

City of Nashua Legislation Details for O-02-61

Bill Number: O-02-61

1st Reading: 6/11/2002

Bill Name: AMENDING THE ZONING ORDINANCE TO REGULATE GLARE AND OTHER ADVERSE IMPACTS OF OUTDOOR LIGHTING

Bill Status: Approved

Approval Date: 8/13/2002

Voting: Not a Roll Call Vote on this Legislation

Bill Sponsor: [Scott A. Cote](#)

Co-Sponsors: No Co-Sponsors to date

Bill Text: **AMENDING THE ZONING ORDINANCE TO REGULATE GLARE AND OTHER ADVERSE IMPACTS OF OUTDOOR LIGHTING**

In the Year Two Thousand and Two The City of Nashua ordains that Nashua Revised Ordinance Chapter 16 "Planning", Article VII "Zoning", Division 4 "Use Regulations", be further amended by adding a new section in italics as follows: "Section 16-231. Outdoor Lighting. (a) Purpose. The benefits of good outdoor lighting are increased safety, energy efficiency, enhancement of the city's evening character and improved security. New technologies have created extremely powerful lights which can inadvertently lead to excessive glare, light trespass and higher energy use. Concerns resulting from excessive glare and light trespass include safety issues, loss of privacy and increased energy costs for everyone. The goal of this lighting section of the ordinance is to recognize the benefits of outdoor lighting and provide clear guidelines for its installation. Appropriately regulated and properly installed, outdoor lighting will maintain and complement the city's character and contribute to the safety and welfare of the residents of the city. The intent of this ordinance is to reduce the problems created by improperly designed and installed outdoor lighting – by establishing regulations which limit the area that certain outdoor lighting luminaires can illuminate and by limiting the total allowable illumination of lots located in the City of Nashua. (b) Definitions. For the purposes of this section of the ordinance, terms used shall be defined as follows: Direct Light: Light emitted directly from the lamp, off of the reflector or reflector diffuser, or through the refractor or diffuser lens, of a luminaire. Fixture: The assembly that houses the lamp or lamps and can include all or some of the following parts: a housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and/or a refractor or lens. ORDINANCE O-02-61 Flood or Spot light: Any light fixture or lamp that incorporates a reflector or a refractor to concentrate the light output into a directed beam in a particular direction. Glare: Light emitting from a luminaire with an intensity great enough to reduce a viewer's ability to see, and in extreme cases causing momentary blindness. Height of Luminaire: The height of a luminaire shall be the vertical distance from the ground directly below the centerline of the luminaire to the lowest direct-light-emitting part of the luminaire. Indirect Light: Direct light that has

been reflected or has scattered off of other surfaces. Lamp: The component of a luminaire that produces the actual light. Light Trespass: The shining of light produced by a luminaire beyond the boundaries of the property on which it is located at a level which exceeds 0.2 foot candles at the property line or on any surrounding property. Lumen: (A unit of luminous flux.) One footcandle is one lumen per square foot. For the purposes of this section of the ordinance, the lumen-output values shall be the INITIAL lumen output ratings of a lamp. Luminaire: This is a complete lighting system, and includes a lamp or lamps and a fixture. Outdoor Lighting: The night time illumination of an outside area or object by any man-made device located outdoors that produces light by any means. Temporary outdoor lighting. The specific illumination of an outside area or object by any man-made device located outdoors that produces light by any means for a period of less than 30 days, with at least 180 days passing before being used again. (c) Regulations. All public and private outdoor lighting installed in the City of Nashua shall be in conformance with the requirements established by this ordinance. (d) Control of Glare – Luminaire Design Factors. (1) Any luminaire with a lamp or lamps rated at a total of MORE than 1800 lumens, and all flood or spot luminaires with a lamp or lamps rated at a total of MORE than 900 lumens, shall be designed and installed so as to prevent light trespass. (2) Any luminaire with a lamp or lamps rated at a total of MORE than 1800 lumens, and all flood or spot luminaires with a lamp or lamps rated at a total of MORE than 900 lumens, shall not emit more than 3% direct light above a horizontal plane through the lowest direct-light-emitting part of the luminaire. ORDINANCE O-02-61 (3) Any luminaire with a lamp or lamps rated at a total of MORE than 1800 lumens, and all flood or spot luminaires with a lamp or lamps rated at a total of MORE than 900 lumens, shall be mounted at a height equal to or less than the value $3 + (D/3)$, where D is the distance in feet to the nearest property boundary. The maximum height of the luminaire shall not exceed 30 feet. Poles shall not exceed 25 feet. (e) Exceptions. (1) Any luminaire with a lamp or lamps rated at a total of 1800 lumens or LESS, and all flood or spot luminaries with a lamp or lamps rated at 900 lumens or LESS, may be used without restriction to light distribution or mounting height, except that if any spot or flood luminaire rated 900 lumens or LESS is aimed, directed, or focused so as to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways, the luminaire shall be redirected or its light output controlled as necessary to eliminate such conditions. (2) Luminaires used for public-street illumination may be installed at a maximum height of 25 feet and may be positioned at that height up to the edge of any bordering property. (3) All temporary lighting required for construction projects, related to road construction and repair, installation of sewer and water facilities, and other public infrastructure. (4) All temporary emergency lighting needed by the police or fire departments or other emergency services, as well as all vehicular luminaires, shall be exempt from the requirements of this article. (5) All hazard warning luminaires required by Federal regulatory agencies are exempt from the requirements of this article, except that all luminaries used must be red and must be shown to be as close as possible to the Federally required minimum lumen output requirement for the specific task. (6) Subject to the restrictions of the sign provisions of this ordinance, luminaires used primarily for sign illumination may be mounted at any height to a maximum of 25 feet, regardless of lumen rating. (7) Luminaires used for the lighting of areas used exclusively or primarily for outdoor recreation may be mounted at any height. (f) Temporary Outdoor Lighting. (1) Any temporary outdoor lighting that conforms to the requirements of this section of the ordinance shall be allowed. Nonconforming temporary outdoor lighting may be permitted by special use permit from the Planning Board under RSA 674:21 II after considering: (1) the public and/or

