SPECIAL PROVISIONS FOR INSTALLATION OF PAINT-OVER-GALVANIZED STEEL MAST-ARM ASSEMBLIES FOR SIGNALIZATION PROJECTS TO BE MAINTAINED BY BROWARD COUNTY

The following outlines the Division’s paint-finish policy on mast-arm traffic signal assemblies. Final acceptance of traffic signalization projects that include paint-over-galvanized mast-arm structures by the Broward County Traffic Engineering Division are contingent upon the Applicant’s documented compliance with the following conditions:

1. All mast-arm assemblies must be fabricated with true circular cross-sections (for both the horizontal arm and vertical upright tube components), with the exception of arm lengths of 72.0 feet or longer for which the tubes may be fabricated with a 16-sided cross-section. **12-sided cross-sections will not be permitted for any assembly type.**

2. The fabricator of the painted galvanized steel mast-arm assemblies must be listed as a manufacturer in the specific portion of Section 649 of the Florida Department of Transportation’s (FDOT’s) Qualified Products List (QPL) for the specific type of mast-arm(s) being supplied.

3. The fabricator shall provide a semi-gloss “solar black” paint finish (Federal Color Standard 27038) over hot-dipped galvanized steel in accordance with all applicable FDOT and American Society for Testing and Materials (ASTM) standards and specifications pertaining to the painting of galvanized structures (in effect as of July 1, 2010), specifically but not limited to the following standards: FDOT Standard Specifications Section 649, ASTM Standard A123 Zinc (Hot-Dip Galvanized Coating on Iron & Steel Products), ASTM Standard D 6386 (galvanized surface preparation), ASTM Standard D 1005 or ASTM D 1186 (paint thickness), Steel Structures Painting Council Standards (SSPC-SP1, solvent-wipe pre-paint preparation), ASTM Standard D 4060 (abrasion resistance), ASTM Standard D-2794 (impact resistance), and ASTM Standard B 117 (salt spray).

4. The fabricator must, prior to providing mast-arms to any project to be maintained by the Broward County Traffic Engineering Division, provide a letter of assumption of obligations by the fabricator clearly indicating that the fabricator is the responsible party for color and adhesion warranties on the painted galvanized mast-arms.

5. The fabricator shall provide a written statement by an officer of the fabricator (with the capacity to bind the fabricator) that certifies that the applicable FDOT and ASTM specifications have been adhered to during the fabrication process, or provide such certification by a qualified third-party ASTM certifying entity.
6. The Fabricator shall provide a five (5) year warranty to the Division against all color and adhesion defects associated with the paint-over-galvanized mast-arm assemblies provided for this project.

7. The start of the warranty period shall begin on the date that the project receives final acceptance for ownership and maintenance by the Broward County Traffic Engineering Division.

The Broward County Traffic Engineering Division shall require that the above seven (7) conditions be included as special notes (or notes added to the “painting of galvanized structures” notes) on the final permit traffic signal design plans so that they are incorporated as part of the official permit application. Documentation of items 4 through 6 must be provided to this Division prior to manufacture of the mast-arm assemblies as a prerequisite to the Broward County Traffic Engineering Division’s inspecting and accepting ownership and maintenance of the signalization project.

SPECIAL PROVISIONS APPROVED BY:

Scott Brunner, P.E., Assistant Director
Broward County Traffic Engineering Division

EFFECTIVE DATE: May 26, 2011