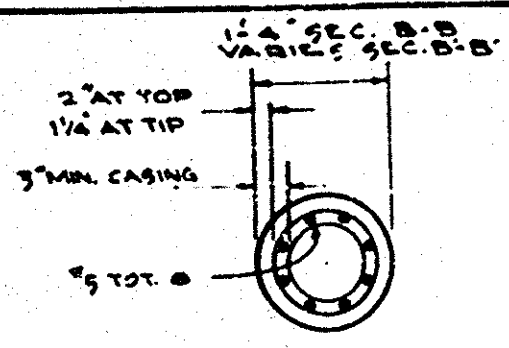
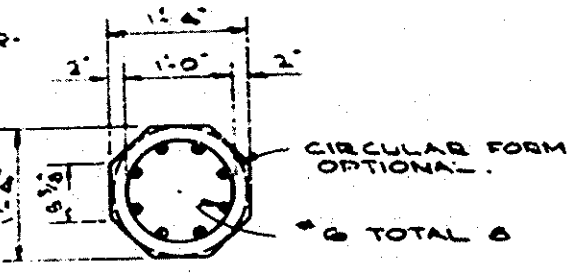


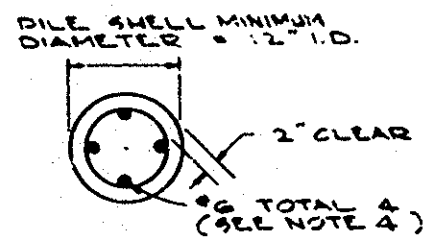


SECTION B-B
SCALE: 3/4" = 1'-0"
SECTION B-B SIMILAR
EXCEPT AS NOTED.

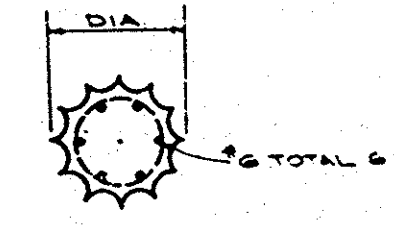
AS AN ALTERNATIVE TO THE REINFORCEMENT SHOWN, ALTERNATIVE "V" LONGITUDINAL REINFORCEMENT MAY CONSIST OF STEEL STRANDS PRESTRESSED TO HAVE A TOTAL REMAINING FORCE AFTER LOSSES OF NOT LESS THAN 1000 LBS. AT NO TIME SHALL THE STRESS IN THE STEEL EXCEED 0.8 OF ITS ULTIMATE VALUE.



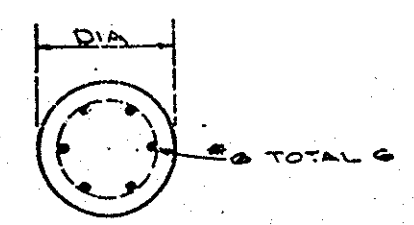
SECTION C-C
SCALE: 3/4" = 1'-0"



