
Index 455-101 Square CFRP & SS Prestressed Concrete Piles - Typical Details & Notes

ORIGINATION

Date: February 12, 2020

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COMMENTARY

Changed Silica Fume, metakaolin or ultra-fine flyash to Highly Reactive Pozzolans; Changed Note 4B.

COMMENTS AND RESPONSES

BLACK = Industry Review Comments **RED** = Standard Plans Response

Name: Salas Coriann

Date: September 15, 2020

COMMENT:

Corrected sheet does not show the GR 240 for the stainless steel reinforcing shown in the mark-up version.

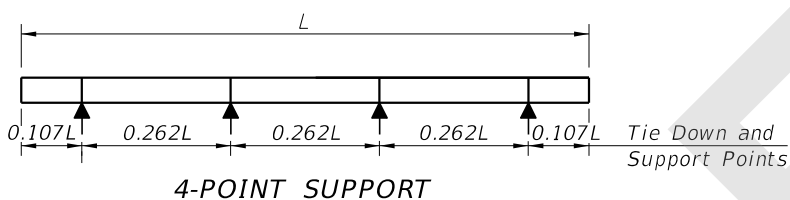
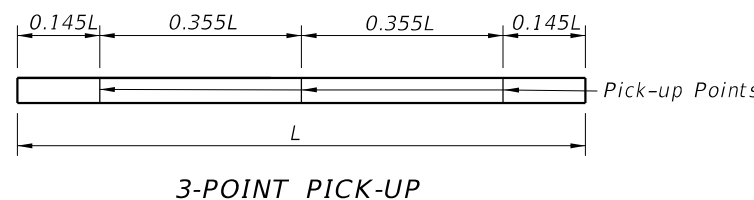
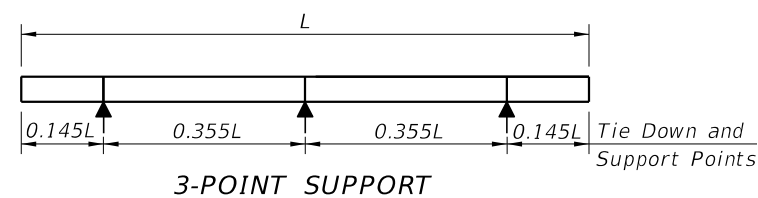
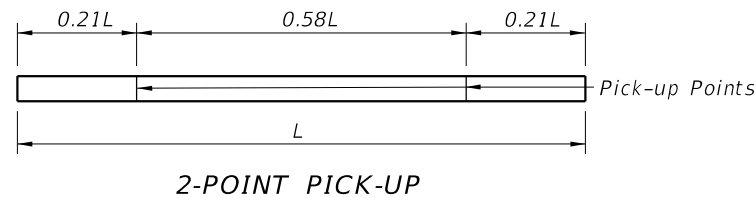
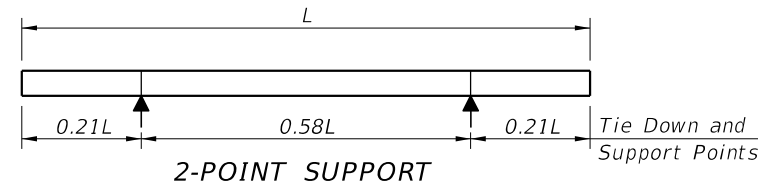
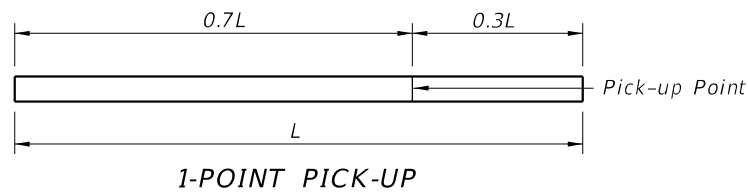
RESPONSE:

Redline will be made on final drawing

Date: 9/16/2020

PRESTRESSED CONCRETE PILE NOTES:

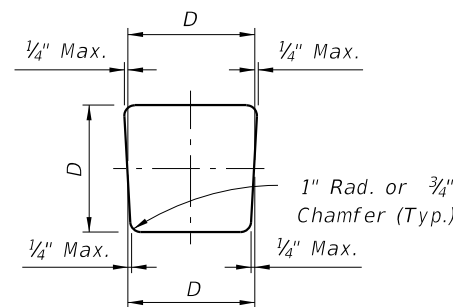
1. Work this Index with the Square Prestressed Concrete Pile Splices (Index 455-102), the Prestressed Concrete Pile Standards (Index 455-112, 455-114, 455-118, 455-124, 455-130, and the Pile Data Table in the Structures Plans.
2. Concrete:
 - A. Piles: Class V (Special)
 - B. See "GENERAL NOTES" in the Structures Plans for locations where the use of Highly Reactive Pozzolans is required for options using stainless steel strand and reinforcing.
3. Concrete strength at time of prestress transfer:
 - A. Piles: 4,000 psi minimum.
4. Reinforcing:
 - A. Bars:
 - a. Stainless Steel: Meet the requirements of Specification Section 931 for Type 304, Grade 75.
 - b. Carbon FRP: Meet the requirements of Specification Section 932.
 - B. Prestressing Strands:
 - a. Stainless Steel: Seven-wire HSSS, Grade 240 strand, meeting the requirements of Specification Section 933.
 - b. Carbon FRP: Meet the requirements of Specification Section 933.
5. Spiral Ties:
 - A. Tie each wrap of the spiral strand to a minimum of two corner strands.
 - B. One full turn required for spiral splices.
6. Pile Splices: Fill dowel holes and form the joint between pile sections with a Type AB Epoxy Compound in accordance with Specification Section 926. Use an Epoxy Bonding Compound or an Epoxy Mortar as recommended by the Manufacturer.



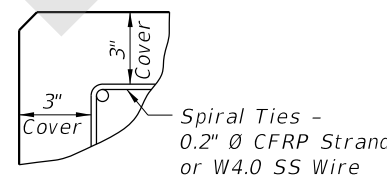
PILE PICK-UP DETAILS

STORAGE AND TRANSPORTATION SUPPORT DETAILS

TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS							
	D = Square Pile Size (inches)					Required Storage and Transportation Detail	Pick-Up Detail
	12	14	18	24	30		
Maximum Pile Length (Feet)	48	52	59	68	87	2, 3, or 4 point	1 Point
	69	75	85	98	124	2, 3, or 4 point	2 Point
	99	107	121	140	178	3 or 4 point	3 Point



TYPICAL PILE SHAPE FOR MOLD FORMS



DETAIL SHOWING TYPICAL COVER

SDATES STIMES

LAST REVISION
11/01/20

REVISION

DESCRIPTION:



FY 2020-21
STANDARD PLANS

SQUARE CFRP & SS PRESTRESSED CONCRETE PILES
- TYPICAL DETAILS & NOTES

INDEX
455-101

SHEET
1 of 1