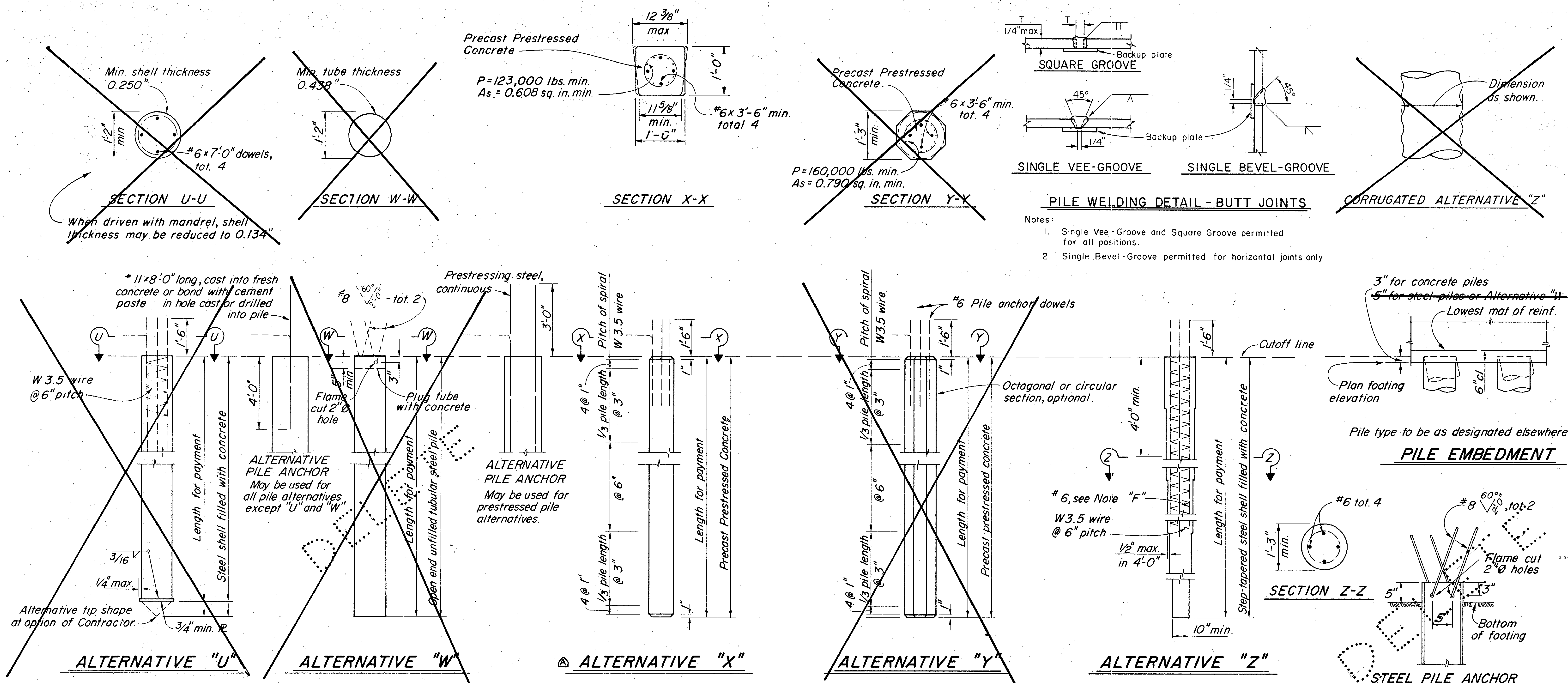




**Notes:**

- A 10" minimum diameter pipe extension (thickness = 0.250" min.) may be used at the tip of Alternative "Z" when taper is 30' or more in length.
- All dowels or bars extending into a footing having a depth less than 2'-0" shall be hooked.
- 5 gauge wire may be substituted for W3.5 wire.
- Piles may not be extended except in accordance with details shown in the Project Plans.

**PRECAST PRESTRESSED PILES:**

- P = Prestressing Force @ anchorage
- As = Minimum Area of prestressing steel required.
- Concrete Strength:  $f'_c$  @ 28 days = 6,000 p.s.i (Alternative "X")  
5,000 p.s.i (Alternative "Y")
- $f'_{ci}$  @ transfer = 4,000 p.s.i

DESIGN LOADING = 70 TONS

**NOTE F**

- In Alternative "Z", two #6 bars shall extend to the pile tip and the other two #6 bars and the spiral wrap shall extend, at least, to a point halfway between the pile tip and the lowest of the following:
  - Bottom of footing.
  - Top of final ground surface.
  - Top of original ground surface when holes are drilled through embankment constructed by Contractor.
  - Bottom of pre-drilled holes greater than pile diameter.

**AS BUILT**

WHEELER & GRAY  
CONSULTING ENGINEERS  
S.E. # 918

|                                                                             |           |             |                                  |
|-----------------------------------------------------------------------------|-----------|-------------|----------------------------------|
| ORANGE COUNTY<br>ENVIRONMENTAL MANAGEMENT AGENCY                            |           |             |                                  |
| SLATER-SEGERSTROM BRIDGE<br>(SA-31A) WIDENING OVER<br>SANTA ANA RIVER (EOI) |           |             |                                  |
| PILING DETAILS                                                              |           |             |                                  |
| MARK                                                                        | DATE      | DESCRIPTION | PREPARED UNDER<br>SUPERVISION OF |
| DESIGNED                                                                    | W.F. POND | SCALE       | DATE                             |
| DRAWN                                                                       | E.G.      | CHECKED     | W.F.P.                           |
| 7-83 AS BUILT                                                               |           |             | SHEET<br>12                      |