



Planning & Development Services

LEGISLATIVE ITEM #121109

**This Item pertains to a referral from the
Community Development Committee
regarding modifications to the Existing
Outdoor Lighting Standards**

Prepared by Lawrence Calderon

07/17/2014

Sec.30-344: Outdoor Lighting

1. After receiving comments from the development community and GRU about the existing lighting ordinance, the City Commission referred the item to the Community Development Committee for consideration.
2. *Based on input from staff, including GRU, the general public and a specific group of stakeholders; the committee discussed several elements of the lighting ordinance.*
3. *The CDC met on October 8, 2013 and asked staff to work with stakeholders to address the following:*
 - a. Consider stakeholder input and suggestions, including GRU
 - b. *Consider ordinance amendments to increase flexibility in implementation of the lighting ordinance*
 - c. *Report back to the committee about suggested amendments to the ordinance.*
4. *After several meetings with stake-holders, GRU and other interested parties, staff submitted the following recommendations to the CDC On January 29, 201*

Recommendation

121109C

Staff recommends the following amendments to the current ordinance:

1. Amend the ordinance to address items proposed by stakeholders.
2. Amend the ordinance to address Items proposed by GRU.
3. Create a section that addresses energy efficiency and security lighting consistent with CPTED (Crime Prevention Through Environmental Design) principles.
4. Revise the waiver provision to create greater flexibility and to clarify the intent and use of the provision.
5. Modify the current development review process to include staff from GRU's Electrical Department (lighting professionals) who would participate in the review of all developments that include a lighting plan.

Items Proposed by Stakeholders 121109C

- a. *Facilitate a performance based review for some of the lighting regulations. Instead of placing restrictions on the fixtures such as full cut-off and mounting heights, the regulations should establish measurable performance values related to light trespass, light pollution, glare, up-light, etc. Remove restrictions on criteria such as pole heights and full cut-off fixtures, replacing those requirements with specific indices consistent with the intent of the ordinance.*
- b. *Reconsider the level of lighting details required during development plan review. Provide detailed specifications during the building permit phase.*
- c. *Provide clarification concerning the specific areas over which the standards should apply*
- d. *With reference to the use of LED fixtures the code should provide specific standards for determining energy efficiency.*

Items Proposed by Stakeholders 121109C

- e. Maintain and improve the waiver provision but with some clarifying modifications.
- f. Reconsider the 15-foot limit on pole heights adjacent to residential areas; the focus should be on minimizing light trespass, glare incident onto adjacent property and night sky pollutions through performance indices.
- g. Clarification of some of the existing definitions and to add others.
- h. Ensure that the required light intensities at entrance and exterior of buildings are consistent with levels required by State and Federal agencies.
- i. Canopy lighting should be designed to capture CPTED principles
- j. Special designs should be included to address lighting needs for special districts and unique designs which would be consistent with areas such as University Heights and the Historic Districts
- k. Ordinance should be designed to minimize the amount of coordination required among electrical and design teams. This effort leads to additional fees, delays and additional review time.

Items Proposed by GRU

121109C

- a. **Sec. 344 (d) (1) (d) pertaining to the use of luminaires which are energy and resource efficient as high performance LED lighting.**
 - a. *GRU requests that the language be changed to include High Intensity Discharge (HID- MH & HPS) luminaires in addition to LED as acceptable light sources.*
- b. **Sec. 344 (d) (1) (e) pertaining to automatically extinguish all outdoor lighting when sufficient daylight is available.**
 - a. *GRU requests that the language be modified because photoelectric controls are used widely to extinguish outdoor lighting.*
- c. **Sec. 344 (e) (4) (f) pertaining to automatically extinguished luminaires no later than one hour after the close of business or facility operation.**
 - a. *GRU recommended further review: The requirement to turn lights on and off or be dimmed at specific times will require some form of energy management system.*

- d. *Sec. 344 (d) (2) which limits the height of poles to 30 feet;*
 - d. *Its current practice is to install poles at heights greater than 30 feet in some situations.*

- e. *Sec. 344 (d) (2) (b) (3) which limits the height of poles to 15 feet when located within 75 feet of property zoned residential*
 - d. *GRU requests that the language for both “d.” and “e.” above be modified to focus on adherence to specified glare and light trespass limits and not to artificial restrictions in lighting system design/options.*

121109C

50' Pole with 80 degree
full cut-off fixtures



30' Pole with 80 degree
full cut-off fixtures



15' Pole with 80 degree
full cut-off fixtures



Items Proposed by GRU

121109C

Glare:- Spill over – Exposure to night sky – high intensity - Safety & Security- comfort level in a night or dark environment

Glare: shall have a specified UGR (Unified Glare Rating)

Using a maximum luminance value of 1200 cd/m² would be a suitable maximum value to control glare

Spill-Over light Intensity at PB: 0.5fc or 1.0 fc

Light Intensity on site: Average of 2.5fc; Max 10fc; Min 0.5fc; Uniformity Ratio of 6:1; Max Uniformity Ratio of 15: 1

Exposure to night Sky: 0.2fc at 5 feet above the light fixture

❖ focusing the light to specific objects instead of allowing it to spread uncontrollably.

Safety & Security:

Recommendation

..Recommendation

The City Commission: 1) Direct staff to initiate a petition to the City Plan Board to modify the lighting ordinance as recommended by staff in the backup materials to the Community Development Committee, including changes to the 15 foot pole height for lighting when adjacent to residential areas; and 2) remove this item from the Community Development Committee's referral list.

Alternative Recommendation

City Staff to the City Commission - Refer the item back to the Community Development Committee for further consideration.