
ORIGINATION FORM

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

Contact Information:

Date: February 12, 2020

Originator: Cheryl Hudson

Phone: 414-5332

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

Standard Plans:

Index Number: 455-060

Sheet Number (s): 1

Index Title: 60" Prestressed Concrete Cylinder Pile

Summary of the changes:

Change Silica Fume, metakaolin or ultra-fine flyash to Highly Reactive Pozzolans

Commentary / Background:

Specification changed to fit silica fume, metakaolin and ultra-fine flyash under Highly Reactive Pozzolans

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:

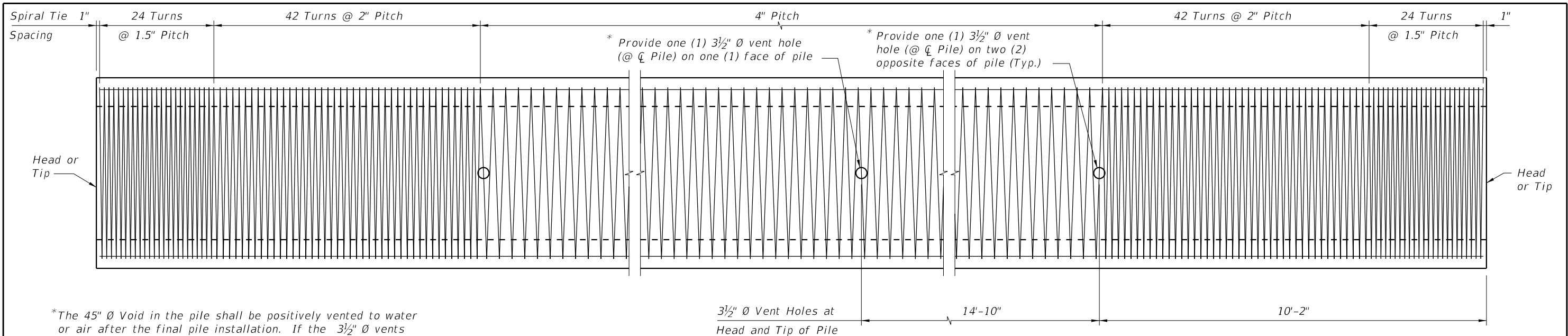
(Email or hand deliver package to Rick Jenkins)

- | 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:

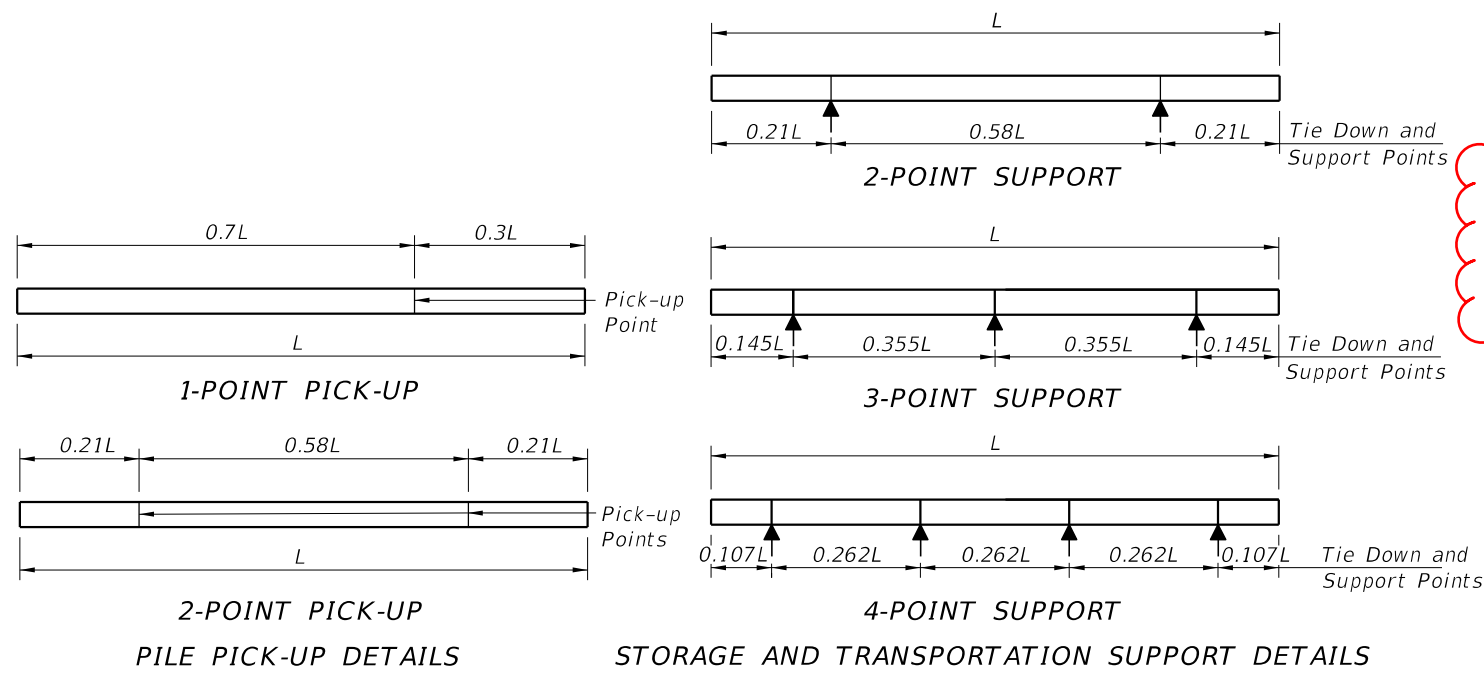
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|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Design Bulletin (Interim) |
| <input type="checkbox"/> | DCE Memo |
| <input type="checkbox"/> | Program Mgmt. Bulletin |
| <input checked="" type="checkbox"/> | FY-Standard Plans (Next Release) |

