



## CITY COUNCIL AGENDA REPORT

**Meeting Date:** January 18, 2024

**From:** Adrienne Etherton, Sustainability Manager

**Subject:** Dark Sky Ordinance Second Reading

This Ordinance is exempt from further environmental review under the California Environmental Quality Act (CEQA) because it is not a project (CEQA Guidelines, §15378 (b) (2)).

### **Community Goal/Result**

Ecological Sustainability; Community Building; Safe Community

### **Purpose**

To protect and enhance the local environment and public health by reducing light pollution at night through reasonable restrictions on outdoor lighting.

### **Recommendation**

Adopt an ordinance, waiving second reading, adding Chapter 15.88 Outdoor Lighting Standards to the Brisbane Municipal Code.

### **Background**

This ordinance was introduced at the regular City Council meeting held on November 16, 2023, and was passed unanimously with minor changes requested.

### **Discussion**

The following changes were incorporated into the final ordinance, as shown in the redlined version in Attachment 2. The first four changes were requested by Councilmembers and the date in the fifth change was inserted by staff.

1. A definition of “internally illuminated signage” was added and clarification of how that signage is covered was added in section 15.88.040.
2. Clarification of how lighting at building entrances is covered was added in section 15.88.040.
3. Curfew requirements were moved out of the table in section 15.88.050 and consolidated into an existing subsection on Curfew in section 15.88.060.
4. Seasonal lighting dates were shifted to September 15 to January 31.
5. The effective dates in section 15.88.110 were updated from TBD to March 1 of the respective years; the start of the first month after anticipated passage plus 30 days.

### **Measure of Success**

Adoption of the Dark Sky Ordinance leads to reduced local light pollution and energy waste.

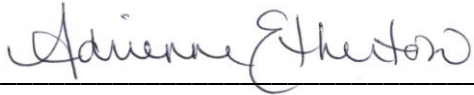
### **Environmental Review**

Adoption of this ordinance does not need further environmental review under the California Environmental Quality Act (CEQA) as it is general policy and procedure making not applied to a

specific instance and therefore it is not a “project” (California Code of Regulations, Title 14, Division 6, Chapter 3, Article 20, §15378 (b) (2)).

**Attachments**

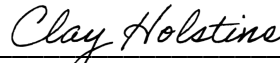
1. November 16, 2023 staff report without attachments
2. Dark Sky Ordinance - redline version
3. Dark Sky Ordinance - clean version



Adrienne Etherton, Sustainability Manager



Randy Breault, Public Works Director



Clay Holstine, Interim City Manager



## CITY COUNCIL AGENDA REPORT

**Meeting Date:** November 16, 2023

**From:** Adrienne Etherton, Sustainability Manager

**Subject:** Dark Sky Ordinance

This Ordinance is exempt from further environmental review under the California Environmental Quality Act (CEQA) because it is not a project (CEQA Guidelines, §15378 (b) (2)).

### Community Goal/Result

Ecological Sustainability; Community Building; Safe Community

### Purpose

To protect and enhance the local environment and public health by reducing light pollution at night through reasonable restrictions on outdoor lighting.

### Recommendation

Introduce the Dark Sky Ordinance, waiving first reading, adding Chapter 15.88 Outdoor Lighting Standards to the Brisbane Municipal Code.

### Background

Growing evidence in recent years has recognized the significant negative impact of artificial light at night on ecosystems and human health. As LED lighting has decreased in cost and grown in popularity, increased use has contributed to over-lighting that wastes energy, interrupts the sleep of neighbors, and disrupts the habits of pollinators, migratory birds and other species.

Brisbane's Open Space and Ecology Committee (OSEC) has had this on their annual workplan since 2018. Beginning in 2021, an OSEC subcommittee and Sustainability and Planning staff collaborated to evaluate priorities for the ordinance and appropriate standards.

In February 2023, City Council liaisons O'Connell and Mackin joined OSEC to discuss whether the City should pursue International Dark Sky Community certification. Due to the strict requirements of certification and Brisbane's surroundings in a heavily urbanized area, direction was provided to bring forth an ordinance customized to the local context.

John Barentine of Dark Sky Consulting was engaged to review an initial draft of the ordinance. Barentine recommended modifications and helped establish quantitative standards to ensure the ordinance would reduce the impacts on local environmental and public health while providing the lighting necessary to ensure community safety and security. The draft ordinance was reviewed by Public Works, Community Development, Police, Fire, and Code Enforcement staff, and legal counsel.

In September, staff and the subcommittee released a community survey to collect feedback on the proposed ordinance; 173 responses were received with the overwhelming majority from local residents. As you can see in the summary in Attachment 4, most respondents were

supportive of the proposed rules and felt that outdoor lighting at night in Brisbane is a problem, while a vocal minority were opposed or felt it would not make a difference.

OSEC reviewed the ordinance at their October meeting and with a minor modification related to regulation of the Brisbane STARS, voted unanimously to recommend the ordinance for City Council consideration. After OSEC's review, staff noticed the omission of the C/PU zoning district from section 15.88.050, and the need for clarification on lighting exempted from shielding or broader compliance with the ordinance being exempt from the prohibition on light trespass. These changes have been added in redline in the attached draft.

