

ORDINANCE NO. 2000-4-16

AN ORDINANCE OF THE CITY OF PLANO, TEXAS, AMENDING SPECIFIC SECTIONS OF ORDINANCE NO. 85-5-27 CODIFIED AS ARTICLE XI (OUTDOOR LIGHTING) OF CHAPTER 6 OF THE CITY OF PLANO CODE OF ORDINANCES AS FOLLOWS; AMENDING SECTION 6-466 BY ADDING TERMS TO THE DEFINITIONS SECTION; AMENDING SECTION 6-467 BY CHANGING THE PENALTY AMOUNT; AMENDING SECTION 6-469(c) BY PROVIDING AIMING OF LUMINARIES; AMENDING SECTION 6-470(c) BY PROVIDING METER SENSOR MOUNTING REQUIREMENTS; AMENDING SECTION 6-471(a) BY PROVIDING PROVISIONS FOR COMPUTATIONAL METHODS DEFINED IN SECTION 6-471(b); AMENDING 6-472 BY CHANGING THE COMPLIANCE STANDARD; ADDING A NEW SECTION 6-473 "EFFECTIVE OUTDOOR LIGHTING"; AND PROVIDING A PENALTY CLAUSE, REPEALER CLAUSE, A SEVERABILITY CLAUSE, A SAVINGS CLAUSE, A PUBLICATION CLAUSE AND AN EFFECTIVE DATE.

WHEREAS, on May 13, 1985, by Ordinance No. 85-5-27, the City Council of the City of Plano codified regulations regarding outdoor lighting as Article XI (Outdoor Lighting), Sections 4-466 through 4-485 of Chapter 6 of the City of Plano Code of Ordinances; and

WHEREAS, the City Council of the City of Plano finds it is necessary and in the best interest of the City and its citizen to amend certain provisions in the existing ordinance and add a new section to the ordinance so as to further promote the health, safety and welfare of the citizens of Plano and the general public; and

WHEREAS, the City Council hereby finds that it is necessary and in the best interest of the City and its citizens to amend Ordinance 85-5-27 by amending Section 6-466, Section 6-467, Section 6-469(c), Section 6-470(c), Section 6-471(a), Section 6-472, and adding Section 6-473 to Article XI (Outdoor Lighting), Chapter 6 of the City of Plano Code of Ordinances.

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

Section I. Ordinance No. 85-5-27 duly passed and approved by the City Council of the City of Plano, Texas, on May 13, 1985, and codified as Article XI (Outdoor Lighting), Chapter 6 of the Code of Ordinances of the City of Plano has been heretofore amended.

Section II. Section 6-466 of Article XI (Outdoor Lighting), Chapter 6 of the Code of Ordinances of the City of Plano, Texas, is hereby amended to read as follows:

"Sec. 6-466. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Building Official means the Chief Building Official for the City of Plano, or his designee, having responsibility to enforce and administer this article.

Bulb or Lamp means the source of electric light. To be distinguished from the whole assembly, lamp is used to denote the bulb and its housing.

Candela means the unit of luminous intensity in a given direction. It is commonly called one (1) candlepower.

Class I Lighting means all outdoor lighting use for, but not limited to outdoor sales areas, recreational facilities and assembly areas, eating areas, repair areas, advertising displays, billboards and other signs and similar applications when color rendition is important.

Class II Lighting means all other outdoor lighting including, but not limited to illumination for walkways, roadways, equipment yards, parking areas, outdoor security and similar application when color rendition is not important.

Cutoff Fixture means a fixture that provides a cutoff (shielding) of the light emitted.

Diffusing luminaire means one that scatters light substantially in all directions as contrasted with a directional luminaire which confines its light principally in an angle of less than one hundred eighty (180) degrees.

Floodlight means a luminaire designed to project its light in a well-defined area. It is directional in character.

Floodlight beam means the angular spread of light between two (2) orthogonal planes each of which equal ten (10) percent of the maximum candlepower within the beam.

Footcandle means the amount of illumination provided by one (1) lumen uniformly distributed on one (1) square foot of surface.

Footlambert means the luminance of a surface uniformly emitting, transmitting, or reflecting one (1) lumen per square foot of surface.

Fixture means the assembly that holds the lamp in a lighting system. It includes the elements designed to give light output control, such as a reflector (mirror) or defractor (lens), the ballast, housing and the attachment parts.

Full Cutoff Fixture means a fixture that allows no emission above a horizontal plane through the fixture.

Fully Shielded means light fixtures that are constructed so all light rays emitted by the fixture are projected below the horizontal plane passing through the lowest point on the fixture from which light is emitted, nearly 100% cut-off type, as evidenced by the manufacturers photometric data.

