City of Bellaire

PROPOSED LIGHTING REGULATIONS

OPTION A

City of Bellaire

ORDINANCE NO. 23-___

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BELLAIRE, TEXAS, AMENDING *CHAPTER 22, OFFENSE – MISCELLANEOUS, ARTICLE I, IN GENERAL,* OF THE *CODE OF ORDINANCES OF THE CITY OF BELLAIRE, TEXAS,* BY ADDING A NEW *SECTION 22-30, LIGHTING*, FOR THE PURPOSE OF REGULATING LIGHTING ON PROPERTY WITHIN THE CITY.

[WHEREAS CLAUSES TO BE ADDED]

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BELLAIRE, TEXAS:

Section 1. That *Chapter 22, Offense – Miscellaneous, Article I, In General,* of the *Code of Ordinances of the City of Bellaire, Texas ("Code")*, is hereby amended by amended by adding a new *Section 22-30, Lighting*, for the purpose of regulating lighting on property within the City. The amended Code shall read as set out in Appendix A, attached hereto. All other portions of *Chapter 22* of the City's Code not specifically amended hereby shall remain in full force and effect.

Section 2. That all ordinances and parts of ordinances in conflict with this Ordinance are repealed to the extent of the conflict only, in particular, to the extent of any conflict with any provision currently contained in *Chapter 24* of the Code, this Ordinance shall control.

Section 3. That if any word, phrase, clause, sentence, paragraph, section or other part of this Ordinance or the application thereof to any person or circumstance, shall ever be held to be invalid or unconstitutional by any court of competent jurisdiction, neither the remainder of this Ordinance, nor the application of such word, phrase, clause, sentence, paragraph, section or other part of this Ordinance to any other persons or circumstances, shall be affected thereby.

Section 4. That the City Council officially finds, determines and declares that a sufficient written notice of the date, hour, place and subject of each meeting at which this Ordinance was discussed, considered or acted upon was given in the manner required by the Texas Open Meetings Act, as amended, and that each such meeting has been open to the public as required by law at all times during such discussion, consideration and action. The City Council ratifies, approves and confirms such notices and the contents and posting thereof.

Section 5. That this Ordinance shall be effective immediately upon its passage and adoption.

PASSED and **ADOPTED** this, the _____ day of _____, 2023.

SIGNED:

_____
Andrew S. Friedberg
Mayor

ATTEST:

_____
Tracy L. Dutton, TRMC
City Clerk

APPROVED AS TO FORM:

_____
Alan P. Petrov
City Attorney

Appendix A

(Language to be added shown by underline, language to be deleted shown by strike-out).

Sec. 22-30. - Lighting.

(a) *Purpose.* The making, creation, and maintenance of undesirable light and light trespass onto adjoining properties affects and is a detriment to the public health, comfort, convenience, safety, welfare, and prosperity of the residents of the city. The purpose of this Section is to provide regulations for outdoor lighting that will minimize undesirable light and light trespass onto adjoining properties, curtail light pollution, reduce skyglow, permit the use of outdoor lighting specified for nighttime safety, utility, security, productivity, enjoyment, and commerce. The provisions and prohibitions contained in this section are intended to ensure appropriate lighting levels that support wayfinding and crime prevention and allow flexibility in architectural design while conserving energy and resources.

(b) *Definitions.* The following definitions shall apply in the interpretation and enforcement of this section.

(1) *Existing lighting* means any lighting existing and installed on or before July 1, 2023.

(2) *Footcandle* means the unit measure expressing the quality of light received on a surface. One footcandle is the illuminance produced by a candle on a surface equal to one square foot, from a distance of one foot.

(3) *Horizontal plane* means a line horizontal to the lowest point on the fixture from which light is emitted.

(4) *Landscape lighting* means lighting of trees, shrubs, or other plant material as well as pools, ponds and other landscape features.

(5) *Light trespass* means light that falls beyond the property it is intended to illuminate. For purposes of this section, it is presumed that lighting is not intended to illuminate beyond the property line of the property on which the lighting is located, and that light emitted from a luminaire is presumed to fall beyond the property line if the lamp is visible, either directly or indirectly by reflection or otherwise, from beyond the property line.

(6) *Lumen* means the unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire. The term is not synonymous with the term "watt," which is a measure of power consumption.

