Wasatch County
Planning Commission
March 30, 2023

Item #1

Ordinance 16.21.16 and 16.26
-Church of Jesus Christ of Latter Day Saints-

Code Text Amendment
ITEM 1

Core architecture, representing the Church of Jesus Christ of Latter Day Saints, is requesting an amendment to Wasatch County Code §16.21.16 and §16.26 that will affect how outdoor lighting is regulated by the County. *If forwarded, the recommendation by the Planning Commission on this item will be considered by the County Council as the Legislative Body, at a Public Hearing on April 5, 2023. (DEV-7336; Doug Smith)

APPLICATION SUMMARY

Applicant: Curtis Miner, representing the LDS Church
Hearing Date: 30 March 2023
Related Applications: None
Affected Zone(s): Countywide
Applicable Code Section(s): 16.21.16 (Outdoor Lighting Regulations), 16.26 (Sign Regulations)

BACKGROUND

This is a proposed code amendment to change the outdoor lighting section of the code as well as sections of the sign code that relate to lighting. Utah Code does not require cities or counties to adopt dark sky ordinances. However, Wasatch County has worked for decades to reduce outdoor light pollution. The outdoor lighting regulations were originally adopted in 2003 and have been amended since that time in 2013 and 2014. Since the inception of the code in 2003 the code has mostly been used for street and parking lot lighting. Most of the development in the county is residential and parking lot lights have been the limited commercial lighting that has been reviewed for compliance. Residential lighting (home, porch, garage, decks etc.) for private homes have not been regulated. The existing code intends to preserve the night sky by requiring lighting to have a 90 degree or less cutoff angle directed down, but does not include any further limitations. The code does not presently adhere to widely recognized latest dark-sky best practices.

The purpose and intent of this staff report is to provide the necessary information in a concise and clear manner so that the decision makers (planning commission and county council) can make an informed decision based on an understanding of the proposed changes. The adoption of any code is a legislative decision made by the County Council after a recommendation by the Planning Commission. This requires a general understanding of terms that will be discussed later in this report.

The impetus behind this proposal is an application submitted by the LDS Church who has an interest in the code due to a proposed temple and its associated lighting. Requests to amend the County code require the applicant to provide proposed code language the applicant wants changed, which the LDS Church provided. The County staff is recommending a different code than what was initially proposed by the Church. The County staff, including a consultant, reviewed the proposed code by the LDS Church and determined that a more comprehensive overhaul of the ordinance could better meet the needs of the County than either the LDS Church proposed code or the existing code. Any amendments to the code, if approved, would apply countywide.
The lighting code amendment application is the first step the LDS Church has taken towards approving the temple. Whether the lighting code is approved or not, the proposed temple may still have to go through a subdivision plat, a conditional use, and a site plan approval. Applications for further processing have not been applied for at this time and are not part of this discussion or decision.

After initial discussions with the LDS Church it was determined that the Church would need to comply with the existing code or apply for a code amendment because, as depicted in published renderings and considering the lighting verbally discussed by the Church, the temple could not comply with the existing lighting code which requires that, “All light shall require a luminary or shield with less than a ninety (90) degree full cutoff. All light rays emitted by the fixture, either directly from the lamps or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted (16.21.16 D)”.

The existing code is two pages long and, for the most part, has provided the needed protection with the limited types of projects the County has seen. In the future the County anticipates dealing more with mixed use (residential and commercial) villages and multi-story buildings as the development in the Jordanelle basin becomes more imminent. Lighting technology in the last 20 years since the original code adoption has become increasingly complex. The existing code does not take advantage of any of the advances in technology. The latest lighting allows for manipulation of color temperature, brightness, timing, shielding and direction among other things. The current code, although requiring everything to be directed down, does not limit the total amount of lighting on a site, luminance, provide for dimmers, photo cells, lighting time limits or limits to the correlated color temperature (kelvins). Under the current code an applicant could have as many lights on a site at any level of total lumens as wanted on a building and grounds as long as they meet the single requirement of being directed downward. This amendment to the code proposes to better address the County goals by adding regulations to cap total lumens on a site and by adapting the regulatory measures to reflect current technologies.

Large commercial and institutional projects, like the temple, typically employ lighting engineers. In order to ensure we were utilizing superior expertise on the latest lighting technology and terminology, the County hired a consultant to help review the proposed code and identify suggested modifications to the proposal. After interviewing a number of lighting consultants the County contracted to work with John Barentine with Dark Sky Consulting in Tucson Arizona. Mr. Barentine, Ph. D., was the former International Dark Sky Places Program Manager and Director of Public Policy for the International Dark Sky Association (IDA). In his role with IDA, Mr. Barentine worked to help communities and agencies like the US and UK National Parks establish dark sky conservation best practices. Mr. Barentine also helped applicants through the nomination process in 29 of the 38 IDA Communities (IDSCs) designated to date, including both Utah IDSCs (Helper and Torrey). In addition, he advised a number of Utah municipalities seeking to write or improve outdoor lighting ordinances (Bluff, Springdale, Ivins and Kanab). County staff has relied heavily on Mr. Barentine for technical advice and with the writing of the proposed code.

The Planning Department has received a number of e-mails and letters regarding the proposal. All of the letters have been saved and catalogued. These letter only reflect those that were sent regarding the change of the ordinance not the temple in general. Here is the web link to a file share service containing all the letters for review: https://app.sharebase.com/#/folder/10542/share/156-wcWblODkme7M2LL3iu62BDrRppx. We have not attempted to catalogue all the emails sent to the council.

County staff, for some time, has wanted to update the County outdoor lighting regulations, and the Church’s application served as a catalyst for a comprehensive update. To date from the time of retaining Mr. Barentine, the proposed County version of the code has been a working document formed through interaction between the County staff, a subcommittee of three council members who received substantial comment from county residents, and Mr. Barentine. As the initial applicant for the code change, the LDS Church has given input on the ordinance from time to time, and
their initial proposal was considered, but the draft ordinance is designed by staff to serve as a generally applicable ordinance for the County. The latest iteration derived from the process of review by both parties becomes the proposal presented to the County Council for consideration. Most likely there will not be consensus between the County and LDS Church on some items in the proposed code.

Due to the large amount of public interest in this issue, the County has sought to facilitate public comment by moving the public hearings to the Senior Center, which can accommodate many more people than the regularly used Council Chambers. Staff has also posted this staff report and the draft code on the County website about a week before the first public hearing. This was done in order to give the planning commission and public time to carefully consider the staff’s recommendations to the Planning Commission before the first public hearing on the ordinance. Staff published the notice of the first public hearing over 14 days before the hearing in the Wasatch Wave, and in several other ways to try and ensure the public was aware of the public hearings. This is in addition to following the minimum requirements under the Wasatch County Code and Utah Code for noticing a public hearing. After the public hearing and after the item is forwarded from the Planning Commission, the code in its entirety, as well as any issues where consensus has not been reached, will be decided by the County Council who has sole discretion regarding legislative issues.

**IMPORTANT TERMS TO UNDERSTAND**

Most of the following terms are part of the proposed code and contained in the definitions section. The terms are important in understanding how the code regulates lighting. Explanatory comments, if provided, are italicized.

**CORRELATED COLOR TEMPERATURE (CCT):** The absolute temperature of a blackbody whose chromaticity most nearly resembles that of the light source. CCT values, measured in units of Kelvins (K), are typically provided in lighting manufacturer data sheets.

*CCT is a measure of how the human eye perceives the color. The higher the Kelvin level the whiter the light appears. In this situation the code is proposing a CCT kelvin level of 3000 which is a warmer yellowish color. A higher CCT like 5000 will be a whiter/bluer, cooler light. CCT is not brightness but color.*

**INTERNATIONAL BUILDING CODE (IBC):** The International Building Code (IBC) is the foundation of the complete Family of International Codes. It is an essential tool to preserve public health and safety that provides safeguards from hazards associated with the built environment. It addresses design and installation of innovative materials that meet or exceed public health and safety goals.

*The IBC is adopted by the state of Utah and the County for regulation of building and minimum safety standards associated with building. The IBC requires minimum outdoor lighting for access from a building to a public way.*

**ILLUMINATING ENGINEERING SOCIETY (IES):** An industry-supported, nonprofit learned society headquartered at 120 Wall Street, New York City, New York, recognized as an authoritative body on the science and application of lighting that publishes and promotes recommended practices for a variety of specific lighting applications.

*The IES standards in the proposed code are used to set the standards for the parking lot lighting areas. The IES is proposed to be used because they are a recognized authority on lighting regulations and are considered conservative in their approach. IES lighting recommendations are made through an American National Standards Institute (ANSI)-accredited process on the basis of a combination of scientific research and the consensus of lighting engineers and designers who serve on its technical committees.*
**IMPROVED ACRE:** The gross acreage of a parcel less any acres that are not covered by structures, impervious surfaces and manicured or irrigated landscape areas. Landscape areas not accessible to pedestrians, stormwater facilities and areas of native vegetation are considered unimproved for the purposes of this definition.

What this definition intends to do is not allow the applicant to count the whole site as improved and get a higher total Lumen number that can be concentrated in a smaller portion of the site. Following the principles of dark-sky friendly outdoor lighting published by the IDA, the reasoning for this is that outdoor lighting should serve a readily identifiable purpose benefitting people; therefore, lighting allowances should not scale up with undeveloped portions of parcels that are not expected to be illuminated at night. The code proposes to count the portion of the site that is improved in calculating the amount of lumens.

**EXEMPT LIGHTING** – The proposed code allows for exemption for lighting required by a governmental agency higher than the County.

Any requirements of the IBC for egress from the building to a public way as well as any required FAA lighting as per the proposed code would be exempt from the lighting cap. The proposed code also allows for exempting parking lot lighting that is limited to the minimum illumination level recommended by the IES standards. What this means is the cap on the lumens per improved acre only counts for the building lighting, landscape lighting etc. not otherwise required elsewhere in the code or by the state of Utah or the federal government.

The term “exempt lighting” is in this staff report to help people understand the effect of the ordinance, although this term is not a defined term in the ordinance.

**LUMEN:** The SI unit of luminous flux equal to the luminous flux emitted within a unit solid angle (one steradian) by a point source having a uniform luminous intensity of one candela.

A lumen is a unit representing the amount of light emitted by a fixture. For example, a candle flame emits about 12 lumens of light. The amount of light from a fixture which is stated and specified by the manufacturer and added together with all fixtures on the site to determine the total Lumens.

**LUMINANCE:** The amount of light that passes through, is emitted, or reflected, from a particular area, and that falls within a given solid angle. Luminance is a measure of light emitted by or from a surface. The SI unit of luminance is candela per square meter (cd/m²).

Luminance is a measure of the light reflected per unit area from a surface which can depend on color of the surface and texture of the surface. It is an industry standard of the perceived brightness of an illuminated surface. This is measured in terms of Candela per square meter. Candela per square meter and Lumens per square foot will be used in presentations as a means to address lighting on a building. The attached code language is proposing Candelas per square meter because it measures the luminance (reflected light) of a structure.

**SINGLE-FAMILY RESIDENTIAL LOT:** a lot for a detached single-family residence, half of a twinhome, or a townhome, and ancillary uses. IADUs, accessory residential units, and caretaker accessory dwelling units do not alone exclude the lot as a single-family residential lot.

