



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

June 7, 2010

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 346
Proposed Specification: 3461001 Portland Cement Concrete - General.

Dear Ms. Gourdine:

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

These changes were proposed by Rodney Chamberlain to address the use of high strength concrete. The 10% provision for high strength concrete allows too large of a deficiency in concrete strength before a structural evaluation would be required. This change does not impact concrete with compressive strength less than 5000psi.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/cah

Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

PORTLAND CEMENT CONCRETE.**(REV ~~3-264-14-10~~)**

SUBARTICLE 346-10.1 (Page 337) is deleted and the following substituted:

346-10.1 General: When a concrete acceptance strength test result falls more than ~~10% or 500 psi~~ below the specified minimum strength, ~~whichever is the greater deviation from the specified minimum strength,~~ and the Department determines that an investigation is necessary, make an investigation into the structural adequacy of the LOT of concrete represented by that acceptance strength test result at no additional expense to the Department. The Engineer may also require the Contractor to perform additional strength testing as necessary to determine structural adequacy of the concrete.

Furnish either a structural analysis performed by the Specialty Engineer to establish strength adequacy or drilled core samples as specified in 346-10.3 to determine the in-place strength of the LOT of concrete in question at no additional expense to the Department. Obtain the Engineer's approval before taking any core samples. When the concrete is deemed to have low strength, obtain and test the cores and report the data to the Engineer within 14 days of the 28 day compressive strength tests. Core strength test results obtained from the structure will be accepted by both the Contractor and the Department as the in-place strength of the LOT of concrete in question. The core strength test results will be final and used in lieu of the cylinder strength test results for determination of structural adequacy and any pay adjustment. The Department will calculate the strength value to be the average of the compressive strengths of the three individual cores. This will be accepted as the actual measured value.

SUBARTICLE 346-10.2 (Pages 337 – 338) is deleted and the following substituted.

346-10.2 Determination of Structural Adequacy: If core strength test results are less than 500 psi ~~or 10%, whichever is greater,~~ below the specified minimum strength, consider the concrete represented by the cores structurally adequate. If the core strength test results are more than ~~10% or 500 psi, whichever is greater,~~ below the specified minimum strength, the Department will consider the concrete represented by the cores structurally questionable. Submit a structural analysis performed by the Specialty Engineer. If the results of the structural analysis indicate adequate strength to serve its intended purpose with adequate durability, and is approved by the Department, the Contractor may leave the concrete in place subject to the requirements of 346-11, otherwise, remove and replace the LOT of concrete in question at no additional expense to the Department.

SUBARTICLE 346-11.2 (Page 338) is deleted and the following substituted.

346-11.2 Basis for Pay Adjustments: When an acceptance strength test result falls more than ~~10% or 500 psi, whichever is greater,~~ below the specified minimum

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strength, core samples may be obtained in accordance with ASTM C 42 from the respective LOT of concrete represented by the low acceptance strength test result for determining pay adjustments. Price adjustment will be applied to the certified invoice price the Contractor paid for the concrete or the precast product.

PORTLAND CEMENT CONCRETE.
(REV 4-14-10)

SUBARTICLE 346-10.1 (Page 337) is deleted and the following substituted:

346-10.1 General: When a concrete acceptance strength test result falls more than 500 psi below the specified minimum strength, and the Department determines that an investigation is necessary, make an investigation into the structural adequacy of the LOT of concrete represented by that acceptance strength test result at no additional expense to the Department. The Engineer may also require the Contractor to perform additional strength testing as necessary to determine structural adequacy of the concrete.

Furnish either a structural analysis performed by the Specialty Engineer to establish strength adequacy or drilled core samples as specified in 346-10.3 to determine the in-place strength of the LOT of concrete in question at no additional expense to the Department. Obtain the Engineer's approval before taking any core samples. When the concrete is deemed to have low strength, obtain and test the cores and report the data to the Engineer within 14 days of the 28 day compressive strength tests. Core strength test results obtained from the structure will be accepted by both the Contractor and the Department as the in-place strength of the LOT of concrete in question. The core strength test results will be final and used in lieu of the cylinder strength test results for determination of structural adequacy and any pay adjustment. The Department will calculate the strength value to be the average of the compressive strengths of the three individual cores. This will be accepted as the actual measured value.

SUBARTICLE 346-10.2 (Pages 337 – 338) is deleted and the following substituted.

346-10.2 Determination of Structural Adequacy: If core strength test results are less than 500 psi below the specified minimum strength, consider the concrete represented by the cores structurally adequate. If the core strength test results are more than 500 psi below the specified minimum strength, the Department will consider the concrete represented by the cores structurally questionable. Submit a structural analysis performed by the Specialty Engineer. If the results of the structural analysis indicate adequate strength to serve its intended purpose with adequate durability, and is approved by the Department, the Contractor may leave the concrete in place subject to the requirements of 346-11, otherwise, remove and replace the LOT of concrete in question at no additional expense to the Department.

SUBARTICLE 346-11.2 (Page 338) is deleted and the following substituted.

346-11.2 Basis for Pay Adjustments: When an acceptance strength test result falls more than 500 psi below the specified minimum strength, core samples may be obtained in accordance with ASTM C 42 from the respective LOT of concrete represented by the low acceptance strength test result for determining pay adjustments.

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Price adjustment will be applied to the certified invoice price the Contractor paid for the concrete or the precast product.