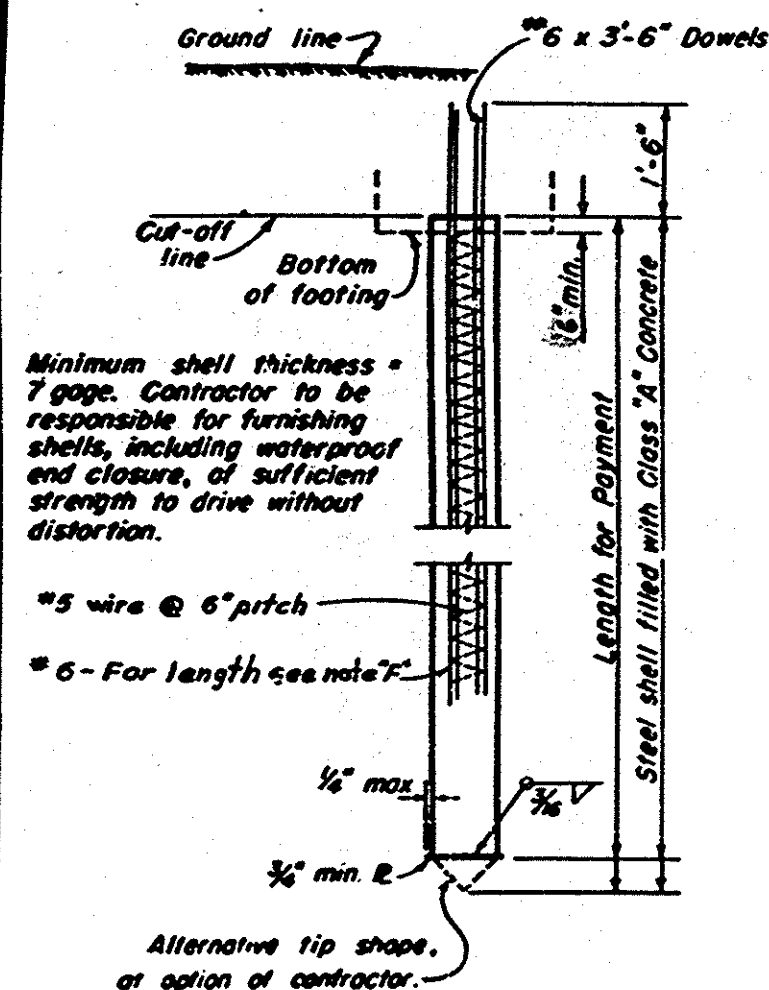


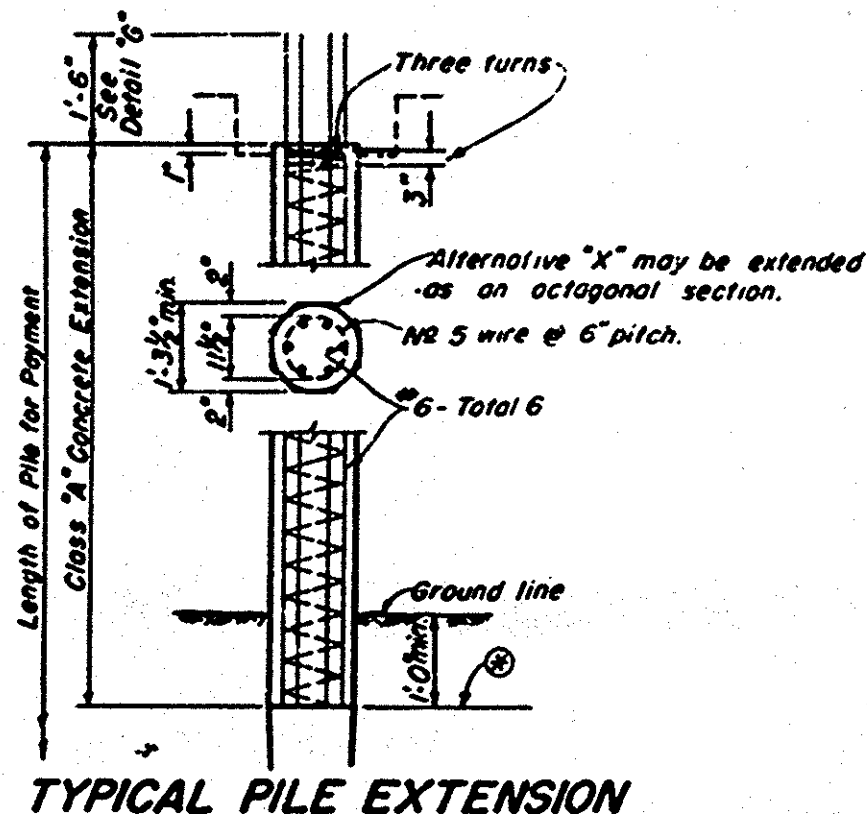
Pile shell min. diameter =
12" inside dia. without extension
16" outside dia. with extension

