



*Florida Department of Transportation*

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GOVERNOR

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ANANTH PRASAD, P.E.  
SECRETARY

December 31, 2014

Khoa Nguyen  
Director, Office of Technical Services  
Federal Highway Administration  
545 John Knox Road, Suite 200  
Tallahassee, Florida 32303

Re: State Specifications and Estimates Office  
Section **353**  
Proposed Specification: **3530300 Concrete Pavement Slab Replacement.**

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Timothy Ruelke of the State Materials Office (SMO) to revise the language for consistency with changes proposed for Section 105. The Department is revising the Contractor Quality Control (QC) Plan requirements and deleting the narrative portion of the Contractor QC Plan. This change is being made in conjunction with the implementation of the Materials Acceptance and Certification system (MAC), which is replacing the current Laboratory Information Management (LIMS) application.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to SP965DS or [daniel.scheer@dot.state.fl.us](mailto:daniel.scheer@dot.state.fl.us).

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on file

Daniel Scheer, P.E.  
State Specifications Engineer

DS/dt

Attachment

cc: Florida Transportation Builders' Assoc.  
State Construction Engineer

## CONCRETE PAVEMENT SLAB REPLACEMENT.

(REV ~~10-29~~~~11-7-14~~)

ARTICLE 353-3 is deleted and the following substituted:

### 353-3 Composition of Concrete.

**353-3.1 Mixture Proportions:** Designate the actual proportions to be used to produce a concrete with a minimum 6-hour compressive strength of 2,200 psi and a minimum 24-hour compressive strength of 3,000 psi.

Prior to producing concrete, submit the design mix for approval on a form acceptable to the Department. Ensure the 24-hour acceptance strength has a minimum over design of 400 psi. Indicate slump before and after addition of accelerator. Use mixes approved by the Department and *obtain concrete* from ~~an approved concrete production facility plant that is currently on the Department's Production Facility listing. Producers seeking inclusion on the list shall~~ meeting the requirements of Section 105.

When an accelerating admixture is used in solution, the amount of water in the solution is considered to be part of the mixing water. Make necessary adjustment to the concrete mix-water to account for the amount of water in the accelerating admixture solution. Test the concrete for consistency subject to the following values from the approved mix design values:

Slump Tolerance\*\* .....plus or minus 1.5 inches

Entrained Air\*\* ..... 1% to 6%

*Temperature..... not to exceed 100°F*

~~Temperature not to exceed 100°F~~

\*\*For values as specified in the approved Design Mix prior to the addition of accelerating admixture.

**353-3.2 Certification:** Provide certification in accordance with 346-6.3.

**353-3.3 Demonstration Slab:** Prior to batching production concrete, demonstrate the ability to furnish replacement slabs by constructing a demonstration slab on site. Demonstrate production techniques for slab removal, dowel installation, concrete placement, finishing, slab curing, sample preparation and curing, and proper timing of joint sawing. Demonstrate the ability to achieve the required compressive strengths. Demonstrate the ability of the slabs to achieve the maturity needed for opening to traffic within the required time. Schedule construction of the demonstration slab during the same time period specified in the Contract Documents. If the Engineer determines that elements of the demonstration slab fail to meet requirements of the Contract Documents, propose adjustments to the construction processes and/or materials for the Engineer's approval. The Engineer may require additional demonstration slabs until a demonstration slab conforms ~~with~~*to* the Contract Documents.

SUBARTICLE 353-10.1 is deleted and the following substituted:

**353-10.1 General:** The requirements of 350-6 apply to this Section. Keep the slab closed to traffic until the compressive strength requirement of 2,200 psi is achieved. Verify the achievement of the required strength by cylinder testing as specified in 353-5 or the use of the maturity method test as described in 353-10.2. Provide documentation that 6-hour strength was

achieved prior to opening to traffic, by either a cylinder test report or a printed maturity meter monitoring record.

Protect the pavement from all traffic, including construction vehicles, until the specified 2,200 psi strength has been obtained. ~~Include in the Quality Control Plan (QCP) what actions will be used to protect the pavement.~~ The protective measures shall be arranged so as not to interfere with traffic lanes being utilized for required maintenance of traffic.

**CONCRETE PAVEMENT SLAB REPLACEMENT.**  
**(REV 11-7-14)**

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