

**ROADWAY LIGHTING DESIGN QUESTIONNAIRE**

The intention of this questionnaire is to determine Roadway Lighting design preferences. The information provided will be used to develop lighting plans for your agency.

Date: _____	Return By: _____
Project Name: _____	
Project No: _____	
UPC No: _____	
Advertisement Date: _____	
Plan Design Contact Information:	
Name: _____	
Phone No.: _____	
E-Mail Address: _____	

**Roadway Lighting Preferences:**

1. Luminaires wattage & type? (VDOT recommends high pressure sodium type)  
\_\_\_\_\_
2. VDOT lighting standard? Type LP-1 \_\_\_\_\_, LP-2 \_\_\_\_\_, or LP- 3 \_\_\_\_\_
3. Type of lighting standard:
  - a. Poles & foundations? (breakaway supports) \_\_\_\_\_
  - b. Direct buried poles? (type - wood, aluminum, fiberglass, etc.) \_\_\_\_\_
  - c. Any special pole or luminaire preferences? (color, style, etc.) \_\_\_\_\_
4. Any propriety lighting equipment required? \_\_\_\_\_
5. Location of lighting standards:
  - a. Outside edge of roadway? (behind sidewalk, utility strip) \_\_\_\_\_
  - b. Median? (not recommended by VDOT) \_\_\_\_\_
  - c. Use of Local Power Company poles? \_\_\_\_\_
6. Mounting height of luminaire? (min. or max. restrictions) \_\_\_\_\_
7. Location of luminaires in relation to roadway? (e.g.; along curb or over edge of pavement) \_\_\_\_\_

8. Type pole arrangement:
- a. Staggered? \_\_\_\_\_
  - b. Opposite? \_\_\_\_\_
  - c. Same side of roadway? (Not preferred) \_\_\_\_\_
  - d. Median? (Not preferred) \_\_\_\_\_
9. Luminaire arm length? (min. or max. restrictions) \_\_\_\_\_
10. Wiring system:
- a. Conduit & junction boxes? \_\_\_\_\_
  - b. Direct buried? \_\_\_\_\_
  - c. Installed by Local Power Company? \_\_\_\_\_
11. Conduit: (if applicable)
- a. Size? \_\_\_\_\_
  - b. Type? (Specs provide contractor the choice of Metal, PVC or Fiberglass) \_\_\_\_\_
  - c. Installation? (In accordance with VDOT Standard ECI-1) \_\_\_\_\_
12. Junction box sizes & type? (VDOT prefers: JB-R1, R2, S1 or S2) \_\_\_\_\_
13. Junction box spacing? (VDOT recommends 250' spacing) \_\_\_\_\_
14. Electrical service type? SE-7 \_\_\_\_\_, SE-8 \_\_\_\_\_, SE-9 \_\_\_\_\_, and Type A \_\_\_\_\_, or Type B \_\_\_\_\_

15. Classification of Roadway and Nighttime Pedestrian Conflict according to IESNA, RP-8 (See Table below and circle selected values)

<b>ROADWAY ILLUMINATION LEVELS</b>			
Roadway and Nighttime Pedestrian Conflict Classification		Minimum Maintained Average Values	Uniformity Ratio
Road	Pedestrian Conflict Area	FC	Average/Minimum
Freeway Class A		0.9	3.0
Freeway Class B		0.6	3.0
Expressway	High	1.4	3.0
	Medium	1.2	3.0
	Low	0.9	3.0
Major	High	1.7	3.0
	Medium	1.3	3.0
	Low	0.9	3.0
Collector	High	1.2	4.0
	Medium	0.9	4.0
	Low	0.6	4.0
Local	High	0.9	6.0
	Medium	0.7	6.0
	Low	0.4	6.0

This Table is abridged from IESNA, RP-8, Table 2 - Illumination Method - Recommended Values

16. Combination Signal / Luminaire poles? (yes or no - if applicable) \_\_\_\_\_

17. Classification of Intersection and Nighttime Pedestrian Conflict according to IESNA, RP-8 (See Table below and circle selected values)

<b>INTERSECTION ILLUMINATION LEVELS</b>					
Roadway Functional Classification	Minimum Maintained Average Illumination Values by Pedestrian Area Classification (FC)			Uniformity Ratio	Intersection Name
	High	Medium	Low	Average/Minimum	
Major/Major	3.4	2.6	1.8	3	
Major/Collector	2.9	2.2	1.5	3	
Major/Local	2.6	2	1.3	3	
Collector/Collector	2.4	1.8	1.2	4	
Collector/Local	2.1	1.6	1	4	
Local/Local	1.8	1.4	0.8	6	

This Table is abridged from IESNA, RP-8, Table 9 - Recommended Illumination for the Intersection of Continuously Lighted Urban Streets

18. If the local power company is installing lighting poles after completion of the project, what is the minimal amount of R/W or easements desired for the installation of these items. \_\_\_\_\_
19. If lighting poles are installed under a separate contract, provide the required foundation bolt circle size. \_\_\_\_\_
20. Is under bridge lighting desired? (Bridge number/location) \_\_\_\_\_
21. Are above ground receptacles required? (Normally used for parking lots, weigh stations, inspection stations, etc.) \_\_\_\_\_

**Adjacent Community:**

22. Urban, Suburban, Rural, Business, Residential? \_\_\_\_\_
23. Near-by airports or heliports? (Name & approximately how close) \_\_\_\_\_
24. Are there places along the roadway (known at this time) where lighting poles should be avoided or glare shields used because of houses or businesses? \_\_\_\_\_
25. Requirement for bridge or air navigation lightings? \_\_\_\_\_
26. What will be the posted speed limit on the road to be lighted? \_\_\_\_\_

**Existing Lighting and Electrical Systems:**

27. Available power source:
- 240/120-volt single-phase? \_\_\_\_\_
  - 480/277-volt three-phase? \_\_\_\_\_
  - Is there a preference? \_\_\_\_\_
28. Are any major power distribution lines in close proximity of the proposed Lighting Project? \_\_\_\_\_
29. Name and phone number of Local Power Company Representative? (if known) \_\_\_\_\_
30. Is there a minimum spacing required between utility poles? \_\_\_\_\_

- 31. Existing lighting conditions: (if available)
  - a. Existing plans? \_\_\_\_\_
  - b. Existing luminaires mounting height? \_\_\_\_\_
  - c. Existing luminaires wattage, type, arm lengths? \_\_\_\_\_
  - d. Pole type and locations? \_\_\_\_\_
  - e. Power source? (120/240-volt or 480/277-volt) \_\_\_\_\_
  - f. Is lighting installed on local power company poles? \_\_\_\_\_

32. Other issues to be considered in the Lighting Plan:

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Contact Name: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Email Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_