



MEMORANDUM

Office of the City Attorney

LEGISLATIVE ITEM NO. 000516

Phone: 334-5011/Fax 334-2229
Box 46

TO: Mayor and City Commission

DATE: February 11, 2002

FROM: City Attorney

**CITY ATTORNEY
SECOND READING**

SUBJECT: Ordinance No. 0-01-34, Petition No. 147TCH-00PB
An ordinance of the City of Gainesville, Florida, relating to outdoor lighting; Providing for Intent and Purpose; amending Section 30-23(c) of the Land Development Code by adding definitions; amending Subsection 30-160(d)(33) of the Land Development Code to require a photometric plan be included as part of a preliminary development plan; amending Subsection 30-330(a)(4) of the Land Development Code setting requirements for lighting of off-street parking facilities; amending Section 30-345 of the Land Development Code setting general performance standards on lighting; creating and adding subsection 30-93(e) to the Land Development Code establishing lighting requirements for gasoline and alternative fuel service stations; creating and adding Section 30-345.1 to the Land Development Code, providing for nonconforming luminaires and a schedule for compliance; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.

*To Sharon
From
Cecilia
City Atty
Office*
*2-12-02
delivered at 3:40 PM*

Recommendation: The City Commission adopt the proposed ordinance as revised.

COMMUNITY DEVELOPMENT STAFF REPORT

In recent years, lighting intensity has become an issue in the City of Gainesville, particularly in regards to the lighting of parking lots, gas stations and light trespass onto adjacent properties. The proposed ordinance includes more specific and enforceable standards related to site plan submittal requirements, lighting intensity levels for off street parking facilities, general performance standards related to glare, light trespass, exterior lighting, outdoor recreation and light fixture height, and specific requirements for gas stations. Many of the proposed changes are based on Illuminating Engineering Society of North America (IESNA) standards, a renowned organization in the lighting industry which maintains standards on state of the art technology and up to date research and recommendations for various lighting scenarios.


The public hearing for this petition was held at the May 29, 2000 City Commission meeting, and was approved with a 5-0 vote. Since the approval several changes were made and are included in the proposed ordinance. Some of those changes were for clarification purposes. The more substantial changes include the addition of two definitions in Section 30-23 for "luminaire" and

"Illuminating Engineering Society of North America". Illustrations were added in Section 30-330 to illustrate a "full cut-off fixture" and in Section 30-93 to illustrate "gas station canopy lighting". Additionally, a new section 30-345.1 was created and revised related to nonconforming luminaires.

CITY ATTORNEY MEMORANDUM

The City Commission, at its meeting of May 29, 2001, authorized the city attorney's office to prepare and advertise the necessary ordinance amending the Land Development Code of the City of Gainesville. Staff recommends a revision to the ordinance on page 4 (as shown by *italics*) that would permit certain cut-off decorative light fixtures in parking areas.

Prepared and Submitted by:


Marion J. Radson, City Attorney

MJR/afm

Attachment

Passed on first reading on 1/28/02 by a vote of 4-0.

ORDINANCE NO. _____
0-01-34

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An ordinance of the City of Gainesville, Florida, relating to outdoor lighting; Providing for Intent and Purpose; amending Section 30-23(c) of the Land Development Code by adding definitions; amending Subsection 30-160(d)(33) of the Land Development Code to require a photometric plan be included as part of a preliminary development plan; amending Subsection 30-330(a)(4) of the Land Development Code setting requirements for lighting of off-street parking facilities; amending Section 30-345 of the Land Development Code setting general performance standards on lighting; creating and adding subsection 30-93(e) to the Land Development Code establishing lighting requirements for gasoline and alternative fuel service stations; creating and adding Section 30-345.1 to the Land Development Code, providing for nonconforming luminaires and a schedule for compliance; providing directions to the codifier; providing a severability clause; providing a repealing clause; and providing an immediate effective date.

