

ALABAMA DEPARTMENT OF TRANSPORTATION

DATE: November 6, 2014

Special Provision No. 12-0737(2)

EFFECTIVE DATE: January 1, 2015

SUBJECT: Structures for Traffic Control Devices and Highway Lighting.

Alabama Standard Specifications, 2012 Edition, SECTION 718 shall be revised as follows:

SECTION 718 STRUCTURES FOR TRAFFIC CONTROL DEVICES AND HIGHWAY LIGHTING

718.03 Design.

(a) GENERAL.

Subarticle 718.03(a) shall be replaced with the following:

(a) GENERAL.

1. Design Data.

The details of pole foundations for Traffic Signals (Section 730) and Roadway Lighting (Section 750) are shown on the plans. When details of a structure or foundation are not shown on the Plans, or if the Contractor proposes alternate structure or foundation details, the Contractor shall submit complete designs and details.

Geotechnical borings may be shown on the plans. These borings may not be representative of the actual conditions encountered throughout the project. The Contractor shall be responsible for any assumptions made from these borings. The Contractor shall obtain any additional geotechnical data that is necessary for determining the actual subsurface conditions.

2. Design Requirements.

All structures shall be designed in accordance with the requirements given in the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 2009 Edition*, and the requirements given in this Section. Fatigue importance factors shall be as follows:

STRUCTURE	FATIGUE IMPORTANCE FACTOR CATEGORY
Strain Poles	No Fatigue
Mast Arm Poles / Lighting Poles less than 45 ft. in height	Category II with 25 year service life
High Mast Poles / Sign Structures / Overhead Sign Bridges / Lighting Poles 45 ft. or greater in height	Category I

Wind pressures shall be calculated in accordance with "Appendix C: Alternate Method for Wind Pressures". Minimum design wind speed shall be 100 miles per hour {165 km/hr} for Mobile and Baldwin Counties and 80 miles per hour {130 km/hr} elsewhere in the State.

The Combined Stress Ratio (CSR), shall be less than or equal to 0.9, for all load cases.

3. Foundations.

Foundations shall be located to avoid damaging existing underground installations and avoid conflicting with known future installations such as pipes, conduits, guardrail posts, lighting standards, etc.

The design shall be sufficient to provide a minimum factor of safety of 2.0 against overturning and torsion induced displacement.