For purposes of this code “single family residential lot” and those specific uses listed are exempt from the requirements of this code. This means, as proposed, the code would not be regulating attached lighting (garages, porches) for single family, twin homes or townhomes. This does not preclude regulation of street lights. The code regulates light trespass in residential areas.
SUMMARY OF PROPOSED LIGHTING REGULATIONS

The proposed code regulates exterior lighting in the following fashion:

1. Establishes the improved acreage for the site. This is the total amount of the site minus areas that are not hard surface, buildings or improved landscaping.
2. The improved acreage amount is multiplied by the 25,000 lumens per improved acre to come up with the total lumens allowed on the site.
3. In an effort to balance safety and aesthetics, the code exempts any lighting required by the IBC, FAA or recommended IES minimum standards for parking lot lighting from the number of lumens per improved acre. In essence, the exterior of the building and any other “optional” lighting is the only lighting subject to the total cap. Any lighting besides architectural uplighting that is not required by the IBC, FAA, or the IES recommendations for parking lots, will be required to comply with IES recommendations.
4. The code allows for uplighting of the structure as long as it’s limited to 25,000 lumens per improved acre and lighting is shielded by the building with full cutoff on all fixtures that stops lighting at edge of walls and roof such that the light emitted by the fixture(s) is completely captured by the target surface and is not emitted directly into the night sky or toward any other property. The brightest spots on the building, closest to the fixture, is limited to a maximum of 27 candelas per square meter.
5. The code, as proposed, sets the CCT at 3000 kelvin.

ANALYSIS

The code is lengthy and a page by page analysis has not been provided in this report. This report attempts to address those items that will be the bigger discussion points. This report has attempted to explain those items as openly as possible. The proposed code in its entirety is included in the exhibits to this report.

GENERAL PLAN RECOMMENDATIONS –

The General Plan provides high level goal and policy guidance that are made more specific through code text and zoning maps. As part of the review for any code amendment, the proposal would need to be in compliance with the recommendations of the General plan. If not in compliance with the recommendations of the General Plan, the General Plan would need to be amended or the code should not be approved. Narrative to the sections below is italicized.

Chapter 1: Introduction: Purpose, Intent, and Use of the General Plan:  The purpose, intent, and use of this general plan is to provide a comprehensive approach to the coordination of development, natural resources and open space in such a way as to provide a harmonious relationship that meets the needs of present and future residents and also promotes the health, safety and general welfare of the residents of the County.

Ensuring the health, safety, and general welfare of the residents of the County as provided for in the outdoor lighting code is essential. In order to ensure that development in the county is safe, it is necessary to balance the benefits of reducing light emissions against the benefits of adequate exterior lighting. Under the IBC and FAA regulations, outdoor lighting is required on some walkways and on structures in a flight path. Lighting near fire hydrants and on roads makes roads safer from traffic accidents, crime, and helps mitigate fire risks. Adequate lighting in parking lots also is important to reduce crime and to help people safely walk to and from their car in a parking lot.

Policy 1.1.7 of the General Plan is the most directly applicable to the proposal being considered at this time. It establishes a policy to “Preserve the views of the night sky and reduce the health impacts of artificial light by requiring all development to have dark sky compliant lighting.”

We are not sure what the term “dark sky compliant lighting” meant as referenced in the General plan some 20
years ago. The General Plan certainly could not have envisioned all the current options for controlling light that have been made available in the last 20 years. It may be assumed that dark sky compliant lighting, as it was referred to then, meant that everything is full cutoff and directed down, but this approach does not consider the impact of total outdoor lighting on the site, which can have more impact on light emissions than solely restricting uplighting. The existing code takes a very limited approach of addressing this through a full cut-off requirement. The proposed code amendment augments this by acknowledging technologies that provide the intent of the cut-off, but then adds better regulation to other factors not currently addressed in the code such as, color temperature, lighting levels, and caps on total lumens etc.

Chapter 4: Environmental: Light Pollution: In order to prevent the night skies from being dulled by pollution from street lights, homes, commercial and industrial establishments, the Development Code established lighting standards that would reduce light pollution.

The proposed code helps prevent the night skies from being dulled by light pollution from street lights, commercial, and industrial establishments. It is more restrictive than the existing code by regulating light trespass, and by limiting the total light emissions on developed properties. It is intended to balance the interests of reducing light pollution against some potentially conflicting health, safety, and welfare interests of the residents by allowing for IBC, FAA, or recommendations of the IES to be followed and by allowing for regulated lighting of buildings and landscaping.

EXISTING CODE PURPOSE AND INTENT –

Wasatch County Code 16.02.05 requires that amendments to Title 16 “shall not be made except to promote more fully the objectives and purposes of the general plan and this title.” As stated, proposed amendments should be consistent with the purpose and objectives of the chapter or section being amended. The purpose outlined in the Outdoor Lighting Regulations is quoted below:

The purpose of the outdoor lighting regulations is to establish standards for all outdoor lighting so that its use does not unreasonably interfere with the reasonable use and enjoyment of property and astronomical observations within the county. It is the intent of this section to encourage, through regulation of types, kinds, constructions, installation and uses of outdoor electricity, lighting practices and systems which will reduce light pollution, conserve energy, provide consistent lighting standards, reduce maintenance and replacement costs while increasing nighttime safety, utility, security and productivity.

PARKING LOT AND PATHWAY LIGHTING –

The proposed code has a cap on the total number of lumens per improved acre as a method for controlling how much light output a site will produce. Exempt from the calculation towards maximum allowable lighting is any form of lighting whose use is mandated or otherwise governed by any legal jurisdiction higher than that of the County. This would include the International Building Code (IBC), which the state and County has adopted, and the Federal Aviation Administration (FAA).

The IBC has a minimum requirement to provide safe egress lighting from the exits of a building to a public way. This minimum IBC requirement would become the maximum allowed in the code for the required lighting to the public way. Similarly, the Federal Aviation Administration (FAA) also has standards required by law for lighting in a flight path. In addition to these two exemptions, the proposed code does not count the minimum level of parking lot lighting as recommended by the Illuminating Engineers Society (IES) which is not a regulatory agency.
If there is more lighting proposed for a site above what is required by the IBC, FAA, and what is recommended by the IES for a conservative level of parking lot lighting, those areas would be calculated into the total light budget for the site.

-ARCHITECTURAL LIGHTING –
Outside of the areas required by IBC and FAA, and parking lot lighting for safety as recommended by the IES standards, the proposed code outlines specific regulations on how architectural and landscape lighting can be employed. It is necessary to analyze these regulations in a collective context rather than on an individual basis since the regulations are intended to work in harmony with one another to fulfill the purpose of the lighting ordinance as described by the General Plan and the purpose statement of the outdoor lighting code. The additional regulations are things such as total lumens per improved acre, fixture types allowed, luminance levels and IES recommendations etc.

If adopted as drafted, architectural lighting of a building is only allowed with the following requirements: 1) the building must block any and all lighting from creating light trespass to achieve the intent of otherwise full cut-off fixtures. With current technology, this is typically accomplished through adjustable shielding at each light fixture so it is fully captured by the walls or roof of the building, preventing emittance of light into the night sky; 2) limits on the CCT (Correlated Color Temperature) to 3000 Kelvin; 3) regulation of the reflection of light off the building which is a factor of color, material and finish and regulated by candelas per square meter; 4) all site lighting (excluding IBC, FAA and recommended parking lot lighting) cannot exceed the lumens per improved acre; and 5) curfew limits would be required for the building and site except for any IBC and FAA required lighting.

If uplighting is allowed, an important discussion point will be what the means of measurement for the lighting of a structure should be. Two measurement options have been discussed: candelas per square meter or lumens per square foot (also known as foot candles). While the initial interpretation of these two may appear to simply be a conversion of metric or imperial units, the reality is that the measurement would place the primary focus on different factors. A measure of lumens per square foot will focus solely on the brightness output of a fixture where the use of candela will require an analysis of not only the brightness of the fixture, but also the reflectivity of the surface that the light is being directed to. For this reason County staff recommends that candelas per square meter be used and not lumens per square foot. The County staff proposed code currently limits architectural lighting to a maximum at any given spot of 27 candelas per square meter, the impact of that uplighting measured in lumens per square foot could be greater or less on light emissions into the night sky depending on the reflectivity of the building materials. In other words, the candelas allows the actual reflected emissions in the night sky to be more directly regulated. The Church is requesting that an average of 8 lumens per square foot be considered by the Council. For comparison, 8 lumens per square foot is about equal to 27 candelas per square meter. All building lighting would contribute toward the 25,000 lumens per improved acre, unless required by the IBC or FAA.

-CURFEW FOR LIGHTING –
The proposed code has a regulation for turning non-exempt exterior lighting off as proposed below:

“All exterior lighting shall be extinguished either by 10 P.M.; or within one (1) hour of the close of normal business hours; or at the conclusion of usual operations, whichever occurs later. Businesses whose normal operating hours are twenty-four (24) hours per day, or as determined by the land use authority if a conditional use, may be exempt from this provision”.

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This provision is to prevent the use of non-exempt lighting unnecessarily.

-PROPOSED SIGN CODE CHANGES –
Since the sign code allows for outdoor lighting of signs the proposed code regulates the lighting of signs in the following manner:
Section 16.15.25(F,6) is proposed to be amended so that:

a. Internally illuminated signs are exempted from the full shielding requirement.

b. Not exceed, in any design or message element, a luminance of 40 candelas per square meter between one hour after sunset and one hour before sunrise; and

c. Be fully extinguished after the end of regular business hours and remain in that state until no earlier than one hour before sunrise.

-RESEARCH OF OTHER AREAS AND CODES –
An important aspect of writing code is building an understanding of what the code language could do. When potential impacts aren’t fully known, a common approach is to analyze other communities’ codes and compare the proposed code to the codes in place in other communities. Below is a list of various communities, some of which are IDA certified and some that are not, along with various aspects of their lighting codes. It should be noted that a number of IDA certified communities have codes that allow for uplighting. Also of note is the lumens allowed per improved acre. Codes however, may or may not exempt higher governmental agency required lighting. The only codes that expressly state excluded required lighting is Helper, Utah which excludes higher governmental agency requirements and Park City Utah which excludes parking lot lighting. It is also important to understand that in the case of Tucson and Flagstaff Arizona there is a range of Lumens per improved acre which is regulated by lighting zones. The lower lighting allowances are for rural areas and these allowances get higher towards commercial and industrial areas.
**SYNOPSIS OF CODE CHANGES**

The following synopsis lists the main changes that are being proposed to be made to the code. A full list of changes is contained in exhibit E:

<table>
<thead>
<tr>
<th>Proposed code changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Added a number of new definitions (section A) to update for latest technology and define new terms used for regulating lighting.</td>
</tr>
<tr>
<td>Better defined applicability section (section B) of the code and regulates all exterior lighting except for that considered single family residential. (single family residential as proposed would prohibit light trespass)</td>
</tr>
<tr>
<td>Provides for amortization (section C) of non-conforming lighting on non-residential uses based on building permits, change of use, renovations, reconstruction etc.</td>
</tr>
<tr>
<td>Updated graphic (Figure A) of acceptable and unacceptable lighting fixtures</td>
</tr>
<tr>
<td>Expanded prohibited lighting list (Section F): floodlighting, searchlights, lasers (except for holiday lighting), flashing, blinking, rotating, and neon.</td>
</tr>
</tbody>
</table>
Increased list of requirements for a lighting plan (section G) in order to determine lighting on a site: lumens, candelas, CCT, lighting controls, renderings, demonstration of compliance etc.

