

City Council Policy: CP250 - Comprehensive Street Lighting

Effective Date: February 19, 2008

Amends: CP250 - Comprehensive Street Lighting, June 20, 1994

Approved By: Governing Body

# I. SCOPE

### II. PURPOSE

A. The overall objective of this comprehensive street lighting policy is:

- 1. To achieve good visibility through effective utilization while minimizing energy consumption to provide the level of illumination required according to this policy.
- 2. To provide street lighting that will contribute to the safety and welfare of City residents and visitors by:
  - a.) Reducing night accidents;
  - b.) Aiding police protection;
  - c.) Facilitating traffic flow;
  - d.) Promoting business activity during night hours; and
  - e.) Providing inspiration for community spirit and growth.

## III. RESPONSIBILITY

A. Director of Public Works

### IV. <u>DEFINITIONS</u>

### V. POLICY

- A. Design Criteria:
  - 1. The roadway classification for street lighting design will be:
    - a.) Arterial having an Average Daily Traffic (ADT) volume of greater than 15,000 vehicles or 100 pedestrians per night and serves as the principle network for through traffic flow.
    - b.) Collector having an ADT volume of less than 15,000 and 1,000 or more vehicles or 100 pedestrians per night and servicing traffic arterial and local roadways.
    - c.) Local having an ADT volume of less than 1,000 vehicles or 50 pedestrians per night and used for direct access to residential properties.
  - 2. The minimum average maintained horizontal illumination in foot candles will be:
    - a.) Arterial
      - Commercial (business area where ordinarily there are many pedestrians during night hours) 1.2
      - Intermediate (where moderately heavy night time pedestrian activity in such areas as libraries, recreation centers, apartments and neighborhood retail stores) 0.9
      - Residential (where residential development occurs with few pedestrians at night) 0.6
    - b.) Collector
      - Commercial 0.8
      - Intermediate 0.6
      - Residential 0.4
    - c.) Local
      - Commercial 0.6
      - Intermediate 0.5
      - Residential 0.3
  - 3. The minimum average-to-minimum uniformity ratios will be:
    - a.) Commercial 3:1
    - b.) Intermediate 4:1
    - c.) Residential 6:1
  - 4. The road surface classification will be R-3 Asphalt road surfaces with dark aggregates and rough texture after months of use.
  - 5. The equipment will be:
    - a.) Pole steel pole of 25 feet to 30 feet in height, except for intersections with no trees, the maximum height of 40 feet is permitted.

- b.) Luminaire cutoff type using high pressure sodium lamp mounted at right angle to the pavement.
- c.) Mast arm sufficient length to cause the maximum foot candles to be over travel lane of roadway.
- 6. The installation design will be based on the above design criteria. The formulas will be contained in either the US Department of Transportation Federal highway Administration Implementation Package 78-15, as amended, or the Illuminating Engineering Society (IES) Special Report ED-3A, as amended.
- 7. The installation design will be evaluated to determine the effect on street trees. The intent will be to minimize damage from pruning. Also, the location of a street light pole will be as near to property line as feasible to minimize viewing from the front of a residence or business. If detrimental issues are found, the installation design will be altered to minimize the aesthetic impact.
  - a.) NOTE: The Public Works Director will invite residents to a public information meeting when a street light is to be changed, installed or removed from their property.

#### VI. PROCEDURES

- A. For all accepted City streets.
  - 1. The City will consider a street lighting request, if a petition form is received from over 50 percent of the abutting properties within 500 feet of the proposed street light location.
    - a.) Only one signature is required per building owner.
    - b.) The office of the City Clerk will receive the petition and verify the names on the petition. Verified petitions will be forwarded to Public Works for appropriate action; or
    - c.) Public Works may request street lighting as a part of any project of where, in the opinion of the Public Works Director, a street light or street lighting system may be necessary.
  - 2. Public Works will prepare a warrant for the requested street light(s). The purpose of the warrant will be to establish warranting condition that can be used to determine the necessity of the light and a priority when compared to other street light requests.
    - a.) Public Works will estimate the cost and prepare a report for the Council Committee of the Whole.
  - 3. The Council Committee of the Whole will hold a public information meeting and recommend action to the City Council.
  - 4. The City Council will take appropriate action consistent with the amount of funds available for street lighting.
- **B.** For all private or unaccepted City streets:
  - The City will not install or pay for any power usage for any street light installed on a private or unaccepted City street.
  - 2. The developer will pay for any street lighting that will be installed on streets to be accepted by the City.