Florida Department of Transportation

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MATERIALS BULLETIN NO. 02-14
DCE MEMORANDUM NO. 03-14
(FHWA Approved: 3/24/2014)

TO: **DISTRICT MATERIALS AND RESEARCH ENGINEERS**
DISTRICT CONSTRUCTION ENGINEERS

FROM: Timothy Ruelke P.E., Director, Office of Materials
David A. Sadler, P.E., Director, Office of Construction

COPIES: Tom Byron, Rudy Powell, Bob Burleson, Chad Thompson, Caitlin Alcorn, Rafiq Darji, Nick Finch, Mike Bergin, Toby Dillow

SUBJECT: **TITAN AMERICA CEMENT COMPANY PLANT (CMT23)**

In order to prevent concrete placement delays on ongoing construction projects due to the shortage of cement from the Titan America Cement Company plant located in Medley, Florida concrete producers may request the Department to implement a modified mix design approval process. This memorandum will allow placement of concrete prior to receiving formal Department mix design approval, and is only applicable for replacing Titan America Cement Company Plant cement incorporated in currently approved concrete mix designs assigned to current projects. The Contractor/Producer assumes all risks involved for ensuring that plastic and hardened properties are in compliance with the specifications at the time of placement.

If the modified mix approval process is used, the following requirements must be met:

1. District Materials Office personnel will ensure the replacement mix contains the same component materials and quantities as the replaced mix and only cement substitution is permitted. The new mix must meet the same requirements as the old mix, including yield, plastic and hardened properties. Adjustments to weights according to specific gravity of replacement cement chosen will be permitted as long as the replacement mix equals the original mix regarding application and environmental conditions. All materials must be from an approved source.
2. District Materials Office personnel will submit the replacement mix design to the State Materials Office similar to the material substitution procedure found in MM 9.2.6.8.

3. The State Materials Office will assign a new temporary design mix number with the old design mix number referenced in the mix design comments.
4. At the first job-site placement of the new mix, for each project, the Concrete Producer's ACI certified technician or the Contractor's QC certified CTQP inspector will cast a minimum of SIX extra 4x8 cylinders to be tested by the Concrete Producer's or the Contractor's qualified laboratory. THREE will be tested for 7-day results, and THREE will be tested for 28-day results. If the producer wants earlier than 28-day design mix approval, then additional cylinder sets of THREE can be fabricated at their discretion.
5. District Materials Office personnel will submit the Producer's 7-day and/or 28-day results to the State Materials Office. Whenever overdesign strength is reached, the new design mix will be fully approved as a new stand-alone permanent mix for FDOT use. **Acceptance cylinders are not to be used for design mix approval process.**

This memorandum does not waive any specification requirements but simply allows an expedient means to approve mix designs. It is in effect until **May 1, 2014**. After that date the normal mix design approval process will be in effect. It serves as a blanket approval to process this change as a no cost specification revision and shall be attached to the work order or supplemental agreement required for its processing.

Should you have any questions please contact Toby Dillow, State Materials Office at 352-955-6681 or Mike Bergin, State Materials Office 352-955-6666.

TR/mb