for examples of fully shielded*

fixtures.

Figure 1



- 2. Foot candle. A unit of illuminance amounting to one lumen per square foot.*
- 3. Glare. The sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance and visibility.*
- 4. Illuminance. The quantity of light, or luminous flux, arriving at a surface divided by the area of the illuminated surface, measured in lux or foot candles.*
- 5. Luminance. The physical quantity corresponding to the brightness of a surface (e.g. lamp, luminaire, sky, or reflecting material) in a specified direction. It is the luminous intensity of an area of the surface divided by that area. The unit is candela per square meter.*
- 6. Lux (lx). The SI unit of illuminance. One lux is one lumen per square meter.*
- 7. Outdoor Light Output Total. The maximum total amount of light, measured in lumens, from all outdoor light fixtures.*
- 8. Partially Shielded. Fixtures that are shielded in such a manner that the bottom edge of the shield is below the plane centerline of the light source (lamp), minimizing the emission of light rays above the horizontal plane. This type of fixture uses a lamp that is partially exposed and an internal reflector that directs the light downward and spill light to the side and upward. Such fixtures provide some lighting control. Partially shielded fixtures are prohibited except as allowed in 5.02.080 (E).*
- 9. Unshielded Fixtures. A lamp that provides no lighting control and is totally exposed with no internal reflector, allowing light to be emitted in all directions. This type of fixture provides no lighting control. Unshielded fixtures are prohibited except as allowed in 5.02.080 (E).*

D. Prohibitions.

- 1. The operation of searchlights for advertising purposes are prohibited.*
- 2. The unshielded or partially shielded outdoor illumination of any building, landscaping, signage or other purpose, is prohibited.*
- 3. Soffit lighting and recessed soffit lighting are not allowed except when directly over a porch or deck area.*
- 4. The nighttime use of white lighting or white strobe lighting for communications towers is prohibited. (Nighttime white strobe lighting is not required by the FAA). Applicants must show proof of any such FAA requirement.*

E. Lighting Exemptions.

1. *Temporary emergency lighting in use by law enforcement or government agencies or at their direction.*
2. *Outdoor lighting on facilities and lands owned and operated or protected by the United States Government, the State of Utah, or Wasatch County are exempted by law from all requirements of this Section. Voluntary compliance with the intent of this Chapter at those facilities is encouraged.*
3. *The City Council may grant a special exemption to the City lighting requirements contained herein only upon a written finding that there are extreme geographic or geometric conditions warranting the exemption and that there are no conforming fixtures that would suffice.*
4. *Display of the American flag and Utah Flag on Memorial Hill.*
5. *Temporary exterior lighting intended as holiday or seasonal decorations displayed between November 15th and the following January 20th. Lights that strobe (blinking more than once per second) are prohibited.*
6. *Permanent exterior holiday lighting may be displayed between November 15th and the following January 20th. Lights shall not strobe (blinking more than once per second). Lighting may also be turned on for the following holiday dates (actual dates and observed dates).*
 - a. *Valentine's Day*
 - b. *Washington's Birthday*
 - c. *Memorial Day*
 - d. *Juneteenth National Independence Day*
 - e. *Independence Day*
 - f. *Pioneer Day*
 - g. *Labor Day*
 - h. *Columbus Day*
 - i. *Halloween Day*
 - j. *Veterans Day*
7. *Low-lumen seasonal lights and string lights that are used to outline buildings or illuminate decks, porches and patios are exempt from shielding requirements and can be used year-around used on commercial properties in the C-2, C-3, and RZ zones.*
8. *Commercial sign illumination (not backlit) that is directed specifically for illuminating a sign that has been approved by the VAC. This provision is only allowed in the C-2, C-3, and RZ zones.*

F. Lighting Plan - All sign permit applications, subdivision applications, site plan applications, building permit applications (residential, commercial and resort), 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:

- a. *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.*
- b. *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 and shielding mechanisms to be able to determine compliance with the provisions of this chapter.

We would encourage members of the City Council to take a few minutes leading up to our meeting to observe residential lighting in both established areas and newly constructed areas to see how the proposed language and alternative B ideas could impact outdoor lighting.