Glare means direct lighting emitted from a luminary that causes reduced vision or temporary blindness.

High Pressure Sodium (HPS) means a high intensity discharge lamp where radiation is produced from sodium vapor at relatively high partial pressures (100 to). HPS is essentially point source light.

Horizontal Plane means a line horizontal to the lowest point on the fixture from which light is emitted.

Illumination means the density of the luminous flux (lumens) incident on a surface. It is the quotient of the luminous flux divided by the area of the surface, expressed in footcandles.

Incandescent Lamp means any lamp that produces light by heating a filament through use of an electric current.

Installed means the attachment, or assembly fixed in place, whether or not connected to a power source, or any outdoor light fixture.

Kilowatt (kwh) means a unit of energy equal to the work done by one kilowatt (1000 watts) of power acting for one hour.

Light source means a device (such as a lamp) which produces visible energy as distinguished from devices or bodies which reflect or transmit light such as a luminaire.

Light Trespass means light falling outside the boundary of property for which it was originally intended or needed. Also referred to as spillover light or obtrusive light.

Low Pressure Sodium (LPS) means a discharge lamp where the light is produced by radiation from sodium vapor at a relatively low partial pressure (about 0.001 to). LPS is a "tube source" monochromatic light.

Lumen means the quantity of luminous flux intercepted by a surface of one (1) square foot, all points of which are one (1) foot from a uniform source of one (1) candela. A one-candela source provides 12.57 lumens.

Luminaire means a device or fixture containing a light source and means for directing and controlling the distribution of light from the source.

Luminance means the luminous intensity per unit projected area of a given surface viewed from a given direction for purposes of this article expressed in candelas divided by distance squared.

Mercury Lamp means a high intensity discharge lamp where light is produced by radiation from mercury vapor.

Metal Halide Lamp means a high intensity discharge lamp where light is produced by radiation from metal halide vapor.

Outdoor Lighting Fixture means an outdoor artificial illumination device, whether permanent or portable, used for illumination outdoors and shall include but not be limited to devices used for search, spot, flood and area lighting for buildings and structures, recreational facilities, parking areas, landscape lighting, outdoor advertising displays, billboards, signs, public and private street lighting and walkway lighting.

Partially Shielded means shielding so that the lower edge of the shield is at or below the centerline of the light source or lamp so as to minimize light transmission above the horizontal plane, or at least 90% of the emitted light projects below the horizontal plane as evidenced by the manufacturer's photometric data.

Photometric means quantitative measurements of light levels and distribution.

Shielding means a physical structure intended to restrict emitted light."

Section III. Section 6-467 of Article XI (Outdoor Lighting), Chapter 6 of the Code of Ordinances of the City of Plano, Texas, is hereby amended to read as follows:

"Any person violating any provision of this article shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be fined in an amount not less than one dollar (\$1.00) nor more than two thousand dollars (\$2,000.00) for each violation, and each and every day any such violation shall continue shall be deemed to constitute a separate offense."

Section IV. Section 6-469 of Article XI (Outdoor Lighting), Chapter 6 of the Code of Ordinances of the City of Plano, Texas, is hereby amended by the revision of Subsection (c) to read as follows:

"(c) *Shielding.* Luminaries which are directed toward a viewer shall be aimed in such a manner that the viewer's eye, at least five (5) feet above ground at or beyond the property line, shall not be exposed to fixture luminance within the floodlight beam of the luminary."

Section V. Section 6-470 of Article XI (Outdoor Lighting) of the Code of Ordinances of the City of Plano, Texas, is hereby amended by the revision of Subsection (c) as follows:

"(c) *Vertical method of measurement.* The meter sensor shall be mounted *at least* five (5) feet above ground level in a vertical position, perpendicular to the property line and facing the outdoor lighting in question."

Section VI. Section 6-471 of Article XI (Outdoor Lighting) of the Code of Ordinances of the City of Plano, Texas, is hereby amended by the revision of Subsection (a) as follows:

- “(a) *Calculations generally.* If illumination measurements are not practical and no other means of measuring fixture luminance is immediately available, a computational method as defined in Section 6-471(b) for measuring luminance may be used to determine compliance with this article.”

Section VII Section 6-472 of Article XI (Outdoor Lighting), Chapter 6 of the Code of Ordinances of the City of Plano, Texas, is hereby amended to read as follows:

“Section 6-472. Existing Lighting

When outdoor lighting does not conform to the provisions of this article and lawfully exists on April 24, 2000, it shall be deemed a lawful use. Any substantial change or addition to existing lighting system shall, however, comply with the provisions of this article.”