Expanded list of exempt lighting (section H) i.e., emergency lighting, holiday lighting, sports lighting, underwater lighting of swimming pools, single family lot lighting, IBC, FAA, IES etc.

Lighting Standards (section I) illuminance limits, IBC, FAA, nothing over 25,000 lumens per improved acre, CCT, lighting trespass, curfew, flagpoles, service station canopies etc.

Regulation of public lighting for government buildings (section J) County buildings, SSD’s with curfew, adaptive controls etc.

Expanded temporary lighting requirements (section K)

Architectural and landscape lighting (section L) allowing uplighting with limits to lumens, CCT, total lumens etc.

16.15.25 changes to the sign section of the code stating to, not exceed in any design or message element, a luminance of 40 candelas per square meter between one hour after sunset and one hour before sunrise; and be fully extinguished after the end of regular business hours and remain in that state until no earlier than one hour before sunrise.

-AREAS WHERE CONSENSUS HAS NOT BEEN REACHED–

As of the writing of this report the following items need to be determined.

<table>
<thead>
<tr>
<th>Aspects of the proposed code that there is NOT a consensus</th>
<th>Applicant</th>
<th>County Current Draft</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCT correlated color temperature</td>
<td>3500 Kelvin</td>
<td>3000 Kelvin</td>
</tr>
<tr>
<td>Candelas and Lumens (measuring reflection off the building)</td>
<td>8 lumens per square foot (8 lumens per square foot which is roughly 27 candelas per square meter)</td>
<td>27 candela per square meter</td>
</tr>
<tr>
<td>Lumens per improved acre</td>
<td>55,000 per improved acre (requested in the code submitted prior to changes in exempt regulations and improved acre definition)</td>
<td>25,000 Lumens per improved acre</td>
</tr>
<tr>
<td>Light trespass</td>
<td>0.5 fc at the property line for non-residential and 0.1 fc for residential</td>
<td>Strict adherence to the definition (i.e., numerical threshold at the property line)</td>
</tr>
<tr>
<td>Exemption from the general curfew for walkways, stairs, parking lot lighting, controlled by motion sensors</td>
<td>Require a curfew but motion sensors that would stay on for 15 minutes per trigger.</td>
<td>Allow for a 5 minute trigger duration</td>
</tr>
<tr>
<td>Illuminated sign curfew</td>
<td>All allowed to be lit until 10 pm.</td>
<td>Sign lighting extinguished after regular business hours and remain unlit until one hour before sunrise</td>
</tr>
</tbody>
</table>
REQUIRED FUTURE APPROVALS

As noted earlier in the report, although the catalyst for this proposed code amendment is a proposed temple, this proposal is NOT the review or approval of the temple project. The temple may require a subdivision plat, a site plan, and a conditional use permit application(s). Those application(s) or other applications, have not yet been made and will be reviewed for compliance with County codes at the time of application and will be required to follow the procedures required by applicable law.

RECOMMENDED MOTION

Move to forward a Recommendation for Approval with Conditions to the County Council consistent with the findings

Findings:

1. The existing lighting code has been in place, in a somewhat similar form, since 2003 with several amendments throughout the years.
2. The current code requires a full 90 degree cutoff directed down, and the primary application has mostly been used to regulate street lighting.
3. Attached residential lighting and non-residential building lighting has not been strictly enforced with the code.
4. Application to amend the code was made by the LDS Church. As part of that application the LDS Church submitted a proposed lighting code. The version of the code proposed by the LDS Church allowed for building uplighting.
5. The County is proposing a version of the code that is more comprehensive then the LDS Church proposed code and the existing code and allows for regulated uplighting.
6. The existing code allows any amount of light on a site or building without limits as long as it is directed down.
7. The proposed code places a cap on the total site lighting.
8. The proposed code does not count, as part of the cap, the minimum amount of lighting required by the IBC, FAA and minimum safety lighting for parking lots as regulated using the recommended standards of the IES.
9. The code proposes to use the IES (Illuminating Engineering Society) recommended standards as the requirements for lighting of areas like the parking lots and other pathways not regulated by the IBC. The IES is a nationally recognized organization in lighting standards.
10. The proposed code takes advantage of new technology and best management practices that allows for LED lighting, dimmers, photo cells, timers, motion sensors, directional cutoff and kelvin adjustability.
11. The code is for the entire County and if approved will be used in areas that are proposing institutional uses, multi-story hotels, retail, office areas and other developments.
12. The General Plan requires the County to: “Preserve the views of the night sky and reduce the health impacts of artificial light by requiring all development to have dark sky compliant lighting” (Policy 1.1.7).
13. The purpose and intent statements of the existing code and proposed code is to; “not unreasonably interfere with the reasonable use and enjoyment of property and astronomical observations within the county. It is the intent of this section to encourage, through regulation of types, kinds, constructions, installation and uses of outdoor electricity, lighting practices and systems which will reduce light pollution, conserve energy, provide consistent lighting standards, reduce maintenance and replacement costs while increasing nighttime safety, utility, security and productivity”.
14. If uplighting is going to be allowed, an updated lighting code needs to be in place prior to a site plan and conditional use approval of the temple so that the allowed lighting and associated impacts of the lighting can be determined and mitigated.
15. The proposed code brings the County closer to compliance with the best management practices (BMP’s) as required of municipalities by the International Dark Sky Association requirements for accreditation as International Dark Sky Communities.
16. The proposed amendment balances the health, safety, welfare interests of adequate lighting required under the
IBC, FAA, and recommendations of the IES with the welfare interests in reducing light pollution.

17. The staff report is adopted except as modified by, respectively, the Council or the Planning Commission.

18. All public hearings and noticing requirements under the Wasatch County Code and the Utah Code for adopting or modifying a land use regulation have been followed by the County.

19. Written comments have been considered by the planning commission and forwarded to the council.

20. The proposed amendment is in the interest of the public, and is consistent with the goals and policies of the Wasatch County General Plan.

21. The Wasatch County Council, as the legislative body, has broad discretion for amendments to the Wasatch County Code.

**Possible specific findings for recommendation to the Council:**

1. A recommendation to the County Council on CCT (Kelvin levels).

2. A recommendation on using 27 candelas per square meter or 8 lumens per square foot, and if 27 candela per square meter or 8 lumens per square foot is the right number.

3. A recommendation on the light trespass.

4. A recommendation on sign curfew times.

5. A recommendation on duration of time for motion sensor lights to remain on.

**ALTERNATIVE ACTIONS**

The following is a list of possible motions the Planning Commission can take. If the action taken is inconsistent with the potential findings listed in this staff report, the Planning Commission should state new findings.

1. **Recommendation for Approval.** This action may be taken if the Planning Commission finds that the General Plan and proposed code amendments are consistent and compatible.

2. **Recommendation for Approval with Conditions.** This action can be taken if the Planning Commission feels comfortable that remaining issues can be resolved with conditions.

3. **Advance to the Council without a recommendation for approval or a denial.** The Planning Commission can take this action if they recommend this matter is ready for consideration by the Council, but believes the policy determinations would be best made by the elected officials of the County Council.

4. **Continue.** This action can be taken if the Planning Commission needs additional information before making a recommendation, if there are issues that have not been resolved, or if the application is not complete.

5. **Recommendation for Denial.** This action may be taken if the Planning Commission finds that the proposed code amendment is not appropriate at this time and/or is not supported by the General Plan.

**Exhibits:**

A. **Existing Code**
B. **Applicant Letter of Request**
C. **Applicant Submitted Code Amendment**
D. **Staff Proposed Code Amendment**
E. **List of proposed changes**
F. **Explanatory lighting graphics**
EXHIBIT A – Existing Code

16.21.16: OUTDOOR LIGHTING REGULATIONS
The purpose of the outdoor lighting regulations is to establish standards for all outdoor lighting so that its use does not unreasonably interfere with the reasonable use and enjoyment of property and astronomical observations within the county. It is the intent of this section to encourage, through regulation of types, kinds, constructions, installation and uses of outdoor electricity, lighting practices and systems which will reduce light pollution, conserve energy, provide consistent lighting standards, reduce maintenance and replacement costs while increasing nighttime safety, utility, security and productivity.

In the event that any provisions contained within this title conflict with the provisions contained in this section, the provisions of the more restrictive regulations shall apply.

A. Definitions:

CUTOFF: The point at which all light rays emitted by a lamp, light source or luminary are completely eliminated (cut off) at a specific angle above the ground.

CUTOFF ANGLE: The angle formed by a line drawn from the direction of light rays at the light source and a line below a horizontal plane running through the lowest point on the fixture where light is emitted (see figure A of this section).

CUTOFF TYPE LUMINARY: A unit of illumination with elements such as shield, reflectors or refractor panels that direct and cut off the light at a cutoff angle less than ninety degrees (90°).

FOOT-CANDLE: A unit of illumination produced on a surface, all points of which are one foot (1’) from a uniform point source of one candle.

GLARE: Light emitting from a luminary with an intensity great enough to reduce a viewer's ability to see and in extreme cases, causing momentary blindness.

LUMINARY: A complete lighting unit consisting of a light source and all necessary mechanical, electrical and decorative parts.

OUTDOOR LIGHTING: For purposes of this section, "outdoor lighting" shall refer to all street lighting, commercial lighting, and all lighting in a residential neighborhood, excepting small porch lights using not over one hundred (100) watt bulbs, and garden lights under one hundred (100) watts and under the height of seven feet (7’).

STANDARDS: As used in this section, reference to a standard shall be the pole portion of the structure not including the fixture or the concrete base.

B. Conformance With Applicable Codes: All outdoor electrically powered illuminating devices shall be installed in conformance with the provisions of this title, the building code, the electrical code and the sign regulations of the county as applicable and under appropriate permit and inspections.

C. Approved Materials And Methods Of Construction Or Installation/Operation: The provisions of this section are intended to prevent the use of any design, material or method of installation or operation not specifically prescribed by this section.
D. Cutoff Angle: All light shall require a luminary or shield with less than a ninety (90) degree full cutoff. All light rays emitted by the fixture, either directly from the lamps or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted (see figure A of this section).

FIGURE A
ACCEPTABLE SHIELDING, HOODING AND AIMING OF OUTDOOR LIGHT FIXTURES

E. Heights Of Standards: Heights of standards shall not exceed twenty feet (20') in commercial areas and fifteen feet (15') in residential areas.

F. Prohibited Lighting: Flashing lights, searchlights and neon lighting is prohibited.
G. Plan Required: During the approval process of a development, a lighting plan shall be submitted as part of the application, which shall address the following:

1. Type of illumination;
2. Height above grade;
3. Location at intersections of streets and at fire hydrants;
4. Source of light;
5. Lighted area for each source light which is proposed; and
6. Rendering of the standard approved by Heber Light And Power or other applicable service provider in accordance with the requirements of this title.