Contact the Roadway Design Office for assistance in completing this form



*The 45" Ø Void in the pile shall be positively vented to water or air after the final pile installation. If the 3 1/2" Ø vents are included in the pile cut-off section, then venting shall be provided by the use of a 1" Ø PVC conduit through the substructure cap or column.

ELEVATION



NOTES

- Work this Index with the Pile Data Table in the Structures Plans.
- Concrete:
 - Piles: Class V (Special)
 - Splice Collar: Class IV
 - ~~Silica Fume: See "GENERAL NOTES" in the Structures Plans for locations where the use of silica fume, metakaolin or ultra-fine flyash is required.~~
- Concrete Strength at time of prestress transfer:
 - Piles: 4,000 psi minimum.
- Carbon-Steel Reinforcing:
 - Bars: Meet the requirements of Specification Section 415.
 - Prestressing Strands: Use 0.6 dia. carbon-steel, Grade 270, low-relaxation strand stressed to 44.0 kips that meets the requirements of Specification Section 933.
 - Protect all carbon-steel strands permanently exposed to the environment and not embedded under final conditions in accordance with Specification Section 450.
- Spiral Ties:
 - One half turn is required for carbon-steel spiral splices
 - One full turn is required at the head and tip of each pile
- Pile Splices:
 - Epoxy: Type AB Epoxy Compound or Epoxy Mortar must meet the requirements of Specification Section 926.
 - Use a Type AB Epoxy Bonding Compound or Epoxy Mortar, as recommended by the Manufacturer, to form the joint between pile sections.
 - Use a Type AB Epoxy Bonding Compound as a bonding agent on internal pile surfaces.
 - Splices: Resume pile driving after the splice concrete reaches a minimum strength of 5,500 psi.
- Mark piles at the pick-up points to indicate the proper points for attaching handling lines.

Highly Reactive Pozzolans

Maximum Pile Length (Feet)	Required Storage and Transportation Detail	Pick-Up Detail
122	2, 3, or 4 point	1 Point
174	2, 3, or 4 point	2 Point

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LAST REVISION 11/01/16	DESCRIPTION:
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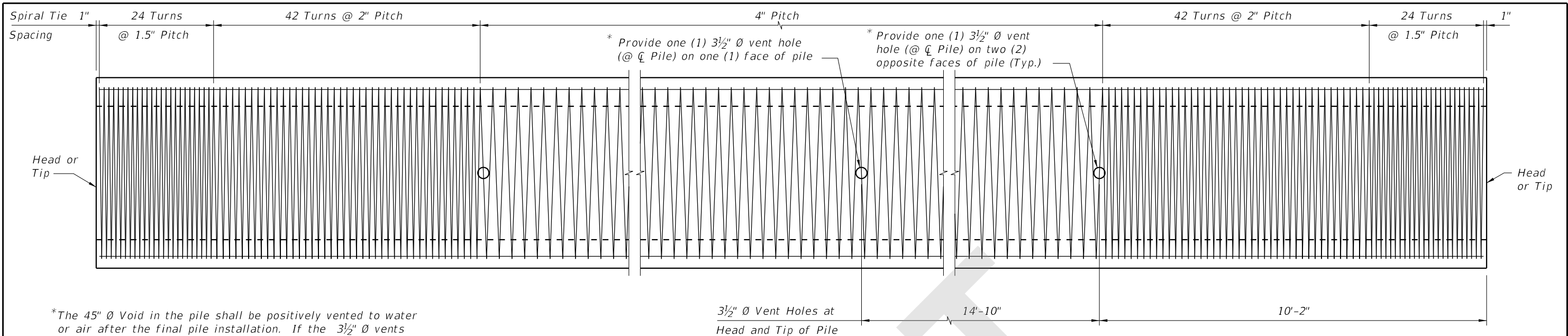