WHEREAS, the City Plan Board authorized the publication of notice of a Public Hearing that the text of the Land Development Code of the City of Gainesville, Florida, be amended; and

WHEREAS, notice was given and publication made as required by law and a Public Hearing was then held by the City Plan Board on March 22, 2001; and

WHEREAS, notice was given and publication made of a Public Hearing, which was then held by the City Commission on May 29, 2001; and

WHEREAS, at least 10 days notice has been given prior to first reading by publication in a newspaper of general circulation notifying the public of this proposed ordinance and of a Public Hearing to be held in the City Commission Auditorium, City Hall, City of Gainesville; and

1 **WHEREAS**, the Public Hearings were held pursuant to the published notice
2 described at which hearings the parties in interest and all others had an opportunity to be
3 and were, in fact, heard; and

4 **NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION**
5 **OF THE CITY OF GAINESVILLE, FLORIDA:**

6 **Section 1. Intent and Purpose.** It is the intent and purpose of this ordinance to
7 encourage lighting practices and systems that will minimize glare, light trespass, and light
8 pollution; conserve energy and resources while maintaining nighttime safety, utility,
9 security and productivity; and curtail the degradation of the nighttime visual environment.

10 **Section 2.** Subsection (c) of Section 30-23, Land Development Code, is amended
11 by creating and adding definitions, as follows:

12 *Luminaire* means a complete lighting unit consisting of a lamp or lamps and
13 ballasting (when applicable) together with the parts designed to distribute the light, to
14 position and protect the lamps, and to connect the lamps to the power supply.

15 *Illuminating Engineering Society of North America (IESNA)* means the
16 recognized technical authority on illumination, whose mission is to advance knowledge
17 and disseminate information for the improvement of the lighted environment to the
18 benefit of society.

19 **Section 3.** Subsection 30-160(d)(33), Land Development Code, is amended to
20 read as follows:

21 **Sec. 30-160. Submittal requirements.**

1 (d) *Preliminary development plan.* Each preliminary development plan shall include
2 the following:

3 (33) A photometric plan. For all development plans requiring development plan
4 review by a reviewing board, the plan shall be certified by a registered
5 architect or engineer, or lighting professional holding a current LC (Lighting
6 Certification) from the National Council on Qualifications for the Lighting
7 Profession (NCQLP), as providing illumination in accordance with the
8 applicable standards set forth in sections 30-330(a)(4) and 30-345(a)(9) and
9 (10). For development plans requiring staff review only, the city manager or
10 designee shall determine whether such a lighting plan is required. Plans
11 shall indicate the location, height and types of lights (manufacturer's catalog
12 cut, including make and model numbers and glare reduction/control
13 devices), footcandle grid to illustrate light levels required, uniformity ratio,
14 lamp wattage, shades, deflectors, beam direction, luminous area for each
15 source of light and a statement of the proposed hours when the luminaires
16 will be on and when they will be extinguished. A lighting plan which
17 illustrates how the lighting systems function in relationship to landscaping,
18 signage, adjacent developments, pedestrian and vehicular circulation.

19 **Section 4.** Subsection 30-330(a)(4), Land Development Code, is amended to read
20 as follows:

21 **Sec. 30-330. Design requirements for vehicle parking.**

1 (a) *Off-street parking.* Off-street parking, including public parking facilities, shall be
2 designed, constructed and maintained in accordance with the following standards and
3 regulations:

4 (4) All off-street parking facilities shall be continuously lighted after dark
5 throughout the hours that they are in use by the public. Such lighting shall be designed to
6 maintain an average horizontal illuminance not to exceed 2.5 footcandles, and a
7 minimum horizontal illuminance of 0.5 footcandles ~~not exceed an intensity of five~~
8 ~~footcandles.~~ The uniformity ratio (ratio of average to minimum illuminance) shall be no
9 greater than 5:1, and the maximum to minimum uniformity ratio shall be no greater than
10 15:1. Multiple-family dwellings must provide parking area lighting sufficient to light the
11 area for pedestrians entering and exiting the parking area. All ~~nonresidential~~
12 ~~development must~~ other uses and development, shall, at a minimum, meet the standards
13 ~~listed provided~~ in the "IESNA Lighting Handbook: Recommended Maintained
14 Illuminances for Open and Covered Parking Facilities, Latest Edition (hereinafter
15 IESNA)" for pedestrian safety. ~~Sources of light, including bulbs and tubes and all~~
16 ~~reflecting surfaces, shall be hooded or shielded so as not to create a nuisance across lot~~
17 ~~lines.~~ All lighting fixtures serving parking lots shall be full cut-off fixtures as defined by
18 IESNA. Cut-off type (as defined by the IESNA) decorative light fixtures of either
19 pedestrian or intermediate height (such as Washington globe, lantern, pendant, or other
20 such decorative fixtures) may be allowed by the appropriate reviewing board, or City
21 Manager or designee for development plans requiring only staff review. A photometric
22 plan shall be provided in compliance with section 30-160(d). Parking lot lighting

1 locations shall not be in conflict with required trees or any existing trees required to
2 remain on the property. The maximum height of fixtures shall not exceed 30 feet, except
3 as regulated by an adopted special area plan or other applicable regulations.