7. A different standard may be allowed with the understanding that if the standard needs to be replaced it will be replaced with the typical standard provided by the service provider. Standards other than the typical standards provided by the service provider will be paid for by the homeowners' association or property owners. The requirements in subsection I of this section must still be complied with.

H. Exceptions:

1. All temporary emergency lighting needed by the police, fire department or other emergency services, as well as all vehicular lighting, shall be exempt from the requirements of this section; and
2. All hazard warning lighting required by any county, state or federal agencies.

I. Lighting Standards: The following shall be required on all streetlights for consistency of maintenance:

1. Bulb: LED, fifty (50) to seventy (70) watt max.
2. One hundred twenty (120) volt.
3. Toolless replacement and interchangeable ballast.
4. Twistlock photocell.
5. Head: Glass or acrylic, asymmetric.
6. Temperature: 4000 K.
8. Mounting condition: Concrete base with J bolts.
9. Pole: As required in this section.
10. Fixture head type: Cutoff with full top aluminum reflector.
11. Fixture style: Washington Acorn HCSS 16530 or similar style approved by the service provider in compliance with this title.
12. The fixture shall comply with the cutoff standards listed in subsection D of this section.
22 November 2022

Mr. Doug Smith, Director
Mr. Austin Corry, Senior Planner
Wasatch County Planning Department
35 South 500 East
Heber City, Utah 84032

Re: 16.21.16: OUTDOOR LIGHTING REGULATIONS – Zoning Code Text Amendment

Dear Doug and Austin,

As outlined by Wasatch County submittal guidelines for Zoning Code Text Amendments, we have prepared the following responses:

Reason for the Request

The current Wasatch County OUTDOOR LIGHTING REGULATIONS (Section 16.21.16) seem to have been written to govern very simple outdoor lighting conditions consistent with the character of the County when they were adopted. The proposed amendments allow the County to objectively govern installation of lighting systems on new and upgraded existing properties while protecting the original intent of the lighting code.

Positive Impact of Proposed Changes

The proposed changes create an objective framework for lighting design to adequately address public safety, to preserve natural nighttime dark conditions, and to allow appropriate and subtle highlighting of buildings and landscape features to support the economic growth of the County. Further, the proposed changes identify and define appropriate hours of lighting operation, provide standards for lighting type, color, location, brightness, backlight, uplight, glare, trespass, etc.

Establishing a thorough and complete outdoor lighting standard will remove the challenging and subjective lighting design environment in Wasatch County.
Negative Impact of Proposed Changes

Some in the community are likely to prefer minimal lighting of any type.

Impact on the Community and General Public

The community and general public are currently subject to an outdoor lighting ordinance that attempts to protect the natural nighttime dark conditions by controlling only the direction and color temperature of outdoor lighting fixtures (not the intensity). This approach has the potential to create light installations that comply with the ordinance but miss the objective entirely.

The proposed amendment to the outdoor lighting ordinance protects the community and general public from inappropriate outdoor lighting installations by creating an objective and comprehensive framework for lighting design. The proposed amendment governs all elements of lighting design, provides the Wasatch County Staff an objective measure of the success of each lighting proposal in meeting the ordinance, and allows for the appropriate beautification of the community without compromising the natural nighttime dark environment.

Promote the Goals and Objectives of the General Plan

The proposed Outdoor Lighting Ordinance amendments promote the Wasatch County General Plan by supporting the “comprehensive approach to the coordination of development, natural resources and open space in such a way as to provide a harmonious relationship that meets the needs of present and future residents and also promotes the health, safety and general welfare of the residents of the County”. Additionally, they standardize “the most acceptable type of development”, “ensure the orderly growth of urbanizing areas”, and “protect the natural… resources (natural nighttime dark environment) of the County”.

Respectfully submitted,

[Signature]

Curtis N. Miner AIA, NCARB
Principal Architect

On behalf of
The Church of Jesus Christ of Latter-day Saints
EXHIBIT C - Applicant Submitted Code Amendment

16.21.16: OUTDOOR LIGHTING REGULATIONS

1. PURPOSE

The purpose of the outdoor lighting regulations is to establish standards for all outdoor lighting so that its use does not unreasonably interfere with the reasonable use and enjoyment of property and astronomical observations within Wasatch County. It is the intent of this section to encourage lighting practices and systems which reduce light trespass, glare, and pollution, conserve energy, provide consistent lighting standards, reduce maintenance and replacement costs while increasing nighttime safety, utility, security and productivity.

These regulations provide outdoor and exterior building lighting guidelines based on industry standards and encourage quality lighting design and fixtures. Creative use of current light fixture technologies to appropriately highlight building architecture and to enhance outdoor enjoyment and security are encouraged rather than discouraged within the framework of this ordinance. Outdoor and exterior building lighting should reinforce the style and character of the architecture and of outdoor spaces. Lumen limits included herein are upper limits and not the design goal. Lighting should be designed to the lowest output level possible.

In the event that any provisions contained within this title conflict with the provisions contained in this section, the provisions of the more restrictive regulations shall apply.

2. DEFINITIONS

CUTOFF ANGLE: The angle formed by a line drawn from the direction of light rays at the light source and a line below a horizontal plane running through the lowest point on the fixture.
where light is emitted.

FOOT-CANDLE: A unit of illumination produced on a surface, all points of which are one foot (1') from a uniform point source of one candle.

GLARE: Light emitting from a luminary with an intensity great enough to reduce a viewer's ability to see and in extreme cases, causing momentary blindness.

LUMINARY: A complete lighting unit consisting of a light source and all necessary mechanical, electrical and decorative parts.

OUTDOOR LIGHTING: For purposes of this section, "outdoor lighting" shall refer to all parking lot lighting, site lighting, and building lighting for commercial projects, institutional projects, municipal projects, and multi-family and mixed use projects with five (5) or more residential units.

STANDARD: For the purposes of this section, “standard” shall refer to the pole portion of the structure not including the fixture or the concrete base.

3. SUBMITTALS AND APPROVALS

A. A lighting plan shall be submitted as part of the application. It shall include the following:

1. Type(s) of luminaire(s).
2. Type(s) of standard(s).
3. Total output of each luminaire.
4. Locations of lights relative to edges and intersections of streets, drives, sidewalks, building entries, fire hydrants, etc.

5. Height of each light source above grade.

6. Photometric diagram showing the light output of each light source according to Illuminating Engineering Society (IES) standards.

7. Dimensioned elevation drawing and cut sheet for each of the luminaires and standards proposed.

B. Coordinate with Heber Light and Power or other applicable service provider for approved types of luminaries and standards within or adjacent to the public right-of-way.

1. Alternate luminaries and standards may be allowed within or adjacent to the public right of way with the understanding that if they fail to perform as expected, they will be replaced with the approved standard luminaries and standards at the expense of the owner / developer.

2. Alternate luminaries and standards will be purchased, installed, and maintained by the owner / developer.
   
   a. The requirements of this section must still be met for alternate luminaries and standards.

4. PERMITS, INSPECTIONS, AND INSTALLATION

A. All outdoor electrically powered illuminating devices shall be installed in conformance with the provisions of this title, the building code, the electrical code and the sign regulations of the county as applicable and under appropriate permit and inspections.

5. NON-CONFORMING LIGHTING
A. All lighting existing prior to the adoption of this section is considered non-conforming and is allowed to remain in its current state.

B. Non-conforming lighting shall be brought into compliance with the current Wasatch County outdoor lighting regulations with the redevelopment or expansion of the site or change of use based on the following:
   a. When an existing building or structure is expanded in size by twenty-five percent or more,
   b. When an existing parking area is expanded in size by twenty-five percent or more,
   c. When an existing outdoor use (e.g. outdoor storage, vehicle sales, etc.) is expanded in size by twenty-five percent or more,
   d. When there is a change in the primary use of the subject property.

C. The stated thresholds in items I, ii, iii, or iv above apply to a single addition or to cumulative additions.

D. Non-conforming lighting is not required to be brought into compliance with the current Wasatch County Outdoor Lighting Regulations when the lighting upgrade cost exceeds twenty-five percent of the total project cost.

6. EXEMPTED LIGHTING

A. Lighting in the public right-of-way. See Wasatch County streetlight regulations.
B. Lighting for single family residential homes, duplexes, triplexes, and four-plexes.
C. All temporary emergency lighting required by police, fire department, or other emergency response personnel.
D. All fire hydrants with an approved light fixture as required by Wasatch County.

E. Lighting at airports and surrounding areas regulated by the Federal Aviation Administration.

F. All hazard warning lighting required by any county, state, or federal agency.

G. Lighting solely for signs. See Wasatch County sign regulations.

H. Lighting for the flag of the United States of America with one narrow-beam spotlight fixture that illuminates only the flag.

I. Holiday lighting that is displayed between November 15 and January 21, in which any single nonresidential or residential property is lighted with 20,000 lumens per developed acre or less.

J. Holiday lighting that is displayed between January 22 and November 14 for the following specific holidays, in which any single nonresidential or residential property is lighted with 20,000 lumens per developed acre or less:
   c. Memorial Day or Decoration Day, last Monday of May.
   g. Labor Day, first Monday of September.
   h. Columbus Day, second Monday of October.
   i. Halloween Day, October 31.
   j. Veterans Day, November 11.

K. Low-lumen string lights (does not include temporary or permanent holiday lighting) that are used to light decks, pergolas, and patios. These lights are exempt from shielding regulations and can be used year-round. These lights shall not strobe or
flash. These lights shall not be left on for more than five hours at a time.

L. Underwater lighting in swimming pools, fountains, and other water features.

M. Open flame gas lighting.

N. Lighting solely for agricultural purposes.

O. Lighting allowed or required by state or federal law.

7. PROHIBITED LIGHTING

A. Holiday lighting that is displayed between January 22 and November 14, except for the specific holidays listed above.

B. Holiday lighting that is displayed between November 15 and January 21, in which any single property is lighted with more than 20,000 lumens per developed acre.

C. Flashing or flickering lights.

D. Searchlights, laser lights, aerial lasers, or holograms.

E. Neon lighting.

F. Mercury vapor lighting.

G. Lighting affixed to buildings for the purposes of lighting parking areas where the parking lot has more than twenty-five parking stalls.

H. Any lighting that is operated to constitute a hazard or danger to persons, or to safe vehicular operation.

8. LIGHTING STANDARDS

A. All outdoor and exterior building lighting shall comply with Illuminating Engineering Society (IES) standards.

B. All outdoor and exterior building light fixtures shall be LED.

C. The correlated color temperature of any exterior light source shall not exceed 4000 Kelvin.
D. The correlated color temperature shall be the same across the entire site at all outdoor light fixtures and exterior building lighting.

E. Any light source whose initial output exceeds 5,000 lumens shall be fully shielded such that no light is emitted above the horizontal plane of the light fixture.

F. Light fixtures 5,000 lumens or less that project light above the horizontal plane of the fixture may be used to highlight architecture and other site features where the architecture of the building or other site features restrict light above the horizontal plane.

