#### **ORDINANCE NO. 3229**

AN ORDINANCE AMENDING THE COMPREHENSIVE ZONING ORDINANCE OF THE CITY OF NORTH RICHLAND HILLS BY AMENDING SECTIONS 118-1 AND 118-728 AND PROVIDING ILLUSTRATIONS FOR ARTICLE IX OF CHAPTER 118 OF THE NORTH RICHLAND HILLS CODE OF ORDINANCES; PROVIDING REGULATIONS FOR LIGHTING; PROVIDING FOR SEVERABILITY; PROVIDING A PENALTY FOR VIOLATIONS; PROVIDING A SAVINGS CLAUSE; AND PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER.

- **WHEREAS,** it is the goal of the City Council to provide quality community development and revitalization, safety and security, a positive city image, a sense of community, and local and regional leadership; and
- **WHEREAS**, the Scenic City Certification Program recommended improvements to the City's lighting regulations; and
- **WHEREAS**, the *2001 City Image Study* also recommended a more detailed policy on commercial parking lot lighting; and
- WHEREAS, appropriate lighting regulations reduce the negative effects of unwanted nighttime light on residents, drivers, the environment and the night sky; and
- WHEREAS, the City Council has received the recommendations of the Planning and Zoning Commission concerning the matters herein dealt with, which recommendations were made after the holding of a public hearing before said Commission on such matters; and
- **WHEREAS**, notice has been published of the time and place of a public hearing held before the City Council concerning the changes herein made, which public hearing has been duly held; and,
- WHEREAS, the City Council has determined that the amendment to the Comprehensive Zoning Ordinance herein made is in the best interest of the health, safety and general welfare of the citizens of the City of North Richland Hills; NOW, THEREFORE,

### BE IT ORDAINED BY THE CITY COUNCIL OF NORTH RICHLAND HILLS, TEXAS:

**SECTION 1.** That Section 118-1 of the Code of Ordinances of the City of North Richland Hills, Texas, is hereby amended by adding the following definitions:

#### "Sec. 118-1. Definitions

. . .

Architectural Lighting. Lighting designed to reveal architectural beauty, shape and/or form and for which lighting for any other purpose is incidental.

Color Temperature. A description of the warmth (oranges and yellows) or coolness (blues) of a light source as measured in Kelvins. Warm light is considered between 2700 Kelvin and 3000 Kelvin. Cool light is considered between 3600 Kelvin and 5500 Kelvin.

Color Rendering Index (CRI). The relative ability of a light source to replicate true colors. It is measured as a number between 0 and 100.

Foot-candle. The unit of measure expressing the quantity of light received on a surface. One footcandle is the illuminance produced by a candle on a surface one foot square from a distance of one foot.

Fully Shielded Luminaire. A luminaire constructed and installed in such a manner that all light emitted by the luminaire, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane through the luminaire's lowest light-emitting part.

Glare. Lighting entering the eye directly from luminaires or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.

*Kelvin.* The industry measurement unit of color temperature.

Landscape Lighting. Lighting of trees, shrubs, or other plant material as well as ponds and other landscape features.

Light Pollution. Any adverse effect of artificial light including, but not limited to, glare, light trespass, skyglow, energy waste, compromised safety and security, and impacts on the nocturnal environment.

Light Trespass. Light that falls beyond the property it is intended to illuminate. See Figure I-12, Article IX, "Light Trespass," for illustrative definition.

Lighting. "Electric" or "man-made" or "artificial" lighting and its associated equipment specifically intended to provide gas or electric illumination, including but not limited to, lamp(s), luminaire(s), ballast(s), poles, posts, lens(s), and related structures, electrical wiring, and other necessary or auxiliary components.

Lumen. The unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from "watt," a measure of power consumption).

Luminaire. The complete lighting unit (fixture), consisting of a lamp, or lamps and ballast(s) (when applicable), together with the parts designed to distribute the light (reflector, lens, diffuser), to position and protect the lamps, and to connect the lamps to the power supply.