POSSIBLE FINDINGS:

- The proposed adjustment could help curb the ever-increasing issue of light pollution as the city continues to grow and residential properties are developed
- The proposed adjustment will prohibit the use of un-shielded fixtures and limit the use of partially shielded fixtures
- The proposed adjustment will create many non-conforming lighting fixtures
- The proposed adjustment would require proof of compliance at building permit and development application

ALTERNATIVE ACTIONS:

1. Approval. This action can be taken if the City Council finds that the proposed language is an acceptable amendment to the City’s Municipal Code.
 - a. Accept staff report
 - b. List accepted findings
2. Continuance. This action can be taken if the City Council would like to continue exploring potential options for the amendment.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for continuance
 - i. Unresolved issues that must be addressed
 - d. Date when the item will be heard again
3. Recommendation of Denial. This action can be taken if the Planning Commission finds that the proposed amendment is not an acceptable revision to the City’s Municipal Code.
 - a. Accept staff report
 - b. List accepted findings
 - c. Reasons for denial

Exhibits

Exhibit 1 – Redlined Version of Section 5.02.080 – Outdoor Lighting and Glare ordinance

Exhibit 1

Section 5.02.080 Outdoor Lighting and Glare

A. Purpose. The purpose of this Section is to restrict the use of outdoor artificial illuminating devices emitting undesirable light rays that:

1. Have a detrimental effect on astronomical observations.
2. Create a public nuisance.

B. General Regulations.

1. The provisions of this Section shall apply to all outdoor artificial illuminating devices, outdoor fixtures, lamps and other devices, permanent or portable, used for illumination or advertisement. Such devices shall include, but are not limited to search, spot, or flood lights, and other fixtures used to illuminate:

- a. buildings and structures
- b. recreational areas
- c. parking lot lighting
- d. billboards and other signs (advertising or other)
- e. street lighting
- f. lighting for gas station canopies and other similar uses
- g. general area and yard lighting (including security lighting and lighting for the convenience of customers, patrols, visitors, and so forth)

2. Every outdoor light source shall be operated so that it does not emit a beam or intense glare beyond the property boundary. Such lighting shall be operated in a way that it is directed away from and shielded from any adjacent property and shall not detract from driver visibility on adjacent streets. Compliance is achieved with fixture shielding, directional control designed into the fixture, fixture location, fixture height, fixture aim, or a combination of these factors.

3. All ~~outdoor artificial illuminating devices~~ ~~exterior illuminating devices~~, except those devices exempted in 5.02.080 (E) ~~from this Section~~, shall be fully ~~or partially~~ shielded as required in this Chapter, ~~“Requirements for Shielding and Filtering,” including requirements set forth in Table 2.~~

4. ~~Those outdoor light fixtures requiring a filter according to Table 2 below shall be equipped with a filter consisting of a glass, acrylic or translucent enclosure. Quartz glass does not meet this requirement.~~

5. ~~Outdoor light output total. For lamp types that vary in their output as they age (such as high pressure sodium), the initial output, as defined by the manufacturer, is the value to be considered. For determining compliance with this Chapter, the light emitted from outdoor light fixtures is to be included in the total output as follows:~~

- a. ~~Outdoor light fixtures installed on poles (such as parking lot luminaries) and light fixtures installed on the sides of buildings or other structures, when not shielded from above by the structure itself as defined in b and c below, are to be included in the total outdoor light output by simply adding the lumen output of the lamps used.~~
- b. ~~Outdoor light fixtures installed under canopies, building overhangs, or roof eaves where the center of the lamp or luminary is located at least five feet but less than ten feet from the nearest edge of the canopy or overhang are to be included in the total outdoor light output as though they produced only one-quarter (1/4) of the lamp’s rated lumen output.~~
- c. ~~Outdoor light fixtures located under the canopy and ten or more feet from the nearest edge of a canopy, building overhang, or eave are to be included in the total outdoor light output as though they are produced one-tenth (1/10) of the lamp’s rated lumen output.~~