G. Lighting may accentuate a building façade and its architectural elements with up to 8 lumens per square-foot.

H. The maximum total output of unshielded lights on a site shall not exceed 15,000 lumens per developed acre.

I. Parking and walkway lighting shall not exceed 0.5 foot-candle average with a 0.8 foot-candle maximum and a 0.1 foot-candle minimum, measured free of snow.

J. The total lighting per site shall not exceed 55,000 lumens per developed acre for all outdoor and exterior building lighting, measured free of snow.

K. BUG light fixture ratings (Backlight, Uplight, Glare):
   a. Street Lighting = 1-0-2.
   b. General Site Lighting = 2 or 3-0-2.
   c. Lighting adjacent to residential areas when within twenty-five feet of residential property lines, measured perpendicular to the lot line = 0-0-2 with backlight shielding.

L. All lights aiming up towards a building or site feature, and all parking lot lights are to be turned off no later than 10:00 pm, and not turned on earlier than 5:30 am, except for individual motion sensors on each parking lot luminaire for enhanced public safety and site security.
a. Exceptions:
   i. Lighting required by the Building Code.
   ii. Lighting required by the Americans with Disabilities Act.
   iii. Lighting necessary for public safety and site security including walkway bollard, ramp, in-wall, and in-step stair light fixtures.
   iv. Lighting for tunnels, parking garages, garage entrances, and similar conditions.
   v. When the exterior site or parking lighting consists of only one luminaire.
   vi. Lighting governed by a conditional use permit in which times of operation are specifically identified.

M. Projects designed primarily for individuals with visual impairments (e.g. retirement communities, hospices, and hospitals) may use up to two times the illumination allowed, measured free of snow.

N. Light trespass illumination levels at property boundary lines shall not exceed 0.5 foot-candles. No direct light shall pass beyond the property lines. In no case shall the lighting element be visible from beyond the property lines. Measured free of snow.

O. Standard-mounted site and outdoor lighting shall not exceed 20 feet from the light source to the ground for non-residential projects and 15 feet for residential or mixed-use projects from the light source to the ground.

P. All light standards and fixtures shall be decorative type. No square or rectangular shoe box fixtures are allowed.

Q. All nonresidential light fixtures shall employ automatic lighting controls that extinguish exterior lighting when sufficient daylight is available. Such controls include, but are not limited to timers, wireless remote monitoring with turn on/off capabilities, photo sensitive light controls, photoelectric switches, astronomical
time switches or equivalent functions from a programmable lighting controller, building automation system or lighting energy management system, all with battery or similar backup power or device.

a. Exceptions:

   i. Lighting required by the Building Code.
   ii. Lighting necessary for public safety and site security.
   iii. Lighting for tunnels, parking garages, garage entrances, and similar conditions.

R. Home Owners Associations (HOAs) in new residential subdivisions shall include these outdoor and exterior building lighting regulations in their Covenants Conditions and Restrictions (CC&Rs) to cover nonresidential development (clubhouses, pavilions, parking lots, recreational and fitness facilities, spas, restaurants and bars, coffee shops, retail stores and gift shops, rental shops, property entry buildings, storage facilities, etc.).

S. Service station canopy lighting shall comply with the following requirements:

   a. All light fixtures 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 bare-lamp light output used for illuminating service station canopies shall not exceed 100 lumens per square foot of canopy including but not limited to the light fixtures mounted on the under surface of the service station canopies and auxiliary lighting within signage or display panels.
### 16.21.16: EXTERIOR LIGHTING REGULATIONS

- **A. Definitions**
- **B. Applicability**
- **C. Amortization of non-conforming installations**
- **D. Approved Materials And Methods Of Construction Or Installation/Operation**
- **E. Heights Of Pole-Mounted Luminaire Standards**
- **F. Prohibited Lighting**
- **G. Plan Required**
- **H. Exceptions Exemptions**
- **I. Lighting Standards**
  1. Compliance with building codes
  2. Full shielding required
  3. Total site lighting limits
  4. Spectrum management
  5. Light trespass prohibited
  6. General curfew
  7. Flagpoles
  8. Service station canopies
- **J. Public Lighting**
  1. Warranting
  2. Curfew
  3. Adaptive controlling
  4. Additional street lighting requirements
- **K. Temporary Lighting**
- **L. Architectural and Landscape Lighting**

### 16.15.25: SIGN STANDARDS

- **A. Statement Of Purpose**
- **B. Use Authorized**
- **C. Short Title**
- **D. Definitions**
- **E. Permits Required**
- **F. Construction Specifications**
- **G. Prohibited Signs**
- **H. Master Sign Plans**
- **I. Setback Requirements**
- **J. Maintenance And Repair**
- **K. Abandoned Signs**
- **L. Notices**
M. Disposal Of Signs  
N. Dangerous Signs  
O. Conflict  

Key:  
Red is proposed new language  
Black strikethrough is language proposed to be deleted  
Green double underline is moved language  

16.21.16: OUTDOOR EXTERIOR LIGHTING REGULATIONS

The purpose of the outdoor exterior lighting regulations is to establish standards for all outdoor exterior lighting so that its use does not unreasonably interfere with the reasonable use and enjoyment of property and astronomical observations within the county. It is the intent of this section to encourage, through regulation of types, kinds, constructions, installation and uses of outdoor electricity, lighting practices and systems which will reduce light pollution, conserve energy, provide consistent lighting standards, reduce maintenance and replacement costs while increasing nighttime safety, utility, security and productivity.

In the event that any provisions contained within this title conflict with the provisions contained in this section, the provisions of the more restrictive regulations shall apply.

A. Definitions: When used in this section, the following words, terms, and phrases, and their derivations shall have the meanings provided in this section, except where the context clearly indicates a different meaning. Other words not defined shall have their respective and commonly understood meanings.

CUTOFF: The point at which all light rays emitted by a lamp, light source or luminary are completely eliminated (cut off) at a specific angle above the ground.

CUTOFF ANGLE: The angle formed by a line drawn from the direction of light rays at the light source and a line below a horizontal plane running through the lowest point on the fixture where light is emitted (see figure A of this section).
CUTOFF-TYPE LUMINARY: A unit of illumination with elements such as shield, reflectors or reflector panels that direct and cut off the light at a cutoff angle less than ninety degrees (90°).

CORRELATED COLOR TEMPERATURE (CCT): The absolute temperature of a blackbody whose chromaticity most nearly resembles that of the light source. CCT values, measured in units of Kelvins (K), are typically provided in lighting manufacturer data sheets.

EXTERIOR LIGHTING: All lighting, including, without limitation, street lighting; parking lot lighting; commercial, industrial, and institutional lighting, where the light source originates outside the exterior walls of a structure, and lighted exterior signs whether illuminated internally or externally.

FOOT-CANDLE: A unit of illumination produced on a surface, all points of which are one foot (1') from a uniform point source of one candle.

FOSSIL FUEL LIGHTING: Lighting whose emissions are directly produced by the combustion of fossil fuels such as natural gas and propane are permitted so long as the light source is completely enclosed in a suitable housing such as a lantern.

FULLY SHIELDED: The condition of an outdoor luminaire constructed such that in its installed position all of the light emitted by the luminaire is projected below the horizontal plane passing through the lowest light-emitting part of the luminaire. In the IES Luminaire Classification System for Outdoor Luminaires, these luminaires have an uplight rating of U0.

FIGURE A
ACCEPTABLE SHIELDING, HOODING AND AIMING OF OUTDOOR LIGHT FIXTURES

[Figure A removed at this location]

GLARE: Light emitting from a luminaire luminaire with an intensity great enough to reduce a viewer's ability to see and in extreme cases, causing momentary blindness.

HOLIDAY LIGHTING: Low-intensity string lights, whose luminous output does not exceed fifty (50) lumens per linear foot, and fully-shielded floodlights, whose luminous output does not exceed
one thousand (1,000) lumens and which are aimed and oriented in such a way as to not directly emit any light into the night sky, and operated only during prescribed periods of time during the calendar year.

ILLUMINANCE: The areal density of the luminous flux incident at a point on a surface. Illuminance is a measure of the light received by or on a surface.

ILLUMINATING ENGINEERING SOCIETY (IES): An industry-supported, nonprofit learned society headquartered at 120 Wall Street, New York City, New York, recognized as an authoritative body on the science and application of lighting that publishes and promotes recommended practices for a variety of specific lighting applications.

IMPROVED ACRE: The gross acreage of a parcel less any acres that are not covered by structures, impervious surfaces and manicured or irrigated landscape areas. Landscape areas not accessible to pedestrians, stormwater facilities and areas of native vegetation are considered unimproved for the purposes of this definition.

INTERNATIONAL DARK-SKY ASSOCIATION (IDA): A nonprofit advocacy organization headquartered at 5049 E. Broadway Boulevard #105, Tucson, Arizona, which is a recognized global authority on light pollution.

LIGHT TRESPASS: A condition in which artificial light emitted from a luminaire on one property, not inclusive of light incidentally scattered or reflected from adjacent surfaces, is directed in such a manner that the lamp or light source is visible from any other property.

LUMEN: The SI unit of luminous flux equal to the luminous flux emitted within a unit solid angle (one steradian) by a point source having a uniform luminous intensity of one candela.

LUMINARY/LUMINAIRE: A complete lighting unit consisting of a light source and all necessary mechanical, electrical and decorative parts. A complete lighting unit consisting of a light source(s) and ballast(s) or driver(s) (when applicable), together with the parts designed to distribute the light, to position and protect the light source(s), and to connect the light source(s) to the power supply. Also known as a light fixture.
LUMINANCE: The amount of light that passes through, is emitted, or reflected, from a particular area, and that falls within a given solid angle. Luminance is a measure of light emitted by or from a surface. The SI unit of luminance is candela per square meter (cd/m²).

OUTDOOR LIGHTING: For purposes of this section, "outdoor lighting" shall refer to all street lighting, commercial lighting, and all lighting in a residential neighborhood, excepting small porch lights using not over one hundred (100) watt bulbs, and garden lights under one hundred (100) watts and under the height of seven feet (7').

OUTDOOR SPORTS LIGHTING: Lighting equipment designed and installed specifically to illuminate outdoor venues used for the practice and play of any outdoor sport or similar recreation activity. This term refers only to lighting directed toward, or intended to facilitate, play or recreation on outdoor surfaces, or to illuminate spectator viewing stands, but not for illumination of any other part of a connected or adjacent property.

POLE HEIGHT: The distance in the vertical direction above finished grade to the lamp or light source of a pole-mounted luminaire.

STANDARDS: As used in this section, reference to a standard shall be the pole portion of the structure not including the fixture or the concrete base.

SINGLE-FAMILY RESIDENTIAL LOT: a lot for a detached single-family residence, half of a twinhome, or a townhome, and ancillary uses. IADUSs, accessory residential units, and caretaker accessory dwelling units do not alone exclude the lot as a single-family residential lot.

B. Applicability.

1. All exterior lighting installed after the effective date of this section in the County, except where specifically stated in subsection I, shall be in conformance with the requirements established by this section and any other applicable ordinances. Single-family residential lots and agricultural uses shall be exempt from these requirements, except for light
trespass requirements. The provisions of this section shall apply to all new development of real property that involves:

a. New construction for which a land use application is required;

b. Remodeling of an existing building or structure for which a land use application is required; provided, however, that compliance with the requirements of this section is required for a remodel of an existing building or structure only with respect to the remodeled portion of the existing building or structure unless the amortization provisions of this section require all lighting to comply; or

c. Installation of new outdoor luminaires for any purpose.

