

TOWNSHIP OF LOWER MERION  
Building & Planning Department

MEMORANDUM

TO: Douglas S. Cleland, Township Manager

FROM: Robert E. Duncan, Director of Building & Planning

SUBJECT: Exterior lighting amendments

DATE: July 23, 2012

Staff has been developing an ordinance to amend the exterior lighting standards to better regulate high intensity lighting and glare problems. This amendment will also relocate the exterior lighting standards from the zoning code to Chapter 105. This will place the noise and lighting regulations in the same Chapter of the Township code and give the Board of Commissioners jurisdiction on applications for relief/waiver from these provisions.

These amendments are designed to address some of the immediate problems with exterior lighting. They will help address some of the light trespass and glare problems in our residential districts. The long term solution to address both lighting and noise problems is to adopt a more comprehensive ordinance that would incorporate current lighting and acoustical technology practices to replace the existing noise and exterior lighting code provisions.

Below is a summary of the amendments we would like the Board to consider.

Sections 105-9 through 105-20 are being reserved to allow space for future amendments to the noise regulations.

The exterior lighting standards are being amended to include better standards for the different types of exterior lighting used today. Section 105-21 B (1) through (8) sets maximum lamp wattages or light levels for the different types of light sources used on the exterior of a property. These standards will apply only to residential lighting or to commercial lighting that spills onto residential properties. Section B (9) creates a reserve section for LED. Our plan is to come back to the Board in the future with LED standards as technology continues to improve LED lighting.

We also added an exemption from the 11:00 PM time limit if an exterior light is controlled by an automatic motion sensor. These light fixtures will remain off until the control device senses motion in the vicinity of the luminaire (light fixture).

I also want to point out some potential issues with these amendments from an enforcement perspective. Determining whether these proposed luminaire lamp wattage limits are being

violated after installation could become difficult. Staff does not have the right to enter onto a property to determine the luminaire type and the lamp wattage of the exterior lighting. Even when site access is available, if lights are more than one story above grade, we may not have easy access to the light fixture to determine the lamp wattage. The easiest method for enforcement is at the permit stage. If a permit is obtained for the installation of new exterior lighting, staff can review the specifications to determine compliance. Although enforcement after installation may be difficult, due to limited access and difficulty in obtaining the exact lamp wattage, these proposed lighting limits are reasonable requirements to have in place to protect adjacent residential property owners from light trespass and glare caused by excessive exterior lighting.

If you or any Board members have any questions about the noise and lighting regulations, please give me a call.

AN ORDINANCE

NO. \_\_\_\_\_

**AN ORDINANCE To Amend The Code Of The Township Of Lower Merion, Chapter 105 Thereof, Entitled Noise, By Amending The Title Of This Chapter To Noise And Exterior Lighting, By Reformatting The Chapter Into Articles, By Adding Thereto Exterior Lighting Standards Applicable To Residential Districts And Commercial Districts Adjacent To Residential Districts; And By Removing The Exterior Lighting Regulations In § 155-139 Of The Lower Merion Zoning Code.**

The Board of Commissioners of the Township of Lower Merion hereby ordains:

**Section 1.** The Code of the Township of Lower Merion, Chapter 105 thereof, entitled Noise, shall be amended so that the name of the chapter shall read as follows:

**Chapter 105, Noise and Exterior Lighting**

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**Section 2.** The Code of the Township of Lower Merion, Chapter 105 thereof, entitled Noise and Exterior Lighting, shall be amended by dividing the chapter into Articles with §105-1 through §105-6 now being set forth under Article I – Definitions, and §105-2 through §105-6 now being set forth under Article II – Noise.

**Section 3.** The Code of the Township of Lower Merion, Chapter 105 thereof, entitled Noise and Exterior Lighting, shall be amended by creating a new Article IV – Penalties; Remedies; Charges, by re-numbering §105-7 and §105-8 as §105-22 and §105-23 respectively and placing them with Article IV, and by holding §155-7 and §105-8 in reserve, to read as follows:

**§ 105-7. Reserved**

**§105-8. Reserved**

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**Article IV, Penalties; Remedies; Charges.**

**§ 105-22. Violations and penalties.**

Any person who shall fail to comply with any of the provisions of this chapter shall be liable, on conviction thereof, to a fine or penalty of not less than \$25 nor more than \$1,000 for each offense. Whenever such person shall have been notified by the Director or by the service of a summons in a prosecution or in any other way that he is

committing a violation of this chapter, each day in which he shall continue such violation after notification shall constitute a separate offense, punishable by a like fine or penalty. Such fines or penalties shall be collected before any Magisterial District Judge as like fines or penalties are now by law collected.

**§ 105-23. Chapter cumulative.**

This chapter shall be cumulative and shall be in addition to other Township ordinances and regulations and, in particular, to any ordinance pertaining to disorderly conduct.