~~56. Total outdoor light output (excluding streetlights used for illumination of public rights-of-way) of any development project in Midway City shall not exceed 80,000 lumens per net acre, averaged over the entire project. Furthermore, no more than 5,500 lumens per net acre may be accounted for by lamps in unshielded or partially shielded fixtures permitted in Table 2, except that lamps emitting no more than 4,720 lumens per single family dwelling unit or duplex dwelling unit for residential outdoor lighting purposes are exempt from the shielding requirements of Table 2, though they must conform to all other applicable restrictions. Single-family attached units (e.g. townhouses), and multi-family residential units are limited to 360 lumens of unshielded lights per unit.~~

~~47. Service Station Canopy Lighting. In addition to the calculations for subsections 5 and 6 above, the~~ The following requirements shall apply to service station canopies:

- a. All luminaries mounted on the under surface of service station canopies shall be fully shielded and utilize flat glass or flat plastic (acrylic or polycarbonate) covers.
- b. The total light output used for illuminating service station canopies, defined as the sum of all under-canopy initial bare-lamp outputs in lumens, shall not exceed 100 lumens per square foot of canopy in all lighting mounted under the canopy, including but not limited to luminaries mounted on the lower surface of the canopy and auxiliary lighting within signage or panels over the pumps, is to be included toward the total.

~~8. Requirements for Shielding and Filtering.~~

~~a. The requirements for shielding and filtering light emissions from outdoor light fixtures shall be as set forth in the following Table 2 below.~~

59. The provisions of this Section are not intended to prevent the use of any material or method of installation that is not specifically prohibited by this Section, if any such alternative has been approved by the Planning Director. The Planning Director may approve any such alternate as long as the proposed design, material or method:

- a. Provides approximate equivalence to those specific requirements of this Section; or
- b. Is otherwise satisfactory and complies with the intent of this Section.

610. All outdoor illuminating devices shall be installed in conformance with the provisions of this Section as well as with all other provisions of the Midway City Land Use and Building Codes, as these are later amended and as applicable. Any language contained in this Section that conflicts with other Sections of the Midway City Municipal Code shall be construed consistent with this Section.

7. All illuminated signs shall comply with the standards of Section 16.21.

TABLE 2 REQUIREMENTS FOR SHIELDING AND FILTERING

<u>FIXTURE/LAMP TYPE</u>	<u>SHIELDED</u>	<u>FILTERED¹</u>
Low Pressure Sodium ²	Partially	None
High Pressure Sodium	Fully	None
Metal Halide ³	Fully	Yes

Fluorescent	Fully ⁴	Yes ⁵
Quartz ⁶	Fully	None
Incandescent 100-Watt or more (per fixture)	Fully	None
Incandescent 100W or Less (per fixture)	None	None
Mercury Vapor	Fully	Yes
Fossil Fuel	None	None
Glass Tubes filled with Neon, Argon, Krypton	None	None
Other Sources	AS APPROVED BY THE CITY COUNCIL	

¹Most glass, acrylic, or translucent enclosures satisfy these filter requirements. Quartz glass does not meet this requirement.

²This is the preferred light source to minimize undesirable light into the night sky affecting astronomical observations

³Metal halide display lighting shall not be used for security lighting after 11 p.m. (or after closing hours if before 11 p.m.) unless fully shielded. Metal halide lamps shall be in enclosed luminaires.

⁴Outdoor advertising signs of the type constructed for translucent materials and wholly illuminated from within do not require shielding (nevertheless, all signs shall meet requirements in the Sign Regulations of the Zoning Ordinance).