## **Discussion**

Outdoor lighting is crucial for safety and security and is effective when light is used when and where needed; light that is directed into the sky, beyond the property on which it is being used, or in areas not in use is a waste of energy and detrimental to neighbors and the nocturnal environment. The ordinance focuses on a few key strategies to reduce problematic lighting:

1. **Shielding:** most outdoor light fixtures are required to be fully shielded, that is, physically covering the light source so that light is only emitted downward. Exceptions include low-intensity string lights, seasonal lighting, and lighting of a US or CA flag.
2. **Light trespass:** the light source (i.e. bulb) cannot be visible offsite of the property.
3. **Color temperature:** the "correlated color temperature" of outdoor lighting, except seasonal or other exempted lighting, shall be 3000 Kelvin or less, which is a "warmer" yellow light as opposed to "cooler" blue light hues that mimic daylight.
4. **Curfews and other lighting controls:** most outdoor lighting should be off after 10pm or close of business, whichever is later. Lighting activated by motion sensor which extinguishes ten minutes after activation and lighting at building entrances, parking areas and driveways (residential), or driveway egress points (commercial) is not subject to curfew. Commercial uses shall utilize automated control systems such as motion sensors, timers and/or photocells which are programmable and have battery backup.
5. **Sitewide illumination limits which vary by zoning district:** The ordinance limits the total illumination, measured in lumens, generated by all exterior lighting on a given property. Maximum illumination limits vary by district and land use, and are based on either the developed lot area (roughly equivalent to the lot coverage) for residential uses or area of hardscape (i.e., driveways, parking lots, patios) for commercial uses. Limits are tailored to the land use, with allowable illumination in Open Space areas only ten percent of those in commercial zones.

In addition, the ordinance exempts or has limited requirements over certain lighting types:

- **Exempt:** Low-intensity landscape lighting, indoor lighting, combustible fuel lighting when used temporarily in occupied areas, fire alarm notification devices, and any form of lighting regulated by authorities above the City (i.e. school districts, federal agencies such as the Coast Guard). Address lighting, temporary emergency or construction lighting, or temporary lighting not subject to city permitting are exempt but shall be deployed to comply to the greatest practical extent with the ordinance.

- Curfew Only: Brisbane Stars and seasonal/holiday lighting, with seasonal lighting limited to Oct 1 – Feb 15.
- Streetlights: are not subject to curfew and light trespass; acorn-style decorative lights are exempt from shielding until an approved replacement program is in place; a maximum brightness level is established; and all lamps will be replaced upon burnout to meet ordinance standards.
- Recreational and Athletic Fields: shall meet appropriate Illuminating Engineering Society standards and include timers to prevent lights being left on accidentally.

Compliance is addressed across various timelines depending on difficulty:

- All new or replaced outdoor lighting after the effective date shall comply. Planning and building application requirements will be modified to include lighting inventories and other details to demonstrate compliance with the ordinance.
- Within one year of the effective date of the ordinance, all existing outdoor lights (except streetlights) shall make the “easy fixes”: directing lighting downward if possible, adjusting dimmers and motion timers to comply where lighting is equipped with them, and replacing bulbs to meet color and lumen thresholds when they are replaceable.
- More extensive changes, such as replacement of fixtures, shall be completed within:
  - Five (5) years for non-residential zones;
  - Ten (10) years for residential zones;
  - Fifteen (15) years for streetlights and other City facilities.
  - Extensions for financial or other hardship up to one year may be requested.
- Deviations may be approved for unique circumstances and shall achieve the intent of the ordinance to the maximum extent feasible. Decisions shall be noticed publicly and to property owners within a 300’ radius and are appealable to the City Manager.
- Enforcement would be complaint-based and subject to the City’s regular Administrative Citation process.

Altogether, the proposed standards attempt to balance lighting needs for safety, security and outdoor activities while eliminating or reducing lighting that doesn’t serve a useful purpose. The compliance timelines intend to provide property owners ample opportunity to make changes as existing lighting burns out or is otherwise due for replacement and limit the financial burden. Staff and the OSEC dark sky subcommittee expect to embark on an extensive education and outreach campaign to bring awareness to the problem of light pollution and the regulations. In addition, if the Council advises, a program to support conversions among those with financial hardship could be proposed for consideration with the next fiscal year budget; such a program was recommended by some survey respondents.

### **Fiscal Impact**

As proposed, the ordinance will result in required changes to streetlights and other public facilities within fifteen (15) years of the effective date, with an estimated cost upwards of \$1M. Staff proposes to create a program to systematically make updates over time, spreading the cost out, with priority for areas deemed most problematic. This program will be subject to Council’s approval for funding.

Additional implementation costs may include equipment and training for police officers.

Should the City Council wish to consider a program for those with financial hardship, those additional costs could be considered within the annual budget.

**Measure of Success**

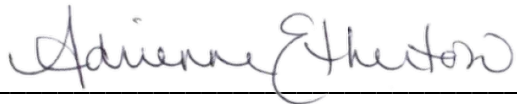
Adoption of the Dark Sky Ordinance leads to reduced local light pollution and energy waste.

**Environmental Review**

Adoption of this ordinance does not need further environmental review under the California Environmental Quality Act (CEQA) as it is general policy and procedure making not applied to a specific instance and therefore it is not a “project” (California Code of Regulations, Title 14, Division 6, Chapter 3, Article 20, §15378 (b) (2)).

**Attachments**

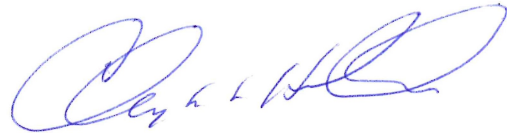
1. Draft Dark Sky Ordinance
2. Sample educational ordinance summary
3. Map of proposed overall light allowances
4. Results of community survey



Adrienne Etherton, Sustainability Manager



Randy Breault, Public Works Director



Clay Holstine, City Manager

**ORDINANCE NO. xxx**  
**AN ORDINANCE OF THE CITY OF BRISBANE**  
**ADDING CHAPTER 15.88 TO THE BRISBANE MUNICIPAL CODE**  
**CONCERNING OUTDOOR LIGHTING STANDARDS**

**The City Council of the City of Brisbane hereby ordains as follows:**

**SECTION 1: Chapter 15.88 is hereby added to the Brisbane Municipal Code to read as follows:**

**§15.88.010 - Title.**

This chapter shall be known as the “Brisbane Dark Sky Ordinance.”

