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**ORIGINATION FORM**

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Proposed Revisions to a Standard Plans Index  
(Please provide all information — Incomplete forms will be returned)

**Contact Information:**

Date: March 12, 2020

Originator: Cheryl Hudson

Phone: 414-5332

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

**Standard Plans:**

Index Number: 455-130

Sheet Number (s): 1

Index Title: 30" CFRP & SS Prestressed Concrete Piles

**Summary of the changes:**

Added 0.6" HSSS strand

**Commentary / Background:**

**Other Affected Offices / Documents:** (Provide name of person contacted)

- | Yes                      | No                                  |                             |
|--------------------------|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans –      |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual –        |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Basis of Estimates Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Standard Specifications –   |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Approved Product List –     |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Construction –              |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Maintenance –               |

**Origination Package Includes:**

(Email or hand deliver package to Rick Jenkins)

- | Yes                                 | N/A                                 |  |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Redline Mark-ups                         |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Revised SPI                              |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Other Support Documents                  |

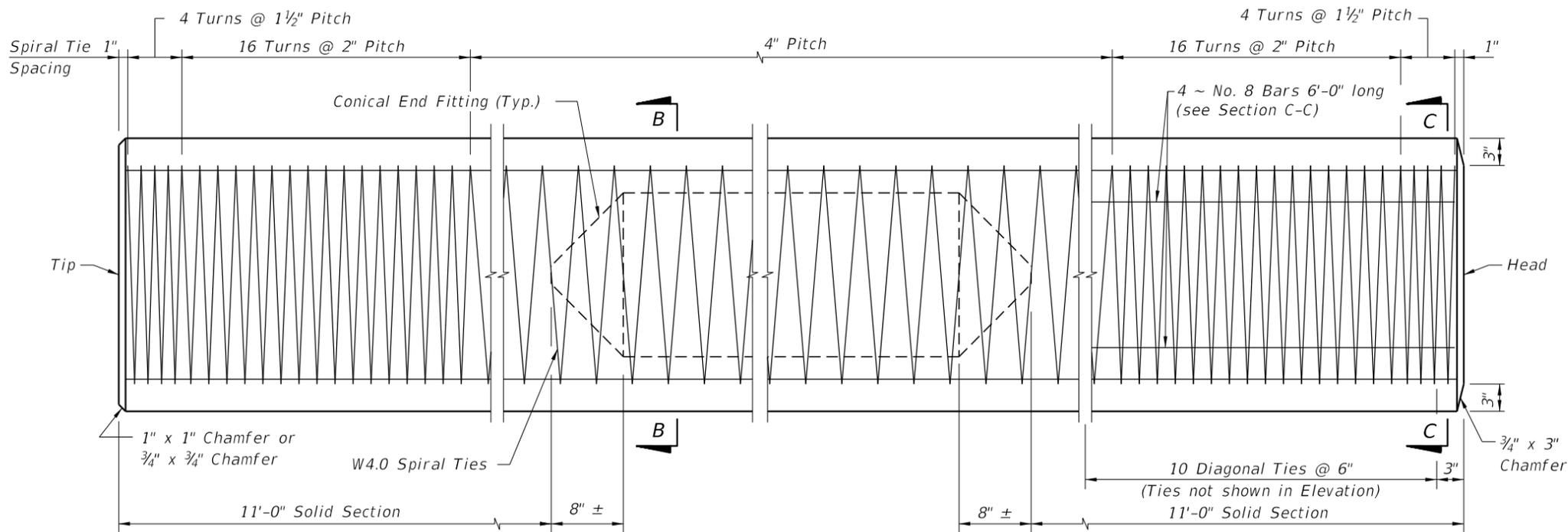
**Implementation:**

- Design Bulletin (Interim)
- DCE Memo
- Program Mgmt. Bulletin
- FY-Standard Plans (Next Release)

