
ORIGINATION FORM

Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: October 21, 2021

Originator: Joshua Turley

Phone: (850) 414-4475

Email: joshua.turley@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:

Changed Class V (Special) concrete to Class V.

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)

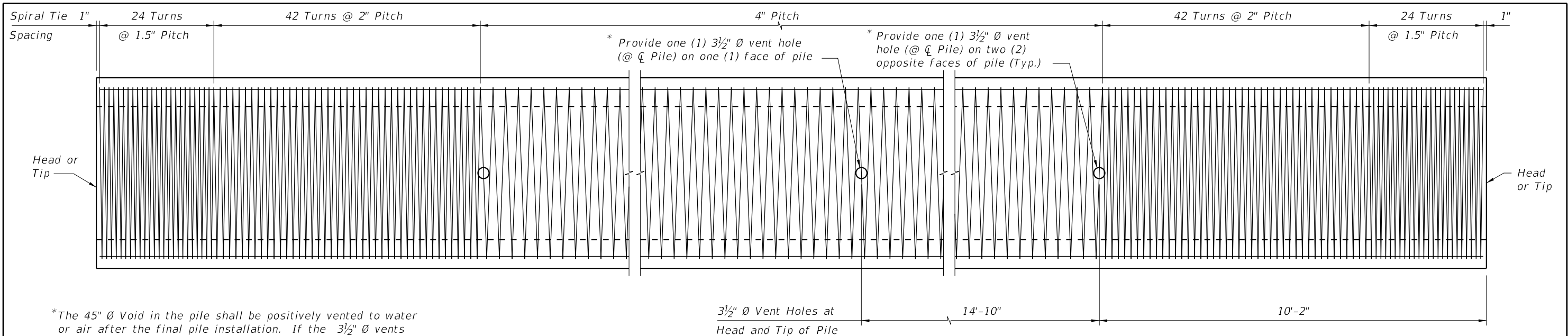
- | Yes | N/A | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/> |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

Implementation:

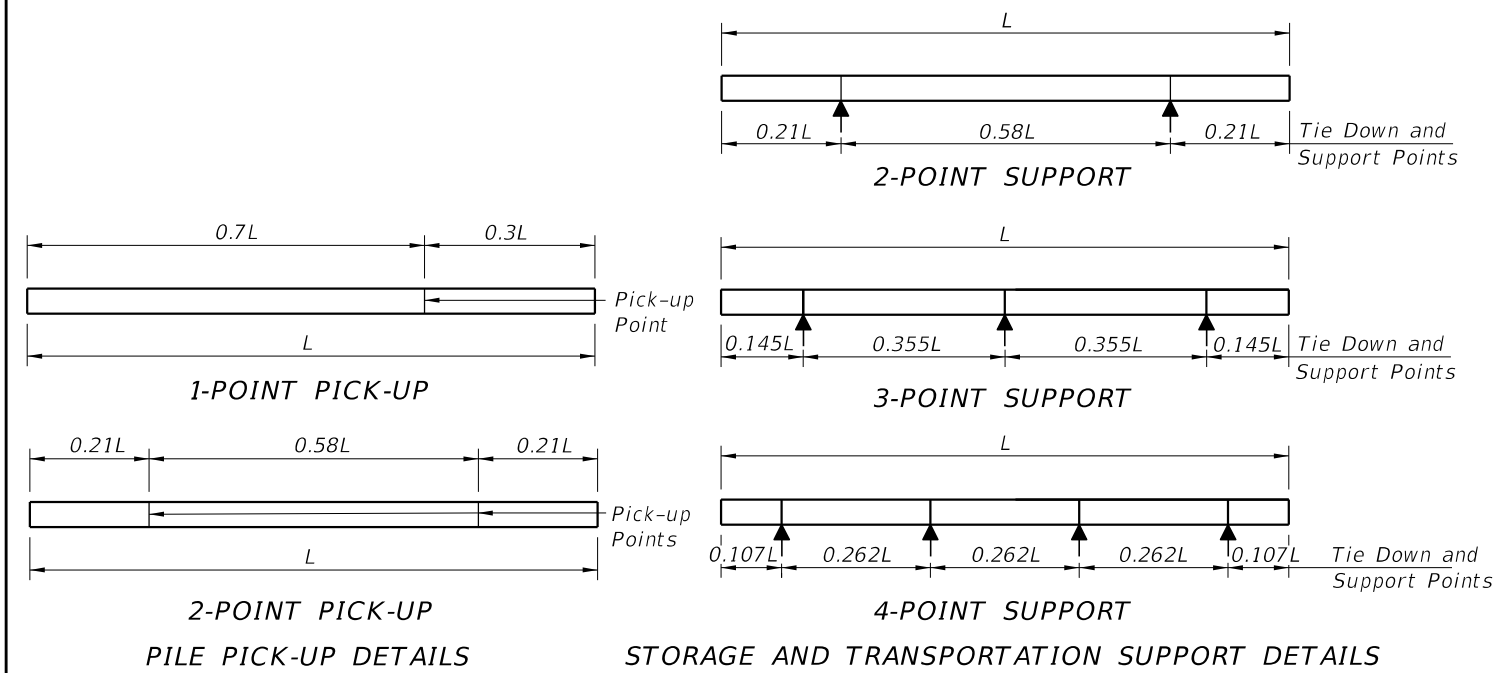
- | | |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Design Bulletin (Interim) |
| <input type="checkbox"/> | DCE Memo |
| <input checked="" type="checkbox"/> | Program Mgmt. Bulletin |
| <input checked="" type="checkbox"/> | FY-Standard Plans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