#6 x 3'-6" Tot. 4
(with pile extension
total 6)

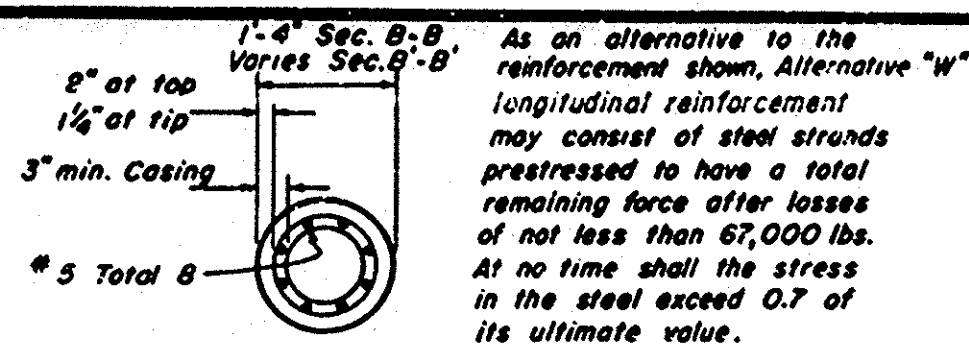
PLAN
Scale: 3/4" = 1'-0"



**CAST-IN-PLACE
CONCRETE PILE
ALTERNATIVE "U"**



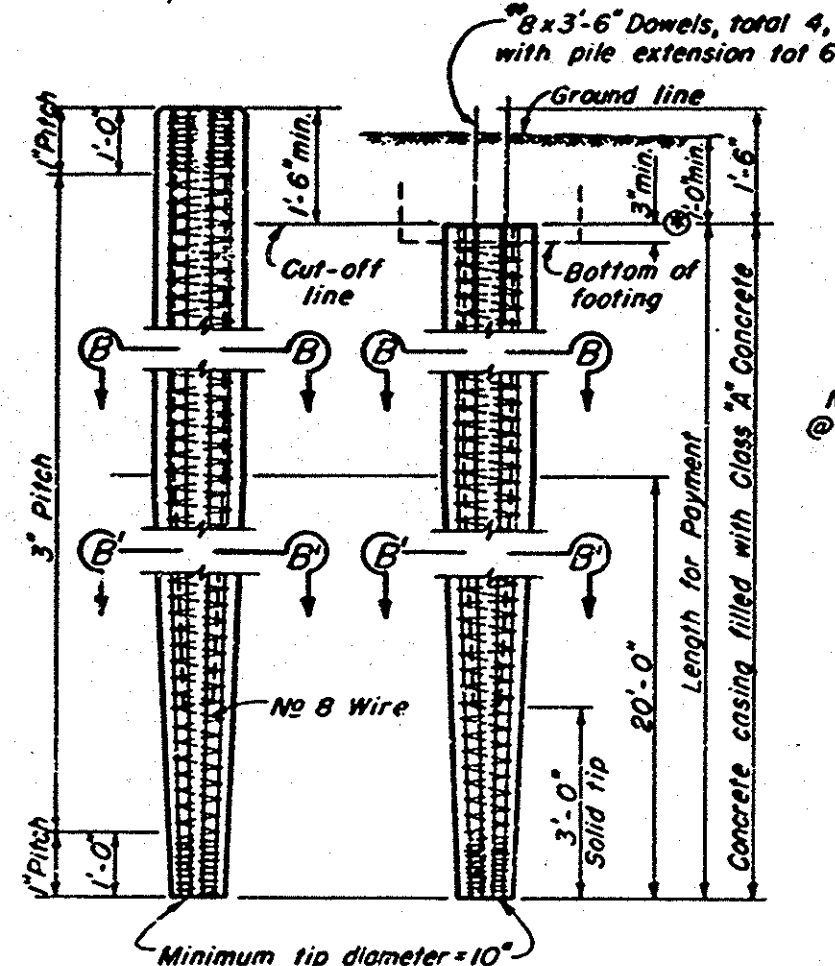
TYPICAL PILE EXTENSION