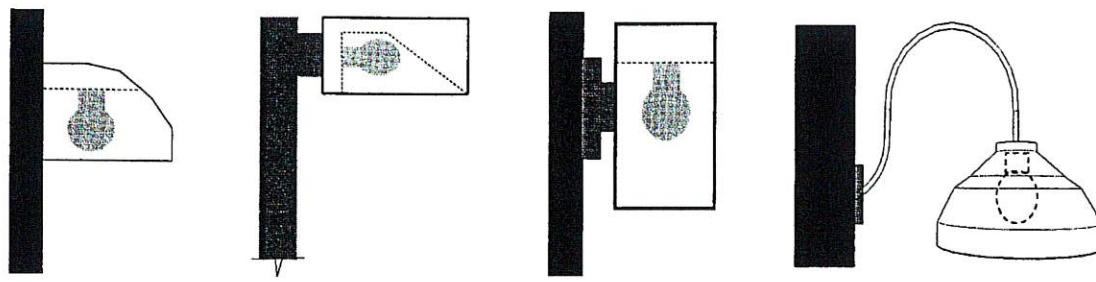
⁵Warm White and Natural Lamps are preferred to minimize detrimental effects.

⁶For the purposes of this Code, quartz lamps shall not be considered an incandescent light source.

C. Definitions

1. Fully Shielded. (full cut off) Fixtures shall be shielded in such a manner that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, are below a horizontal plane running through the lowest point on the fixture where light is emitted, thus preventing the emission of light above the horizontal. ~~This type of fixture uses a lamp that is recessed in the fixture and an internal reflector that directs the light downward, thereby eliminating the spill of light. This fixture has a solid housing with a flat lens or bottom and the bulb is fully within the housing.~~ This type of fixture provides optimum light control. See figure 1 for examples of fully shielded fixtures.

Figure 1



2. Foot candle. A unit of illuminance amounting to one lumen per square foot.
3. Glare. The sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance and visibility.
4. Illuminance. The quantity of light, or luminous flux, arriving at a surface divided by the area of the illuminated surface, measured in lux or foot candles.
5. Luminance. The physical quantity corresponding to the brightness of a surface (e.g. lamp, luminaire, sky, or reflecting material) in a specified direction. It is the luminous intensity of an area of the surface divided by that area. The unit is candela per square meter.
6. Lux (lx). The SI unit of illuminance. One lux is one lumen per square meter.
7. Outdoor Light Output Total. The maximum total amount of light, measured in lumens, from all outdoor light fixtures.
8. Partially Shielded. Fixtures ~~shall be~~ that are shielded in such a manner that the bottom edge of the shield is below the plane centerline of the light source (lamp), minimizing the emission of light rays above the horizontal plane. This type of fixture uses a lamp that is partially exposed and an internal reflector that directs the light downward and spill light to the side and upward. Such fixtures provide some lighting control. Partially shielded fixtures are prohibited except as allowed in 5.02.080 (E).
9. Unshielded Fixtures. A lamp that provides no lighting control and is totally exposed with no internal reflector, allowing light to be emitted in all directions. This type of fixture provides no lighting control. Unshielded fixtures are prohibited except as allowed in 5.02.080 (E).

D. Prohibitions.

1. The operation of searchlights for advertising purposes are prohibited.
2. The unshielded or partially shielded outdoor illumination of any building, landscaping, signing signage or other purpose, is prohibited. ~~except with incandescent fixtures less than 100 watts per fixture, fossil fuels, and/or glass tubes (see Table 2).~~
3. Soffit lighting and recessed soffit lighting are not allowed except when directly over a porch or deck area.
34. The nighttime use of white lighting or white strobe lighting for communications towers is prohibited. (Nighttime white strobe lighting is not required by the FAA). Applicants must show proof of any such FAA requirement.

E. Lighting Exemptions.

1. Temporary emergency lighting in use by law enforcement or government agencies or at their direction. Light fixtures using fossil fuel (i.e. light produced directly or indirectly by the combustion of natural gas or other utility type fossil fuels) are exempt from the requirements of this Chapter.
2. Outdoor lighting on facilities and lands owned and operated or protected by the United States Government, ~~or~~ the State of Utah, or Wasatch County are exempted by law from all requirements of this Section. Voluntary compliance with the intent of this Chapter at those facilities is encouraged.
3. The illumination of outdoor recreational facilities, public or private, shall be shielded such that the glare or beam does not emit beyond property lines, and no such facility shall be illuminated after 11 p.m. except to conclude a specific sporting event or any other activity