Contact the Roadway Design Office for assistance in completing this form

Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us



ELEVATION



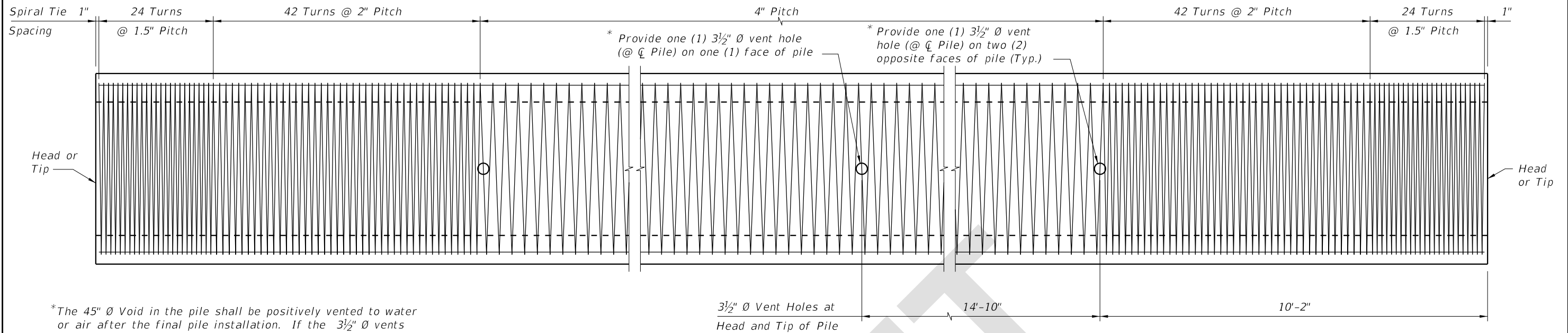
NOTES

1. Work this Index with the Pile Data Table in the Structures Plans.
2. Concrete:
 - A. Piles: Class V (~~Special~~)
 - B. Splice Collar: Class IV
 - C. See "GENERAL NOTES" in the Structures Plans for locations where the use of Highly Reactive Pozzolans is required.
3. Concrete Strength at time of prestress transfer:
 - A. Piles: 4,000 psi minimum.
4. Carbon-Steel Reinforcing:
 - A. Bars: Meet the requirements of Specification Section 415
 - B. 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.
 - C. Protect all carbon-steel strands permanently exposed to the environment and not embedded under final conditions in accordance with Specification Section 450.
5. Spiral Ties:
 - A. One half turn is required for carbon-steel spiral splices
 - B. One full turn is required at the head and tip of each pile
6. Pile Splices:
 - A. Epoxy: Type AB Epoxy Compound or Epoxy Mortar must meet the requirements of Specification Section 926.
 - a. Use a Type AB Epoxy Bonding Compound or Epoxy Mortar, as recommended by the Manufacturer, to form the joint between pile sections.
 - b. Use a Type AB Epoxy Bonding Compound as a bonding agent on internal pile surfaces.
 - B. Splices: Resume pile driving after the splice concrete reaches a minimum strength of 5,500 psi.
7. Mark piles at the pick-up points to indicate the proper points for attaching handling lines.