4 (see Exhibit "A" attached hereto and made a part hereof as if set forth in full)

5 Figure 1. Full Cut-Off Fixture

6 ~~Lighting shall be located on site plans and shall not be in conflict with required trees,~~
7 Transformer boxes or utility poles ~~for security lighting~~ should not be located within
8 required parking lot landscape islands. Where transformer boxes or utility poles are
9 located within such islands, the island should be designed so the required tree will still
10 have the minimum of 140 square feet.

11 Section 5. Subsection 30-345(a)(9), Land Development Code is amended to read
12 as follows:

13 **Sec. 30-345. General performance standards.**

14 (a) All uses and activities permitted in any zoning district shall conform to the
15 standards of performance described below, and the failure to conform to any of such
16 standards is hereby declared to be a public nuisance and a violation of this code:

17 (9) *Glare. Lighting.* Any light installation which provides for re-aiming of
18 the fixture shall be aimed in compliance with this section.

19 a. Light trespass and glare. Any development adjacent to a residential use
20 shall not create light trespass of more than 0.5 footcandles measured
21 perpendicularly from the light source at a distance of 25 feet from the property
22 line. Any light trespass onto adjacent non-residential properties shall not exceed

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1 1.0 footcandle measured perpendicularly from the light source at a distance of 25
2 feet from the property line. Roadway lighting ~~on public streets~~ is exempt from
3 light trespass requirements. Directional luminaires such as floodlights, spotlights,
4 sign lights and area lights shall be so installed and aimed that they illuminate only
5 the task intended and that the light they produce does not shine directly onto
6 neighboring properties or roadways. Building facade lighting, sports lighting and
7 other applications using floodlights shall have glare shielding (external or internal
8 shields) to prevent light trespass and light pollution. All lighting shall be so
9 designed, hooded or shielded as to reflect the direct light in such a manner so that
10 no illumination source or glare creates a nuisance to any adjoining property or
11 unreasonably interferes with the lawful use and enjoyment of any adjoining
12 property. Such lighting shall not under any circumstances exceed a maximum
13 intensity of 25 footcandles at ground level. However, the maximum light
14 intensity may be increased by the city plan board through site plan review, or the
15 board of adjustment by special exception if site plan review is not required,
16 provided that the applicant establishes that such an increase is reasonably required
17 for security purposes for the particular use or activity in question, that the
18 increased intensity will not result in a nuisance to adjoining properties, does not
19 interfere with the lawful use and enjoyment of property, that necessary screening
20 will be erected or exists to reduce the impact of the increased intensity on
21 adjoining properties.

22 b. *Exterior lighting.* Lighting which is provided for the security of areas such

1 as, but not limited to, building entrances, stairways, ramps and main walkways or
2 for a permitted outdoor use of land (such as ball parks) shall not under any
3 circumstances exceed a maximum average maintained illumination of 25
4 footcandles at ground level, and uniformity ratio of 6:1. Exterior wall-mounted
5 lighting shall be full cut-off fixtures (as defined by IESNA). The maximum
6 lighting intensity permitted for the security of the areas described above, for
7 permitted outdoor land uses, or pole heights, other than those located in off-street
8 parking facilities, may be increased by the appropriate reviewing board through
9 site plan review, or the board of adjustment by obtaining a special exception if site
10 plan review is not required, provided that the applicant establishes that such an
11 increase meets the following standards: a. the increase in intensity is reasonably
12 required for security purposes for the use or for conducting the permitted outdoor
13 use; b. the increase in intensity will not result in a nuisance to adjoining properties
14 and does not interfere with the lawful use and enjoyment of adjoining properties;
15 and c. necessary screening will be erected or exists and maintained to reduce the
16 impact of the increase in intensity on adjoining properties.

17 c. *Outdoor recreational lighting.* Lighting installations for outdoor
18 recreational uses (including pole heights) shall be designed in accordance with
19 IESNA standards, as outlined in report number RP-6-88, or any update thereto.