Seasonal Lighting. Temporary decorative lighting installed and operated in connection with holidays between October 15 and February 15.

*Skyglow.* The brightening of the nighttime sky that results from scattering and reflection of artificial light by moisture and dust particles in the atmosphere. Skyglow is caused by light directed or reflected upwards or sideways and reduces one's ability to view the night sky.

Temporary Lighting. Lighting installed and operated for periods not to exceed 60 days, completely removed and not operated again for at least 30 days.

*Uplight*. For an exterior luminaire, flux radiated in the hemisphere at or above the horizontal plane."

**SECTION 2.** That Section 118-728 of the North Richland Hills Code of Ordinances is hereby amended to read as follows:

### •Sec. 118-728. Outdoor Lighting

- (a) *Purpose.* The purpose of this Section is to provide regulations for outdoor lighting that will:
  - (1) Minimize adverse offsite impacts of lighting such as light trespass and glare.
  - (2) Curtail light pollution, reduce skyglow and improve the nighttime environment.
  - (3) Conserve energy and resources to the greatest extent possible.
- (b) Conformance with applicable codes. All outdoor lighting shall be installed in conformance with the provisions of this Section, applicable Electrical and Energy Codes, and applicable sections of the Building Code.
- (c) *Applicability.* The provisions of the outdoor lighting regulations provided in this Section shall apply in the following situations:
  - (1) When an existing property is proposed for remodeling, alteration, addition, or expansion, in which the value of the proposed construction exceeds 50 percent of the current appraised value of the existing improvements, excluding the value of the land;

- (2) When an existing property is proposed for a single addition or cumulative additions after January 14, 2013 that increases the number of dwelling units, gross floor area, seating capacity, or parking spaces by 30 percent or more;
- (3) Upon all new development, redevelopment, construction or new luminaire installation.
- (d) Nonconforming Luminaires.
  - (1) Except as otherwise noted above, all exterior lighting luminaires in existence and legally installed and operative on or before January 14, 2013 shall be exempt from the requirements of this Section and shall be considered legally nonconforming.
  - (2) Except as otherwise noted above, legal nonconforming luminaires may be repaired, maintained and replaced.
- (e) General Requirements for Single Family and Duplex Residential Property.
  - (1) All luminaires shall be placed so as to not cause light trespass or glare beyond the property boundary.
  - (2) Any luminaire installed on a residential property shall be shielded such that glare from the light source is not directly visible from six (6) feet above grade on any other residential property line.
  - (3) Flood or spotlights shall be aimed no higher than forty-five (45) degrees above straight down when the fixture is visible from any other residential property or public right-of-way.
  - (4) All light fixtures shall be located, aimed or shielded so as to minimize light trespass.
- (f) General Requirements for Nonresidential and Multifamily Property.
  - (1) Uplight/Skyglow Limitation. Except as otherwise permitted in this Section, all luminaires shall utilize a full-cutoff or fully-shielded design, so as to have no light emitted above 90 degrees. See Figure I-11, Article IX, "Examples of Fully Shielded Luminaires," for examples.
  - (2) Light Trespass Limitation.
    - a. Residential Adjacency. The following shall apply to all luminaires located on a property adjacent to a property zoned for residential

use, designated on the Comprehensive Land Use Plan for residential use, or used or subdivided for residential use.

1. The light source (bulb or lamp) of the luminaire shall be completely shielded from direct view of at a point three (3) feet above grade on the adjacent property line.

All luminaires shall be designed or positioned so that the maximum illumination at the adjacent property line shall not exceed one-quarter (1/4 or 0.25) foot-candle.

- b. Right-of-Way Adjacency. The following shall apply to luminaires located on a property adjacent to public right-of-way:
  - 1. The light source (bulb or lamp) of a luminaire shall be completely shielded from direct view of at a point six (6) feet above grade on the right-of-way line.