**Section 4.** The Code of the Township of Lower Merion, Chapter 105 thereof, entitled Noise and Exterior Lighting, shall be amended by adding thereto §§ 105-9 through 105-20 and designating each such section “Reserved.”

**Section 5.** The Code of the Township of Lower Merion, Chapter 105 thereof, entitled Noise and Exterior Lighting, shall be amended by adding thereto a new Article III, Exterior Lighting, and a new § 105- 21, Residential exterior lighting to provide as follows:

**Article III, Exterior Lighting**

**§105- 21. Residential exterior lighting or commercial outdoor lighting directing light onto residential properties.**

In residence districts, or commercial districts where exterior lighting equipment casts significant light onto residential properties, any permitted illumination of buildings, structures, tennis courts, pools, signs, or other open areas shall be subject to the following regulations:

- A. Outdoor lighting shall be selected, located and focused so that only the building, structure, sign, or other open area on the lot is illuminated. Signs, if lighted, shall be externally illuminated only from directly above the face of the sign. The internal lighting limitation shall not apply to approved commercial signs in a commercial zoning district where signs are permitted to be internally illuminated.
- B. Outdoor lighting shall be aimed and/or shielded so that the light shall not be directed onto any adjacent lot, public street or public right of way. If any exterior luminaire (light fixture) exceeds the following lamp wattage limits, then the source of illumination shall be fully shielded in order to prevent glare and off-site migration of light onto adjacent properties. The following limits shall apply to the total lamp wattage per luminaire.
  - (1) Incandescent: 100 Watts.
  - (2) Halogen (Quartz or Tungsten Halogen): 75 Watts.
  - (3) Halogen Infrared Reflecting (Infrared-conserving): 60 Watts.

- (4) High Pressure Sodium (HPS): 50 Watts.
  - (5) Pulse Start Metal Halide (PSMH) or Ceramic Metal Halide (CMH): 40 Watts.
  - (6) Compact Fluorescent (CFL): 26 Watts.
  - (7) Straight (linear) Fluorescent: 32 Watts.
  - (8) Low voltage (12 to 24 Volts) landscape lighting utilizing either an incandescent or halogen lamp: 25 Watts.
  - (9) LED: reserved.
- C. Outdoor lighting shall not result in a measurable light level greater than one half of one (0.5) foot-candle at the property line or lot line, measured either vertically, horizontally, or line of site at an elevation of five feet (5') above grade.
- D. No decorative, sign or floodlighting, except low intensity (low brightness) safety or security lighting, which exceeds the lamp wattages as listed above shall be permitted to operate after 11:00 PM and until dawn. Lighting controlled by an automatic motion sensor, with daylight detection plus automatic turnoff and adjusted for a maximum "on" duration of not more than ten (10) minutes, shall be exempt from the 11:00 p.m. time limit.

**Section 6.** The Code of the Township of Lower Merion, Chapter 155 thereof, entitled Zoning, Article XXV, General Regulations, shall be amended by deleting §155-139, entitled Residential Outdoor Lighting and holding this section in reserve for future use as follows:

§ 155-139. ~~Residential outdoor lighting~~ Reserved

~~In residence districts, any permitted illumination of signs, buildings, structures, tennis courts or other open areas shall be subject to the following regulations:~~

- ~~A. Floodlighting or high intensity lighting shall be selected and installed so that only the sign, building, structure, tennis court or other open area on a lot is directly illuminated.~~
- ~~B. Floodlighting or high intensity lighting shall be so aimed or shielded that the light shall not be directed onto any adjacent lot.~~
- ~~C. Floodlighting or high intensity lighting over 150 watts shall be located so that the glare or reflection visible from a street or residence adjacent to the sign, building,~~

~~structure, tennis court or other open area being illuminated shall not be greater than one footcandle at the property or boundary line.~~

~~D. No floodlighting or high intensity lighting, except surveillance, security, decorative or safety lighting, shall be permitted after 11:00 p.m.~~

**Section 7.** Nothing in this Ordinance or in Chapter 105 of the Code of the Township of Lower Merion, as hereby amended, shall be construed to affect any suit or proceeding in any Court, any rights acquired or liability incurred, any permit issued, or any cause or causes of action existing under the said Chapter 105 prior to the adoption of this amendment.

**Section 8.** The provisions of this Ordinance are severable, and if any section, sentence, clause, part, or provision thereof shall be held illegal, invalid, or unconstitutional by any Court of competent jurisdiction, such decision of the court shall not affect nor impair the remaining sections, sentences, clauses, parts, or provisions of this Ordinance. It is hereby declared to be the intent of the Board that this Ordinance would have been adopted as if such illegal, invalid, or unconstitutional section, sentence, clause, part, or provision had not been included herein.

**Section 9.** This Ordinance shall take effect and be in force from and after its approval as required by law.

Approved by the Board this      day of                      , 2012.

BOARD OF COMMISSIONERS OF  
THE TOWNSHIP OF LOWER MERION

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Elizabeth S. Rogan President

Attest:

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Eileen R. Trainer, Secretary