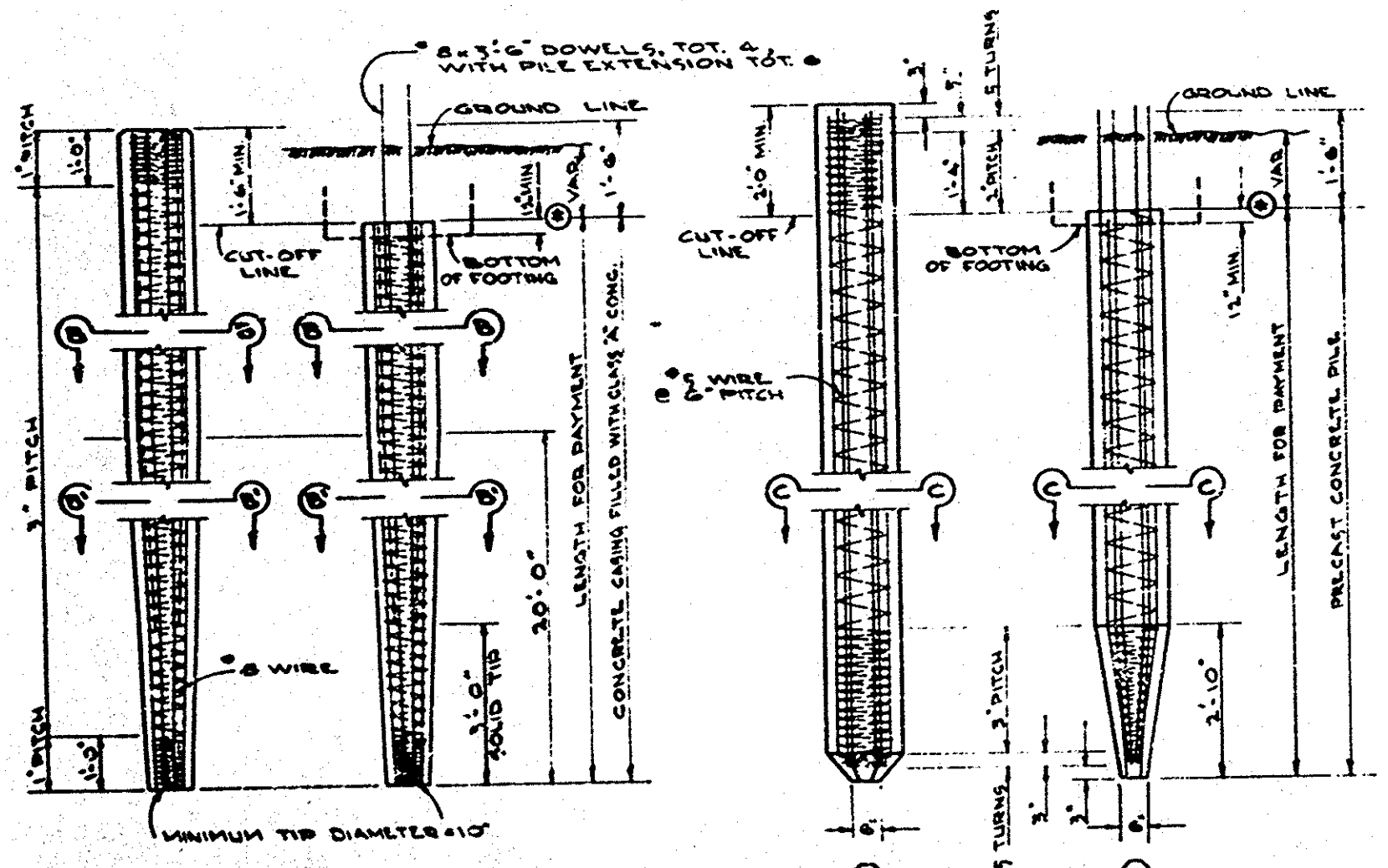
PLAN
SCALE: 3/4" = 1'-0"



SECTION D-D
SCALE: 3/4" = 1'-0"



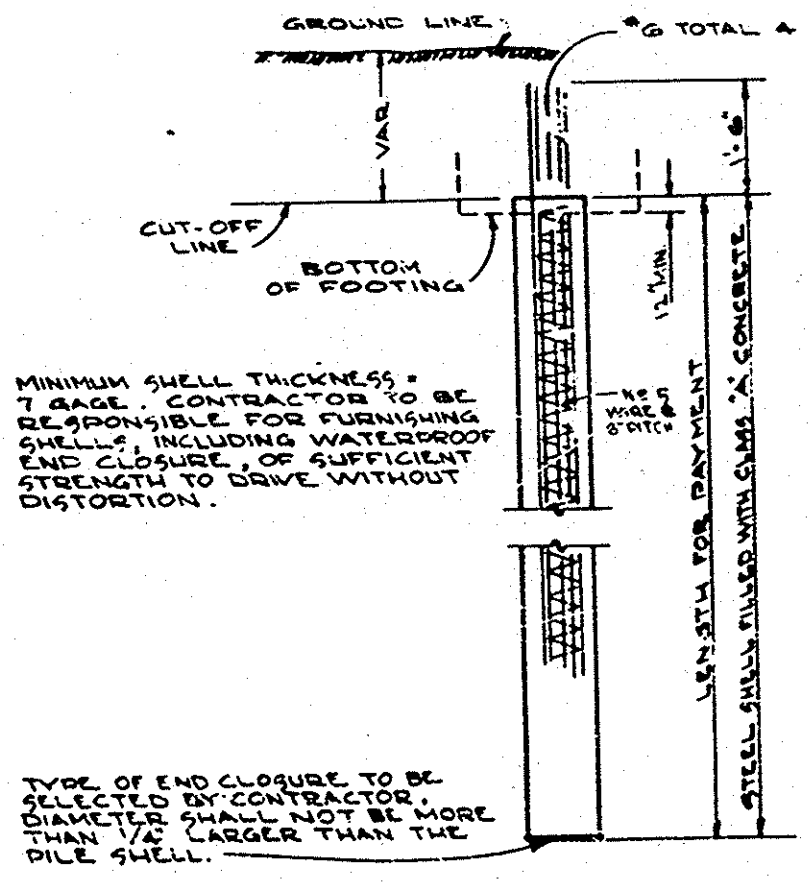
SECTION E-E
SCALE: 3/4" = 1'-0"