(7) *Luminaire* means the complete lighting assembly, less the support assembly. For purposes of determining total light output, lighting assemblies which include multiple lamps or light sources in a single housing shall be considered as a single luminaire.

(8) *Outdoor lighting fixture* means an outdoor artificial illumination device, whether permanent or portable, used for illumination outdoors, and game courts, and

shall include but is not limited to devices used for search, spot, floor and area lighting for building and structures, recreational facilities, parking areas, landscape lighting, signs, public and private street lighting and walkway lighting.

(9) *Photometric* means quantitative measurements of light levels and distribution.

(10) *Seasonal Lighting* means temporary lighting installed and operated in connection with holidays or traditions.

(11) *Sign* means a structure or any part thereof which is used or intended to be used to attract attention to a subject matter for advertising purposes, and which is properly permitted under the provisions of this code.

(c) *General prohibition.* It shall be unlawful for any person to make, permit, or cause any outdoor lighting to result in light trespass upon any lot, tract, parcel of land, or other private property in excess of 0.2 footcandles. This prohibition applies to all existing lighting and includes, but is not limited to, lighting on residential, commercial, and institutional properties. The use of laser source light, searchlights, flashing and/or rotating lights or any similar high intensity light for outdoor advertising or entertainment, when projected above the horizontal plane, is prohibited.

(d) *General provisions.* All exterior lighting in the city consisting of, but not limited to, spotlights, floodlights, pool and landscape lighting or similar illuminating devices shall be installed, hooded, regulated and maintained by the owner or person in control thereof in such a manner that the direct beam of any such light shall be cast in a manner so that it will not result in light trespass glare upon any lot, tract, or parcel of land in excess of 0.2 footcandles in, on, or over the ground at or beyond the boundary of the lot, parcel, or tract. Exterior lighting mounted on a building, of any kind, shall not extend above the building roof line unless otherwise specifically allowed by this section. Additionally, as measured on the Kelvin color temperature scale, warm colored lighting 3000k or below shall be used where possible.

(e) *Applicability.* Except as provided by the subsection below, all outdoor lighting, including existing lighting within the city limits, must comply with the requirements of this section; however, the following are not regulated by this section:

(1) Lighting within the public right-of-way for the principal purpose of illuminating streets or roads;

(2) Lighting operated for emergency lighting used by police, fire, emergency, or utility work personnel; and

(3) Lighting required by law to be installed on motor vehicles.

(f) *Enforcement.* Upon receipt of a complaint from any person, or upon the initiative of any employee of the city, a compliance inspection shall be conducted by the city building official, code enforcement officers, peace officer, or other representatives designated by the city manager. Identity of complainant should be protected

(g) *Inspection.* Upon completion of any outside lighting installation for which a permit has

been issued in accordance with the building code of the city, the electrician shall be subject to a compliance inspection to be made during nighttime hours, with an accurate light meter. The inspection shall be made with the city administrator or his or her designee and the electrician responsible for the installation present. An accurate light meter, used for the inspection, shall be furnished by the electrician. The outside lighting permit fee, which shall include the cost of one inspection, and fees for additional inspections or re-inspections, shall be in such amounts as may be established from time to time by city council.

(h) *Hours of lighting at residential recreational facilities.* The use of outdoor lighting designed or used for the purpose of illuminating residential recreational facilities such as, but not limited to, pools, tennis courts, paddle ball courts, or other types of game courts, game field or site shall not be allowed after 10:00 p.m.

(i) *Sign Illumination.* All provisions relating to sign illumination are located in Chapter 24, Planning and Zoning, Article X, Signs, of this code, and shall be deemed controlling as to the interpretation and enforcement of this section.

(j) *Seasonal Lighting.* Notwithstanding the provisions of this section, seasonal lighting and light of seasonal decorations using typical, unshielded, low-wattage, incandescent lamps, LED or twinkle bulbs, or holiday light projectors shall be permitted for 45 days from date of installation provided that such light is not directed onto property other than the property upon which the seasonal lighting and decorations are located.

(k) Requirements for off-street parking lighting.

(1) Parking Lot Lighting. Parking lot lighting shall be arranged to avoid spillover outside property lines. Parking lot lights shall have a maximum height of 20 feet, and be glare shielded. Height shall be measured from the finish grade, inclusive of the pedestal, to the top of the fixture. Lights mounted on a building shall not extend above the building roof line.

