



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
DESIGN DIVISION
NASHVILLE, TENNESSEE 37243-0348

INSTRUCTIONAL BULLETIN NO. 11-14

**Regarding revised traffic signal support poles note
used on Metro Nashville Public Works projects**

Effective immediately, the following **revised** note shall be used on TDOT roadway plans for projects in Metro Nashville that include cantilevered traffic signal support poles or any other pole type as specified by the ITS, Traffic, and Standards Section .

The traffic signal support poles shall be designed in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (current edition with addenda). Wind loads shall be based on a basic wind speed of 90 mph with a recurrence interval of 50 years. Overhead cantilevered traffic signal structures shall be designed for Fatigue Category I. Fatigue loads are based on the requirements of Section 11.7 of the subject AASHTO document and the following loads:

- ***Gallop***ing – No design necessary. Vibration dampeners shall be used on all cantilevered arms that are 50' or longer.
- ***Vortex Shedding*** – Not applicable on traffic signal supports with a taper of at least 0.14 in/ft.
- ***Natural Wind Gusts*** – The yearly mean wind speed for natural wind gusts shall be 11.2 mph.

The traffic signal support poles shall be poles with curved cantilevered arm(s) in accordance with Metro Public Works. For pole and arm details, contact Mike Hirtzer at 615-880-3261.

This instructional bulletin voids IB 11-04.

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