LONGITUDINAL REINFORCEMENT IN THE SHOWN PORTION OF ALTERNATIVE "W" SHALL BE PRESTRESSED TO 10,000 LBS. PER BAR.

CENTRIFUGALLY SPUN
CONCRETE PILE
ALTERNATIVE "W"

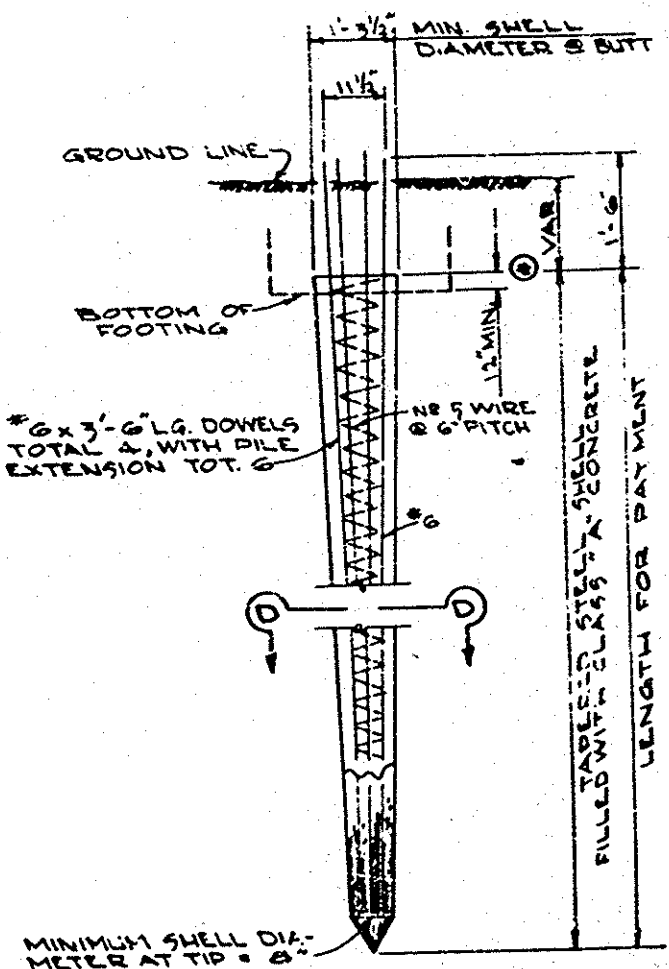
PRECAST
CONCRETE PILE
ALTERNATIVE "X"



TYPE OF END CLOSURE TO BE SELECTED BY CONTRACTOR. DIAMETER SHALL NOT BE MORE THAN 1/8" LARGER THAN THE PILE SHELL.