Section VIII. A new section shall be added to Article XI (Outdoor Lighting), Chapter 6 of the City of Plano Code of Ordinances as **Section 6-473. Effective Outdoor Lighting.** Section 6-473 will read as follows:

“Section 6-473 Effective Outdoor Lighting

The purpose of the Effective Outdoor Lighting section is to minimize glare, sky glow, light trespass and excessive energy consumption through use of appropriate lighting fixtures, practices and systems, while maintaining safety, security and productivity and curtailing degradation of the nighttime visual environment.

(a) Requirements:

- (1) Shielding shall be required in all outdoor lighting installations as specified below:

Lamp Type	Class I Lighting - Color Rendition Important	Class II Lighting – Color Rendition Not Important
Low Pressure Sodium (LPS)	Fully Shielded	Fully Shielded
High Pressure Sodium (HPS)	Fully Shielded	Fully Shielded
Metal Halide	Fully Shielded	Fully Shielded
Mercury Vapor	Prohibited	Prohibited
Fluorescent	Partially or Fully Shielded	Fully Shielded
Incandescent (over 150 watts/fixture)	Partially or Fully Shielded	Prohibited
Incandescent (under 150 watts/fixture)	Partially or Fully Shielded	Partially or Fully Shielded
Any light source 50 watts and under	Unshielded Permitted	Unshielded Permitted
Low intensity Neon, Krypton or Argon Discharge Tubes	Unshielded Permitted	Unshielded Permitted

- (2) Hours of operation shall be complied with in all installations, except as specified in paragraph (8).
- (3) Outdoor advertising, displays, and signs not exclusively illuminated internally, may only utilize illuminating devices mounted on the top and pointing downward on the advertising display structure. All such installations shall comply with all other provision of this ordinance.
- (4) Glare – Exterior outdoor lights shall be constructed and installed in a manner consistent with this ordinance and shall be located so as to not produce direct illumination across the building property line.
- (5) Sky Glow – External outdoor lights shall be constructed and installed in a manner so as to conform with requirements in Section 6-473(A)(1).
- (6) Light Trespass – External outdoor lights shall be constructed and installed in a manner so as to conform with requirements in Section 6-470(d)(1).
- (7) Outdoor advertising signs constructed of translucent materials and wholly illuminated from within do not require shielding.
- (8) Class I lighting used for illumination of:
 - (a) Outdoor sales and eating areas, on site advertising, assembly areas, repair areas and businesses may be operated during the hours that the facility is open to the public.

(b) Off-site advertising displays and billboards or signs may be operated from dusk to 11:00 p.m. only; unless fully shielded and pointing downwards from the horizontal.

(c) Recreational and sporting areas may operate from dusk to 11:00 p.m. except to conclude a specific recreational or sporting event, tournament or similar activity which was in progress prior to 11:00 p.m. For facilities owned, leased or otherwise controlled by the City of Plano, light usage may be extended to allow activities to begin after 11:00 p.m. with approval of the Parks and Recreation Department. For approval, activity must be part of league, season or tournament which has an immediate completion deadline.

(9) Permitted Class II lighting may be operated anytime (walkways, roadways, equipment yards, parking areas and outdoor security).

(10) Laser source light and strobe lights in addition to other high intensity light sources for advertising or entertainment shall not be projected above the horizontal plane, unless a permit is obtained for specific events and timeframes.

(11) Searchlights are prohibited unless required in an emergency as declared by the City.

(b) Exemptions:

(1) Permanent exemptions:

- (a) Lighting fixtures installed and operated prior to the date of this ordinance are exempt from the requirements of this Ordinance except that they must comply with paragraphs (8)(a), 8(b), 8(c) and 9.
- (b) Navigation and airport lighting required by the FAA for operation of airplanes are exempt from this Ordinance.
- (c) Emergency lighting by police, fire and/or other municipal, state or federal government authorities are exempt from this Ordinance.
- (d) Seasonal decorative street lighting is exempt from this Ordinance.

(2) Temporary exemptions:

(a) The Building Inspections Department, the City Manager or City Manager's designee may approve temporary exemptions from the requirements of this Ordinance provided the duration of the approval is not more than fourteen (14) days from the date of approval. Temporary exemptions may be granted for two (2), two-week periods each calendar year per legal business. A two-week period will commence on the day the exemption is approved. The two, two-week periods shall not occur in the same or consecutive months. A legal business shall include any

commercial, industrial, or institutional use for which a Certificate of Occupancy is issued.

