



## MEMO

August 16, 2016

**To:** District Engineers

**From:** Gregg Freeby, P.E., Director *Jamie Harris for GAF*  
Bridge Division

Carol Rawson, P.E., Director *Carol Rawson, P.E.*  
Traffic Operations Division

**Subject:** Revised High Mast Illumination Poles Standards (HMIP(1)-16 and HMIP(2)-16)

The High Mast Illumination Poles Standard Sheets (HMIP(1)-16 and HMIP(2)-16) have been revised and they replace the previous High Mast Illumination Poles standards issued in 1998. The revisions to the sheets consist of the following changes:

- Removed the option to eliminate the ground sleeve.
- Increased the inside radius of the hand hole frame from 3 to 3 ½ inches.
- Added a table specifying the materials to be used for each element of the pole.

The first change addresses the problem of galvanization-induced micro-cracking in the pole shaft base metal at the toe of the baseplate to pole weld. This cracking potentially reduces the fatigue life of the pole.

The thickness (dimension 'S') of the hand hole frame for most HMIP designs is 1-3/4". Both ASTM A6 and the S2.1 AASHTO/NSBA Steel Bridge Collaboration recommend a minimum 2T inside bending radius for steel thicknesses of 1-3/4". Fabricators who have chosen to bend or form their frames in the past have had some of the plate edges curl along the bend radius. Therefore, to eliminate this problem and conform to the recommendations of industry, the bend radius has been revised from 3" to 3 ½".

Lastly, a materials table has been added to sheet 2 of 2 bringing the standard in conformity with the Construction Specifications.

The standard sheets may be used immediately and shall be used for all applicable PS&E beginning with the January 2017 letting.

If you have any questions, please contact Tim Bradberry at (512) 416-2179 or Greg Jones at (512) 416-3121.

Attachment

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