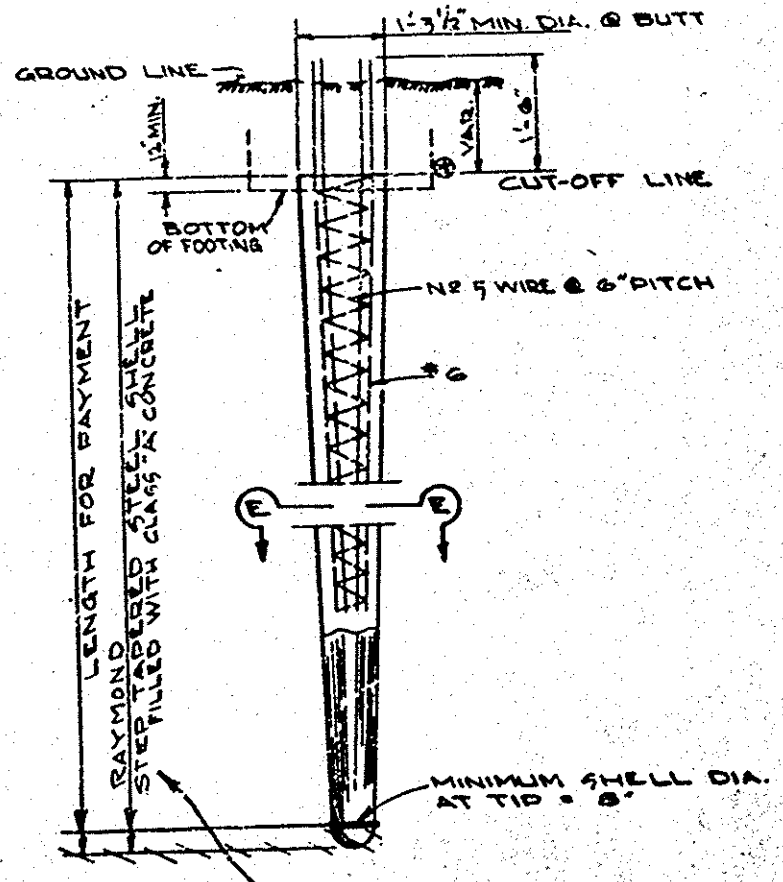
CAST-IN-PLACE
CONCRETE PILE
ALTERNATIVE "U"

EXTENSIONS OF ALTERNATIVE "U" WILL NOT BE PERMITTED ABOVE THE GROUND WITH EITHER THE TYPICAL PILE EXTENSION OR THE 12' PILE SHELL.



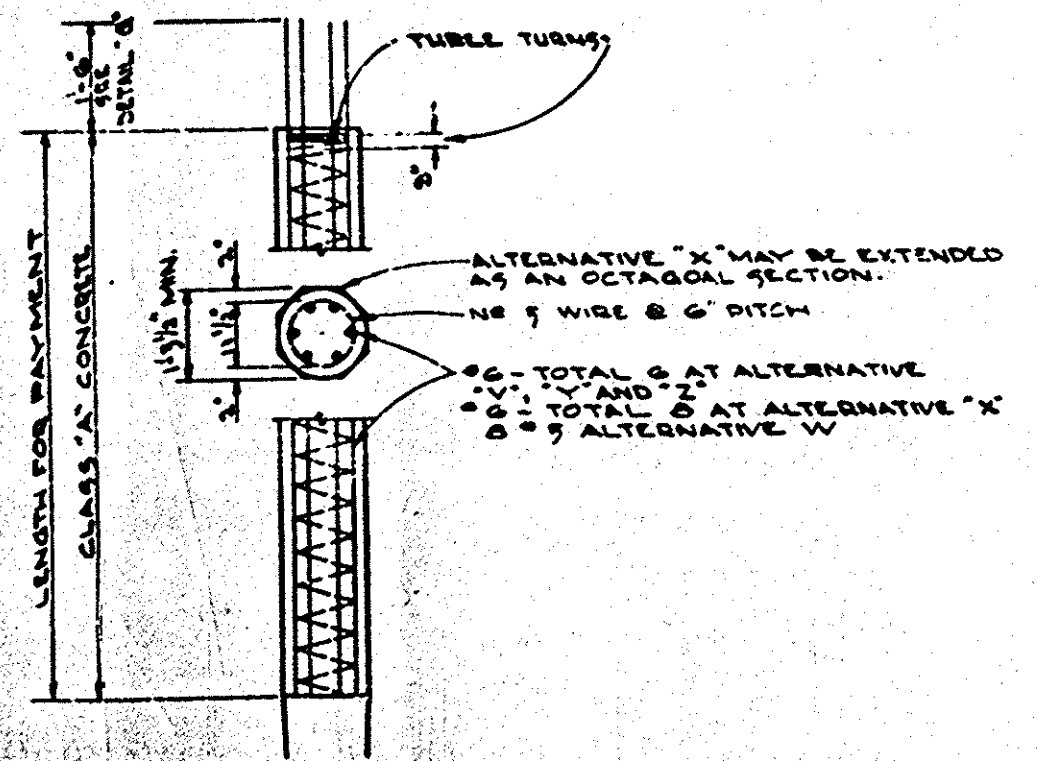
MINIMUM SHELL THICKNESS = 8 GAGE. CONTRACTOR TO BE RESPONSIBLE FOR FURNISHING SHELLS OF SUFFICIENT THICKNESS TO DRIVE WITHOUT DISTORTION.