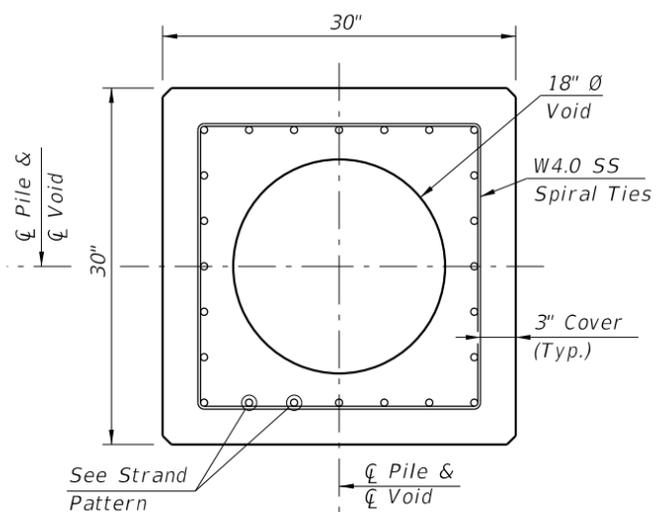
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Contact the Roadway Design Office for assistance in completing this form

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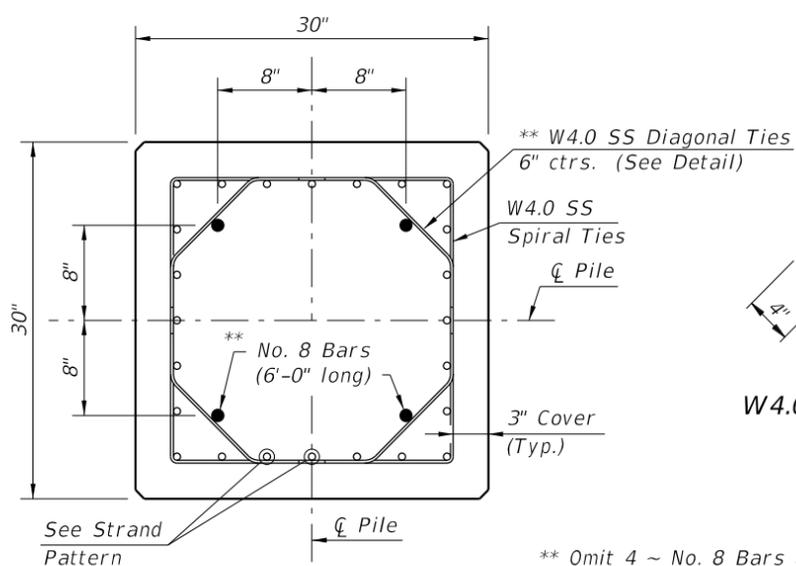


ELEVATION



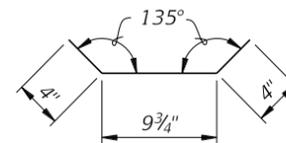
SECTION B-B

(See Pile Splice Reinforcement Details)



SECTION C-C

(See Pile Splice Reinforcement Details)