~~conducted at a ball park, outdoor amphitheater, arena or similar facilities in progress prior to 11 p.m.~~

~~34. The City Council may grant a special exemption to the City lighting requirements contained herein only upon a written finding that there are extreme geographic or geometric conditions warranting the exemption and that there are no conforming fixtures that would suffice.~~

~~45. Display of thean American flag and Utah Flag on Memorial Hill .~~not to exceed 150 watts per fixture.~~~~

~~56. Seasonal holiday displays. Temporary exterior lighting intended as holiday or seasonal decorations displayed between November 15th and the following January 20th. Lights that strobe (blinking more than once per second) are prohibited.~~

~~6. Permanent exterior holiday lighting may be displayed between November 15th and the following January 20th. Lights shall not strobe (blinking more than once per second). Lighting may also be turned on for the following holiday dates (actual dates and observed dates).~~

~~a. Valentines Day~~

~~b. Washington's Birthday~~

~~c. Memorial Day~~

~~d. Juneteenth National Independence Day~~

~~e. Independence Day~~

~~f. Pioneer Day~~

~~g. Labor Day~~

~~h. Columbus Day~~

~~i. Halloween Day~~

~~j. Veterans Day~~

~~7. Low-lumen seasonal lights and string lights that are used to outline buildings or illuminate decks, porches and patios are exempt from shielding requirements and can be used year-around used on commercial properties in the C-2, C-3, and RZ zones.~~

~~8. Commercial sign illumination (not backlit) that is directed specifically for illuminating a sign that has been approved by the VAC. This provision is only allowed in the C-2, C-3, and RZ zones.~~

~~F. Lighting Plan - All sign permit applications, subdivision applications, site plan applications, building permit applications (residential, commercial and resort), 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:~~

~~a. 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.~~

~~b. 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 and shielding mechanisms to be able to determine compliance with the provisions of this chapter.

Temporary Exemptions. Any individual as defined herein may submit a written request to the City Council on a Midway City form prepared for a “temporary exemption” to the requirements. The exemption shall contain the following listed information:

1. Specific exemptions and justification for exemptions requested.
2. Type, use and hours of operation of exterior light involved.
3. Duration of time for requested exemption.
4. Type of lamp and calculated lumens.
5. Total wattage of lamps.
6. Proposed location of exterior light.
7. Physical size of exterior lights and type of shielding and/or filtering provided.
8. Previous temporary exemption, if any.

In addition to the above data, the City Council may request any additional information which would enable its member to make a reasonable evaluation of the request for temporary exemption. The City Council may grant a temporary exemption only if it finds that doing so would not be injurious to the public health, safety, or welfare and would not constitute a nuisance.



Midway

ORDINANCE

2022-_____

**AN ORDINANCE TO AMEND CERTAIN SECTIONS OF
THE MIDWAY CITY MUNICIPAL CODE TO ADDRESS
OUTDOOR LIGHTING AND GLARE.**

WHEREAS, pursuant to Utah Code Section 10-9a-509 the Midway City Council may formally initiate proceedings to amend city ordinances; and

WHEREAS, within Midway City, there is an increasing desire to keep the City's skies dark by minimizing light pollution generated by the ongoing development in the community; and

WHEREAS, the increased light pollution reduces the ability of residents and visitors to view the night skies, something that many appreciate about Midway City; and

WHEREAS, the immediate concern of the Midway City Council is outdoor lighting on residential structures and properties, which have recently trended toward installing soffit and landscaping lights that significantly increase light pollution in Midway City; and

WHEREAS, the Midway City Council desires to amend Section 5.02.080 to address these concerns.

