### CITY OF FARMINGTON HILLS OAKLAND COUNTY, MICHIGAN

#### **ORDINANCE NO. C-7-2013**

AN ORDINANCE TO AMEND THE FARMINGTON HILLS CODE OF ORDINANCES BY AMENDING CHAPTER 17, "NUISANCES," ARTICLE VII, "PERFORMANCE STANDARDS," SECTION 17-106, "LIGHTING," RELATING TO PERFORMANCE STANDARDS FOR LIGHTING AND TO PROVIDE STANDARDS FOR LIGHTING FIXTURES AND THE EFFECT OF LIGHTING ON ADJACENT PROPERTIES.

### THE CITY OF FARMINGTON HILLS ORDAINS:

### Section 1 of Ordinance. Ordinance Amendment.

The Farmington Hills City Code, Chapter 17, "Nuisance," Article VII, "Performance Standards," is hereby amended to add the following regulations:

Sec. 17-106. - Lighting.

- A. The following definitions apply to lighting in this section:
  - 1) Footcandle: the unit of measure expressing the quantity of light received on a surface. One footcandle (fc) is the illuminance produced by a candle on a surface one foot square from a distance of one foot.
  - 2) 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.
  - 3) Full cutoff fixture: A luminaire light distribution where zero candela intensity occurs at an angle of 90 degrees above nadir and at all greater angles from nadir. Also, the candela per 1,000 lamp lumens does not exceed 100 (10 percent) at a vertical angle of 80 degrees above nadir.
  - 4) Glare: Lighting entering the eye directly from luminaires or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.
  - 5) Hardscape: Permanent hardscape improvements to the site including parking lots, drives, entrances, curbs, ramps, stairs, steps, medians, walkways and non-vegetated landscaping that is 10 ft or less in width. Materials may include concrete, asphalt, stone, gravel, etc.
  - 6) Illuminance: a measure of how much light is arriving upon a surface, measured in footcandles (lumens per square foot) in the English system or lux (lumens per square meter) in the metric system.
  - 7) Lamp: a generic term for 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.

- 8) Light trespass: Light that falls beyond the property it is intended to illuminate.
- 9) 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).
- 10) 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.
- 11) Luminance: the amount of light that reflects from the surface and reaches the eye of the observer.
- 12) Nadir: The angle that points directly downward, or 0°, from the luminaire.
- 13) 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.
- 14) Temporary lighting: Lighting installed and operated for periods not to exceed 60 days, completely removed and not operated again for at least 30 days.
- B. Lighting shall be permitted and regulated as follows:
  - 1) Exterior light under 1400 lumens. Exterior light sources with a lamp or lamps rated at a total of not more than fourteen hundred (1400) lumens shall be permitted, except for flood or spotlights and illumination at building entrances, as permitted in the Zoning Ordinance (Section 34.5.16.3).
  - 2) Flood or spotlights. Flood or spotlights used for the external illumination of buildings, signs, or flags with a lamp or lamps rated at nine hundred (900) lumens or less shall be permitted in any use district, provided that such lighting is not aimed, directed, or focused toward residential districts or uses or toward a public street, so that there is no interference with the vision or comfort of persons on public streets or in residential districts or uses (see Section 34-5.16 in the Zoning Ordinance for additional requirements that apply to uses or developments that require site plan approval).
  - 3) Exterior lights of more than 1400 lumens. Exterior lighting with a lamp or lamps of more than fourteen hundred (1400) lumens will be permitted, provided that the light source is down-lit to reduce intensity and glare and is so arranged as to reflect lights away from all adjacent residential districts or uses and from adjacent public streets. Additionally, the light diffusing media shall be totally shielded with opaque material on the top and all sides, and the light source shall be parallel to the horizontal plane of the area to be lighted (see Section 34-5.16 in the Zoning Ordinance for additional requirements that apply to uses or developments that require site plan approval).
  - 4) Security lighting. Notwithstanding any other provision of this section 17-106, security lighting that is controlled by a properly-functioning motion detector and which does not

remain on longer than ten (10) minutes after activation shall be permitted, provided that such lighting is not aimed, directed, or focused toward residential districts or uses or toward a public street, so that there is no interference with the vision or comfort of persons on public streets or in residential districts or uses.