SECTION B-B

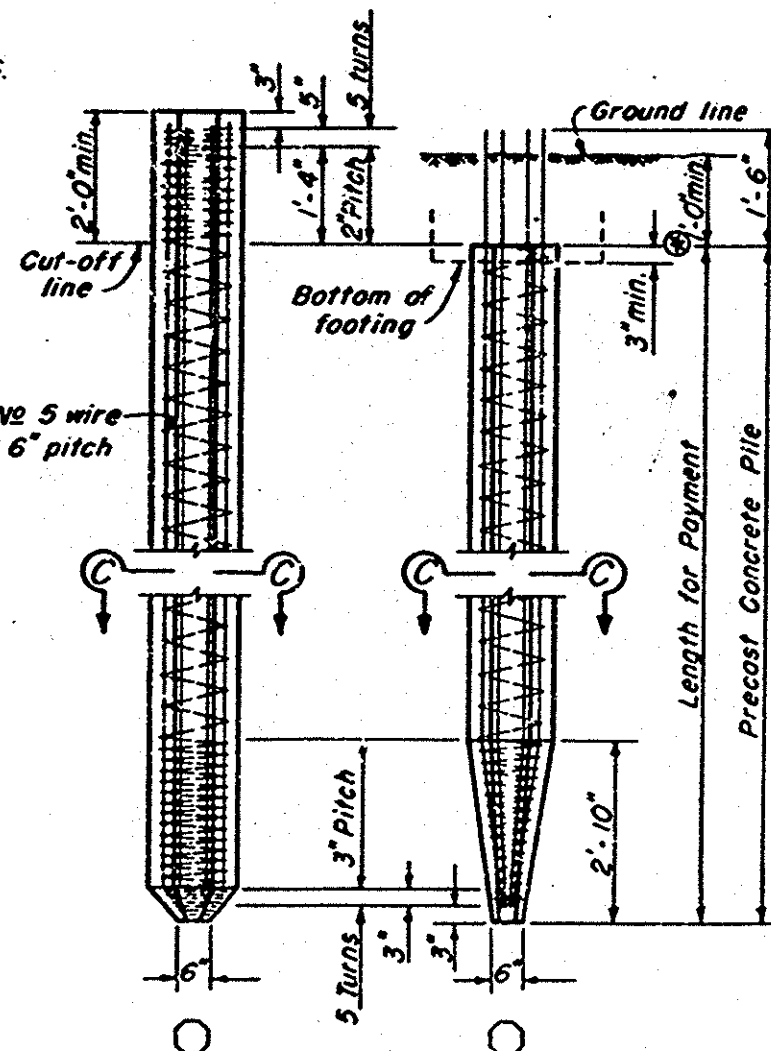
Scale: 3/4" = 1'-0"

Section B-B similar
except as noted.



Longitudinal reinforcement in the driven
portion of Alternative "W" shall be
prestressed to 10,000 lbs. per bar.