NOW THEREFORE, be it ordained by the City Council of Midway City, Utah, as follows:

Section 5.02.080 shall be amended to read as follows:

Section 5.02.080 Outdoor Lighting and Glare

A. Purpose. The purpose of this Section is to restrict the use of outdoor artificial illuminating devices emitting undesirable light rays that:

1. Have a detrimental effect on astronomical observations.
2. Create a public nuisance.

B. General Regulations.

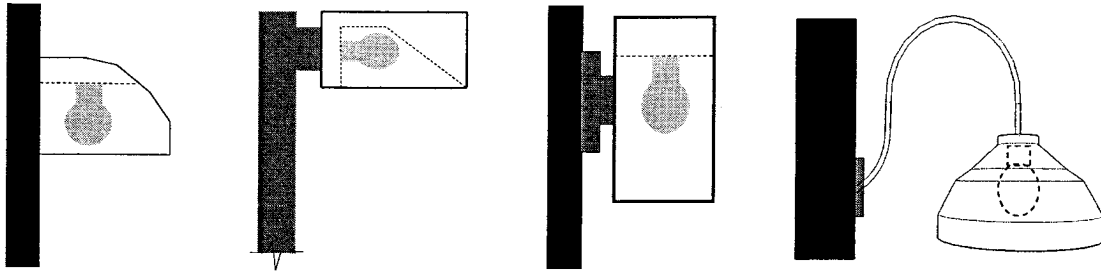
1. The provisions of this Section shall apply to all outdoor artificial illuminating devices, outdoor fixtures, lamps and other devices, permanent or portable, used for illumination or advertisement. Such devices shall include, but are not limited to search, spot, or flood lights, and other fixtures used to illuminate:
 - a. buildings and structures
 - b. recreational areas
 - c. parking lot lighting
 - d. billboards and other signs (advertising or other)
 - e. street lighting
 - f. lighting for gas station canopies and other similar uses
 - g. general area and yard lighting (including security lighting and lighting for the convenience of customers, patrols, visitors, and so forth)
2. Every outdoor light source shall be operated so that it does not emit a beam or intense glare beyond the property boundary. Such lighting shall be operated in a way that it is directed away from and shielded from any adjacent property and shall not detract from driver visibility on adjacent streets. Compliance is achieved with fixture shielding, directional control designed into the fixture, fixture location, fixture height, fixture aim, or a combination of these factors.
3. All outdoor artificial illuminating devices, except those devices exempted in 5.02.080 (E), shall be fully shielded as required in this Chapter.
4. Service Station Canopy Lighting. The following requirements shall apply to service station canopies:
 - a. All luminaries mounted on the under surface of service station canopies shall be fully shielded and utilize flat glass or flat plastic (acrylic or polycarbonate) covers.
 - b. The total light output used for illuminating service station canopies, defined as the sum of all under-canopy initial bare-lamp outputs in lumens, shall not exceed 100 lumens per square foot of canopy in all lighting mounted under the canopy, including but not limited to luminaries. mounted on the lower surface of the canopy and auxiliary lighting within signage or panels over the pumps, is to be included toward the total.
5. The provisions of this Section are not intended to prevent the use of any material or method of installation that is not specifically prohibited by this Section, if any such alternative has been approved by the Planning Director. The Planning Director may approve any such alternate as long as the proposed design, material or method:
 - a. Provides approximate equivalence to those specific requirements of this Section; or
 - b. Is otherwise satisfactory and complies with the intent of this Section.
6. All outdoor illuminating devices shall be installed in conformance with the provisions of this Section as well as with all other provisions of the Midway City Land Use and Building Codes, as these are later amended and as applicable. Any language contained in this Section that conflicts with other Sections of the Midway City Municipal Code shall be construed consistent with this Section.
7. All illuminated signs shall comply with the standards of Section 16.21.

C. Definitions

1. Fully Shielded. (full cut off) Fixtures shall be shielded in such a manner that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture,

are below a horizontal plane running through the lowest point on the fixture where light is emitted, thus preventing the emission of light above the horizontal. This fixture has a solid housing with a flat lens or bottom and the bulb is fully within the housing. This type of fixture provides optimum light control. See figure 1 for examples of fully shielded fixtures.