20 d. *Height.* The maximum height of light fixtures, except as otherwise
21 regulated by this section, shall not exceed 30 feet.

22 **Section 5.** Subsection (e) is created and added to Sec. 30-93, Land Development

1 Code, to read as follows:

2 **Sec. 30-93. Gasoline and alternative fuel service stations (GN-554), and food stores**
3 **(MG54) with accessory gasoline and alternative fuel pumps.**

4 (e) Lighting. The requirements for lighting are as follows:

5 (1) Remote areas. Areas on the apron away from the gasoline pump islands,
6 used for parking or vehicle storage, shall be illuminated in accordance with the
7 requirements for parking areas as set forth in Section 30-330(a)(4).

8 (2) Areas around pump islands. Areas within 6 feet of a pump island or under
9 canopies shall be designed to maintain a minimum average horizontal illuminance
10 of at least 2.0 footcandles and a maximum average of no more than 10
11 footcandles. The uniformity ratio (ratio of average to minimum illuminance) shall
12 be no greater than 5:1. The above lighting must be delineated on a photometric
13 plan.

14 (3) Fixtures. Light fixtures mounted on or under canopies shall be full cut-off
15 classification as defined by the IESNA, or recessed so that the lens cover is flush
16 with the bottom surface (ceiling) of the canopy.

17 (See Exhibit "B" attached hereto made a part hereof as if set forth in full.)

18 Figure 1. Canopy Lighting

19 (4) Alternatives. As an alternative or supplement to recessed lights, indirect
20 lighting may be used where light is aimed at the underside of the canopy and
21 reflected back down. In this case the light fixtures must be shielded so that all
22 direct illumination is focused exclusively on the underside of the canopy.

1 (5) Prohibited lights. Lights shall not be mounted on the top or sides of the
2 canopy when not part of a permitted sign, and the sides (fascias) of the canopy
3 shall not be illuminated, unless the illumination is part of a permitted sign.

4 (6) The submittal requirements of Section 30-160(d), Land Development
5 Code shall be met.

6 **Section 7.** A new Section 30-345.1 is created and added to the Land
7 Development Code of the City of Gainesville, as follows:

8 **Sec. 30-345.1 Nonconforming luminaires.**

9 All lamps, light fixtures and lighting systems (hereinafter "luminaires") lawfully
10 in place prior to February 11, 2002, shall be deemed legally nonconforming. However, if
11 cumulatively at any time, 50% or more of the existing outdoor light fixtures are replaced,
12 or number of outdoor light fixtures is increased by 50% or more, then all outdoor light
13 fixtures shall conform to the provisions Section 30-160, Section 30-330, and Section 30-
14 345. A development plan amendment shall be certified by a registered engineer or
15 architect, or lighting professional holding a current L.C. (lighting certificate) from the
16 National Council on Qualifications for the Lighting Profession (NCQLP). Additionally,
17 nonconforming luminaires that direct light toward streets or parking areas that cause glare
18 so as to cause a public nuisance should be either shielded or re-directed within 30 days of
19 notification.

20 **Section 8.** It is the intention of the City Commission that the provisions of
21 Sections 2 through 7 of this ordinance shall become and be made a part of the Code of
22 Ordinances of the City of Gainesville, Florida, and that the Sections and Paragraphs of

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10/15/2001

1 this ordinance may be renumbered or relettered in order to accomplish such intentions.

2 **Section 9.** If any section, sentence, clause or phrase of this ordinance is held to be
3 invalid or unconstitutional by any court of competent jurisdiction, then said holding shall
4 in no way affect the validity of the remaining portions of this ordinance.

5 **Section 10.** All ordinances, or parts of ordinances, in conflict herewith are to the
6 extent of such conflict hereby repealed.

7 **Section 11.** This ordinance shall become effective immediately upon final
8 adoption.

9
10 **PASSED AND ADOPTED** this _____ day of _____, 2002.