private benefits that will result from the temporary lighting; (2) any annoyance or ORDINANCE O-02-61 safety problems that may result from the use of the temporary lighting; and (3) the duration of the temporary nonconforming lighting. The applicant shall submit a detailed description of the proposed temporary nonconforming lighting to the Planning Board which shall adopt procedures for acting on such applications. (g) Nonconforming Luminaires. (1) All luminaires lawfully in place prior to the effective date of this section of the ordinance may continue to be used. However, any luminaire that replaces a nonconforming luminaire, or any nonconforming luminaire that is moved must meet the standards of this section of the ordinance. (h) Administration. (1) The city building permit and other land use applications shall include a statement requiring details of any outdoor lighting. (2) The applicant shall provide a site plan that outlines site lighting locations and a photometric plan of the site. And be further amended by, in Chapter 16 "Planning", Article VI "Subdivision Regulations", Division 1 "Generally", Section 16-100 "Purpose", by adding a new paragraph (12), as follows: "(12) To ensure that site lighting does not result in excessive glare, light trespass, energy use, or other impact on surrounding properties." And be further amended by, in Chapter 16 "Planning", Article VI "Subdivision Regulations", Division 1 "Generally", Section 16-101 "Definitions", by adding a new definition as follows: "Light Trespass: The shining of light produced by a luminaire beyond the boundaries of the property on which it is located at a level which exceeds 0.2 foot candles at the property line or on any surrounding property." And be further amended by, in Chapter 16 "Planning", Article VI "Subdivision Regulations", Division 1 "Generally", Section 16-122 "Site Plan - Submission and approval", paragraph (f)(11), by striking the word "and", and adding the following at the end of the paragraph: " and hours during which site lighting shall be operational;" and by adding a new paragraph (f)(14) as follows: "(14) A lighting plan of the site which shows, at a minimum, the location, type, and intensity of all site lighting and a photometric plan of the site." ORDINANCE O-02-61 And be further amended by, in Chapter 16 "Planning", Article VI "Subdivision Regulations", Division 1 "Generally", Section 16-123 "Same - Factors in determining approval", paragraph (b), by adding a new paragraph 16 as follows: " (16) That the site lighting is consistent with the purpose of the regulation of site lighting as expressed in section 16-100(12), and that the site lighting shall not cause light trespass " And be further amended by, in Chapter 16 "Planning", Article VI "Subdivision Regulations", Division 1 "Generally", Section 16-123 "Same - Factors in determining approval", paragraph (c), by striking the word "and", and adding the following after the phrase "for any businesses located within the site" " and hours during which site lighting shall be operational," and by adding at the end of the paragraph: "or would be consistent with the purpose of review of site lighting as as expressed in section 16-100(12).