All luminaires shall be designed or positioned so that the maximum illumination at the property line adjacent to a street right-of-way shall not exceed one-half (1/2 or 0.5) footcandle.

- c. In all other circumstances, luminaires shall be designed or positioned so that the maximum illumination at the property line shall not exceed one (1) foot-candle.
- (3) Lighting Type.
  - a. Color Temperature. The light source (bulb or lamp) shall have a minimum color temperature rating of 2,700 Kelvin and a maximum of 5,700 Kelvin, as provided by the manufacturer's specifications.
  - b. Color Rendition. The light source (bulb or lamp) shall have a minimum Color Rendering Index (CRI) rating of 50, as provided by the manufacturer's specifications.
- (4) Location, Height and Quality Criteria for Luminaires. The following criterion for luminaires applies to all outside lighting on a property.
  - a. Landscape Setback Areas. Luminaires are prohibited in landscape setback areas as established in Chapter 114 of the Code of Ordinances. Landscape lighting fixtures used to accent landscaping are exempt from this requirement so long as the fixtures are aimed and shielded to minimize light spill into the night sky and glare into adjacent uses and rights-of-way.

- b. Luminaires are permitted to be a maximum of 30 feet in height.
- c. When a luminaire is located within one hundred (100) feet of a property zoned for residential use, designated on the Comprehensive Land Use Plan as residential, or used or subdivided for residential use, the maximum permitted height shall be 20 feet.
- d. *Material and Color.* Neither concrete nor wood poles shall be used for the support of freestanding luminaires. Poles shall be low reflectance, subtle, neutral, or earth tone colors or original factory metal finish. The use of high intensity, primary or fluorescent colors shall be prohibited.
- (5) Lighting Control Requirements.
  - a. Automatic Switching Requirements. Controls shall be provided that automatically extinguish all outdoor lighting when sufficient day light is available using a control device or other system conforming to the current adopted Electrical and/or Energy Code.
  - Automatic lighting controls are not required for lighting under canopies or lighting for tunnels, parking garages, garage entrances, and similar conditions.
- (6) Architectural and landscaping lighting. Outdoor lighting used to illuminate flags, statues, signs or other objects mounted on a pole, pedestal or platform, spotlighting or floodlighting used for architectural or landscape purposes, must use full cutoff or directionally shielded lighting fixtures that are aimed and controlled so that the directed light is substantially confined to the object intended to be illuminated.
- (7) Exterior Lighting Plan Required. The following exterior lighting information must be included with all site plan submissions. Such information shall be prepared by a certified engineer, architect, landscape architect or lighting engineer:
  - a. Plans indicating the location of the exterior lighting 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. The description may include, but is not limited to, catalog cuts by manufacturers and drawings (including sections where required) and height of the luminaires.

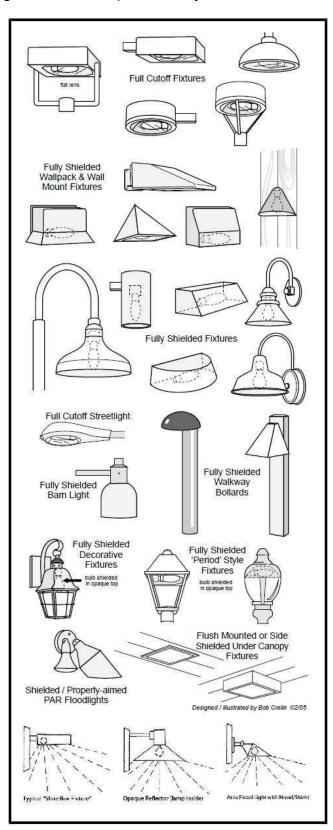
- c. A statement from the property owner, developer, or agent and the preparer of the Lighting Plan that exterior lighting depicted on the Lighting Plan will comply with the requirements of this Section after installation.
- d. Photometric Plan and data sheets showing the angle of cut off or light emissions in footcandles across the entire property and at the property lines.
  - A waiver to the Photometric Plan requirement may be granted by the Development Review Committee upon request for certain small-scale, low-impact developments so long as the other submittal requirements of this subsection are met.

