



MEMORANDUM

TO: All District Engineers

DATE: January 2, 2007

FROM: Carlos A. Lopez, P.E.

Carlos A. Lopez, P.E.

SUBJECT: Revised Roadway Illumination (RID)
Sheets and New Roadway Illumination
Poles (RIP) Standard Sheets

The Traffic Operations Division, with assistance from the Bridge Division, has revised and reorganized the old Roadway Illumination Detail (RID) Standard sheets into two new sets of standard sheets. The new standard sheets are called the Roadway Illumination Details (RID) and Roadway Illumination Poles (RIP). We have addressed the comments that we received from the districts and manufacturers after the draft version was sent out in April of 2006. Changes have also been made to the title block and pen tables have been added for batch plotting purposes. These standards, approved for use on all projects beginning with the June 2007 letting, are posted on the Texas Department of Transportation (TxDOT) website and are available for use. Please distribute this information to the appropriate district staff and area offices as well as any consulting engineers currently working on TxDOT projects for your district.

The following are revisions made to the original standard sheets.

RID (LUM)-07 Sheet 1 of 2 (formerly RID (1))

1. Added title name "Roadway Illumination Light Fixtures" to standards.
2. Revised wording on lines A, C and I. 4 under Fixture Housing.
3. Added bolt specification to line H. 1 under Fixture Housing.
4. Changed subsection name from "Ballast" to "Electrical Components."
5. Removed wording from line K. 4 under Electrical Components.
6. Removed wording from line N. 1.
7. Revised arrangement of words and line numbers under line Q and added new lamp rating on line 3.
8. Changed arrangement of words on lines R. 2 and 3.
9. Added note with asterisk (*) for UL listing.

RID (LUM)-07 Sheet 2 of 2 (formerly RID (2))

1. Changed website address on material producers list and removed punctuation marks.
2. Revised name on warranty subsection to manufacture warranty.

3. Reworded manufacturer warranty information to define failing fixtures.
4. Changed information on bonding connector under note 1.
5. Removed breakaway and clamp manufacturer product names and re-arranged notes and numbers.

RID (FND)-07 (formerly RID (3))

1. Revised design of "Foundation Detail" to view accurate separation of conduits.
2. Changed design of "Anchor Bolt Detail" to view the separate pole base designs and revised wording on notes.
3. Changed bolt design on pole base to show 6 sides and removed hatch from hold down washer.
4. Revised wording on foundation information for line 1.
5. Added new wording to lines 4 and 5 for foundations.
6. Remove repeated wording from line 7.
7. Removed and changed wording for line 10.
8. Re-designed foundation lengths table to accommodate new information.
9. Added new line note number 11 for rip-rap foundations.

RID (UP)-07 (formerly RID (4))

1. Added new wording to note A. 7 for bridge mounted enclosures and lighting circuits.
2. Re-designed the underpass light mounting design to show fixture mounting position level with bottom of beam.

RID (IF)-07 (formerly RID (5))

1. Changed several of the number fractions text style for better clarity, under subsection "Fixture Housing."
2. Added new wording to line D under subsection "Fixture Housing."
3. Revised and added text on lines B and C under subsection "Ballast and Lamp."
4. Changed performance rating parameters on lines 3 and 5 under subsection "Performance."
5. Revised wording to line B under subsection "Mounting."
6. Fixed typos and changed fraction text style on lines D, E, and F under subsection "Mounting."
7. Added new line (C) with note under subsection "Pre-qualification."
8. Modified and added new text on fixed mounting bracket leader notes and external mounting designs.

As previously mentioned, the Bridge Division extracted the pole and anchor bolt information from the former RID sheets, and placed it on the new RIP-07 standard sheets. The pole standards incorporate breakaway, non-breakaway, and barrier mounted poles and mast arms. Luminaire poles fabricated in accordance with these

standards will no longer require the submission and approval of shop drawings prior to fabrication.

RIP-07 Sheet 1 of 4

1. Changed pole designations listed in table from ST to SA in order to continue to allow aluminum poles as optional designs.
2. Revised the label in the "Explanation of Roadway Illumination Assembly Designations" for SP to refer to "squashed (ovalized) poles", instead of "special (ovalized) poles". This was done to avoid any confusion between this type of pole and other special designs. Wording was also added to allow for these squashed poles to be made from aluminum.
3. Revised general notes to remove discussion of electrical requirements.
4. Changed note A.1 to note B.1 and revised to clarify the requirements for the submission of shop drawings and design calculations for optionally designed steel poles, and to allow for the continued use of pre-approved shop drawings.
5. Added note A to separate and provide clarification for the requirements for Standard Steel Pole Designs.
6. Added note C to separate and provide clarification for the requirements for Aluminum Pole Designs.
7. Added note D to clarify that these requirements are not applicable for architectural or other special lighting.
8. Changed note A.4 to B.4 and revised to refer to the anchor bolt assembly rather than simply the anchor bolt circle.

RIP-07 Sheet 2 of 4

1. Removed requirements for 100% penetration seam welds at base and splices.
2. Added note 3, to allow for ASTM A1011 SS Gr 50 material to be used.
3. Revised general notes to show height of base assumption for design moments listed in the tables.
4. Added a note to provide guidance for poles when mounting height falls between values listed in the tables.
5. Revised note specifying location of the hand hole relative to the mast arms.

RIP-07 Sheet 3 of 4

1. Changed the gusset plate thickness and weld sizes for pole simplex attachment.
2. Removed ASTM A595 Gr A from the possible materials for simplexes, and deleted the corresponding note 3.
3. Added note 9 to prevent or reduce deviations from the standard simplexes.

RIP-07 Sheet 4 of 4

1. Added the word "minimum" to the template thickness dimensions. If contractors have problems receiving bent templates, or bending templates during construction, they can now request that fabricators provide thicker templates.
2. Changed template square dimension for 40-50' shoe and transformer base poles.
3. Changed some anchor bolt washer configurations.
4. Updated note number 9 to number 10 as required.
5. Added note to provide guidance for poles when mounting height falls between values listed in the tables.
6. Changed note about transformer base doors from "non-aluminum" to "non-metallic."

The revised standards are available on the Traffic Operations Division website, under the section "Traffic Engineering Standard Plan Sheets" (English and Metric). The website address is:

<http://www.dot.state.tx.us/insdtdot/orgchart/cmd/cserve/standard/toc.htm> .

If you have questions or comments concerning the new standards, please contact Greg Jones at (512) 416-3121, Art Hernandez at (512) 416-3305 or me at (512) 416-3200.

Attachments

cc: ADM

AUD

BRG

CST

DES

MNT

TTA

All District Traffic Engineers

AGC

Cooper Lighting

ESCO Lighting

Energy Plus

GE Lighting Systems

Hapco

Holophane

Hossley Lighting Associates

Infinity Lighting

Kenall Lighting

Lighting Sciences Inc.

Osram Sylvania

RKI

Structural Steel Products

Union Metal

URL

Millerbernd Manufacturing Co.

Valmont Industries

WhitcoPoles