**§15.88.020 - Purpose.**

The purpose of this chapter is to establish regulations and a process to review outdoor lighting in order to accomplish the following:

- A. Minimize direct glare and prevent excessive lighting, thereby minimizing light pollution caused by inappropriate or misaligned light fixtures, and promoting common courtesy among neighbors;
- B. Reclaim views of the night sky and thereby help preserve Brisbane’s rural quality of life and the scenic value of this desirable visual resource;
- C. Promote wildlife habitation and migration by minimizing light pollution;
- D. Provide sufficient lighting where it is needed to promote safety and security on public and private property;
- E. Allow flexibility in the style of outdoor lighting;
- F. Provide standards for efficient and moderate use of lighting which balance energy use and economic impact;
- G. Provide lighting standards that may evolve according to advancements in technology; and
- H. Promote lighting practices and systems which conserve energy, decrease dependence on fossil fuels and limit greenhouse gas emissions consistent with the California Global Warming Solutions Act and other applicable state and federal law.

**§15.88.030 - Definitions.**

Notwithstanding the definitions in Chapter 17.02 of this Code, for purposes of this chapter only, the following words and phrases are defined as follows:

- A. “Brisbane Stars” mean outdoor star-shaped lighted structures customary to Brisbane.
- B. “Correlated Color Temperature” or Color Temperature is a specification of the color appearance of the light emitted by a light source, measured in Kelvin (K). Warmer color temperatures are a lower number, and cooler color temperatures are a higher number.

- C. “Curfew” means the time of day when lighting restrictions, based on zoning district, are in effect.
- D. “Developed lot area” means the portion of a lot that is covered or occupied by structures and includes any finished surface, such as a slab or deck, which is covered by a roof or other solid covering with at least seven (7) feet of clearance, other than an eave or overhang, and includes also cantilevered bays and other enclosed architectural projections which contain floor or seating area.
- E. “Directional lighting” means methods of directing light downward, rather than upward or outward, with the intention of directing light where it is needed.
- F. “Dynamic lighting” means lighting that changes intensity or color rapidly during use.
- G. “Fully shielded” means a light fixture constructed and installed in such a manner that all light emitted, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane (from the bottom of the lamp).
- H. “Glare” means light entering the eye directly from a light fixture or indirectly from reflective surfaces that causes visual discomfort or reduced visibility to a reasonable person.
- I. “Hardscaping” means permanent hardscape improvements on a site, including but not limited to parking lots, decks and patios, docks and piers, drives, entrances, curbs, ramps, stairs, steps, medians, walkways, and non-vegetated landscaping that is ten (10) feet or less in width. Materials may include but are not limited to concrete, asphalt, stone, gravel, or wood timbers. Hardscaping does not include the footprint of buildings.
- J. “Internally illuminated signage” means any signage that is illuminated by an interior light source, which is primarily designed to illuminate only the sign.
- ~~J.K.~~ “Lamp” means, in generic terms, a source of optical radiation (i.e., “light”), often called a “bulb” or “tube.” Examples include incandescent, fluorescent, high-intensity discharge (HID) lamps, and low-pressure sodium (LPS) lamps, as well as light-emitting diode (LED) modules and arrays.
- ~~K.L.~~ “Light pollution” means the material adverse effect of artificial light, including, but not limited to, glare, light trespass, sky glow, energy waste, compromised safety and security, and impacts on the nocturnal environment, including light sources that are left on when they no longer serve a useful function.
- ~~L.M.~~ “Light trespass” means 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 light source is visible from any other property.
- ~~M.N.~~ “Lumen” means the common unit of measure used to quantify the amount of visible light produced by a lamp or emitted from a light fixture (as distinct from “Watt,” a measure of power consumption).
- ~~N.O.~~ “Luminaires” means outdoor light fixtures as defined in this Section.



~~O.P.~~ “Outdoor light fixtures” means outdoor illuminating devices, lamps and similar devices, including solar powered lights, and all parts used to distribute the light and/or protect the lamp, permanently installed or portable; synonymous with “luminaires.”

~~P.Q.~~ “Outdoor recreational facility” means outdoor athletic and sports areas, such as ball fields, courts, swimming pools, skate parks and similar, but does not mean or include trails or playgrounds.

~~Q.R.~~ “Seasonal lighting” means lighting installed and operated in connection with holidays or traditions; Brisbane Stars are considered separately for the purposes of this chapter.

~~R.S.~~ “Security lighting” means lighting intended to detect intrusions or other criminal activity occurring on a property or site.

~~S.T.~~ “Skyglow” means the brightening of the nighttime sky that results from scattering and reflection of artificial light by air molecules, moisture, and dust particles in the atmosphere, caused by light directed or reflected upwards or sideways and reduces one’s ability to view the night sky.

~~T.U.~~ “String lights” means light sources connected by free-strung wires or inside of tubing resulting in several or many points of light.

#### **§15.88.040 - Applicability.**

- A. All existing outdoor light fixtures installed prior to the effective date of this ordinance shall conform to the provisions of this ordinance according to the compliance schedule set forth in Section 15.88.100.
- B. All outdoor light fixtures installed or replaced after the effective date of this ordinance shall comply with this chapter.
- C. For any property subject to this chapter and also regulated by permit conditions pertaining to outdoor lighting, the more restrictive provisions in terms of minimizing light pollution shall apply.
- D. Nothing in this chapter shall prohibit a declaration of covenants, conditions, and restrictions for private enforcement from further restricting lighting so long as it meets the minimum standards detailed in this chapter.
- E. The following lighting and activities are not regulated by this chapter:
  1. Indoor lighting.
  2. Construction or emergency lighting provided such lighting is temporary, necessary, and is discontinued immediately upon completion of the construction work or termination of the emergency; provided, however, construction or emergency lighting shall be deployed to comply with the ordinance to the greatest practical extent.
  3. Building or premises address identification lighting that complies with the minimum applicable building or health and safety requirements, as determined by the Building Official; provided however, such lighting shall be deployed to comply with this ordinance to the greatest practical extent, with the exception of curfew requirements.

