

# EXPECTED IMPLEMENTATION JULY 2020

## 933 PRESTRESSING STRAND AND BAR (REV 12-3-19) (FA 1-24-20) (7-20)

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.

Type	Nominal Diameter (in)	Nominal Cross Sectional Area (in <sup>2</sup> )	Nominal Ultimate Load ( $P_u$ ) (kips)	Nominal Ultimate Tensile Stress (ksi)
Single Strand - 5.0mm Ø	0.20	0.025	9.1	364
7-strand - 7.9mm Ø	0.31	0.048	17.8	370
7-strand - 10.8mm Ø	0.43	0.090	33.1	367
Single Strand - 9.5mm Ø	0.38	0.110	35.0	318
7-strand - 12.5mm Ø	0.49	0.117	43.3	370
Single Strand - 12.7mm Ø	0.50	0.196	59.0	301
7-strand - 15.2mm Ø	0.60	0.179	66.2	369
7-strand - 17.2mm Ø	0.68	0.234	86.6	338

SUBARTICLE 933-5.2.2.1 is deleted and the following substituted:

**933-5.2.2.1 Material Acceptance:** Submit to the Engineer a certificate of analysis for each production LOT from the producer of the CFRP strand, confirming compliance with the requirements of this Section.