FY 2020-21
STANDARD PLANS

60" PRESTRESSED CONCRETE CYLINDER PILE

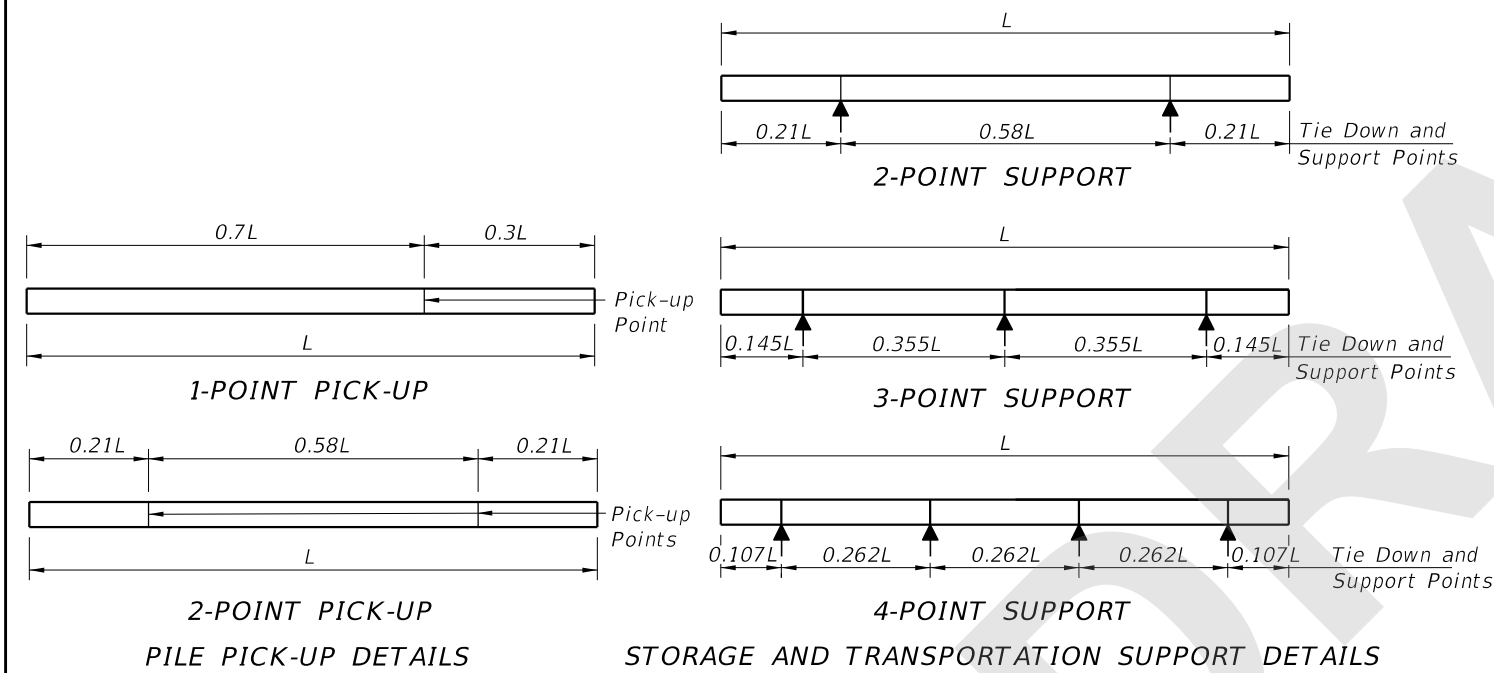
INDEX
455-060

SHEET
1 of 2



ELEVATION

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TABLE OF MAXIMUM PILE PICK-UP AND SUPPORT LENGTHS

Maximum Pile Length (Feet)	Required Storage and Transportation Detail	Pick-Up Detail
122	2, 3, or 4 point	1 Point
174	2, 3, or 4 point	2 Point

SDATES

LAST REVISION 11/01/20	DESCRIPTION:
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