Figure 1



2. Foot candle. A unit of illuminance amounting to one lumen per square foot.
3. Glare. The sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance and visibility.
4. Illuminance. The quantity of light, or luminous flux, arriving at a surface divided by the area of the illuminated surface, measured in lux or foot candles.
5. Luminance. The physical quantity corresponding to the brightness of a surface (e.g. lamp, luminaire, sky, or reflecting material) in a specified direction. It is the luminous intensity of an area of the surface divided by that area. The unit is candela per square meter.
6. Lux (lx). The SI unit of illuminance. One lux is one lumen per square meter.
7. Outdoor Light Output Total. The maximum total amount of light, measured in lumens, from all outdoor light fixtures.
8. Partially Shielded. Fixtures that are shielded in such a manner that the bottom edge of the shield is below the plane centerline of the light source (lamp), minimizing the emission of light rays above the horizontal plane. This type of fixture uses a lamp that is partially exposed and an internal reflector that directs the light downward and spill light to the side and upward. Such fixtures provide some lighting control. Partially shielded fixtures are prohibited except as allowed in 5.02.080 (E).
9. Unshielded Fixtures. A lamp that provides no lighting control and is totally exposed with no internal reflector, allowing light to be emitted in all directions. This type of fixture provides no lighting control. Unshielded fixtures are prohibited except as allowed in 5.02.080 (E).

D. Prohibitions.

1. The operation of searchlights for advertising purposes are prohibited.
2. The unshielded or partially shielded outdoor illumination of any building, landscaping, signage or other purpose, is prohibited.
3. Soffit lighting and recessed soffit lighting are not allowed except when directly over a porch or deck area.

4. The nighttime use of white lighting or white strobe lighting for communications towers is prohibited. (Nighttime white strobe lighting is not required by the FAA). Applicants must show proof of any such FAA requirement.

E. Lighting Exemptions.

1. Temporary emergency lighting in use by law enforcement or government agencies or at their direction.
2. Outdoor lighting on facilities and lands owned and operated or protected by the United States Government, the State of Utah, or Wasatch County are exempted by law from all requirements of this Section. Voluntary compliance with the intent of this Chapter at those facilities is encouraged.
3. The City Council may grant a special exemption to the City lighting requirements contained herein only upon a written finding that there are extreme geographic or geometric conditions warranting the exemption and that there are no conforming fixtures that would suffice.
4. Display of the American flag and Utah Flag on Memorial Hill.
5. Temporary exterior lighting intended as holiday or seasonal decorations displayed between November 15th and the following January 20th. Lights that strobe (blinking more than once per second) are prohibited.
6. Permanent exterior holiday lighting may be displayed between November 15th and the following January 20th. Lights shall not strobe (blinking more than once per second). Lighting may also be turned on for the following holiday dates (actual dates and observed dates).
 - a. Valentine's Day
 - b. Washington's Birthday
 - c. Memorial Day
 - d. Juneteenth National Independence Day
 - e. Independence Day
 - f. Pioneer Day
 - g. Labor Day
 - h. Columbus Day
 - i. Halloween Day
 - j. Veterans Day
7. Low-lumen seasonal lights and string lights that are used to outline buildings or illuminate decks, porches and patios are exempt from shielding requirements and can be used year-around used on commercial properties in the C-2, C-3, and RZ zones.
8. Commercial sign illumination (not backlit) that is directed specifically for illuminating a sign that has been approved by the VAC. This provision is only allowed in the C-2, C-3, and RZ zones.

F. Lighting Plan - All sign permit applications, subdivision applications, site plan applications, building permit applications (residential, commercial and resort), 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:

- a. 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.

b. 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 and shielding mechanisms to be able to determine compliance with the provisions of this chapter.

This ordinance shall take effect upon publication as required by law.

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DRAFT

PASSED AND ADOPTED by the City Council of Midway City, Wasatch County, Utah
this ____ day of _____, 2022.

	AYE	NAY
Council Member Steve Dougherty	_____	_____
Council Member Jeff Drury	_____	_____
Council Member Lisa Orme	_____	_____
Council Member Kevin Payne	_____	_____
Council Member JC Simonsen	_____	_____

DRAFT

APPROVED:

Celeste Johnson, Mayor

ATTEST:

Brad Wilson, City Recorder

APPROVED AS TO FORM:

Corbin Gordon, City Attorney

(SEAL)