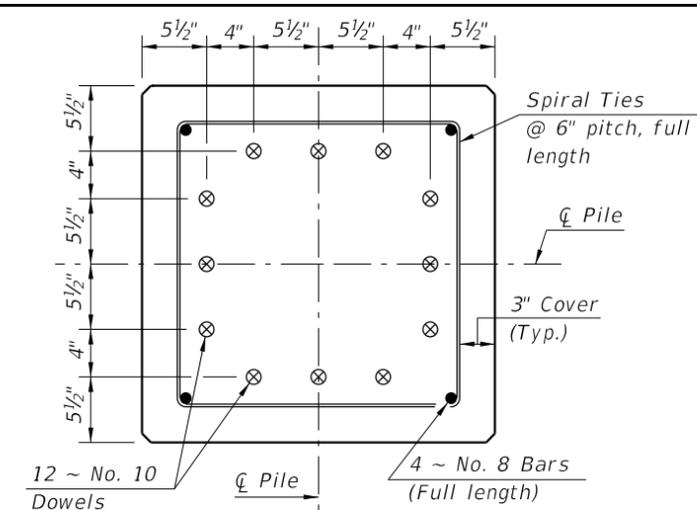


W4.0 DIAGONAL TIE DETAIL

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

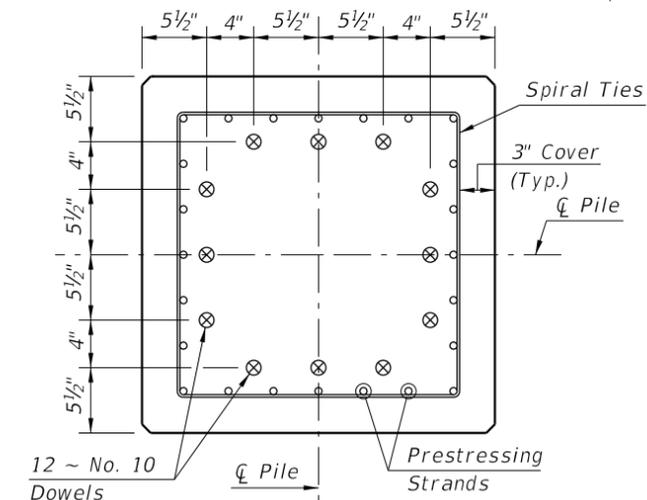
NOTES:

- 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 ~ #8 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.



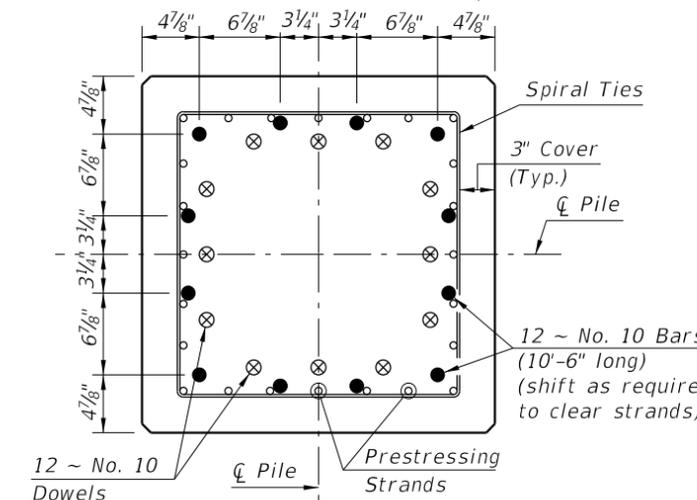
SECTION D-D

(See Non-Drivable Unforescen 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