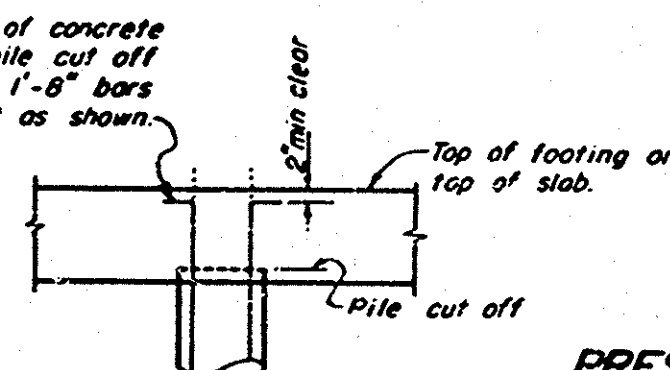
**CAST-IN-PLACE
CONCRETE PILE
ALTERNATIVE "W"**



ALTERNATIVE TIP

**PRECAST
CONCRETE PILE
ALTERNATIVE "X"**

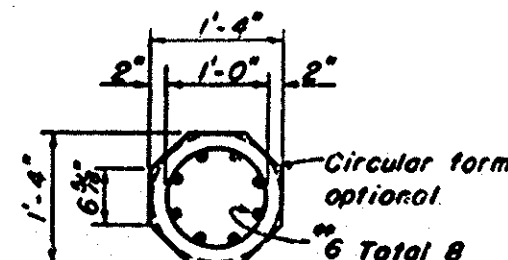
As an alternative to the reinforcement shown this
pile may be prestressed by the use of steel
strands to provide a total remaining force after
losses of not less than 150,000 lbs. At no
time shall the stress in the steel exceed 0.7
of its ultimate value. Place 6-#6 x 8" in top
of prestressed pile to provide for pile extension
or connection to cap or footing.



DETAIL "G"

All steel strand to be prestressed shall be high
tensile cold-drawn stress relieved wire strand, of
a diameter not to exceed 1/2", having an ultimate
tensile strength of not less than 200,000 p.s.i.
and an elongation at rupture of not less than
4% in 24".

PRESTRESSING NOTE



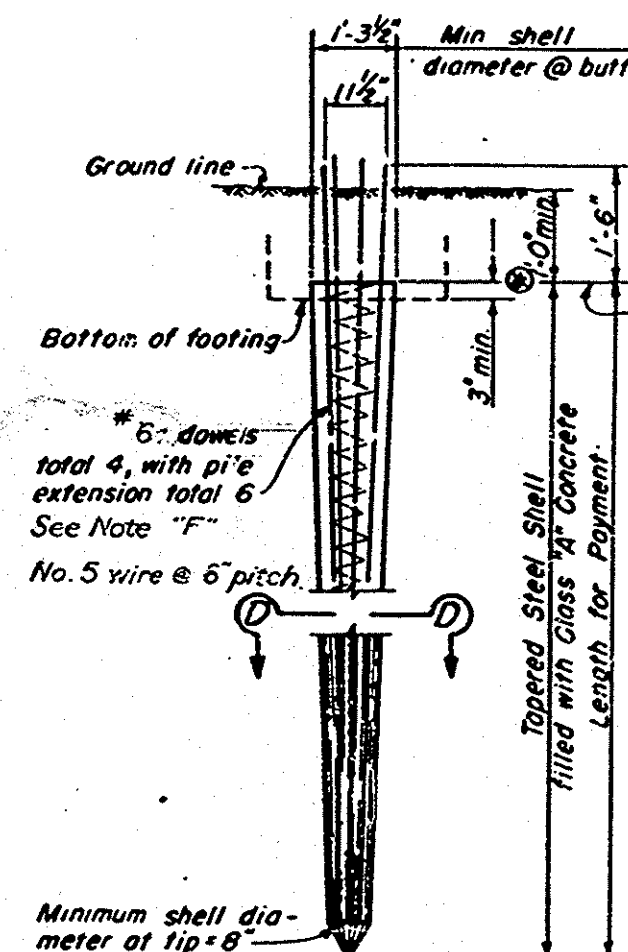
SECTION C-C

Scale: 3/4" = 1'-0"