| 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 |

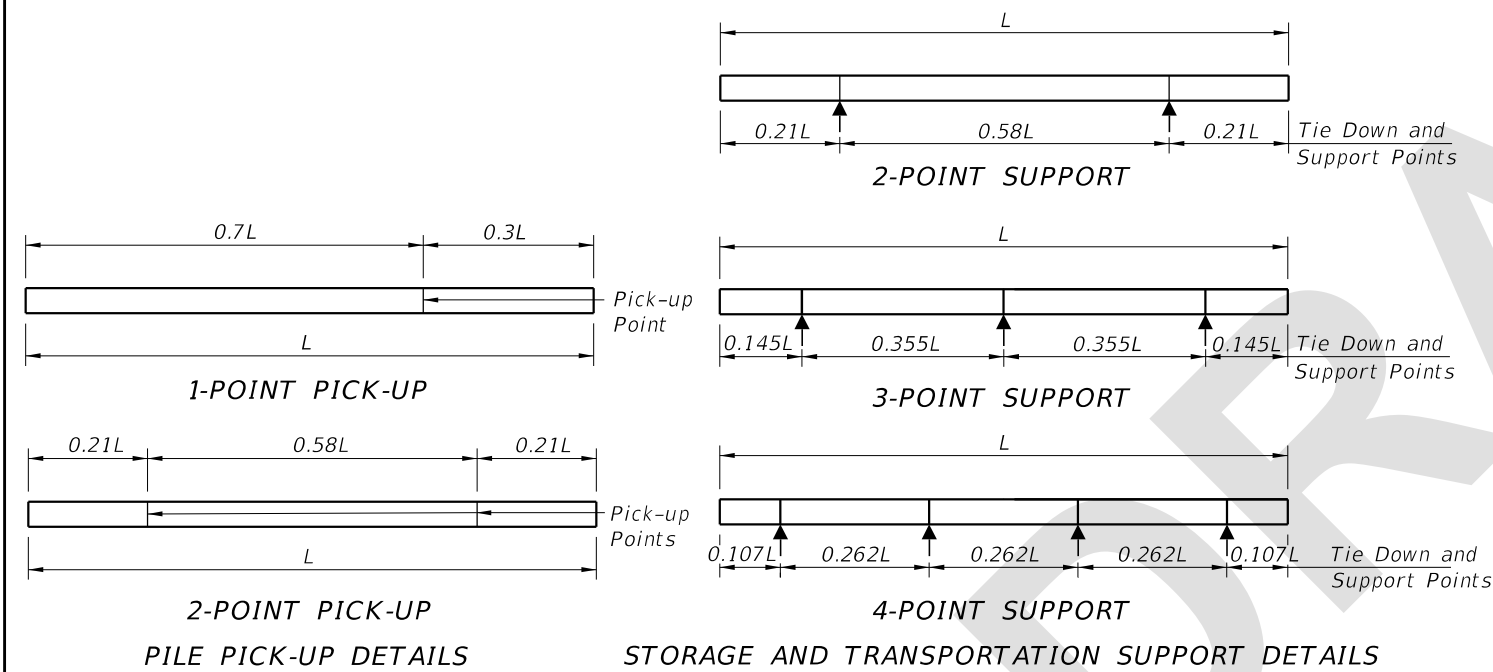
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| | | | |
|---------------|----------|----------|--------------|
| LAST REVISION | 11/01/20 | 11/01/22 | DESCRIPTION: |
|---------------|----------|----------|--------------|



*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.

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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 |

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