2. The land use authority may require, as part of a conditional use, for exterior lighting to comply with standards that are more strict than those in this section when the specific land use requires a conditional use permit and the conditional use standards support greater restriction for the use.

3. In case of conflict between any of the provisions of this section, or any other applicable law, the most restrictive shall apply.

C. Amortization of non-conforming installations.

1. All exterior lighting luminaires that were lawfully installed prior to the effective date of this section, but that do not comply with the requirements of this section, are declared to be legal non-conforming luminaires.

2. All legal non-conforming luminaires may continue to be used and maintained after the adoption of this section, but legal non-conforming luminaires shall be brought into compliance with its requirements upon the first to occur of any of the following:

a. Approval of any land use permit or a building permit that includes structures or real property where the luminaire is placed;
b. A change of use of the property from a single-family residential use or agricultural use to any other use;

c. Any renovation to a structure or other improvement where the luminaire is placed equal to or exceeding twenty (20) percent of its assessed value;

d. Reconstruction of a structure where the luminaire is placed if more than fifty (50) percent of the total appraised value of a structure, as determined from the county's assessment records, is destroyed;

e. A determination by the Planning Director that the legal non-conforming luminaire constitutes a public hazard or nuisance; or

f. The replacement of any legal non-conforming luminaire with new lighting equipment, not inclusive of lamps or similar consumable parts.

3. Conformity shall occur prior to issuance of a certificate of occupancy, final inspection, return of any bonds or improvement assurances associated with the project, or approval by the County of the improvement(s). For other permits, the applicant shall have a maximum of sixty (60) days from date of permit issuance to bring the lighting into conformance.

D. Approved Materials And Methods Of Construction Or Installation/Operation: The provisions of this section are intended to prevent the use of any design, material or method of installation or operation of an outdoor luminaire not specifically prescribed by this section. See Figure A for examples of acceptable, i.e., fully shielded, and unacceptable luminaires.

FIGURE A

ACCEPTABLE SHIELDING, HOODING AND AIMING OF OUTDOOR LIGHT FIXTURES
E. Cutoff Angle: All light shall require a luminary or shield with less than a ninety (90) degree full cutoff. All light rays emitted by the fixture, either directly from the lamps or indirectly from the fixture, are projected below a horizontal plane running through the lowest point on the fixture where light is emitted (see figure A of this section).
FIGURE A
ACCEPTABLE SHIELDING, HOODING AND AIMING OF OUTDOOR LIGHT FIXTURES

E. Heights Of Pole-Mounted Luminaires Standards: The pole heights of standards pole-mounted luminaires shall not exceed twenty feet (20') in commercial or industrial areas zones and fifteen feet (15') in residential or any other areas zones.

F. Prohibited Lighting: Flashing lights, searchlights and neon lighting Without limitation to other prohibited luminaires, the use of the following types of exterior lighting is prohibited—except as specifically exempted here or elsewhere in this section.

1. Outdoor flood lighting by projection of light above the horizontal plane running through the lowest light-emitting portion of a luminaire, except as permitted in subsection L of this section.

2. Searchlights, skybeams, and similar lighting, except as required by first responders in the performance of their duties.

3. Lasers, except Class 2 or lower laser light sources as used only for holiday lighting.

4. Any luminaire that dynamically varies its output by intermittently fading, flashing, blinking, or rotating. This type of lighting includes strobe lighting.

5. Any luminaire that uses mercury vapor lamps or sealed, low-pressure tubes containing inert gasses such as neon.

G. Plan Required:

1. During the approval process of a development, a lighting plan shall be submitted as part of the application any development application. Single-family residential lots and agricultural uses shall be exempt from this lighting plan requirement. The lighting plan, which shall address the following:

   a. Type of illumination;

   b. Mounting height above finished grade;
298. Location at intersections of streets and at fire hydrants;
299. Source(s) of light;
300. Whether the luminaires are fully shielded;
301. Correlated color temperature of light sources;
302. Inclusion of any equipment intended to actively control the light output of luminaires;
303. The number of lumens of light per improved acre;
304. Lighted area for each source light which is proposed; and
305. A rendering of any pole-mounted street and roadway luminaires;
306. Demonstration that all lighting meets the requirements in Section I(3); and
307. Calculations or photometric models indicating the maximum luminance value for any illuminated surface of any building or vertical structure.

1. Type of illumination;
2. Height above grade;
3. Location at intersections of streets and at fire hydrants;
4. Source of light;
5. Lighted area for each source light which is proposed; and
6. A different standard may be allowed with the understanding that if the standard needs to be replaced it will be replaced with the typical standard provided by the service provider. Standard other than the typical standard provided by the service provider will be paid for by the homeowners' association or property owners. The requirements in subsection I of this section must still be complied with.
7. Rendering of the standard approved by Kebler Light and Power or other applicable service provider in accordance with the requirements of this title.

2. Sufficiency of plans. The above required plans and descriptions shall be sufficiently complete to enable the Planning Director to readily determine whether compliance with the requirements of this section can be determined. If
such plans and descriptions cannot enable this determination, by reason of the nature or configuration of the devices, luminaires or lamps proposed, the applicant shall submit evidence of compliance by certified test reports as performed by a recognized lab. The Planning Director may use third-party plan reviewers, the cost of whose services shall be charged to the applicant. The Planning Director shall further have the authority to request additional information consistent with the purposes of this section.

3. Amendment to approved plans. Any change to approved exterior luminaires or lamps must be approved prior to installation.

H. Exceptions

Exceptions: The following are exempt from compliance with all provisions of this section, except as noted.

1. Public lighting, subject to the requirements of subsection J of this section.

2. All temporary emergency lighting needed by the police, fire department or other emergency services first responders only for as long as conditions which warrant the emergency lighting so identified by first responders continue to exist. This includes temporary lighting illuminating the activities of law enforcement, fire and other emergency services, as well as building egress lighting whose electric power is provided by either battery or generator. As well as all vehicular lighting, shall be exempt from the requirements of this section, and

3. Temporary lighting required to save life, limb or property from imminent peril, provided that use persists only during the hours of the peril.

4. Lighting employed during repairs of roads, utilities and similar infrastructure, including unshielded lighting.

5. All hazard warning lighting required by any county, state or federal agencies.

6. Holiday lighting, for a period not to exceed sixty (60) days, whether consecutive or non-consecutive, in one calendar year. The total quantity of light meeting this definition permitted is not limited, but excessive displays are liable to be
declared public nuisances. All holiday lighting must be fully extinguished each night between the hours of 11 P.M. and 5 A.M. during the allowed period.

7. Outdoor sports lighting, provided that its design and installation adhere to the version of the International Dark-Sky Association’s Criteria for Community-Friendly Outdoor Sports Lighting operative at the time when the land use application is submitted to the County for review.

8. Underwater lighting of swimming pools and similar water features provided that such lighting is not oriented in any direction above the horizontal.


10. Lighting required by law to be installed on motor vehicles.

11. String, festoon, and similar lighting, provided that the emission of no individual lamp exceeds fifty (50) lumens, and no installation of such lighting exceeds, in the aggregate, three thousand (3,000) lumens.

12. Temporary lighting allowed by obtaining a temporary use permit as described in Section 16.24 and subsection K of this section.

13. Any form of lighting whose use is mandated or otherwise governed by any legal jurisdiction higher than that of the County.

14. Exterior lighting installed on single-family residential lots and agricultural uses, except for light trespass requirements.

I. Lighting Standards:

1. Compliance with building codes: All exterior lighting luminaires installed in conformance with this section shall comply with all applicable building codes in effect at the time of installation under appropriate permitting and inspection.
2. Full shielding required: Unless exempted in this section, all exterior lighting luminaires shall be fully shielded.

3. Lighting application illuminance limits:
   
a. Exterior lighting required by the International Building Code (IBC) version incorporated by reference in Section 7.04.01, including but not limited to points of egress and along the path of travel for the exit discharge from each exit to the public way, shall employ illuminances that adhere to, but not exceed, the IBC-required values.

b. For all other exterior lighting applications not governed by IBC requirements, excluding architectural lighting, the illuminance employed in each application shall adhere to, but not exceed, the IES-recommended minimum value for the application.

c. With the exception of lighting exempted from regulation in subsection H, item 13 of this section, and permanent lighting of drive aisles and parking areas that adhere to the current IES recommendation found in ANSI/IES RP-8, Table 17-2, in no case shall exterior lighting installed on any site exceed 25,000 lumens per improved acre.


5. Light trespass prohibited: No luminaire shall create conditions of light trespass, except as authorized by this section. Without limitation, single-family residential lots and agricultural uses are prohibited from light trespass.
6. General curfew: All exterior lighting shall be extinguished either by 10 P.M.; or within one (1) hour of the close of normal business hours; or at the conclusion of usual operations, whichever occurs later, and remain extinguished until no earlier than one (1) hour before sunrise. Businesses whose normal operating hours are twenty-four (24) hours per day, or as determined by the land use authority if a conditional use, may be exempt from this provision. The following lighting applications shall be exempt from the general curfew:

a. Walkway bollard, ramp, and in-step stair luminaires provided with individual motion-sensing switches for resumption of illumination at one hundred percent (100%) of their normal lumen levels for no more than a five (5) minute period per trigger.

b. Individual pole-mounted parking lot luminaires provided with individual motion-sensing switches for resumption of illumination at seventy-five percent (75%) of their normal lumen levels for no more than a five (5) minute period per trigger.

7. Flagpoles: Property owners are encouraged to not illuminate flagpoles at night, but rather to hoist flags after dawn and lower flags before sunset. If flags are illuminated at night, lighting of up to a total of two (2) flags per property is permitted with the following conditions:

a. If nighttime illumination is used, flagpoles with a height greater than 20 feet above ground level shall be illuminated only from above. This may be achieved by utilizing a luminaire attached to the top of the flagpole or a luminaire mounted above the top of the flagpole on a structure within fifteen (15) feet of the flagpole and must comply with all sections of this section. The total light output from any luminaire mounted on top of or above a flag pole shall not exceed 800 lumens.

b. Flag poles with a height equal to or less than twenty (20) feet above ground level may be illuminated from below. If ground-level illumination is used, flagpoles may be illuminated with up to two (2) spot type
luminaires, utilizing shields or diffusers to reduce glare, whose maximum combined lumen output is 75 lumens per linear foot of pole height, measured from the level of the luminaire above finished grade to the top of the flagpole. Luminaires are to be mounted so that their lenses are perpendicular to the flag pole and the light output points directly toward the flag(s).

8. Service station canopies: All luminaires mounted on or recessed into the lower surface of service station canopies shall be fully shielded and utilize only flat lenses or windows. Shielding must be provided by the luminaire itself, and not by surrounding structures such as canopy edges. Illuminance values shall not exceed the IES-recommended minimum values.