- 5) Interior lighting. Interior lighting shall be subject to subsection 17-106(b).
- 6) Conformance with all applicable Codes. All outdoor lighting shall be installed in conformance with the provisions of this Ordinance, applicable Electrical and Energy Codes, and applicable sections of the Building Code.
- 7) Applicability. Except where exempt, all outdoor lighting shall comply with these requirements. This includes, but is not limited to, new lighting, replacement lighting, or any other lighting whether attached to structures, poles, the earth, or any other location, including lighting installed by any third party. Lighting within public right-of-way or easement for the principal purpose of illuminating streets or roads is not subject to this ordinance.
- 8) Fully shielded luminaires. All light fixtures shall be fully shielded luminaires, except as provided elsewhere in this ordinance.
- 9) Light Trespass. All outdoor light fixtures shall be installed and maintained in such a manner that does not permit light trespass beyond the property boundary as specified in this ordinance. Further any fixed objects that reflect or diffract light, such as windows, mirrors, or other reflective objects must not permit light trespass.
- 10) Color of illumination. The use of sodium or metal halide lamps is prohibited, unless color-corrected lamps are used.
- 11) Electrical service to light fixtures installed after the effective date of this ordinance shall be placed underground where feasible.
- 12) Façade Lighting. All façade lighting must be restricted to the façade surface and may only be used to highlight specific architectural features. Light trespass is prohibited.
- 13) Security Lighting. Lighting for security purposes shall be directed only onto the area to be secured.
  - a) All fixtures shall be located, shielded and aimed so that light is not cast toward adjacent properties or streets or unnecessarily transmitted into the night sky.
  - b) Fixtures mounted on the building and designed to illuminate the facade are preferred.
- 14) Exterior and interior lighting shall not cause an illuminance that is greater than one (1) foot-candle within two (2) feet of the wall of any main building in an adjacent residential property (see Section 34-5.16 of the Zoning Ordinance for additional requirements that apply to uses or developments that require site plan approval).
- 15) All illumination of signs and any other outdoor features shall not be of a flashing, moving or intermittent type. Artificial light shall be maintained stationary and constant in intensity and color at all times when in use.

- C. The following uses shall be exempt from the provisions of this section:
  - a. Roadway and airport lighting required by the appropriate public agency for health, safety and welfare purposes;
  - b. Construction lighting approved by the building department as part of a building permit;
  - c. Flag lighting, provided that the illumination is the minimum level necessary, and that the light source is aimed and shielded to direct light only onto the intended target and to prevent glare for motorists and pedestrians;
  - d. Emergency lighting approved by the city, provided the lighting is discontinued upon the abatement of the emergency necessitating said lighting; and
  - e. Other temporary lighting determined to be reasonable and appropriate by the City of Farmington Hills Building Official.
- D. An application for a special exception from the provisions of this section may be submitted to the zoning board of appeals, sitting as an administrative review board for purposes of this provision. If it appears to the zoning board of appeals, in its course of review of the applicant's application, that the expertise of a lighting consultant or other expert shall be necessary in order to review the application, the zoning board of appeals shall be authorized to obtain a reasonable escrow for consulting fees from the applicant and retain such expert for such purposes. The zoning board of appeals may grant a special exception where such relief will be within the spirit and intent of this ordinance, would not adversely affect the public health, safety and welfare, and would not be materially injurious to surrounding properties and improvements. The zoning board of appeals may impose conditions in connection with the granting of a special exception.

# Section 2 of Ordinance. Repealer.

All other ordinances or resolutions, or parts of ordinances or resolutions in conflict herewith are hereby repealed.

# Section 3 of Ordinance. Savings.

The amendment of the Farmington Hills Code of Ordinances set forth in this Ordinance does not affect or impair any act done, offense committed, or right accruing, accrued, or acquired or liability, penalty, forfeiture or punishment, pending or incurred prior to the amendment of the Farmington Hills Code of Ordinances set forth in this Ordinance.

# Section 4 of Ordinance. Severability.

If any section, clause or provision of this Ordinance shall be declared to be unconstitutional, void, illegal or ineffective by any Court of competent jurisdiction, the validity of the Ordinance as a whole, or in part, shall not be affected other than the part invalidated, and such section, clause or provision declared to be unconstitutional, void or illegal shall thereby cease to be a part of this Ordinance, but the remainder of this Ordinance shall stand and be in full force and effect.

#### Section 5 of Ordinance. Effective Date.

The provisions of this ordinance are ordered to take effect twenty-one (21) days after enactment.

#### Section 6 of Ordinance. Enactment.

This ordinance is declared to have been enacted by the City Council of the City of Farmington Hills at a meeting called and held on the 12<sup>th</sup> day of August, 2013, and ordered to be given publication in the manner prescribed by law.

AYES: BATES, BRICKNER, BRIDGES, BRUCE, LERNER, MASSEY AND OLIVERIO NAYS: NONE ABSENT: NONE ABSTENTIONS: NONE STATE OF MICHIGAN ) ) ss. COUNTY OF OAKLAND)

I, the undersigned, the qualified and acting City Clerk of the City of Farmington Hills, Oakland County, Michigan, do certify that the foregoing is a true and complete copy of the Ordinance adopted by the City Council of the City of Farmington Hills at a meeting held of the 12<sup>th</sup> day of August, 2013, the original of which is on file in my office.

PAMELA B. SMITH, City Clerk City of Farmington Hills

Introduced:	July 22, 2013
Adopted:	August 12, 2013
Effective:	September 2, 2013
Published:	August 18, 2013