3460301 STRUCTURAL PROTLAND CEMENT CONCRETE COMMENTS FROM INTERNAL/INDUSTRY REVIEW Dan Hurtado (850) 414-5203 Dan.Hurtado@dot.state.fl.us

Comments: (11-19-19, Internal)

Some initial comments below. These can be resolve during Industry Review.

- Footnote 1 in Table 4 in 346-4.1... This is wordy and unclear. Please reword.
- 346-6.2, paragraph 2, sentence 1... Keep the original wording. The proposed wording is

unclear. If there is not a problem, leave the original language alone.

• 346-11.1, paragraph 1, sentence 1... Keep the original wording. If there is not a problem, leave the original language alone.

Response: Change was made prior to Industry review.

Arthur Berger Arthur.Berger@dot.state.fl.us

Comments: (11-19-19, Internal)

A few minor edits highlighted in green. Set attachment.

Also, the following sentence appears to need clarification:

The Engineer will determine using appropriate strength-time correlation equivalency equations between the core strength at the actual test age to the 28 day strength for the design mix represented

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VII¤	752¤	0.37** <u>*</u> ¤	α	Berger, Arthur
* The requirement of the minimum total cementitious materials content per cubic yard is not applicable to the mix design that is				Formatted: Highlight
developed with the amount of cementitious materials less than the amount shown in this Table and the plastic, hardened				Berger, Arthur
properties and durability of concrete mixture meet, the requirements of this Specifications during the laboratory mix design trial				Formatted: Highlight
batch-and-production.				romaccea. mgmight
** The calculation of the water to cementitious materials ratio (w/cm) is based on the total cementitious material including				
cement and any supplementary cementitious materials that are used in the mix.				
*** When silica fume or metakaolin is used, the maximum water to cementitious material ratio will be 0.35. When ultrafine fly				
ash is used, the maximum water to cementitious material ratio will be 0.30.0				
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Response: Change was made prior to Industry review.

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Comments: (12-6-19, Industry)

346-10.2 – Coring for Determination of Structural Adequacy Obtain and test the cores in accordance with ASTM C42. Test the cores after obtaining the samples within seven calendar days and report the data to the Engineer within 14 calendar days of the 28 day compressive strength tests. Comment: How is this to be accomplished within the referenced timelines? This type of investigation usually falls to the producer, and rarely, if ever are the producers notified of failing results in adequate time to meet these specification time limit requirements. 2. When the acceptance compressive strength test result falls below the specified minimum compressive

strength by more than the limits established in 346-10.1, the structure may be core for determination of structural adequacy as directed by the Engineer. Use the result of the 28 day correlated core compressive strength or the acceptance compressive strength test, whichever is less. Comment: replace core with cored 2. When the acceptance compressive strength test result falls below the specified minimum compressive strength by more than the limits established in 346-10.1, the structure may be core for determination of structural adequacy as directed by the Engineer. Use the result of the 28 day correlated core compressive strength or the acceptance compressive strength test, whichever is less. Comment: Use the result of the core compressive strength test, whichever is less. Comment: Use the result of the core compressive strength or the acceptance compressive strength test, which ever is less. 346-11.3 The Engineer will determine payment reductions for low strength concrete accepted by the Department. The 28-day strength is represented by either cylinders or correlated cores strength test results in accordance with 346- 11.2. R Comment: The compressive strength is represented by either cylinders or correlated cores strength test results in accordance with 346- 11.2. R Response: