
Index 455-130 30” Square CFRP & SS Prestressed Concrete Pile

ORIGINATION

Date: June 19 13, 2019

Name: Cheryl Hudson

Phone: (850) 414-5332

Email: Cheryl.hudson@dot.state.fl.us

COMMENTARY

Added void length dimension for EDC.

COMMENTS AND RESPONSES

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

Name: Rafiq Darji, P.E.

Date: September 25, 2019

COMMENT:

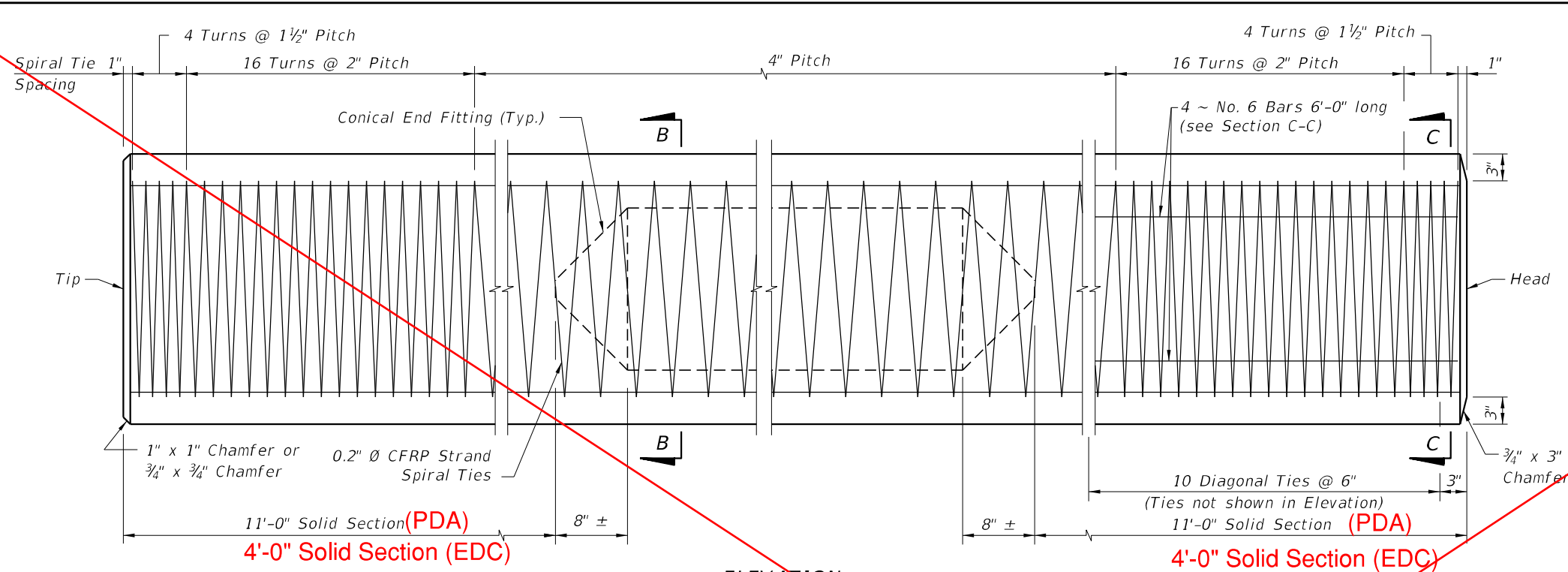
This is a follow up to our yesterday’s meeting that discussed FDOT’s proposed changes to the FY2020 structures standard Index Sheets.

- Please revise and modify as necessary to address constructability issues (PDA and EDC options) for 30” piles as discussed.

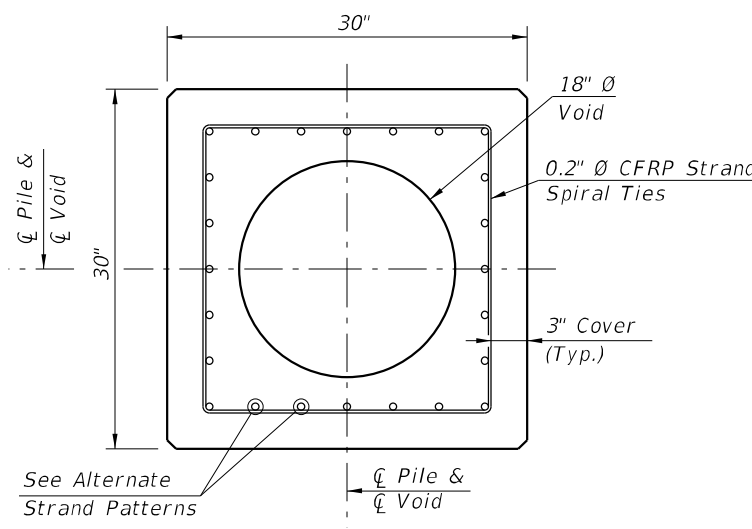
RESPONSE:

Date: September 25, 2019

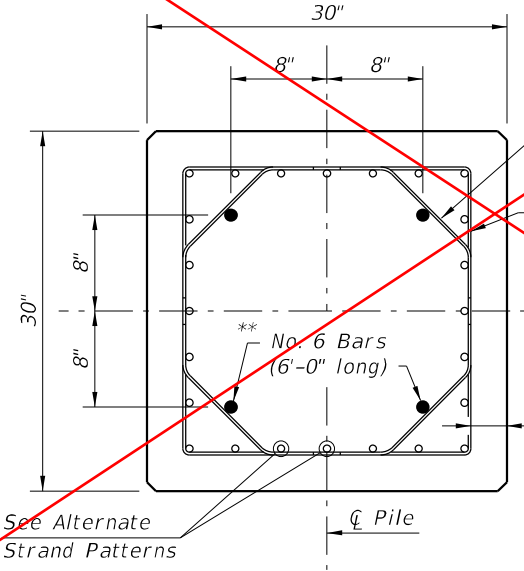
The 30” pile changes will not be made.



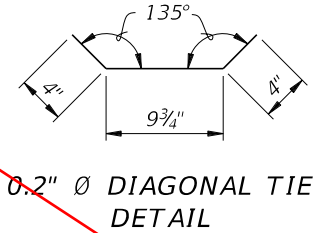
ELEVATION



SECTION B-B
(See Pile Splice Reinforcement Details)

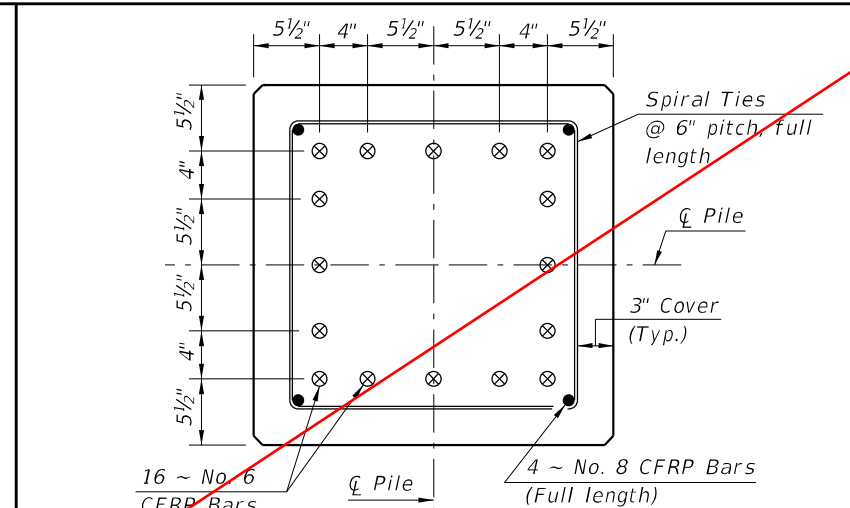


SECTION C-C
(See Pile Splice Reinforcement Details)

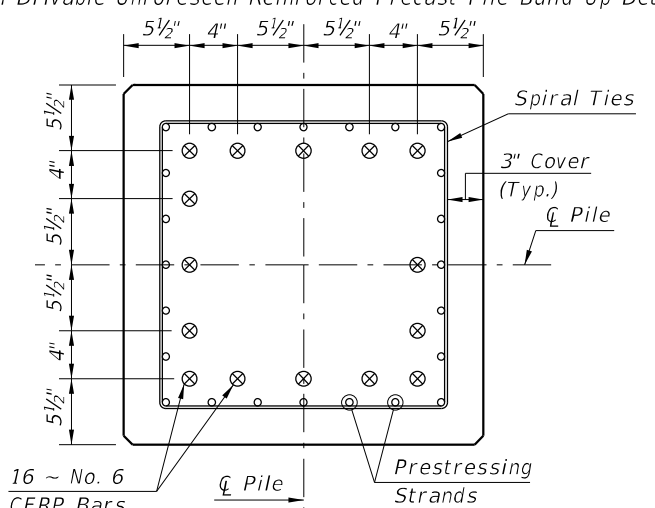


0.2" DIAGONAL TIE DETAIL

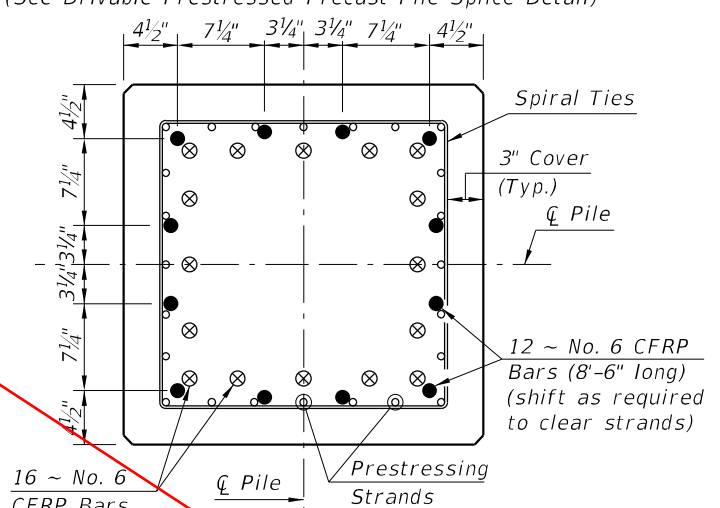
** Omit 4 ~ No. 6 Bars and Diagonal Ties in pre-planned mechanical splice.



SECTION D-D
(See Non-Drivable Unforeseen Reinforced Precast Pile Build-Up Detail)



SECTION E-E
(See Drivable Prestressed Precast Pile Splice Detail)



SECTION F-F
(See Drivable Preplanned Prestressed Precast Pile Splice Detail)

CFRP PILE SPLICE DETAILS

CFRP PRESTRESSED PILE DETAILS

ALTERNATE STRAND PATTERNS

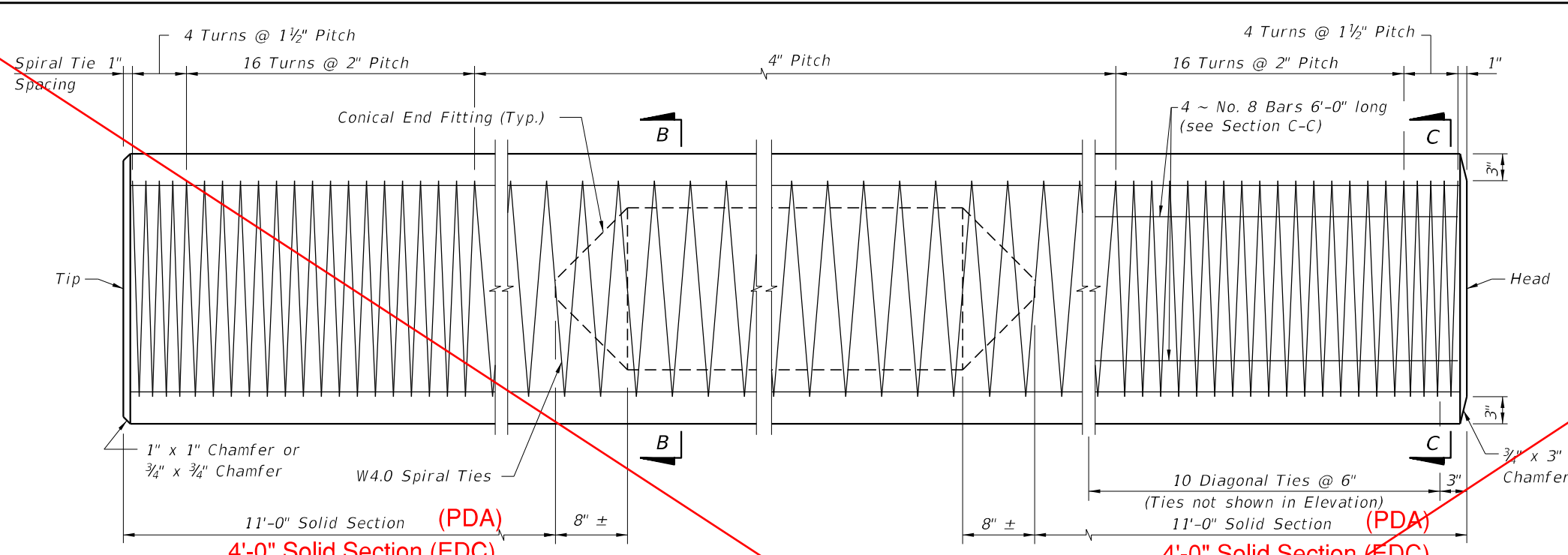
- 20 ~ 0.6" Ø, CFRP 7-Strand at 38 kips
- 20 ~ 1/2" Ø, CFRP Single-Strand at 37 kips

- NOTES:
- Any of the given Strand Patterns may be utilized. The strands shall be located as follows: Place one strand at each corner and place the remaining strands equally spaced between the corner strands. The total strand pattern shall be concentric with the nominal concrete section of the pile.
 - CONTRACTOR OPTION: The 30" pile may be cast SOLID by omitting the 18" Ø void. In this event, the Contractor shall submit calculations for approval and a proposed strand configuration that provide net prestressing after losses equal to 1000 psi. Alternate configurations for the Diagonal Ties, to maintain the position of the 4 ~ #6 Bars, may be approved by the Engineer.
 - Work this Index with Index 455-101 - Typical Details and Notes for Square CFRP & SS Prestressed Concrete Piles and Index 455-102 - Square CFRP & SS Prestressed Concrete Pile Splices.

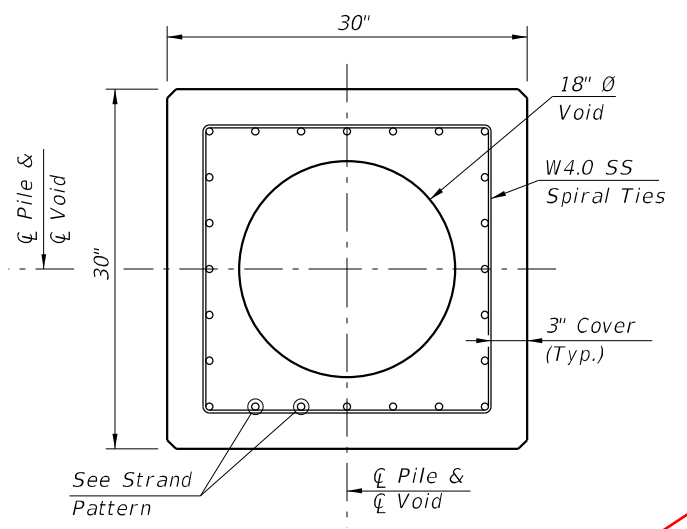
NO CHANGED MADE

10/24/2018 11:42:22 AM

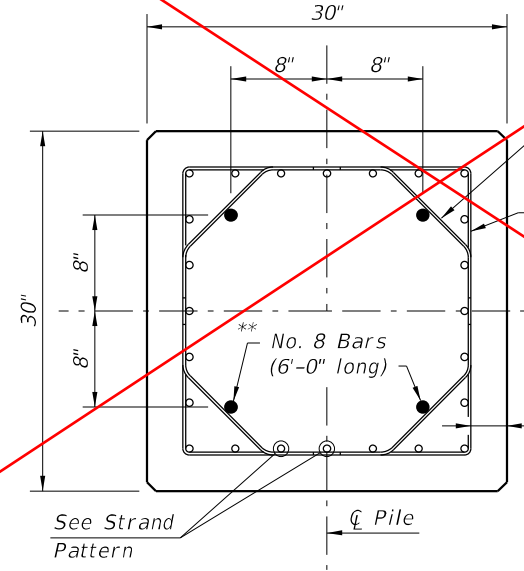
LAST REVISION 11/01/16	REVISION 19	DESCRIPTION:		FY 2019-20 STANDARD PLANS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX 455-130	SHEET 1 of 2
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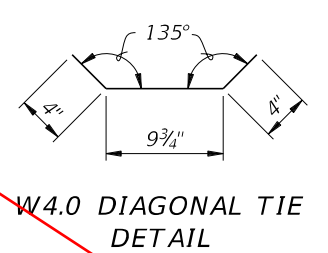
ELEVATION



SECTION B-B
(See Pile Splice Reinforcement Details)



SECTION C-C
(See Pile Splice Reinforcement Details)



W4.0 DIAGONAL TIE DETAIL

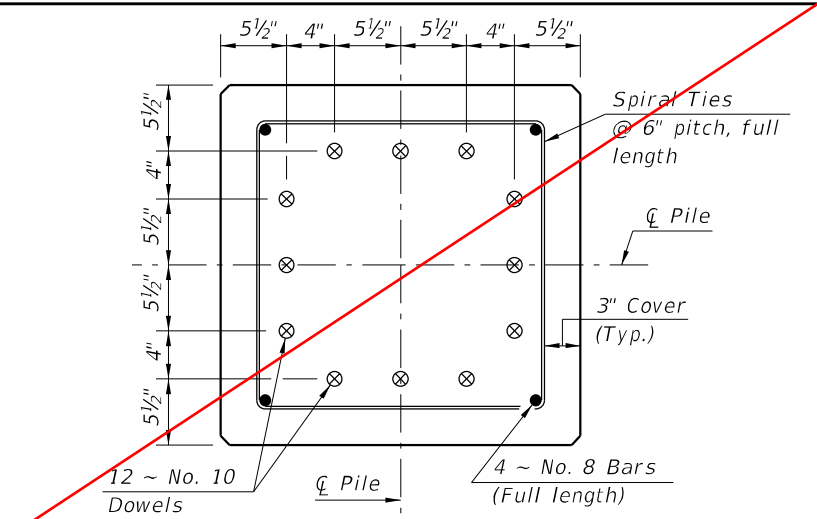
** Omit 4 ~ No. 8 Bars and Diagonal Ties in pre-planned mechanical splice.

NOTES:

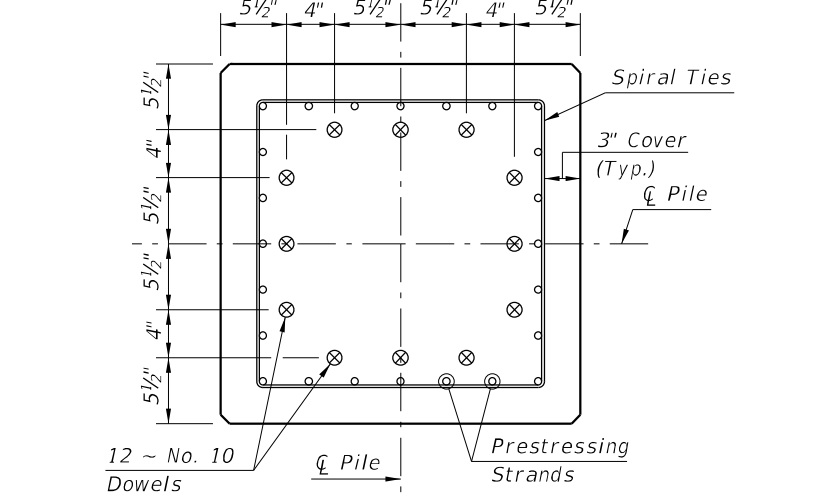
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STRAND PATTERN

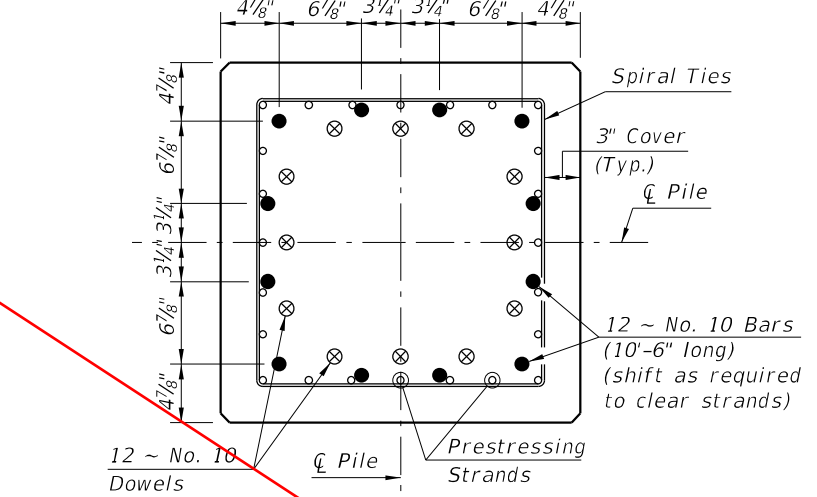
32 ~ 1/2" Ø, HSSS at 26 kips



SECTION D-D
(See Non-Drivable Unforeseen Reinforced Precast Pile Build-Up Detail)



SECTION E-E
(See Drivable Prestressed Precast Pile Splice Detail)



SECTION F-F
(See Drivable Preplanned Prestressed Precast Pile Splice Detail)

SS PILE SPLICE DETAILS

SS PRESTRESSED PILE DETAILS

NO CHANGED MADE

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LAST REVISION	01/01/16	DESCRIPTION:	11/01/19		FY 2019-20 STANDARD PLANS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX	SHEET
							455-130	2 of 2