(b) Any person may submit a written request, on a form prepared by the City, to the Building Official for a temporary exemption request. The request shall contain the following information:

- i. Specific exemption(s) requested;
- ii. Type/use of outdoor lighting fixture involved;
- iii. Duration of time requested;
- iv. Type of lamp and calculated footcandles;
- v. Total wattage of lamp(s);
- vi. Proposed location of fixtures;
- vii. Previous temporary exemption requests;
- viii. Physical side of fixtures and type of shielding provided;
- ix. Such other data or information as may be required by the Building Official.

(c) The Building Official shall have five (5) working days from the date of the submission request to act, in writing, on the request.

(d) Requests for renewal or exemptions shall be processed in the same way as the original request. Each renewal shall be valid for not more than fourteen (14) days.

(e) Approval for temporary exemptions will be based on the effect of location and use of outdoor lighting fixtures.

(3) Roadway lighting is not eligible for exemption.

(c) Submission of Plans and Evidence of Compliance.

(1) The applicant for any permit required by any provision of the laws of this city in connection with the proposed work involving outdoor lighting fixtures shall submit (as part of the application for a building permit) evidence that the proposed work will comply with this code. The submission shall contain but shall not necessarily be limited to the following, all or part of which may be part or, in addition to, the information required elsewhere in the laws of the City upon application for the required permit:

(a) Plans indicating the location on the premises, and the type of illuminating devices, fixtures, lamps, supports, reflectors and other devices;

(b) Description of the illuminating devices, fixtures, lamps, supports, reflectors and other devices and the description may include, but is not limited to, catalog cuts by manufacturers and drawings (including sections where required);

- (c) Photometric data, such as that furnished by manufacturers, or similar showing the angle of cut off or light emissions.
- (2) The above required plans, description and data shall be sufficiently complete to enable the plans examiner to readily determine whether compliance with the requirements of this code will be secured. If such plans, descriptions and data cannot enable this ready determination, by reason of the nature of configuration of the devices, fixtures or lamps proposed, the applicant shall additionally submit as evidence of compliance to enable such determination such certified reports of tests as will do so provided that these tests shall have been performed and certified by a recognized testing laboratory. Projects with site plans and/or engineering plans approved prior to adoption of this ordinance are subject to lighting requirements in effect at the time of plan approval.
- (3) If any subdivision proposes to have installed street or other common public area outdoor lighting, the site plan shall contain a statement certifying that the applicable provisions of the City of Plano Outdoor Lighting Code will be adhered to.
- (4) Should any outdoor 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 his approval, together with the adequate information to assure compliance with this code, which must be received prior to substitution.

(d) Appeal.

Appeals to any decision made by the Building Official with regard to any component of the Effective Outdoor Lighting Section of this Ordinance will be heard by the Building Standards Commission. Commission decisions will be final."

Section IX. All other portions Article XI (Outdoor Lighting), Chapter 6 of the City of Plano Code of Ordinances shall remain in full force and effect.

Section X. Any person violating any of the provisions or terms of this Ordinance shall be subject to a penalty as provided for in Section 6-467, Penalty, of Article XI, Outdoor Lighting, of the City of Plano Code of Ordinances.

Section XI. All provisions of the Ordinances of the City of Plano, codified or uncodified, in conflict with the provisions of this Ordinance are hereby repealed, and all other provisions of the Ordinances of the City of Plano, codified or uncodified, not in conflict with the provisions of this Ordinance, shall remain in full force and effect.

Section XII. It is the intention of the City Council that this Ordinance, and every provision hereof, shall be considered severable, and the invalidity or unconstitutionality of any section, clause, provision or portion of this Ordinance shall not affect the validity or constitutionality of any other portion of this Ordinance.

Section XIII. The correction of any ordinance or part of any ordinance affected by the enactment of this Ordinance shall not be construed as abandoning any action now pending under or by virtue of such ordinance or as discontinuing, abating, modifying, or altering any penalty accruing or to accrue, or as affecting any rights of the municipality under any section or provisions of any ordinances at the time of passage of this Ordinance.

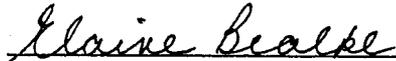
Section XIV. This Ordinance shall become effective from and after its passage and publication as required by law.

DULY PASSED AND APPROVED this the 24th day of April, 2000.



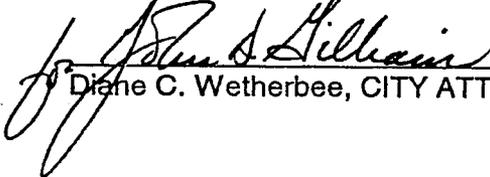
John Longstreet, MAYOR

ATTEST:



Elaine Bealke, CITY SECRETARY

APPROVED AS TO FORM:



Diane C. Wetherbee, CITY ATTORNEY