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## **MEMORANDUM**

TO: ALL LOCAL ENTITIES

FROM: MARK BUCCI, P.E.

BRIDGE DESIGN ENGINEER ADMINISTRATOR

SUBJECT: PROCEDURE FOR APPLYING FOR RETROFITTING EXISTING

ROADWAY LIGHTING TO LIGHT EMITTING DIODE (LED) ON

INTERSTATE HIGHWAYS -

LIGHTING GUIDE "A GUIDE TO CONSTRUCTING, OPERATING, AND MAINTAINING HIGHWAY LIGHTING SYSTEMS" – ADDENDUM 1

DATE: November 15, 2024

This addendum adds the following to A Guide to Constructing, Operating, and Maintaining Highway Lighting Systems (Rev. June 13, 2017).

<u>Addendum Summary</u>: This addendum outlines the procedure for an entity to request retrofitting an existing interstate lighting system to light emitting diode (LED).

Effective immediately, implement the following addendum:

## Procedure for Applying for Retrofitting Existing Roadway Lighting to Light Emitting Diode (LED) on Interstate Highways

Retrofitting to LED is regarded as maintenance under the existing Agreement for repair/maintenance between the DOTD and the local governing entity (entity). Retrofitting to LED applies only to existing luminaires. Modifications to the original as-built condition are prohibited.

- A. The entity must have an existing Agreement for repair/maintenance on file with the DOTD before the DOTD will consider the entity's retrofit request.
- B. The entity must have as-builts of the existing lighting system on file. If the entity is unable to locate as-builts in their files, the entity will have to submit a **Public Records Request Form** to the DOTD to request a copy of the as-builts. The **Form** can be found on the DOTD website.
- C. The entity must submit a complete illumination report in PDF to the DOTD for review and comment. Subsequent re-submittals of the report for review by the DOTD may be required. The requirements of a complete illumination report are shown below.
- D. Upon acceptance of the report by the DOTD, the DOTD will issue the entity an illumination report acceptance letter which will allow the entity to proceed with the LED retrofit. The entity is responsible for all costs associated with the LED retrofit.

A complete illumination report shall include the following:

- A. Full size (22" x 34") PDF and contain multiple sheets as needed for legibility and clarity.
- B. A legible point-by-point illuminance-grid (i.e. iso-footcandle) plot of roadway surfaces within the limits of the project. Calculated average foot-candle data points shall be on a maximum 10' x 10' centers, each shown to 0.00 decimal points.
- C. Stationing (matching plan drawings)
- D. North arrow
- E. Scale bar
- F. Travel lanes and shoulders. Note: Travel lanes shall include highway name/route number and vehicular directional arrows
- G. Adjacent structures, drainage, driveways, parking spaces, buildings, driveway entrances, sidewalks, vegetation
- H. Light pole and luminaire locations
- I. Calculated statistical data for:
  - a. Average foot-candles
  - b. Average-to-minimum ratio
  - c. Maximum-to-minimum ratio
  - d. Veiling luminance
- J. Pole, luminaire and lamp information such as:
  - a. Description
  - b. Initial lumens
  - c. Type
  - d. Luminaire .ies file name
  - e. Luminaire mounting height
  - f. Arm length
  - g. Catalog cut sheet
  - h. Luminaire iso-illuminance contours
- K. Light Loss Factor (LLF)
- L. General information:
  - a. Title
  - b. Table of Contents
  - c. Design Engineer Name, P.E. Number, and Company Name
  - d. Project Name and Project Number (if applicable)
  - e. Date
  - f. Louisiana Professional Engineering and Land Surveying Board (LAPELS) "Pocket Card" indicating current status of license in Louisiana
  - g. Additional information may be requested by DOTD

This addendum is posted on the LA DOTD Website at the following LA DOTD internet location:

LA DOTD Lighting Guide Addendum 1 Page 3

<u>INSIDE La DOTD</u> > <u>Divisions - Engineering</u> > <u>Bridge Design</u> > <u>Roadway Lighting</u> > <u>Highway Lighting Systems Guide</u> > <u>Addendum 1</u>

Please contact Agnes O. Fung (<u>agnes.fung@la.gov</u> or 225-379-1352) if you have questions or comments.

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