

## **Index 455-154 54" Prestressed / CFRP & SS Post-Tensioned Concrete Cylinder Pile**

### **Design Criteria**

***AASHTO LRFD Bridge Design Specifications; Structures Detailing Manual (SDM);  
Structures Design Guidelines (SDG); Fiber Reinforced Polymer Guidelines (FRPG)***

### **Design Assumptions and Limitations**

Standard piles are designed to have 1000 psi uniform compression after prestress losses without any applied loads.

The piles are designed to have 0.0 psi tension using a load factor of 1.5 times the pile self weight during pick-up, storage and transportation as shown in the "Table of Maximum Pile Pick-Up and Support Lengths" on the standard.

### **Plan Content Requirements**

In the Structures Plans:

Show and label the piles on the Foundation Layout, End Bent, Intermediate Bent, Pier, Footing, Typical Section and other sheets as required.

Complete the following "Data Table" in accordance with **SDG** 3.5 and **SDM** 11.4 and include it in the contract plans with the "Foundation Layout" sheets. Modify table and notes as required to accommodate the required number of piles, piers and/or bents and use of Test Piles. When not enough space is available on one plan sheet, continuations of the Data Table and/or separate pile cut-off elevation tables are acceptable. See **FDM 115** for more information regarding use of Data Tables.

For projects without Test Piles change column heading "TEST PILE LENGTH (ft.)" to "PILE ORDER LENGTH (ft.)".



**Payment**

<b>Item number</b>	<b>Item Description</b>	<b>Unit Measure</b>
455-36-AB	Concrete Cylinder Piles, Furnished & Driven (54" Diameter CFRP or SS)	LF