4. Low-intensity landscape lighting which is directed downward and no greater than 300 lumens per fixture; or low-intensity landscape lighting which is dynamic lighting and no more than 100 lumens per fixture.
5. Any form of lighting whose use preempts this ordinance is exempt from this Chapter.
6. Short-term lighting associated with activities that are otherwise exempt from discretionary or ministerial permitting by the City; provided, however, such lighting shall be deployed to comply with this ordinance to the greatest extent practical.
7. Brisbane School District athletic fields and parking lot lights.
8. Combustible fuel lighting (i.e., fire pits, lanterns, or torches) when used temporarily in occupied areas.
9. Fire alarm notification appliances.

F. Brisbane Stars are subject only to the curfew requirements of 15.88.050.

~~F.G.~~ Internally illuminated signage is subject only to the curfew and total illumination maximums established by Section 15.88.050 of this Chapter.

~~G.H.~~ Streetlights only as covered under 15.88.070.

I. Recreational and athletic fields only as covered under 15.88.080.

J. ~~—~~ Lighting at building entrances is subject to all requirements of this chapter except for the curfew requirements in subsection 15.88.060.E of this Chapter.

**§15.88.050 - Lighting levels by zoning district.**

Table 15.88.050

Zoning District	Maximum lumens per SF of hardscape	Maximum lumens per SF of developed lot area	Curfew	
			Residential	Commercial
O-S	0.35		One hour after sunset	N/A
MLB, R-BA	0.875		10 PM <sup>±</sup>	
NCRO-2, PAOZ-1, PAOZ-2, PD (residential uses only), R-1, R-2, R-3, R-MHP		1.75	10 PM <sup>±</sup>	10 PM or close of business, whichever is later <sup>±2</sup>
NCRO-1, SCRO-1, SP-CRO, HC, M-1, TC-1, TC-2, C/PU	3.5		10 PM <sup>±</sup>	10 PM or close of business, whichever is later <sup>±2</sup>

All other zoning districts and uses not named	Determined at time of application or closest applicable district as determined by the Community Development Director
<sup>1</sup> <del>Lighting activated by motion sensor which extinguishes ten (10) minutes after activation and lighting at building entrances, parking areas and driveways is not subject to curfew.</del> <sup>2</sup> <del>Includes illuminated signage. Lighting activated by motion sensor which extinguishes ten (10) minutes after activation, lighting at the building entrances and driveway egress points is not subject to curfew.</del>	

**§15.88.060 - Citywide requirements.**

A. Shielding.

1. Except as provided in paragraph 2 of this subsection A of this section, all outdoor light fixtures shall be fully shielded.
2. Exceptions to the full shielding requirement include:
  - a. String lights that are no more than 300 lumens per fixture (string), or no more than 100 lumens per fixture for dynamic lighting that changes intensity or color rapidly during use, when used in occupied residential and commercial decks or patios.
  - b. Seasonal lighting during the period specified in §15.88.060.F.
  - c. Lighting that illuminates a United States or California flag and the flagpole to which the flag is affixed, provided these luminaires shall be shielded as necessary so that the light source is not visible from the property line.

B. Light trespass is prohibited, except for fixtures exempted from this ordinance or from shielding requirements in subsection 15.88.060.A of this section.

C. Location of Outdoor Lighting. Except as required for security lighting purposes as determined by the Building Official, the following limitations are imposed on the location of outdoor lighting:

1. Lighting around the perimeter of a site is prohibited, except where it is controlled by motion sensor which extinguishes the light no later than ten (10) minutes after activation.
2. For residential sites, outdoor lighting shall only be used within fifty (50) feet of residentially habitable buildings or swimming pools, driveways and walkways.

D. Lighting Color (Color Temperature). The correlated color temperature of all outdoor lighting shall be three thousand (3,000) Kelvin or less except for seasonal lighting.

E. Curfew. ~~Curfews shall be as required per Section 15.88.050 of this Chapter.~~

1. Residential uses: All lighting subject to this ordinance shall be extinguished no later than 10 PM, except lighting at building entrances, parking areas and driveways, and lighting activated by motion sensor which extinguishes ten (10) minutes after activation.

2. Commercial uses:

a. All lighting, including all illuminated advertising signage, shall be extinguished no later than 10 PM or close of business, whichever is later, except lighting at the building entrances and driveway egress points, and lighting activated by motion sensor which extinguishes ten (10) minutes after activation.

~~a.b. Commercial uses:~~ Automated control systems, such as motion sensors and timers, shall be used to meet the curfew requirements for commercial uses. Photocells or photocontrols shall be used to extinguish all outdoor lighting automatically when sufficient daylight is available. Automated controls shall be fully programmable and supported by battery or similar backup.

- F. Seasonal lighting shall be allowed from ~~October 1~~September 15 to ~~February 15~~January 31 only, subject to curfew requirements established in Section 15.88.050.
- G. All outdoor lighting shall comply with applicable regulations in the California Building Standards Code, as may be amended from time to time.

#### **§15.88.070 – Streetlights**

- A. Publicly-owned acorn-style decorative lights, such as those on Visitacion Avenue and in the Ridge neighborhood, are not subject to the shielding requirements of subsection A of §15.88.050 until such time as an approved program for replacement of said lights is in place. Once that program is in place, replacement lights shall be fully shielded.
- B. The lumen output of each streetlight shall be the lowest reasonable lumen output to meet safety standards but in no case greater than 10,000 lumens.
- C. Lamps in all streetlights shall be replaced upon burnout with lamps which meet the color temperature and lumen requirements of this chapter.