## (g) Prohibited.

- (1) "Cobra head" type lighting fixtures having dished or "drop" lenses or refractors which house other than incandescent light sources shall be prohibited.
- (2) Flickering, flashing, rotating, pulsing, moving or alternating colored light sources shall be prohibited.
- (3) Searchlights, lasers and other high-intensity narrow-beam fixtures.
- (h) Exemptions. The following are exempt from the standards contained in this Section, provided that such luminaires do not cause excessive and disabling glare.
  - (1) Lighting within public right-of-way for the principal purpose of illuminating streets or roads.
  - (2) Lighting solely for internally illuminated signs (See Chapter 106 of the Code of Ordinances for additional sign regulations).
  - (3) Incandescent light bulbs of 75 Watts or less used for architectural lighting.
  - (4) Luminous Tube Lighting.
  - (5) Repairs to existing luminaires not exceeding 30 percent of total installed luminaires.
  - (6) Temporary lighting for theatrical, television, performance areas and construction sites.

- (7) Underwater lighting in swimming pools and other water features.
- (8) Temporary lighting and decorative seasonal lighting provided that individual lamps are less than 10 watts and 70 lumens.
- (9) Residential Party Lights for social gatherings. Such temporary outdoor lighting includes, but is not limited to, strings of lights and/or lanterns.
- (10) Specific Outdoor Recreational Facilities (public or private), such as, but not limited to, playing fields, courts, amusements, or show areas; provided that lighting for these outdoor recreational uses shall be shielded to minimize glare and light trespass onto adjacent residential property to the greatest extent possible and any applicable Special Use Permit requirements associated with the facility are met as necessary.
- (11) Lighting that is used by federal, state, county or local authorities and their authorized representatives under emergency conditions or to perform nighttime road construction on major thoroughfares.
- (12) Lighting required by federal, state, county or local laws or regulations.
- (13) Lighting approved by a Special Use Permit, Planned Development zoning district, or other lighting standards specifically created for a particular zoning district that does not otherwise meet the provisions of this Section.
- (i) Enforcement.
  - (1) The Chief Building Official, or his/her designee, shall administer and enforce the provisions of this Section relating to outdoor lighting."
- **SECTION 3.** That Article IX of Chapter 118 ("Illustrations") of the Code of Ordinances of the City of North Richland Hills, Texas, is hereby amended by adding the following illustrations:

"Figure I-11: Examples of Fully Shielded Luminaires



Ilmit for no light trespass

area of light trespass

property a property b

Figure I-12: Light Trespass Illustrative Definition

## SECTION 4. Severability.

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs and section of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

# SECTION 5. Penalty.

Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this ordinance shall be fined not more than Two Thousand Dollars (\$2,000.00) for each offense. Each day that a violation is permitted to exist shall constitute a separate offense.

## **SECTION 6. Savings.**

All rights and remedies of the City of North Richland Hills are expressly saved as to any and all violations of the provision of any other ordinances regulating solicitation or canvassing activities that have accrued at the time of the effective date of this ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

# **SECTION 7. Publication.**

The City Secretary of the City of North Richland Hills is hereby directed to publish the caption and penalty of this ordinance in the official City newspaper.

AND IT IS SO ORDAINED.

PASSED AND APPROVED on this 14th day of January, 2013.

	CITY OF NORTH RICHLAND HILLS
	By: Oscar Trevino, Mayor
ATTEST:	
Patricia Hutson, City Secretary	
APPROVED AS TO FORM AND LEGALI	TY:
George A. Staples, City Attorney	
APPROVED AS TO CONTENT:	
John Pitstick, Planning & Development Dir	rector