Table of Maximum Pile Pick-up and Support Lengths

<table>
<thead>
<tr>
<th>Maximum Pile Length (Feet)</th>
<th>Required Storage and Transportation Detail</th>
<th>Pick-Up Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>119</td>
<td>2, 3, or 4 point</td>
<td>1 Point</td>
</tr>
<tr>
<td>170</td>
<td>2, 3, or 4 point</td>
<td>2 Point</td>
</tr>
</tbody>
</table>

NOTES

1. Pile splices shall reach a minimum strength of 5500 psi before driving is resumed.

2. Grade 270 low relaxation, at 33.8 kips.

3. Prestressing tendons shall be made up of two seven-wire strands. Prestressing strands shall be 5/8" (Special).

4. Grade 270 low relaxation, at 33.8 kips.

5. Pile splices shall be marked at the pick-up points to indicate proper points for attaching handling lines.

6. Epoxy Bonding Compound or Epoxy Mortar as recommended by the manufacturer. For Epoxy Mortar only use sand or other filler material supplied by the manufacturer and in the proportions recommended.

7. Use Epoxy Bonding Compound or Epoxy Mortar as recommended by the manufacturer. For Epoxy Mortar only use sand or other filler material supplied by the manufacturer and in the proportions recommended.

8. The cylinder strength shall be 6,000 psi minimum at time of transfer of the Prestressing Force.

9. SPLICE BONDING MATERIAL:

10. The material to form the joint between pile sections shall be a Type B Epoxy Compound in accordance with Section 926 of the Specifications. The bonding agent used on internal pile surfaces shall be a Type A Epoxy Compound in accordance with Section 926 of the Specifications. Epoxy Compounds used shall be contained on the Qualified Products List (QPL). Use Epoxy Bonding Compound or Epoxy Mortar as recommended by the manufacturer. For Epoxy Mortar only use sand or other filler material supplied by the manufacturer and in the proportions recommended.

11. PICK-UP POINTS:

12. Reinforcing steel shall be Grade 60, except that smooth steel wire (W11 spiral ties and longitudinal spacers and W20 ties) shall be manufactured from cold drawn steel wire meeting the requirements of ASTM A572.

13. PRESTRESSING STEEL:

14. Prestressing tendons shall be made up of two seven-wire strands. Prestressing strands shall be 5/8" (Special).

15. Grade 270 low relaxation, at 33.8 kips.

16. PILE DRIVING AFTER SPlicing:

17. Pile splices shall reach a minimum strength of 5500 psi before driving is resumed.

DESIGN SPECIFICATIONS:


54° PRECAST/POST-TENSIONED CONCRETE CYLINDER PILE

FDOT 2014 DESIGN STANDARDS

INDEX NO. 20654

SHEET NO. 2 of 2

DRIVABLE UNFORESEEN FIELD SPLICE DETAIL
(Cast-In-Place Plug)

1'-0" Ø Void, open top and bottom to allow through venting of sections

Roughen inside surface of 54° Ø Pile to 7/8" amplitude for Spliced Pile Section

Closed No. 4 Bars or W20 Wire Ties @ 1'-0" ± (Typ.)

Full Epoxy Compound Joint around cylinder pile wall only (See Detail "A")

24 – No. 11 Bars

Clean inside surface of 54° Ø Pile with a high pressure water blast (3000 psi Min.) and apply bonding agent for Driven Prestressed Pile

Concrete Seal

1½" Ø Formed Hole (1 tendon per hole; 2 – ½" (Spec.) strands per tendon shown as (Ø) Grout per Specification 938)

24 – ½" Ø Formed Holes for Tendons @ Equal Spaces

3" Min. * Cover (Typ.)

Inside Pile Wall

Temporary Blocking Form to retain epoxy compound

Gasket

Form to retain epoxy compound

Outside Pile Wall

* For Spun Cast Cylinder Piles, the following requirements for concrete cover apply:
1. Slightly or Moderately Aggressive Environments: The concrete cover may be reduced to 2 inches.
2. Extremely Aggressive Environments: The concrete cover may be reduced to 2 inches as long as the concrete has a documented chloride ion penetration apparent diffusion coefficient with a mean value of 0.005 in/year or less; otherwise, a 3-inch concrete cover is required.

For Spun Cast Cylinder Piles, the following requirements for concrete cover apply:
1. Slightly or Moderately Aggressive Environments: The concrete cover may be reduced to 2 inches.
2. Extremely Aggressive Environments: The concrete cover may be reduced to 2 inches as long as the concrete has a documented chloride ion penetration apparent diffusion coefficient with a mean value of 0.005 in/year or less; otherwise, a 3-inch concrete cover is required.