#### **§15.88.080 - Recreational and Athletic Field Facilities**

For outdoor recreational and/or athletic field facilities, the following standards shall apply:

- A. Illuminating Engineering Society (IES) lighting guidelines according to the appropriate class of play or activity;
- B. Field lighting provided exclusively for illumination of the surface of play and viewing stands, and not for any other applications;
- C. Illuminance levels must be adjustable based on the task (e.g., active play vs. field maintenance);
- D. Off-site impacts of the lighting will be limited to the greatest practical extent possible;
- E. Lights must be extinguished by 8 p.m. except when the facilities are being used for active play and the lights are equipped with a timer;
- F. Timers that automatically extinguish lights must be installed to prevent lights being left on accidentally overnight.

#### **§15.88.090 - Deviation Permit Procedures.**

- A. Deviations from the lighting standards provided in this chapter may be approved for private properties if approved by the Community Development Director. Deviations from the lighting standards provided in this chapter may be approved by the Director of Public Works.
- B. Applications to deviate from the lighting standards shall include the following information:
  - 1. A site plan depicting the location of proposed lighting on the site;
  - 2. A lighting inventory that provides, at minimum:

- a. The brightness (in lumens) and correlated color temperature (in Kelvin) of each luminaire;
  - b. The height of each fixture;
  - c. The directional angle of each fixture;
  - d. The character of shielding for each luminaire, if any;
  - e. Identification of luminaires that diverge from the standards of this Chapter and are subject to the deviation request;
  - f. Detailed description of the circumstances which necessitate the deviation;
3. Such other data and information as may be required by the Community Development Director or the Public Works Director.
- C. The deviation may be granted if the following findings are made:
1. There are unique circumstances affecting the subject property or unique design and land use characteristics that make it infeasible or impractical to comply with strict application of the lighting standards detailed in this chapter.
  2. The proposed deviation will achieve the intent of this chapter to the maximum extent feasible.
- D. Notice of the Community Development or Public Works Director's decision to approve or deny the requested deviation shall be mailed to owners of property within a three hundred (300) foot radius of the subject property and posted in compliance with Chapter 1.12 of this Municipal Code. The notice shall describe the requested deviations, the Community Development Director's action to approve or deny the request, and right to appeal the decision to the City Manager pursuant to subsection E of Section 15.88.090.
- E. Appeal Procedures.
- a. An appeal of the Community Development Director's decision shall be in writing and filed with the City Clerk within fifteen (15) days after the date of the notice described in subsection D of Section 15.88.090. The appeal shall be accompanied by a fee, as set by the city council, and shall clearly state the reason for appeal.
  - b. Upon receipt of such appeal, the City Clerk shall notify the Community Development Director and the applicant and shall set a time for an administrative appeal hearing with the City Manager as soon as practical but within thirty (30) days after the receipt of such appeal.
  - c. Notice of the appeal hearing shall be mailed to the applicant, property owner, appellant, and owners of property within three hundred (300) feet of the subject property.
  - d. The City Manager shall conduct a de novo hearing of the application. At the close of the hearing, the City Manager may affirm, reverse or modify the decision of the Director, or refer the matter to the Director for such further consideration as may be directed by the City Manager. The City Manager's decision following the appeal hearing will be final.

### **§15.88.100 - Conflicts with other laws.**

In the event the provisions in this chapter conflict with federal or state law such that this Chapter may be preempted, this chapter shall be applied in a manner intended to carry out all provisions of law to the maximum extent feasible. When there is an irreconcilable conflict between the provisions of this chapter and the requirements of federal or state law such that the provisions of this Chapter are preempted, the provisions of federal or state law shall prevail over the provisions contained in this chapter but only to the extent necessary to avoid preemption.

### **§15.88.110 - Application of chapter to existing nonconforming lighting.**

- A. Effective Date. The effective date of this chapter shall be ~~TBD, 2023~~ March 1, 2024.
- B. The following requirements shall apply to existing outdoor light fixtures, except streetlights covered in §15.88.070, within one year of the effective date of this ordinance:
  - 1. Existing outdoor light fixtures with the ability to be redirected shall be directed downward to minimize sky glow, glare and in a manner to minimize light trespass onto adjacent properties.
  - 2. Outdoor light fixtures that have adjustable dimmers shall be dimmed to comply with Section 15.88.060 to minimize glare and light trespass onto adjacent properties.
  - 3. Outdoor light fixtures that are motion sensor equipped shall be programmed to extinguish not more than 10 minutes after activation.
  - 4. Outdoor light fixtures with removeable lamps shall utilize bulbs meeting this chapter's color and lumen thresholds.
- C. Compliance Period. Notwithstanding the provisions in section B of this Section and Chapter 17.38 (Nonconforming Structures and Uses), a property owner shall comply with the remaining requirements of this chapter by the following compliance deadlines. Any nonconforming lighting still in place after the compliance deadline shall remain extinguished at all times.
  - 1. Existing outdoor lighting in non-residential zoning districts shall comply by ~~TBD, 2028~~ March 1, 2029 [five years from the effective date].
  - 2. Existing outdoor lighting in residential zoning districts shall comply by ~~TBD, 2033~~ March 1, 2034 [ten years from the effective date].
  - 3. Existing streetlights and other lighting at City facilities shall comply by ~~TBD, 2038~~ March 1, 2039 [fifteen years from the effective date].
- D. Extension. A private property owner may apply for an extension of these compliance deadlines by submitting a request to the Community Development Director ninety (90) days before the compliance deadline detailing why an extension is needed. With the exception of lighting provided for security purposes, any noncompliant lighting shall remain extinguished while the request is pending. Upon demonstration of good cause for providing a property owner additional time to comply with the requirements of this section, the Community Development Director may extend the property owner's time to comply and/or may require a plan for compliance that requires partial compliance in advance of full compliance. For purposes of this section, the term "good cause" shall mean a significant financial or other

hardship which warrants an extension or conditional extension of the time limit for compliance established herein. In no instance shall the Community Development Director issue an extension of the compliance period in excess of one year's time. The Community Development Director's decision shall be appealable pursuant to the provisions of Chapter 17.52. of this Code.

