DATE: December 17, 2015

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Program Management Engineers/Administrators, District Construction Engineers, District Structures Design Engineers, District Maintenance Engineers, District Roadway Design Engineers, District Traffic Operations Engineers

FROM: Mark Wilson, Director, Traffic Engineering & Operations Office
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SUBJECT: Design Standards Index 17727 - Span Wire Traffic Signal Hangers

REQUIREMENTS
The following Design Standards Revision (DSR) is released:
Revised Index 17727 Sheet 2 of 2, (Signal Cable & Span Wire Installation Details) is released.

BACKGROUND
The Department is changing the statewide standard for span wire traffic signal hangers from the Pivotal Adjustable Hanger Assembly (PAHA) to the Tri-Stud Adjustable Hanger Assembly. Design Standards, Index 17727 (Signal Cable & Span Wire Installation Details) has been reissued as a DSR requiring a Tri-Stud Adjustable Hanger, Extension Connector, Span Wire Clamp and Messenger Wire Clamp.
Department funded research is currently underway at the Florida International University Wall of Wind facility in Miami to assess the dynamic performance of span wire traffic signal assemblies in hurricane force winds. Observations from recent wind tests of signal assemblies attached to the span wires with PAHAs revealed a significant oscillating behavior at wind speeds well below the design wind speed. In testing, oscillations progressively increased. Signals attached to the span wires with Tri-Stud Adjustable Hangers did not show any significant oscillating behavior in the tests. Given the low wind speed at which signals oscillated when attached to span wires with PAHAs, the Department is issuing this bulletin as a precautionary measure pending completion of the research.

IMPLEMENTATION

The use of the DSR for Index 17727 is required for:

- All projects let on or prior to December 31, 2015, including those currently under construction where the Pivotal Adjustable Hanger Assemblies have not yet been installed. This Construction Memo serves as a blanket approval to process a contract supplemental agreement or work order.
- All projects with lettings from January 1, 2016 to June 30, 2016. Include the DSR for Index 17727 in the back of the component plan set in accordance with the Plans Preparation Manual, Volume 2, Chapter 3. Any projects already accepted by Central Office will need a mandatory revision.

For projects let on or after July 1, 2016, the contents of this DSR will be effective in the FY 2016-17 Design Standards eBook.

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