

CHAPTER 12

STREET LIGHTING DESIGN

12.0 General

The purpose of this chapter is to define the requirements for street lighting on public and private streets, & commercial developed streets.

12.1 Lighting Area Classifications

- A. RESIDENTIAL is characterized by few pedestrians and low parking turnover demand. This area includes areas of single family homes, townhouses, and small apartments.
- B. INTERMEDIATE is characterized by moderately heavy pedestrian traffic and lower parking turnover than in a commercial area. This area includes dense apartment areas, hospitals, and neighborhood recreation centers.
- C. COMMERCIAL is characterized as a business development with a large number of pedestrians and a heavy parking demand. This applies to densely developed business areas outside of and within the central part of a city.

12.2 Illumination Levels

	<u>ROAD TYPE*</u>	<u>AVERAGE FC</u>	<u>UNIFORMITY**</u>
A.	RESIDENTIAL		
	1. Minor	0.4	5:1 to 7:1
	2. Collector	0.6	2:1 to 4:1
	3. Major	1.0	2:1 to 4:1
B.	INTERMEDIATE		
	1. Minor	0.6	2:1 to 4:1
	2. Collector	0.9	2:1 to 4:1
	3. Major	1.4	2:1 to 4:1
3.	COMMERCIAL		
	1. Minor	0.9	2:1 to 4:1
	2. Collector	1.2	2:1 to 4:1
	3. Major	2.0	2:1 to 4:1

* Refer to Street Design for road type definitions

** Ratio of the minimum to average foot candles (FC)

12.3 POLE AND LUMINARIES CRITERIA

- A. Luminaries, poles, brackets, foundations, etc. shall be Dominion Virginia Power stock items.
- B. All luminaries shall be ~~high pressure sodium vapor~~ **Light Emitting Diode (LED) basic fixtures (enclosed flat lens or Traditional Colonial)**.
- C. Maximum residential mounting height shall be 30'.
- D. In residential areas, poles shall be located 2' behind the face of curb. If no curb and gutter, pole shall be a minimum of 8' behind edge of pavement.
- E. In residential areas, poles shall be located at the lot line.
- F. On major roads, poles shall be located behind sidewalk or a minimum of 8' behind edge of pavement.
- G. Condominiums, apartments, and Townhouse plans shall provide appropriate areas for the placement of street lights in accordance with Article 6 (Residential District) of the Zoning Ordinance.
- H. Two (2) sets of approved plans are required to order street lights.