



Florida Department of Transportation

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MEMORANDUM

DATE: January 15, 2016

TO: Specification Review Distribution List

FROM: Daniel Scheer, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: **9310101-2 Metal Accessory Materials for Concrete Pavement and Concrete Structures - REVISED.**

In accordance with Specification Development Procedures, we are sending you a copy of a **REVISED** proposed specification change.

The changes are proposed by Charles Boyd of the State Structures Design Office to incorporate specification language for stainless steel and FRP reinforcing and prestressing strand into the Standard Specifications. **Additional acceptance requirements for steel bars and wire reinforcement have been added.**

Please share this proposal with others within your responsibility. Review comments are due within **one week** and should be sent to Mail Station 75 or online at <http://www2.dot.state.fl.us/ProgramManagement/Development/IndustryReview.aspx> . Comments received after **January 22, 2016**, may not be considered. Your input is encouraged.

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Attachment

METAL ACCESSORY MATERIALS FOR CONCRETE PAVEMENT AND CONCRETE STRUCTURES.

(REV ~~11-16-151-134-16~~)

SUBARTICLE 931-1 is deleted and the following substituted:

931-1.1 Steel Bars:

931-1.1.1 Carbon Steel Bars: ~~Unless otherwise shown in the Plans, billet~~ Carbon steel bars for concrete reinforcement shall conform to the requirements of ASTM A615 Grades 60 or 75 except that the process of manufacture will not be restricted. For processes not included in ASTM A615 the phosphorus content will be limited to 0.08%.

931-1.1.2 Stainless Steel Bars: *Stainless steel bars for concrete reinforcement shall conform to the requirements of ASTM A955, Grades 60 or 75; or ASTM A276, ~~or~~ UNS S31603 or S31803.*

931-1.1.3 Low-Carbon Chromium Steel Bars: *Low-carbon chromium steel bars for concrete reinforcement shall conform to the requirements of ASTM A1035 Grade 100.*

931-1.1.4 Special Requirements: The following special requirements shall apply:

1. Unless otherwise specified or shown in the Plans all ~~reinforcement~~ reinforcing bars No. 3 and larger shall be deformed bars.

~~2. All billet steel bars shall be of the grade called for in the Plans.~~

3. Twisted bars shall not be used.

4. Wherever in the Specifications the word “purchaser” appears it shall be taken to mean the Department.

931-1.1.5 Acceptance of Steel Bars:

Acceptance of reinforcing steel shall be based on *the manufacturer being on the National Transportation Product Evaluation Program (NTPEP) list of compliant producers, samples taken by the Department, and manufacturer’s certified mill analysis. The test results shall certifying that the test results* meet the specification limits of the ASTM or AASHTO designation for the particular size, grade and any additional requirements. The manufacturer’s certified mill analysis for each heat, size, and grade per shipment of reinforcing steel shall be provided to the Engineer prior to use.

The Engineer will select samples representing each LOT of reinforcing steel. A sample is defined as the reinforcing steel and a copy of the certified mill analysis corresponding to the sample. A LOT is defined as the weight of all bars, regardless of size, grade or pay item in consecutive shipments of ~~80-100~~ tons or less. Samples shall be cut from bundled steel that is shipped to the jobsite.

Projects with less than two tons of bars do not require Department sampling.

931-1.2 Welded-Wire Reinforcing-Reinforcement Steel:

931-1.2.1 Carbon Steel Wire Reinforcement: *Plain and deformed carbon steel wire reinforcement shall meet the requirements of ASTM A1064. Deformed carbon steel wire shall be Grade 75.*

931-1.2.2 Stainless Steel Wire Reinforcement: *Plain and deformed stainless steel wire reinforcement shall meet the requirements of ASTM A276, UNS S30400.*

931-1.2.3 Acceptance of Wire Reinforcement: *Acceptance of wire reinforcement shall be based on the manufacturer’s certified mill analysis certifying that the test results meet*

the test results meet the specification limits of the ASTM designation for the particular sizes and any additional requirements. Prior to use, submit to the Engineer the manufacturer's certified mill analysis for each heat and size per shipment.

931-1.3 Carbon Steel Welded Wire Reinforcement:

~~931-1.2.3.1 Plain Welded Wire Reinforcing Steel:~~ ***Unless otherwise shown in the Plans, plain w***Welded wire reinforcing steel shall meet the requirements of ASTM A1064.

~~Acceptance of plain welded wire reinforcement shall be based on the manufacturer's certified mill analysis certifying that the test results meet the specification limits of the ASTM designation for the particular sizes and any additional requirements. Prior to use, submit to the Engineer the manufacturer's certified mill analysis for each heat and size per shipment.~~

~~931-1.2.2 Deformed Welded Wire Reinforcing Steel:~~ ***Unless otherwise shown in the Plans, deformed welded wire reinforcement shall meet the requirements of ASTM A1064.***

~~931-1.3.2 Acceptance of Welded Wire Reinforcement:~~ ***Acceptance of deformed*** welded wire reinforcement shall be based on the manufacturer's certified mill analysis certifying that the test results meet the specification limits of the ASTM designation for the particular sizes and any additional requirements. Prior to use, submit to the Engineer the manufacturer's certified mill analysis for each heat and size per shipment.

The following new Article is added after ARTICLE 931-4:

931-5 Spirals for Concrete Piling.

931-5.1 Carbon Steel Spirals: Carbon steel spirals for reinforcing in concrete piling shall conform to the requirements of ASTM A1064, any grade.

931-5.2 Stainless Steel Spirals: Stainless steel spirals for reinforcing in the concrete piling shall be austenitic stainless steel conforming to the requirements of ASTM A276, ~~Grade~~ UNS S30400.