**§15.88.120 - Enforcement and penalties.**

Any violation of the provisions of this chapter shall be subject to the provisions of Title 1 Chapters 1.14, 1.16, and 1.18 of this code.

**ORDINANCE NO. xxx**  
**AN ORDINANCE OF THE CITY OF BRISBANE**  
**ADDING CHAPTER 15.88 TO THE BRISBANE MUNICIPAL CODE**  
**CONCERNING OUTDOOR LIGHTING STANDARDS**

**The City Council of the City of Brisbane hereby ordains as follows:**

**SECTION 1: Chapter 15.88 is hereby added to the Brisbane Municipal Code to read as follows:**

**§15.88.010 - Title.**

This chapter shall be known as the “Brisbane Dark Sky Ordinance.”

**§15.88.020 - Purpose.**

The purpose of this chapter is to establish regulations and a process to review outdoor lighting in order to accomplish the following:

- A. Minimize direct glare and prevent excessive lighting, thereby minimizing light pollution caused by inappropriate or misaligned light fixtures, and promoting common courtesy among neighbors;
- B. Reclaim views of the night sky and thereby help preserve Brisbane’s rural quality of life and the scenic value of this desirable visual resource;
- C. Promote wildlife habitation and migration by minimizing light pollution;
- D. Provide sufficient lighting where it is needed to promote safety and security on public and private property;
- E. Allow flexibility in the style of outdoor lighting;
- F. Provide standards for efficient and moderate use of lighting which balance energy use and economic impact;
- G. Provide lighting standards that may evolve according to advancements in technology; and
- H. Promote lighting practices and systems which conserve energy, decrease dependence on fossil fuels and limit greenhouse gas emissions consistent with the California Global Warming Solutions Act and other applicable state and federal law.

**§15.88.030 - Definitions.**

Notwithstanding the definitions in Chapter 17.02 of this Code, for purposes of this chapter only, the following words and phrases are defined as follows:

- A. “Brisbane Stars” mean outdoor star-shaped lighted structures customary to Brisbane.
- B. “Correlated Color Temperature” or Color Temperature is a specification of the color appearance of the light emitted by a light source, measured in Kelvin (K). Warmer color temperatures are a lower number, and cooler color temperatures are a higher number.



- C. “Curfew” means the time of day when lighting restrictions, based on zoning district, are in effect.
- D. “Developed lot area” means the portion of a lot that is covered or occupied by structures and includes any finished surface, such as a slab or deck, which is covered by a roof or other solid covering with at least seven (7) feet of clearance, other than an eave or overhang, and includes also cantilevered bays and other enclosed architectural projections which contain floor or seating area.
- E. “Directional lighting” means methods of directing light downward, rather than upward or outward, with the intention of directing light where it is needed.
- F. “Dynamic lighting” means lighting that changes intensity or color rapidly during use.
- G. “Fully shielded” means a light fixture constructed and installed in such a manner that all light emitted, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane (from the bottom of the lamp).
- H. “Glare” means light entering the eye directly from a light fixture or indirectly from reflective surfaces that causes visual discomfort or reduced visibility to a reasonable person.
- I. “Hardscaping” means permanent hardscape improvements on a site, including but not limited to parking lots, decks and patios, docks and piers, drives, entrances, curbs, ramps, stairs, steps, medians, walkways, and non-vegetated landscaping that is ten (10) feet or less in width. Materials may include but are not limited to concrete, asphalt, stone, gravel, or wood timbers. Hardscaping does not include the footprint of buildings.
- J. “Internally illuminated signage” means any signage that is illuminated by an interior light source, which is primarily designed to illuminate only the sign.
- K. “Lamp” means, in generic terms, a source of optical radiation (i.e., “light”), often called a “bulb” or “tube.” Examples include incandescent, fluorescent, high-intensity discharge (HID) lamps, and low-pressure sodium (LPS) lamps, as well as light-emitting diode (LED) modules and arrays.
- L. “Light pollution” means the material adverse effect of artificial light, including, but not limited to, glare, light trespass, sky glow, energy waste, compromised safety and security, and impacts on the nocturnal environment, including light sources that are left on when they no longer serve a useful function.
- M. “Light trespass” means 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 light source is visible from any other property.
- N. “Lumen” means the common unit of measure used to quantify the amount of visible light produced by a lamp or emitted from a light fixture (as distinct from “Watt,” a measure of power consumption).
- O. “Luminaires” means outdoor light fixtures as defined in this Section.

- P. “Outdoor light fixtures” means outdoor illuminating devices, lamps and similar devices, including solar powered lights, and all parts used to distribute the light and/or protect the lamp, permanently installed or portable; synonymous with “luminaires.”
- Q. “Outdoor recreational facility” means outdoor athletic and sports areas, such as ball fields, courts, swimming pools, skate parks and similar, but does not mean or include trails or playgrounds.
- R. “Seasonal lighting” means lighting installed and operated in connection with holidays or traditions; Brisbane Stars are considered separately for the purposes of this chapter.
- S. “Security lighting” means lighting intended to detect intrusions or other criminal activity occurring on a property or site.
- T. “Skyglow” means the brightening of the nighttime sky that results from scattering and reflection of artificial light by air molecules, moisture, and dust particles in the atmosphere, caused by light directed or reflected upwards or sideways and reduces one’s ability to view the night sky.
- U. “String lights” means light sources connected by free-strung wires or inside of tubing resulting in several or many points of light.