The following shall be required on all streetlights for consistency of maintenance:

1. Bulb: LED, fifty (50) to seventy (70) watt max.
2. One hundred twenty (120) volt.
3. Teeless replacement and interchangeable ballast.
4. Twistlock photocell.
5. Read: Glass or acrylic, asymmetric.
6. Temperature: 4000 K.
9. Pole: As required in this section.
10. Fixture head type: Cutoff with full top aluminum reflector.
11. Fixture style: Washington Acorn HCSS 16530 or similar style approved by the service provider in compliance with this title.
12. The fixture shall comply with the cutoff standards listed in subsection D of this section.

J. Public Lighting: All exterior lighting owned or operated by the County, a special service district, an interlocal governmental entity, or a municipality, installed after the effective date of this section shall meet all of the following requirements:

1. Warranting. Except for street lights, new installations of exterior lighting will only be installed on public properties and rights-of-way upon determination by the County Manager, or that person’s designee, that a public health, safety or welfare benefit due to the use of lighting exists. Criteria warranting the use of street lighting are stated in Section 14.02.06.

2. Curfew. All public lighting not adaptively controlled must be fully extinguished by 11:10 P.M., or within one hour of the end of occupancy of the structure or area to be lit, whichever is later, and remain extinguished until no earlier than one (1) hour before sunrise. Street lighting is exempt from this requirement.

3. Adaptive controlling. All new installations of exterior lighting on public properties and rights of way must be regulated with adaptive controls such that the lighting of areas is restricted to times, places and amounts required for safe occupancy. Street lighting is exempt from this requirement.

4. Additional street lighting requirements. In addition to the above, the following shall be required on all streetlights for consistency of maintenance:

   1. **Bulb:** LED, fifty (50) to seventy (70) watt max.
   2. **One hundred twenty (120) volt.**
   3. **Toolless replacement and interchangeable ballast.**
   4. **Twistlock photocell.**
   5. **Head:** Glass or acrylic, asymmetric.
6. **Mounting condition:** Concrete base with J bolts.

7. **Pole:** As required in this section. A different pole may be allowed with the understanding that if the pole needs to be replaced it will be replaced with the typical pole provided by the service provider. Poles other than the typical poles provided by the service provider will be paid for by the homeowners' association or property owners.

8. **Fixture head type:** Fully shielded with full top aluminum reflector.

9. **Fixture style:** As agreed to by the County and the service provider in compliance with this title.

K. Temporary Lighting: Temporary lighting that does not conform to the provisions of this section may be approved at the discretion of the Planning Director subject to submission of an acceptable temporary use permit for exterior lighting. In addition to the requirements in Section 16.24, temporary lighting is subject to the following requirements:

1. **Permit term and renewal.** Permits shall be valid for no more than thirty (30) calendar days and subject to no more than one renewal, at the discretion of the Planning Director, for an additional thirty (30) calendar days.

2. **Conversion to permanent status.** Any lighting allowed that remains installed after sixty (60) calendar days from the issue date of the permit is declared permanent and is immediately subject to all of the provisions of this section and enforcement provisions of this title.

3. **Exterior lighting permit contents.** A request for temporary exemption to any provision of this section shall contain minimally the following listed information:

   a. Specific exemptions requested;

   b. Previous temporary exemptions, if any;

   c. Duration of time requested exemption;
d. Type and use of exterior light involved;

e. Type and lumens of proposed lamps;

f. A plan with proposed luminaire locations; and

g. Manufacturer data sheets for proposed luminaires.

4. In addition to the above data, the Planning Director may request any additional information which would enable a reasonable evaluation of the request for temporary exemption.

L. Architectural and Landscape Lighting: Exterior lighting used to illuminate the walls or architectural features of a building or structure, and landscape lighting used to illuminate trees or other landscape elements, is permitted subject to the following conditions:

1. All such lighting shall comply with the curfew requirement and light trespass prohibition specified in this section.

2. Luminaire used for uplighting of structures may be unshielded by design provided that their direct light is completely captured by architectural surfaces and not emitted directly into the night sky. In the event that an applicant wishes to illuminate surfaces in this manner, the applicant shall also provide with the lighting plan required in subsection G of this section information on the construction materials of illuminated surfaces, their colors and finishes.

3. The luminance of architectural surfaces shall not exceed 27 candelas per square meter.

4. Luminaire used for uplighting of trees or other landscaping elements may be unshielded by design provided that their direct light is mostly captured by trees or landscaping and not emitted directly into the night sky. In the event that an applicant wishes to illuminate trees or landscaping in this manner, the applicant shall also provide with the lighting plan required in subsection G of this section, information on the height of the trees or landscaping. The luminaires used for the uplighting of trees or other landscaping elements shall not exceed 10 lumens per vertical foot of the trees or
landscaping, and may not exceed 1,000 lumens per improved acre. This limit does not create an additional allowance beyond the site lumen threshold stated in subsection I, item 3c of this section.

HISTORY

Adopted by Ord. 13-15 on 10/16/2013
Amended by Ord. 14-05 on 11/5/2014
16.15.25: SIGN STANDARDS

A. Statement of Purpose: The purpose of this code is to establish standards for the erection and use of signs, symbols, markings and advertising devices within the JBOZ. These standards are designed to promote and protect the public welfare, health and safety of persons within the community and to aid in the development and promotion of business and industry by providing sign regulations which encourage aesthetic creativity, effectiveness and flexibility in the design and use of such devices without creating detriment to the general public.

B. Use Authorized: This code authorizes the use of signs, provided they are:

1. Compatible with their surroundings, pursuant to the objectives of proper design and zoning amenities;

2. Designed, installed and maintained to meet the sign user’s needs, while at the same time promoting the amenable environment desired by the general public;

3. Designed, constructed, installed and maintained in such a manner that they do not endanger public safety or traffic safety;

4. Legible, readable and visible from the adjacent travelway or closest right of way in the circumstances in which they are used;

5. Respectful of the reasonable rights of other advertisers whose messages are displayed;

6. Comply with the other requirements of this code.

C. Short Title: This section shall be known as the SIGN CODE OF THE JORDANELLE BASIN OVERLAY ZONE, or may be so cited and pleaded and shall be referred herein as the code.

D. Definitions: The definitions used in section 16.26 of this title shall apply to the sign standards of this section.
E. Permits Required:

1. Except as otherwise provided in this code, it shall be unlawful for any person to erect, construct, enlarge, move or convert any sign in the county, or cause the same to be done, without first obtaining a sign permit for each such sign. This does not apply to changing the copy of any existing sign, nor for the repainting, cleaning or other normal maintenance of such sign, so long as the sign is not modified in any way, and so long as the existing sign complies with the terms of this code as to size, location, lighting and composition as outlined in this code.

2. Any permits issued shall become null and void if such sign is not erected within one hundred eighty (180) days from the issuance of said permit.

F. Construction Specifications:

1. No sign shall be constructed to block any road, driveway, exit, fire escape, door or window, or any means of ingress or egress for persons to and from the building, or for automobiles to and from the property or adjoining property;

2. No sign shall exceed thirty two (32) square feet in size, excluding any supports therefor;

3. No sign shall exceed seven feet (7') in height;

4. All signs shall be made of either wood or an approved material which has the same appearance as wood;

5. All lettering on the sign shall be approved as to size, color and style;

6. All lighting of the sign shall be approved before issuance of a permit and shall comply with the lighting code. Lighted signs, whether illuminated internally or externally, shall comply with all of the following:

   a. Adhere to all provisions of Section 16.21.16. Internally illuminated signs are exempted from the full shielding requirement.
b. Not exceed, in any design or message element, a luminance of forty (40) candelas per square meter between one (1) hour after sunset and one hour before sunrise; and

c. Be fully extinguished after the end of regular business hours and remain in that state until no earlier than one (1) hour before sunrise.

7. All signs shall be readable from the adjacent travelway or closest right of way.

G. Prohibited Signs:

1. Animated and intensely lighted signs;

2. Moving signs;

3. Banners, flags, pennants, search lights, twirling signs, sandwich board signs, sidewalk or curb signs, balloons or other gas filled figures (this does not include a temporary "for sale" sign placed by a realtor or owner of property which is for sale, or "open house" signs);

4. Roof signs;

5. Video signs;

6. Off premises signs;

7. Billboards;

8. Projections signs;

9. Electronic message signs;

10. Other signs:

   a. Signs which bear or contain statements, words or pictures of an obscene or pornographic character;

   b. Signs which are painted on or attached to any fence, wall or structure (unless a permit has been granted
therefore) other than a means of posting the name of the
occupant or address of a residence;
c. Signs which emit audible sound, odor or matter;
d. Signs which are an imitation of an official traffic sign
or signal, or may be confused with such;
e. Any sign or combination of signs which cover more than
ten percent (10%) of the building facade on any side of
such building.

H. Master Sign Plans:

1. Buildings or clusters of buildings within a project or
premises, having more than one tenant or use, shall provide
a master sign plan for the entire structure or project prior
to any sign permit approval by the planning department.

2. The master sign plan shall be designed to establish a common
theme or design for the entire building, using similar
construction methods, compatible colors, scale, and identical
backgrounds.

3. Master sign plans for office buildings must focus primarily
on the identification of the building. Individual tenants may
be identified with lettering on exterior windows, doors or a
building directory.

4. Total sign area within the master sign plan is subject to the
size limitation identified in subsection r2 of this section,
except the planning director may grant additional sign area,
provided the total area requested does not exceed five percent
(5%) of the building face to which the signs are attached.
The planning director must make findings based on the
following criteria:

   a. Signs must be designed to fit within and not detract
      from or obscure architectural elements of the building
      facade;

   b. Signs must establish a visual continuity with adjacent
      building facades and be oriented to emphasize pedestrian
      or vehicle visibility;
c. The building must have more than one tenant in more than one space; and

d. The building must have more than seventy feet (70') of street frontage.

I. Setback Requirements: Signs shall not be placed in the setback area as defined for the zone in which the sign is located, except in the commercial area. Signs in the commercial area may be set back ten feet (10') from the property line. The planning director may decrease the setback if it is determined that the public will benefit from a sign located otherwise, due to site specific conditions such as steep terrain, integration of sign on retaining walls, heavy vegetation, or existing structures on the site or adjoining properties.

J. Maintenance And Repair: All signs shall be maintained in a safe, presentable and good structural condition at all times, including the repair or replacement of defective or worn parts, painting, repainting, cleaning and any other acts required for the maintenance of said sign. If a sign is not made to comply with the standards of this code within ten (10) days of written notice to comply, such sign may be removed and the owner may be charged for the cost of such disposal.

K. Abandoned Signs: Any signs which remain on the premises which becomes vacant and remains unoccupied for a period of ninety (90) days or more, or any sign which pertains to an event, time or purpose which no longer applies, shall be deemed to have been abandoned. All such abandoned signs shall be removed by the owner of the premises on which the sign is located. If not so removed within ten (10) days of written notice to remove such sign, the sign may be removed and the owner may be charged for the cost of such disposal.

L. Notices: The notice shall be mailed to the owner of the property on which the sign is located. An additional notice shall be posted on or very near the sign itself.
M. Disposal Of Signs: Any sign removed under this code becomes the property of the county and may be disposed of in any manner deemed appropriate by the county. The cost of removal of the sign shall be considered a debt owed to the county and may be recovered in an appropriate court action, including any and all incidental expenses incurred in connection with the sign removal.