(2) Parking Garage Lighting. Parking garage lights located at the top floor shall be directed downward and be glare shielded to limit spillover outside the top of garage. Parking garage lighting at the top floor shall have a maximum height of 15 feet, and the height shall be measured from the finish concrete, inclusive of the pedestal, to the top of fixture. Total height for the top floor parking lighting and parking garage must comply with the maximum building height in the zone of which the garage is located. Lights mounted on the side of the parking garage shall not spillover outside property lines and shall not extend above the top parking garage wall.

(l) *Photometric Plan Requirement.* For any exterior new construction, excluding single-family residential, a person must apply for and obtain a permit from the city and pay any applicable fee therefor as may be set by the city manager in a schedule of fees, and submit a photometric plan for review by the city. The photometric plan must include a layout of the property which indicates:

(1) The location and square footage of hardscape area;

(2) The location and mounting height of each proposed new lighting luminaire and of each existing lighting luminaire;

(3) The make, model, and lumen output stated by the manufacturer for each lamp within each proposed new lighting luminaire and each existing luminaire;

(4) The total luminaire lumens for each proposed new lighting luminaire and each existing lighting luminaire; and

(5) Photometric drawing is required for all new, excluding single-family residential, lighting construction.

Photometric calculations detailing all exterior lighting, shall be submitted and drawn on twenty-four (24) inches by thirty-six (36) inch format prepared to scale. Point to point photometric calculations shall be calculated at intervals of not more than ten (10) feet at ground level and may also be required at six (6) feet above finish grade. A copy of all cut sheets for light fixtures shall be submitted and marked as to which information and data applies to the specific luminaire, including the lamp manufacturer.

(m) *New construction, lighting requirements for non-residential properties.* All new construction exterior lighting on non-residential properties must comply with the requirements of this sub-section. Should this section directly conflict with any other provision in this code, the stricter requirement shall apply.

(1) Lighting Reduction Requirements. The total luminaire lumens of all outdoor lighting intended to be left on more than 30 minutes after closing, or the completion of activities, within a nonresidential site is required to be reduced to 25 percent or less of the total site lumen limit as set forth in this section. Motion sensor activation may be allowed to cause the light to resume normal lumen output only when activated and to be reduced back to 25 percent or less or normal lumen output within 5 minutes after activation has ceased, and the light shall not be triggered by activity off the property. The following are exempt from the application of this subsection:

(a) Code required lighting for steps, stairs, walkways, and building entrances.

(b) Lighting required by an order, resolution, or ordinance of the city for be maintained at a particular level; and

(c) Lighting for businesses that operate on a 24-hour basis.

(2) Parking Lot Lighting. The maximum height of parking lot light fixtures shall be 15 feet. Height shall be measured from the finish grade, inclusive of the pedestal, to the top of the fixture.

(3) Parking Garage Lighting. Parking garage lights located at the top floor shall be directed downward and be glare shielded to limit spillover outside the top of garage. Parking garage lighting at the top floor shall have a maximum height of 15 feet, and the height shall be measured from the finish concrete, inclusive of the pedestal, to the top of fixture. Total height for the top floor parking lighting

and parking garage must comply with the maximum building height in the zone of which the garage is located. Lights mounted on the side of the parking garage shall not spillover outside property lines and shall not extend above the top parking garage wall.

(4) Should any light fixture or the type of light source be changed therein after the permit has been issued, a change request must be submitted to the building official for their approval.

(n) *Penalty.* Any person who shall violate any of the provisions of this section, or who shall fail to comply therewith, shall be guilty of a misdemeanor and shall be punished as provided in Section 1-10 of this Code; provided, however that any fine shall not be less than $150.00 for the first offense of a violation of or failure to comply with this section, and not less than $500.00 for any subsequent offense of violation of or failure to comply with this section. Each day or portion thereof in which any violation shall occur shall constitute a separate offense.

Parking Garage Screening. When directly abutting a residential zoning district, the exterior cover of the parking garage structure, on the side facing the residential zoning district, shall be made of an opaque surface or be constructed of other material in a manner that blocks or redirects the light from headlights on vehicles located within the garage. The exterior cover shall be at least 42 inches in height measured vertically from each finished floor where parking occurs. For ramps or other sloped surfaces, the exterior cover shall be positioned to block or redirect light from headlights of vehicles travelling within the garage. Additional screening may be required if it is otherwise not possible to prevent light trespass beyond the property line that exceeds 0.2 footcandles, measured at grade on the property line.