



## DUKE ENERGY ROADWAY LIGHTING REQUIREMENTS

(EXCLUDES SUBDIVISION INTERIOR LIGHTING)

1. Requests must be in writing with the checklist attached (see exhibit A) completed and signed.
2. Please provide recommended lighting levels.

Lighting levels are established from a combination of municipality zoning (area classification) and NC DOT roadway classification. The American Association of State Highway and Transportation Officials' (AASHTO) classifications must be established by the NC DOT prior to design. (Please refer to exhibit B for additional information).

  - a. **DOT Roads:** Send classification request via e-mail to [lightingelectrical@ncdot.gov](mailto:lightingelectrical@ncdot.gov). The Roadway Design Unit is responsible for NC DOT road classifications. Please include:
    - i. Name of roadway and NCSR number.
    - ii. Vicinity Map (Show roadway location)
    - iii. Beginning and End Point of lighting limits
    - iv. Area Classification (i.e., zoning) if within corporate limits
  - b. **Municipality Roads:** If the request is on a road that is not maintained by the DOT, the municipality should stipulate their lighting levels or light to DOT requirements. The Municipality is responsible for providing the "Area Classification" even if the road is a DOT road within the corporate limits.

### **ADDITIONAL INFORMATION REQUIRED FROM MUNICIPALITY/DEVELOPER:**

3. Estimated up front, abnormal charges for street lighting along NCDOT maintained roads will be provided during the design process and can vary. Your signature on Exhibit A acknowledges funding is available for this project and your approval to proceed with design. These charges will be billed prior to construction.
4. Roadway name including beginning and end point of project limits for lighting design.
5. Projected timeframe for standard street light installation (Please allow 2 months for design, 6 months for DOT Encroachment, and 2 months for construction and installation.)
6. OH, or UG conductors?
7. Pole Type – Wood or Fiberglass or Special (black, etc., please explain).

8. Standard Lighting Fixture Type is an LED Roadway (gray). Special types require special design.
9. Preferred lighting configuration - Opposite/Staggered/no preference (i.e., leave it up to the designer).
10. If possible, please provide a road cross section including road right-of-way width, pavement width and width of median if applicable (usually provided w/developers drawings or electronic files). Include type of curb & gutter for new construction:
  - a. Mountable with 6" rise; valley type or none.
11. Please provide electronic drawings in AutoCAD. Provide contact name, phone number and email address for electronic files.
12. Does this request correlate with a roadway improvement project? If so, please provide road project reference name or number and dates Duke Energy can be on site to install lights.
13. To meet NC DOT clear and recovery zone requirements, additional right of way may be required. This can vary from 6 feet behind curb & gutter to 20-30 feet off the travel lane where no curb & gutter exists. Sidewalk adjustment within existing right of way and even road design changes may be necessary to accommodate poles. If these changes are not possible, requestor is responsible for obtaining additional right of way from property owners.

**The final design drawings, one-time charges and monthly bill amount will be submitted to the requestor for approval. The requestor must approve the costs before NCDOT encroachments will be filed.**

**For NCDOT maintained roads, Duke Energy will proceed with construction as soon as practical after encroachment is received.**

**For Municipal roads (not maintained by NCDOT) Duke Energy will proceed with construction as soon as practical after Municipality/Developer approval is received.**



**Exhibit A**  
**Checklist for Roadway Lighting Requests**

Please fill in and return

1. Requestor: Town/City \_\_\_\_ Developer \_\_\_\_ (please check one)  
 Name of Town/Developer: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Duke Energy Account #: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Email address: \_\_\_\_\_
  
2. AASHTO Classification for Roadway: \_\_\_\_\_  
 a. Average Maintained Foot Candles \_\_\_\_\_ Uniformity Ratio \_\_\_\_\_
  
3. Funding Available: Yes \_\_\_\_ No \_\_\_\_
  
4. Name of Roadway: \_\_\_\_\_ NCSR # \_\_\_\_\_  
 a. From: \_\_\_\_\_ To: \_\_\_\_\_  
 b. Is this a continuation of an existing lighting system? Yes \_\_\_\_ No \_\_\_\_
  
5. Date needed: \_\_\_\_\_ (Please allow 6 months for DOT review and approval)
  
6. OH \_\_\_\_ or UG \_\_\_\_ System
  
7. Pole Type: Wood \_\_\_\_ Fiberglass \_\_\_\_ Special (please provide details) \_\_\_\_\_
  
8. Standard Fixture: Yes \_\_\_\_ No \_\_\_\_ Special (please provide details) \_\_\_\_\_
  
9. Lighting Configuration: Opposite \_\_\_\_ Staggered \_\_\_\_ Design determined \_\_\_\_
  
10. Lighting to be installed outside of road right-of-way: Yes \_\_\_\_ No \_\_\_\_  
 a. If yes, has additional right-of-way been secured to accommodate lighting: Yes \_\_\_\_ No \_\_\_\_
  
11. Roadway right-of-way width: \_\_\_\_\_ (include road cross section)  
 a. Type of curb: 6 " non-Mountable \_\_\_\_ Valley type \_\_\_\_ None \_\_\_\_
  
12. Electronic drawings provided: Yes \_\_\_\_ No \_\_\_\_  
 a. Contact Person \_\_\_\_\_ Phone: \_\_\_\_\_  
 b. Email address \_\_\_\_\_
  
13. Proposed roadway construction: Yes \_\_\_\_ No \_\_\_\_  
 a. Project name/number: \_\_\_\_\_

The Requestor, (name here) \_\_\_\_\_ hereby acknowledges abnormal charges and authorizes Duke Energy to proceed with the design and acknowledges lights will be energized and billed upon installation.

Town/City  
Signed: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Developer  
Signed: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

## **Exhibit B**

### **Process for Requesting a Roadway Classification from NC DOT**

Lighting systems installed on highway rights-of-way must meet acceptable design criteria. The “Utility Manual” (Policies and Procedures for Accommodating Utilities on Highway Rights of Way) requires specific information in the Encroachment Agreement package. This information is necessary for a thorough review of the lighting design. A vicinity map that shows the location of the roadway is required, so the roadway classification can be determined. A lighting layout is required, which gives an indication of the type development adjoining the roadway, so the area classification can be determined. With the roadway classification and the area classification, the lighting design can be checked to ensure that the proposed lighting system is in reasonable conformance with the American Association of State Highway and Transportation Officials (AASHTO) guidelines.

Lighting designers have requested that DOT provide the roadway classification before preparing the Encroachment Agreement package. To accommodate their request, DOT needs the same information available in the required encroachment documents: a vicinity map and the area classification. Upon written request, DOT will provide the roadway classification and the lighting design criteria. The following information should be submitted when requesting a roadway classification.

1. Vicinity Map: This is a small sketch showing the location of the encroachment. It should show route numbers (SR, NC, Interstate, etc.) and road/street names. It should be large enough for someone unfamiliar with the area to be able to locate the encroachment.
2. Area Classification: This is a statement provided by the municipality where the lighting encroachment will be installed. According to AASHTO, the three area classifications for lighting design are Commercial, Intermediate and Residential.