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14 _____
15 THOMAS D. BUSSING, MAYOR

16
17 ATTEST:

Approved as to form and legality

18
19
20 _____
21 KURT M. LANNON
22 CLERK OF THE COMMISSION

MARION J. RADSON
CITY ATTORNEY

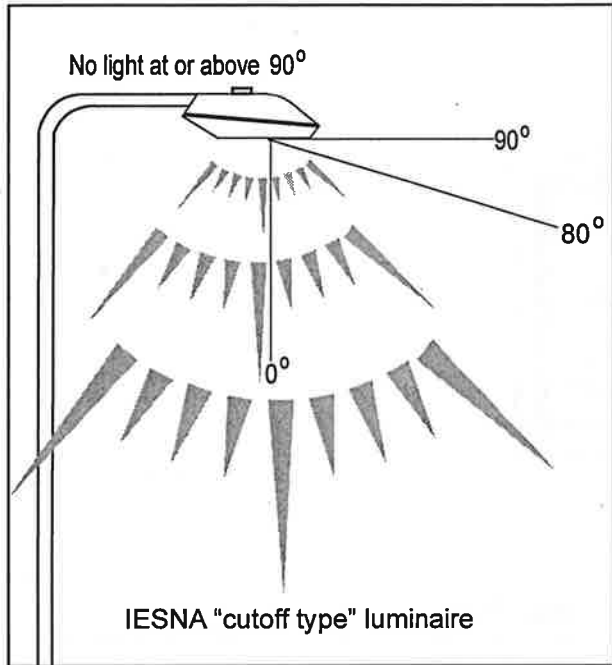
23 This Ordinance passed on first reading this _____ day of _____, 2002.

24 This Ordinance passed on second reading this _____ day of _____,
25 2002.

Figure 1

Full Cut-Off Fixture

This



Not This

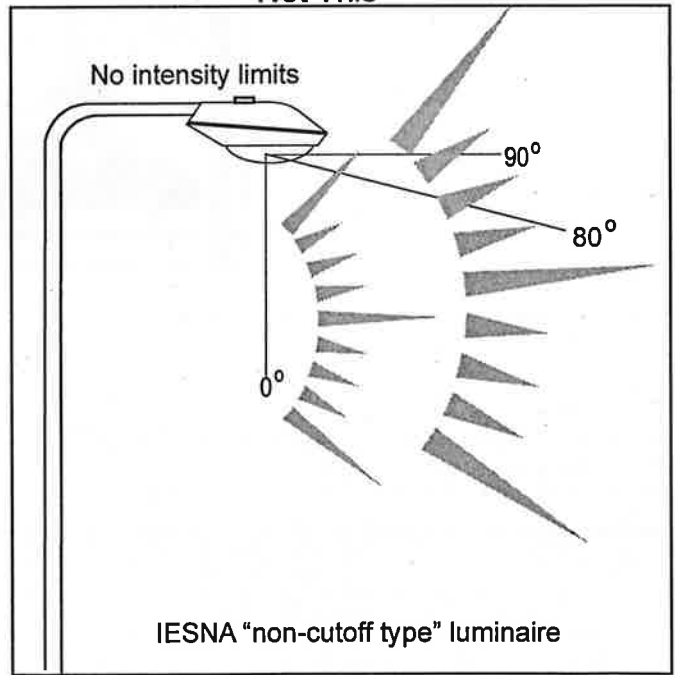
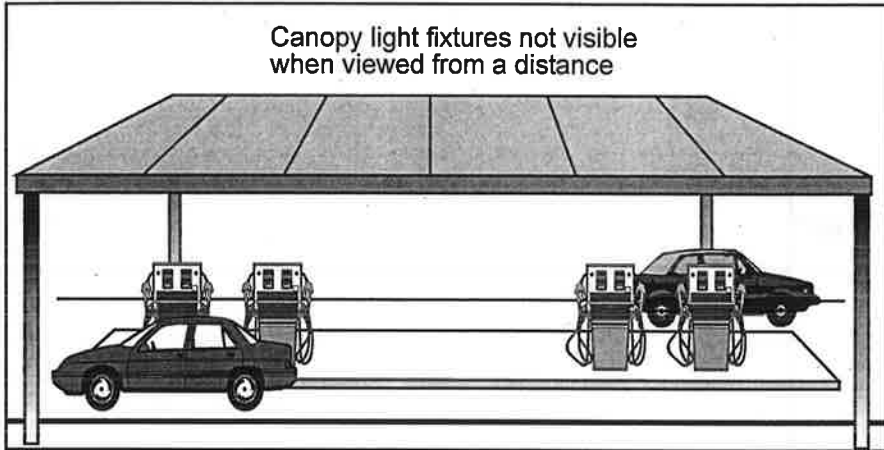


Figure 1
Canopy Lighting

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