**§15.88.040 - Applicability.**

- A. All existing outdoor light fixtures installed prior to the effective date of this ordinance shall conform to the provisions of this ordinance according to the compliance schedule set forth in Section 15.88.100.
- B. All outdoor light fixtures installed or replaced after the effective date of this ordinance shall comply with this chapter.
- C. For any property subject to this chapter and also regulated by permit conditions pertaining to outdoor lighting, the more restrictive provisions in terms of minimizing light pollution shall apply.
- D. Nothing in this chapter shall prohibit a declaration of covenants, conditions, and restrictions for private enforcement from further restricting lighting so long as it meets the minimum standards detailed in this chapter.
- E. The following lighting and activities are not regulated by this chapter:
  - 1. Indoor lighting.
  - 2. Construction or emergency lighting provided such lighting is temporary, necessary, and is discontinued immediately upon completion of the construction work or termination of the emergency; provided, however, construction or emergency lighting shall be deployed to comply with the ordinance to the greatest practical extent.
  - 3. Building or premises address identification lighting that complies with the minimum applicable building or health and safety requirements, as determined by the Building Official; provided however, such lighting shall be deployed to comply with this ordinance to the greatest practical extent, with the exception of curfew requirements.

4. Low-intensity landscape lighting which is directed downward and no greater than 300 lumens per fixture; or low-intensity landscape lighting which is dynamic lighting and no more than 100 lumens per fixture.
  5. Any form of lighting whose use preempts this ordinance is exempt from this Chapter.
  6. Short-term lighting associated with activities that are otherwise exempt from discretionary or ministerial permitting by the City; provided, however, such lighting shall be deployed to comply with this ordinance to the greatest extent practical.
  7. Brisbane School District athletic fields and parking lot lights.
  8. Combustible fuel lighting (i.e., fire pits, lanterns, or torches) when used temporarily in occupied areas.
  9. Fire alarm notification appliances.
- F. Brisbane Stars are subject only to the curfew requirements of 15.88.050.
- G. Internally illuminated signage is subject only to the curfew and total illumination maximums established by Section 15.88.050 of this Chapter.
- H. Streetlights only as covered under 15.88.070.
- I. Recreational and athletic fields only as covered under 15.88.080.
- J. Lighting at building entrances is subject to all requirements of this chapter except for the curfew requirements in subsection 15.88.060.E of this Chapter.

**§15.88.050 - Lighting levels by zoning district.**

Table 15.88.050

Zoning District	Maximum lumens per SF of hardscape	Maximum lumens per SF of developed lot area
O-S	0.35	
MLB, R-BA	0.875	
NCRO-2, PAOZ-1, PAOZ-2, PD (residential uses only), R-1, R-2, R-3, R-MHP		1.75
NCRO-1, SCRO-1, SP-CRO, HC, M-1, TC-1, TC-2, C/PU	3.5	
All other zoning districts and uses not named	Determined at time of application or closest applicable district as determined by the Community Development Director	

**§15.88.060 - Citywide requirements.**

- A. Shielding.
1. Except as provided in paragraph 2 of this subsection A of this section, all outdoor light fixtures shall be fully shielded.

2. Exceptions to the full shielding requirement include:
  - a. String lights that are no more than 300 lumens per fixture (string), or no more than 100 lumens per fixture for dynamic lighting that changes intensity or color rapidly during use, when used in occupied residential and commercial decks or patios.
  - b. Seasonal lighting during the period specified in §15.88.060.F.
  - c. Lighting that illuminates a United States or California flag and the flagpole to which the flag is affixed, provided these luminaires shall be shielded as necessary so that the light source is not visible from the property line.
- B. Light trespass is prohibited, except for fixtures exempted from this ordinance or from shielding requirements in subsection 15.88.060.A of this section.
- C. Location of Outdoor Lighting. Except as required for security lighting purposes as determined by the Building Official, the following limitations are imposed on the location of outdoor lighting:
  1. Lighting around the perimeter of a site is prohibited, except where it is controlled by motion sensor which extinguishes the light no later than ten (10) minutes after activation.
  2. For residential sites, outdoor lighting shall only be used within fifty (50) feet of residentially habitable buildings or swimming pools, driveways and walkways.
- D. Lighting Color (Color Temperature). The correlated color temperature of all outdoor lighting shall be three thousand (3,000) Kelvin or less except for seasonal lighting.
- E. Curfew.
  1. Residential uses: All lighting subject to this ordinance shall be extinguished no later than 10 PM, except lighting at building entrances, parking areas and driveways, and lighting activated by motion sensor which extinguishes ten (10) minutes after activation.
  2. Commercial uses:
    - a. All lighting, including all illuminated advertising signage, shall be extinguished no later than 10 PM or close of business, whichever is later, except lighting at the building entrances and driveway egress points, and lighting activated by motion sensor which extinguishes ten (10) minutes after activation.
    - b. Automated control systems, such as motion sensors and timers, shall be used to meet the curfew requirements for commercial uses. Photocells or photocontrols shall be used to extinguish all outdoor lighting automatically when sufficient daylight is available. Automated controls shall be fully programmable and supported by battery or similar backup.
- F. Seasonal lighting shall be allowed from September 15 to January 31 only, subject to curfew requirements established in Section 15.88.050.
- G. All outdoor lighting shall comply with applicable regulations in the California Building Standards Code, as may be amended from time to time.

**§15.88.070 – Streetlights**

- A. Publicly-owned acorn-style decorative lights, such as those on Visitacion Avenue and in the Ridge neighborhood, are not subject to the shielding requirements of subsection A of

§15.88.050 until such time as an approved program for replacement of said lights is in place. Once that program is in place, replacement lights shall be fully shielded.

- B. The lumen output of each streetlight shall be the lowest reasonable lumen output to meet safety standards but in no case greater than 10,000 lumens.
- C. Lamps in all streetlights shall be replaced upon burnout with lamps which meet the color temperature and lumen requirements of this chapter.