STRAND PATTERN

- 32 ~ 1/2" Ø, HSSS at 26 kips
- 24 ~ 0.6" Ø HSSS at 35 kips

20

10/14/2019

LAST REVISION	DESCRIPTION:
11/01/16	

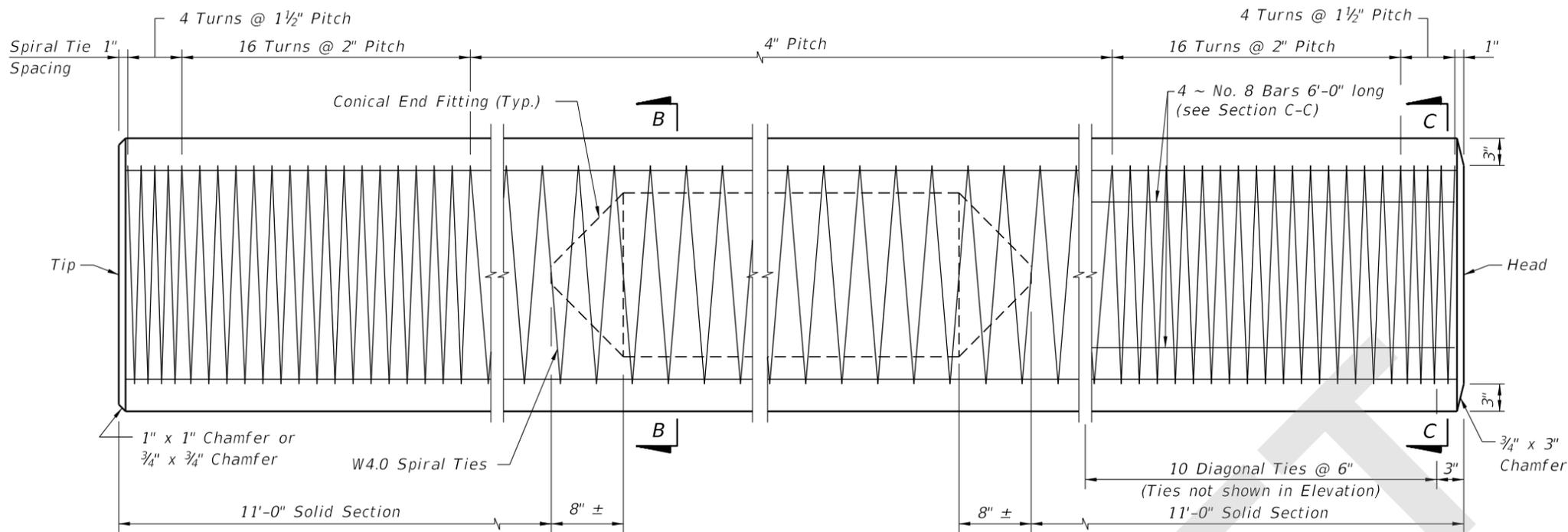


FY 2020-21  
STANDARD PLANS

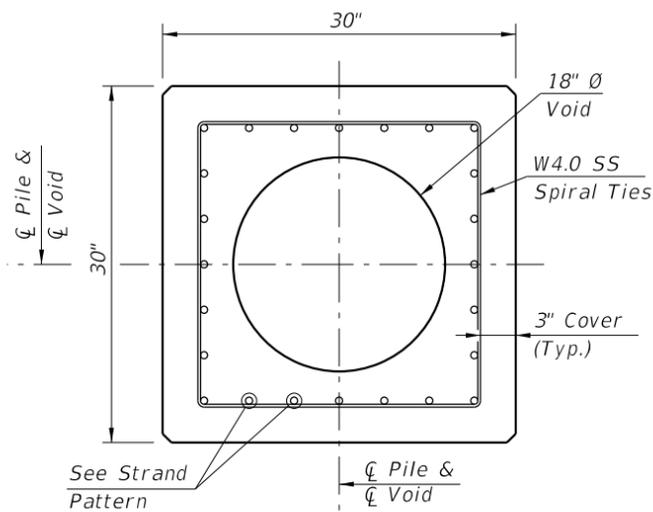
30" SQUARE CFRP & SS PRESTRESSED  
CONCRETE PILE

INDEX  
455-130

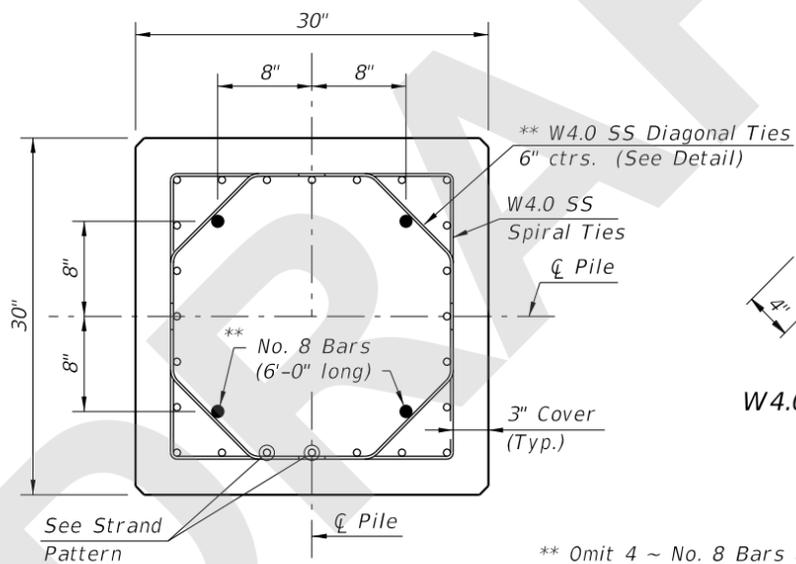
SHEET  
2 of 2



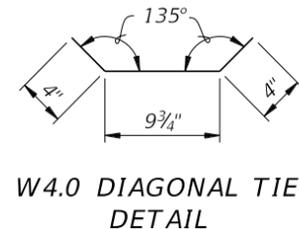
ELEVATION



SECTION B-B  
(See Pile Splice Reinforcement Details)



