Resistance (Tension) Requirements

PILE DETAILS

* See Pile Data Table on the Project Plans for Nominal Resistance (Tension) Requirements

NOTES:

1. Details are the same for both Class 90 and Class 140 piles unless noted otherwise.

2. At the Contractor’s option, alternative steel pipe with at least the diameter and wall thickness shown on these plans may be used. The diameter shall not exceed 1'-6".

3. Pile reinforcement and steel pipe anchor bars extending into a footing shall be hooked or required to provide clearance to top of footing, piles shall be extended only with details shown on the Project Plans.

4. 2" clearance to spiral reinforcement shall be maintained if section used is larger than the minimum section shown.

5. Maximum cutoff length of the top of the Alternative "A" and Alternative "W" piles is 10'-0".

6. For longitudinal reinforcement and prestressing for anchor piles and load test piles, see "Load Test Pile Details (B)", Standard Plan B2-10.

Design Notes

Precast Prestressed Piles

Design Capacity

Class 90

Compressibility: 90 kip (Service state) 180 kip (Nominal axial structural resistance)

Tension: 56 kip (Service state) 140 kip (Nominal axial structural resistance)

Class 140

Compressibility: 140 kip (Service state) 280 kip (Nominal axial structural resistance)

Tension: 56 kip (Service state) 140 kip (Nominal axial structural resistance)

Reinforced Concrete

Fy (Minimum yield strength) = 45,000 psi

Pu (Minimum tensile strength) = 60,000 psi

Steel Pipe Pile

Fy (Minimum yield strength) = 45,000 psi

Pu (Minimum tensile strength) = 60,000 psi

Alternate Pile Anchor for Prestressed Piles

Alternative "V" Anchor

Alternative "W" Anchor

Alternative "X" Anchor

Alternative "Y" Anchor

Notes on the Plan Sheet:

1. All dimensions are in feet unless noted otherwise.

2. All required details are shown in the plan sheet.

3. All specific requirements are stated in the plan sheet.

4. All materials and components are identified in the plan sheet.

5. All calculations and formulas are shown in the plan sheet.

6. All necessary notes and comments are included in the plan sheet.