#### **§15.88.080 - Recreational and Athletic Field Facilities**

For outdoor recreational and/or athletic field facilities, the following standards shall apply:

- A. Illuminating Engineering Society (IES) lighting guidelines according to the appropriate class of play or activity;
- B. Field lighting provided exclusively for illumination of the surface of play and viewing stands, and not for any other applications;
- C. Illuminance levels must be adjustable based on the task (e.g., active play vs. field maintenance);
- D. Off-site impacts of the lighting will be limited to the greatest practical extent possible;
- E. Lights must be extinguished by 8 p.m. except when the facilities are being used for active play and the lights are equipped with a timer;
- F. Timers that automatically extinguish lights must be installed to prevent lights being left on accidentally overnight.

#### **§15.88.090 - Deviation Permit Procedures.**

- A. Deviations from the lighting standards provided in this chapter may be approved for private properties if approved by the Community Development Director. Deviations from the lighting standards provided in this chapter may be approved by the Director of Public Works.
- B. Applications to deviate from the lighting standards shall include the following information:
  - 1. A site plan depicting the location of proposed lighting on the site;
  - 2. A lighting inventory that provides, at minimum:
    - a. The brightness (in lumens) and correlated color temperature (in Kelvin) of each luminaire;
    - b. The height of each fixture;
    - c. The directional angle of each fixture;
    - d. The character of shielding for each luminaire, if any;
    - e. Identification of luminaires that diverge from the standards of this Chapter and are subject to the deviation request;
    - f. Detailed description of the circumstances which necessitate the deviation;
  - 3. Such other data and information as may be required by the Community Development Director or the Public Works Director.
- C. The deviation may be granted if the following findings are made:

1. There are unique circumstances affecting the subject property or unique design and land use characteristics that make it infeasible or impractical to comply with strict application of the lighting standards detailed in this chapter.
  2. The proposed deviation will achieve the intent of this chapter to the maximum extent feasible.
- D. Notice of the Community Development or Public Works Director’s decision to approve or deny the requested deviation shall be mailed to owners of property within a three hundred (300) foot radius of the subject property and posted in compliance with Chapter 1.12 of this Municipal Code. The notice shall describe the requested deviations, the Community Development Director’s action to approve or deny the request, and right to appeal the decision to the City Manager pursuant to subsection E of Section 15.88.090.
- E. Appeal Procedures.
- a. An appeal of the Community Development Director’s decision shall be in writing and filed with the City Clerk within fifteen (15) days after the date of the notice described in subsection D of Section 15.88.090. The appeal shall be accompanied by a fee, as set by the city council, and shall clearly state the reason for appeal.
  - b. Upon receipt of such appeal, the City Clerk shall notify the Community Development Director and the applicant and shall set a time for an administrative appeal hearing with the City Manager as soon as practical but within thirty (30) days after the receipt of such appeal.
  - c. Notice of the appeal hearing shall be mailed to the applicant, property owner, appellant, and owners of property within three hundred (300) feet of the subject property.
  - d. The City Manager shall conduct a de novo hearing of the application. At the close of the hearing, the City Manager may affirm, reverse or modify the decision of the Director, or refer the matter to the Director for such further consideration as may be directed by the City Manager. The City Manager’s decision following the appeal hearing will be final.

**§15.88.100 - Conflicts with other laws.**

In the event the provisions in this chapter conflict with federal or state law such that this Chapter may be preempted, this chapter shall be applied in a manner intended to carry out all provisions of law to the maximum extent feasible. When there is an irreconcilable conflict between the provisions of this chapter and the requirements of federal or state law such that the provisions of this Chapter are preempted, the provisions of federal or state law shall prevail over the provisions contained in this chapter but only to the extent necessary to avoid preemption.

**§15.88.110 - Application of chapter to existing nonconforming lighting.**

- A. Effective Date. The effective date of this chapter shall be March 1, 2024.
- B. The following requirements shall apply to existing outdoor light fixtures, except streetlights covered in §15.88.070, within one year of the effective date of this ordinance:

1. Existing outdoor light fixtures with the ability to be redirected shall be directed downward to minimize sky glow, glare and in a manner to minimize light trespass onto adjacent properties.
  2. Outdoor light fixtures that have adjustable dimmers shall be dimmed to comply with Section 15.88.060 to minimize glare and light trespass onto adjacent properties.
  3. Outdoor light fixtures that are motion sensor equipped shall be programmed to extinguish not more than 10 minutes after activation.
  4. Outdoor light fixtures with removeable lamps shall utilize bulbs meeting this chapter's color and lumen thresholds.
- C. Compliance Period. Notwithstanding the provisions in section B of this Section and Chapter 17.38 (Nonconforming Structures and Uses), a property owner shall comply with the remaining requirements of this chapter by the following compliance deadlines. Any nonconforming lighting still in place after the compliance deadline shall remain extinguished at all times.
1. Existing outdoor lighting in non-residential zoning districts shall comply by March 1, 2029 [five years from the effective date].
  2. Existing outdoor lighting in residential zoning districts shall comply by March 1, 2034 [ten years from the effective date].
  3. Existing streetlights and other lighting at City facilities shall comply by March 1, 2039 [fifteen years from the effective date].
- D. Extension. A private property owner may apply for an extension of these compliance deadlines by submitting a request to the Community Development Director ninety (90) days before the compliance deadline detailing why an extension is needed. With the exception of lighting provided for security purposes, any noncompliant lighting shall remain extinguished while the request is pending. Upon demonstration of good cause for providing a property owner additional time to comply with the requirements of this section, the Community Development Director may extend the property owner's time to comply and/or may require a plan for compliance that requires partial compliance in advance of full compliance. For purposes of this section, the term "good cause" shall mean a significant financial or other hardship which warrants an extension or conditional extension of the time limit for compliance established herein. In no instance shall the Community Development Director issue an extension of the compliance period in excess of one year's time. The Community Development Director's decision shall be appealable pursuant to the provisions of Chapter 17.52. of this Code.

**§15.88.120 - Enforcement and penalties.**

Any violation of the provisions of this chapter shall be subject to the provisions of Title 1 Chapters 1.14, 1.16, and 1.18 of this code.