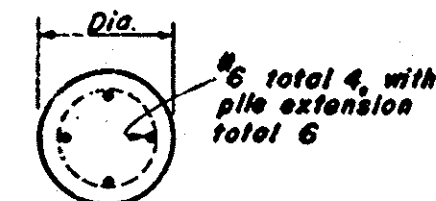
SECTION D-D

Scale: 3/4" = 1'-0"



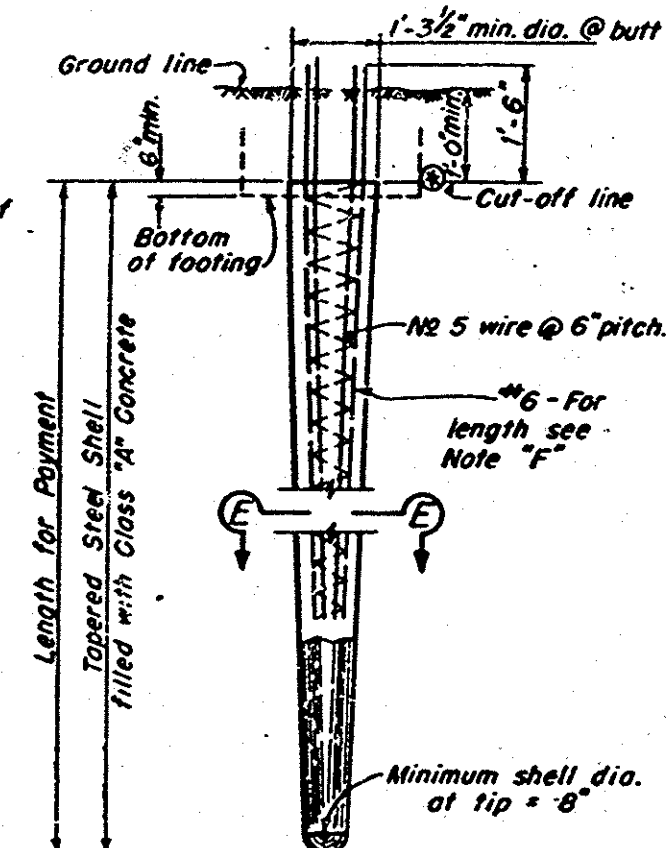
Minimum shell thickness = 9 gage.
Contractor to be responsible for
furnishing shells of sufficient thick-
ness to drive without distortion.

**CAST-IN-PLACE
CONCRETE PILE
ALTERNATIVE "Y"**



SECTION E-E

Scale: 3/4" = 1'-0"



**CAST-IN-PLACE
CONCRETE PILE
ALTERNATIVE "Z"**

PILE NOTES

For Alternatives "W" and "X" the piles may be driven full length and cut off
without extension or they may be extended as shown at the option of the Contractor.
When Alternatives "U", "Y", and "Z" are extended above ground, the Typical Pile Extension
shall be used.

When piles are extended, the bottom of extension shall be located 1'-0"
minimum below ground line, unless shown otherwise on the plans.

Note "F": In Alternatives "Y" and "Z" the length of #6 bars shall be either a
minimum of 1/3 penetration or 12", whichever is the greater. Penetration shall
be measured below the lowest of the following controlling elevations:

1. Bottom of footing.
2. Top of final ground surface.
3. Top of original ground surface, when piles are driven through fills.

4. Maximum depth of scour, 15' below invert.

SA 32 Bridge
P/P Talbert Ave. Bridge
Sheet 11 of 12
Req. Ratio 22.5:1
Scale As Noted
Brownline

MICROFILMED

JUN 18 1962

ORANGE COUNTY HIGHWAY DEPARTMENT

TALBERT AVE. BRIDGE
ACROSS
SANTA ANA RIVER

PILE STANDARDS

SCALE As Noted SHEET 11 OF 12

#14695