CAST-IN-PLACE
CONCRETE PILE
ALTERNATIVE "Y"

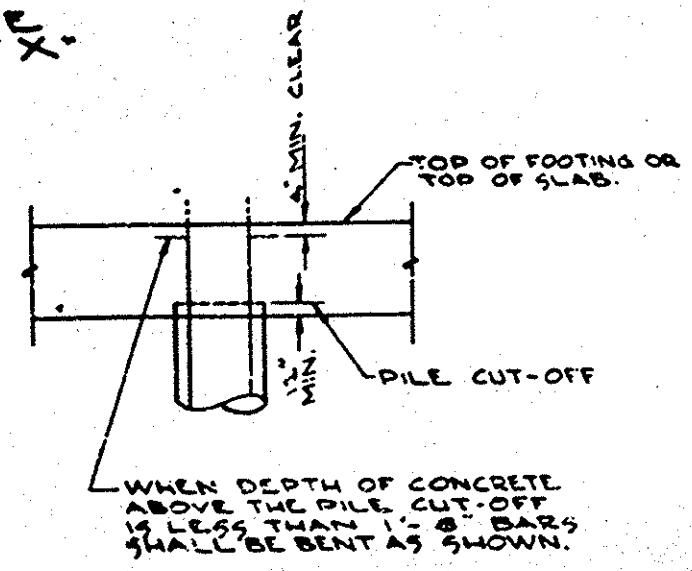


TYPE USED

CAST-IN-PLACE
CONCRETE PILE
ALTERNATIVE "Z"



TYPICAL PILE EXTENSION
TYPICAL EXCEPT FOR ALTERNATIVE "U"



DETAIL "G"

NOTES

1. 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.
2. WHEN ALTERNATIVES "Y" AND "Z" ARE EXTENDED ABOVE GROUND, THE TYPICAL PILE EXTENSION SHALL BE USED.
3. WHEN PILES ARE EXTENDED THE ELEVATION OF CUT-OFF SHALL BE LOCATED 1'-0" MINIMUM BELOW GROUND LINE, UNLESS SHOWN OTHERWISE ON THE PLANS.
4. IN ALTERNATIVE "U" THE LENGTH OF "G" BARS, MEASURED BELOW GROUND LINE OR BOTTOM OF FOOTING, SHALL BE EITHER (1) A MINIMUM OF 1/3 PENETRATION, OR (2) 20', WHICHEVER IS THE GREATER.
5. WHEN THE "TOP OF A BEARING STRATA" IS INDICATED ON THE PLANS, THE LENGTH OF "G" BARS, MEASURED BELOW THE TOP OF THE BEARING STRATA, SHALL BE EITHER (1) A MINIMUM OF 1/3 PENETRATION INTO THIS STRATA OR (2) 12' WHICHEVER IS THE GREATER.

SA-26
Bolsa Ave Bridge-As Built
over Santa Ana River
Sheet 10 of 11
Red 22,511 Scale None
Blackline Print

MICROFILMED
JUN 18 1962

ORANGE COUNTY HIGHWAY DEPARTMENT	
BOLSA AVE BRIDGE ACROSS SANTA ANA RIVER	
PILE DETAIL	
SCALE: AS NOTED	SHEET 10 OF 11