

ORINATION FORM

Proposed Revisions to the Specifications

(Please provide all information - incomplete forms will be returned)

Date:

Office:

Originator:

Specification Section:

Telephone:

Article/Subarticle:

email:

****Will the proposed revision require changes to:**

Publication	Yes	No	Office Staff Contacted and date contacted
Standard Plans Index			
Traffic Engineering Manual			
FDOT Design Manual			
Construction Project Administration Manual			
Basis of Estimate/Pay Items			
Structures Design Guidelines			
Approved Product List			
Materials Manual			

**This section must be completed prior to processing proposed revisions.

Will this revision necessitate any of the following:

Design Bulletin

Construction Bulletin

Estimates Bulletin

Materials Bulletin

Are all references to external publications current?

Yes

No

If not, what references need to be updated? (Please include changes in the redline document.)

Why does the existing language need to be changed?

Summary of the changes:

Are these changes applicable to all Department jobs?

Yes

No

If not, what are the restrictions?

Contact the State Specifications Office for assistance in completing this form.

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KEVIN J. THIBAUT, P.E.
SECRETARY

MEMORANDUM

DATE: December 12, 2019

TO: Specification Review Distribution List

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

SUBJECT: Proposed Specification: **9330103 Prestressing Strand and Bar.**

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

This change was proposed by Chase Knight from the State Materials Office to update the sizes and loads in conjunction with industry and Structures Design Office. As well as clarify material certification requirements.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or online at <http://fdotewp1.dot.state.fl.us/programmanagement/development/industryreview.aspx> . Comments received after **January 9, 2020**, may not be considered. Your input is encouraged.

DS/rf
Attachment

PRESTRESSING STRAND AND BAR
(REV 12-3-19)

SUBARTICLE 933-1.3 is deleted and the following substituted:

933-1.3 Carbon-Fiber-Reinforced Polymer (CFRP) Strands for Prestressing: Obtain CFRP prestressing strands from producers currently on the Department’s Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. CFRP strand shall meet the requirements of this Section.

Table 1-2 Typical Sizes and Loads of CFRP Prestressing Strands and Bars				
Type	Nominal Diameter (in)	Nominal Cross Sectional Area (in ²)	Nominal Ultimate Load (P _u) (kips)	Nominal Ultimate Tensile Stress (ksi)
Single Strand - 5.0mm Ø	0.20	0.02530	9.1	36400
7-strand - 7.95mm Ø	0.319	0.04850	17.8	3740
7-strand - 10.85mm Ø	0.431	0.090	33.12	36756
Single Strand - 9.5mm Ø	0.38	0.110	35.0	318
7-strand - 12.5mm Ø	0.49	0.1178	43.31	37047
Single Strand - 12.7mm Ø	0.50	0.196	59.0	301
7-strand - 15.2mm Ø	0.60	0.179	66.21	36941
19-strand - 20.5mm Ø	0.81	0.320	71	222
7-strand - 17.2mm Ø	0.68	0.234	86.679	338
19-strand - 25.5mm Ø	1.00	0.472	105	222
19-strand - 28.5mm Ø	1.12	0.621	134	216
37-strand - 35.5mm Ø	1.40	0.916	189	206
37-strand - 40.0mm Ø	1.57	1.240	270	218

SUBARTICLE 933-5.2.2.1 is deleted and the following substituted:

933-5.2.2.1 Material Acceptance: Submit to the Engineer a certification of analysis for each production LOT from the producer of the CFRP strand, confirming compliance with that the requirements of this Section are met. ~~The certifications shall conform to the requirements of Section 6.~~