N. Dangerous Signs: When it is determined by the county zoning administrator that any sign would cause an imminent danger to the public safety and contact with the owner cannot be made immediately, no written notice or posting shall be required. In this emergency situation, the sign may be removed by the county immediately.

O. Conflict: If any portion of this section is found to be in conflict with any other provision of any zoning, building, fire safety or health ordinance, the provision which establishes the more restrictive standard shall prevail.

HISTORY
 Adopted by Ord. 09-04 on 3/13/2009
 Amended by Ord. 09-06 on 5/28/2009
EXHIBIT E - List of proposed changes

List of proposed 2023 changes to the Wasatch County, Utah, outdoor lighting ordinance (§16.21.16) and sign ordinance (§16.15.25)

NOTE: Subsection numbering/lettering refers to the proposed amended ordinance.

1. §16.21.16 (Title): “Outdoor lighting” is changed to “Exterior lighting” throughout.
2. §16.21.16(A) (Definitions): Wording is added to indicate "Other words not defined shall have their respective and commonly understood meanings ."
3. §16.21.16(A) (Definitions): The term "correlated color temperature" is added with a definition.
4. §16.21.16(A) (Definitions): The terms "cutoff", "cutoff angle" and "cutoff type luminary" are struck.
5. §16.21.16(A) (Definitions): The term "exterior lighting" is added with a definition.
6. §16.21.16(A) (Definitions): Figure A is moved to new subsection D (Approved Materials And Methods Of Construction Or Installation/Operation)
7. §16.21.16(A) (Definitions): The term "family residential lot" is added with a definition.
8. §16.21.16(A) (Definitions): The term "foot candle" is struck.
9. §16.21.16(A) (Definitions): The term "fossil fuel lighting" is added with a definition.
10. §16.21.16(A) (Definitions): The term "fully shielded" is added with a definition.
11. §16.21.16(A) (Definitions): The term "holiday lighting" is added with a definition.
12. §16.21.16(A) (Definitions): The term "illuminance" is added with a definition.
13. §16.21.16(A) (Definitions): The term "Illuminating Engineering Society" is added with a definition.
14. §16.21.16(A) (Definitions): The term "improved acre" is added with a definition that includes all surfaces covered by building envelopes, hardscape/impervious cover, and manicured landscaping, but not including areas not accessible to pedestrians, detention ponds and areas of native vegetation.
15. §16.21.16(A) (Definitions): The term “International Dark-Sky Association” is added with a definition.
16. §16.21.16(A) (Definitions): The term “light trespass” is added with a definition.
17. §16.21.16(A) (Definitions): The term “lumen” is added with a definition.
18. §16.21.16(A) (Definitions): The term “luminance” is added with a definition.
19. §16.21.16(A) (Definitions): The term “luminary” and its definition are struck and replaced with the term “luminaire” and its definition.
20. §16.21.16(A) (Definitions): The term “pole height” is added with a definition.
21. §16.21.16(A) (Definitions): The term “outdoor lighting” is struck.
22. §16.21.16(A) (Definitions): The term “standards” is struck.
23. §16.21.16(A) (Definitions): The term “outdoor sports lighting” is added with a definition.
24. §16.21.16(A) (Definitions): The term “single-family residential lot” is added with a definition.
25. §16.21.16(B)(1) (Applicability): This section makes the ordinance applicable to:
   a. New construction requiring permits;
   b. Remodeling of existing structures requiring permits; and
   c. “Installation of new outdoor luminaires for any purpose”.

   It also explicitly exempts single-family residential lots and agricultural uses from regulation “except for light trespass requirements”

26. §16.21.16(B)(2) (Applicability): Establishes the possibility of regulation of exterior lighting that is more strict than the ordinance through conditional use permits.
27. §16.21.16(B)(13) (Applicability): Declares that in case of conflicting provisions either within this ordinance, or in any other ordinance, the most restrictive shall control.
29. §16.21.16(C)(2) (Amortization of non-conforming installations): Allows existing non-conforming exterior lighting to persist in that condition until any of several stated compliance triggers occurs, at which point immediate compliance is required. The triggers include:
   a. Approval of a land use permit or a building permit including structures;
   b. Change of use from a single family residential use or agricultural use to any other use;
   c. Any renovation exceeding 20% of the assessed value;
   d. Reconstruction in the event of destruction of at least 50% of the assessed value; and
   e. A determination by the Planning Director that lighting constitutes a public nuisance;
   f. The replacement of a legal non-conforming luminaire.
30. §16.21.16(C)(3) (Amortization of non-conforming installations): Requires conformity prior to the issuance of a certificate of occupancy or similar.
31. §16.21.16(D) (Approved Materials And Methods Of Construction Or Installation/Operation): Reintroduces Figure A, which previously appeared in the original subsection D (Cutoff Angle). That former subsection is struck.

32. §16.21.16(E)(Heights Of Pole-Mounted Luminaires): The former subsection E ("Heights of Standards") is modified to refer to "Heights Of Pole-Mounted Luminaires" and swaps former references to "standards" for references to "poles". The height limits in the current ordinance are retained. References to "areas" are replaced with "zones".

33. §16.21.16(F) (Prohibited Lighting): This section is substantially modified to add a number of additional items including:
   a. Non-fully shielded flood lighting, with limited exemptions in §16.21.16(L) (Architectural and Landscape Lighting);
   b. "Searchlights, skybeams, and similar lighting", with limited exceptions for their use by first responders;
   c. Lasers, except for low-intensity sources used in holiday lighting displays;
   d. "Fading, flashing, blinking, or rotating" sources; and
   e. Luminaires using mercury vapor lamps.

34. §16.21.16(G)(1) (Plan Required): Additional required elements for permit applications are stated:
   a. Whether the luminaires are fully shielded;
   b. Correlated color temperature of light sources;
   c. Inclusion of any equipment intended to actively control the light output of luminaires;
   d. The number of lumens of light per improved acre;
   e. A rendering of any pole-mounted street and roadway luminaires;
   f. Demonstration that all lighting meets the requirements in Section I(3); and
   g. Calculations or photometric models indicating the maximum luminance value for any illuminated surface of any building or vertical structure.

35. §16.21.16(G)(2) (Plan Required): Enables external review of plan submissions by consulting lighting engineers at applicant cost and may require applicants to submit additional supporting information with applications.

36. §16.21.16(G)(3) (Plan Required): Explicitly requires approval of any modifications to approved plans.

37. §16.21.16(H) (Exemptions): The existing "Exception" section is renamed "Exemptions". The list of exempted lighting types is significant expanded, including:
   a. Public lighting, which is now regulated in §16.21.16(J);
   b. Temporary emergency lighting on private property;
   c. Lighting used by public works for use during repairs of "roads, utilities and similar infrastructure";
   d. Holiday lighting displays, subject to certain limitations;
   e. Outdoor sports lighting, subject to certain limitations;
   f. Underwater lighting of water features, provided lighting is not directed above the horizontal;
   g. Lighting generated by combustion of fossil fuels;
h. String or festoon lighting, subject to certain limitations;

i. Temporary lighting installations, subject to the requirements of §16.21.16(K) and §16.24; and

j. Any type of lighting whose installation and use are required by legal jurisdictions higher than the County.

k. Exterior lighting installed on single family residential lots and agricultural uses, except for light trespass requirements.

38. §16.21.16(l) (Lighting Standards): Significant additions as follows:

a. Exterior lighting installations must comply with the building code;

b. All luminaires must be fully shielded unless otherwise exempted;

c. Illuminances of lighting installations on non-residential uses are limited to the IBC requirements, where applicable, or otherwise to the IES-recommended minima per lighting application, and a 25,000 lumen per improved acre site limit in addition to those restrictions (further stating that parking lot lighting and any required lighting by, e.g., the IBC does not count toward the site lumen limit);

d. A 3000K correlated color temperature limit;

e. A general prohibition of light trespass;

f. A 10pm general lighting curfew with exemptions of (1) businesses relating to their business hours, and (2) lighting in certain public safety-related applications on the condition that such lighting is controlled by motion sensors with maximum 5-minute trigger durations. Lighting is allowed to come on again one hour before sunrise.

g. Restrictions on nighttime illumination of flags; and

h. Adherence of lighting of service station canopies to IES minimum illuminance recommendations.

39. §16.21.16(l) (Lighting Standards): Specific requirements for street lighting formerly listed here are moved to the new §16.21.16(J)(4).

40. §16.21.16(J) (Public Lighting): New subsection added with provisions applying only to County-owned lighting as follows:

a. Warranting of all new lighting installations;

b. 10pm curfew (street lighting excepted), with lighting allowed to come back on one hours before sunrise;

c. A requirement that all new installation of County-owned lighting make use of adaptive controls (street lighting excepted); and

d. Certain standards for street lighting formerly appearing in §16.21.16(l).

41. §16.21.16(K) (Temporary Lighting): New subsection establishing a process for formally permitting lighting used in temporary installations with requirements as follows:

a. A 30-day limit on temporary installations subject to one 30-day renewal;

b. Conversion of temporary status to permanent lighting for any permitted lighting persisting beyond 60 days; and

c. Required contents of permits for temporary lighting, granting the Planning Director the authority to request additional information as needed to enable proper evaluation of applications.
42. §16.21.16(L) (Architectural and Landscape Lighting): New subsection added with provisions applying only to non-residential lighting used to illuminate architectural and landscape features for aesthetic purposes with requirements as follows:
   a. Applicability of the curfew requirement and light trespass prohibition in §16.21.16(I);
   b. Allowance of unshielded lighting provided the light is completely captured on surfaces and emitted directly into the night sky;
   c. Additional elements for plan submission include “information on the construction materials of illuminated surfaces, their colors and finishes”; and
   d. A surface luminance limit of 27 candelas per square meter (cd/m²) on illuminated architectural surfaces.
   e. Allowance of landscape lighting subject to (1) a limit of 10 lumens per vertical foot of the tree or landscaping, and (2) landscape lighting may not exceed 1,000 lumens per improved acre (noting further that this does not constitute an allowance beyond the 50,000 lumen per improved acre figure in subsection I, item 3(c).)

43. §16.15.25(F)(6) (Construction Specifications): Adds additional constraints on the use of illuminated signs consisting of the following:
   a. Adherence to all requirements of §16.21.16;
   b. Exemption of internally illuminated signs from the full shielding requirement of §16.21.16(I)(2);
   c. A luminance limit of 40 candelas per square meter during the overnight hours; and
   d. Lighting is to be fully extinguished from the end of usual business hours to one hour before sunrise the following morning.
EXHIBIT F - Explanatory lighting graphics

<table>
<thead>
<tr>
<th>Candlelight</th>
<th>Tungsten Light</th>
<th>Electronic Flash</th>
<th>Overcast Daylight</th>
<th>Blue sky</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Early Sunrise</td>
<td>Noon Daylight</td>
<td>Direct Sun</td>
<td></td>
</tr>
<tr>
<td>Household Light Bulbs</td>
<td></td>
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</tbody>
</table>

Kelvins

LUMENS
NON-DIRECTIONAL LAMPS

USEFUL LUMENS
DIRECTIONAL LAMPS (SPOTLIGHT)