SECTION C-C  
(See Pile Splice Reinforcement Details)



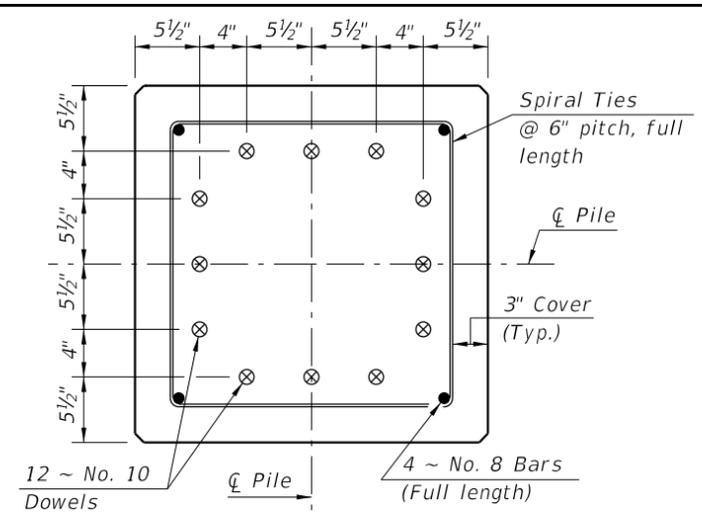
\*\* Omit 4 ~ No. 8 Bars and Diagonal Ties in pre-planned mechanical splice.

NOTES:

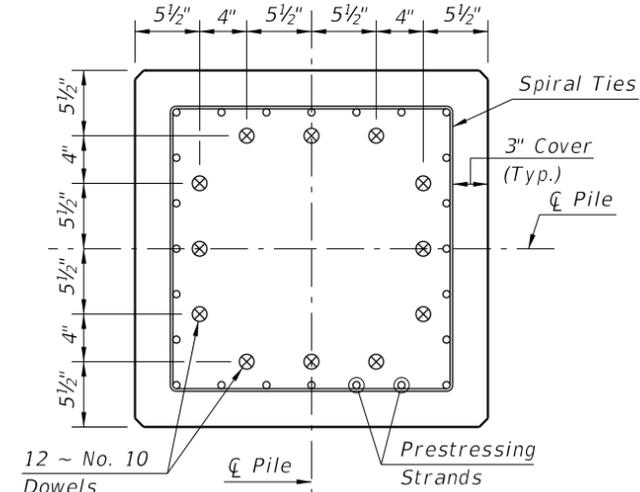
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STRAND PATTERN

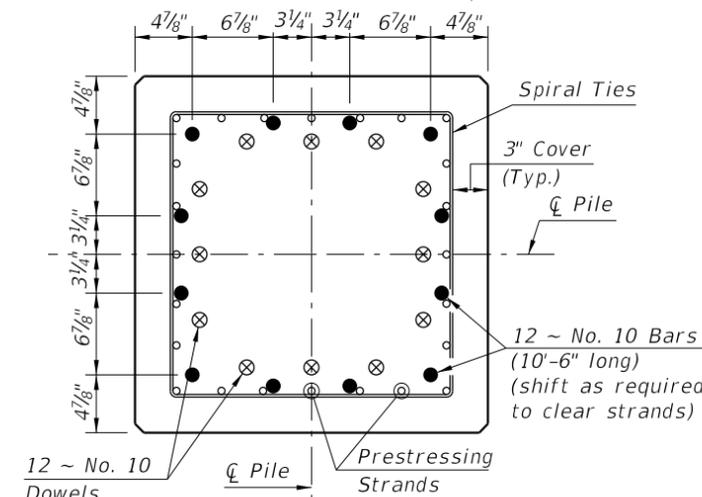
32 ~ 1/2" Ø, HSSS at 26 kips



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

7/27/2020 3:47:47 PM

LAST REVISION 11/01/16	REVISION	DESCRIPTION:		FY 2020-21 STANDARD PLANS	30" SQUARE CFRP & SS PRESTRESSED CONCRETE PILE	INDEX 455-130	SHEET 2 of 2
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