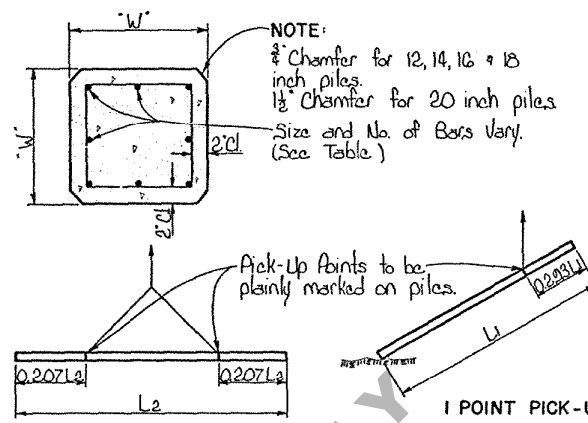
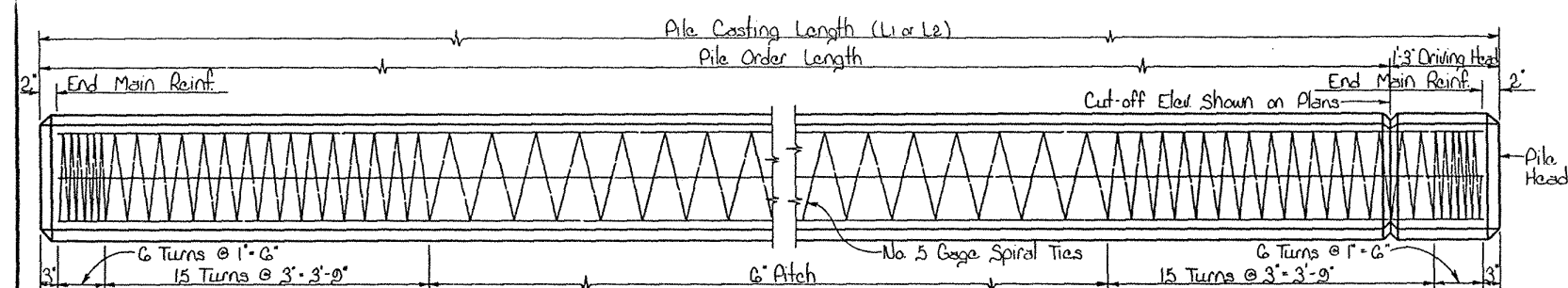
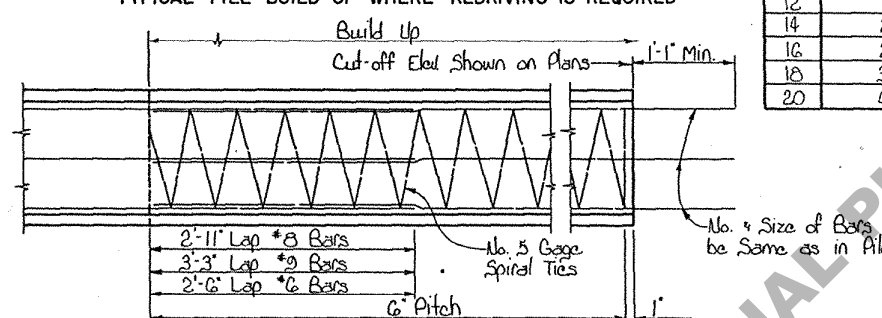
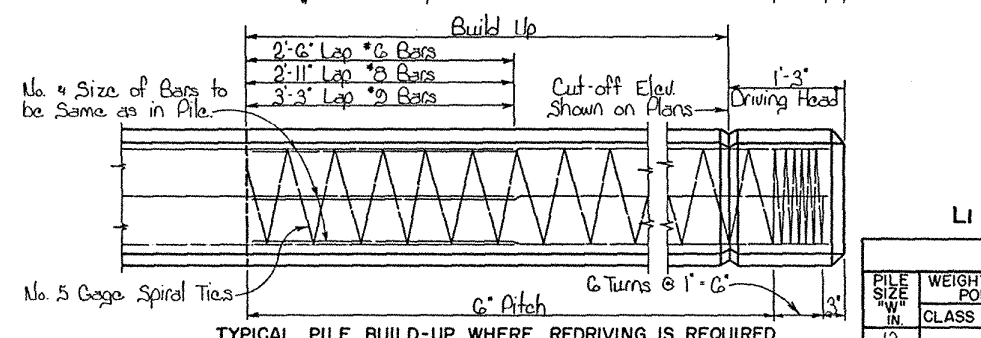




GENERAL NOTES:
PRECAST REINFORCED CONCRETE PILES
Construction Specifications: Latest Approved La. Dept. of Highways Std. Specs.
Design Specifications: A.A.S.H.O. Std. Specs. for Highway Bridges, 1953 as amended to Dec. 31, 1955.
Concrete to be Class 'A'.
Dimensions to Reinforcing Steel are to Bar Faces.
Deformed Reinforcing Steel to be Intermediate or Hard Grade A.S.T.M. A15 or A.S.T.M. A160, or Rail Steel A.S.T.M. A16 and shall conform to A.S.T.M. A305.
Splices of Reinforcement Bars will not be permitted in piles under 40 in. length. One splice per bar will be permitted in piles 40 up to 65 in. length and two splices per bar will be permitted in piles over 65' long. Not more than two bars may be spliced at any Section; only one bar in any face of the pile may be spliced at one Section; the splices shall be not less than 4'-0" on centers, the bars shall be lapped 35 Diameters of each splice, except that corner bars to be spliced shall be butted together in line and spliced with another bar of equal size and not less than 70 Diameters long.
All exposed concrete corners to be chamfered as noted. Pick-up lengths have been computed using values of $f_s = 18,000$ p.s.i. and $f_c = 1200$ p.s.i. with an allowance of 50% for impact, and are based on careful handling. Rotation of pile in the sling is to be prevented until pile is in near vertical position.
Pick-up points for all piles to be clearly marked on pile. The Contractor may use the Reinforced or Prestressed Pile at his option.
No. 5 Gage Spiral Ties may be either cold drawn wire, A.S.T.M. A82 or Intermediate, Structural or Hard Grade A.S.T.M. A15. It will be permissible to substitute 1/4 inch round plain Reinforcement of the same grade and at the same spacing for the No. 5 Gage Spiral Ties.

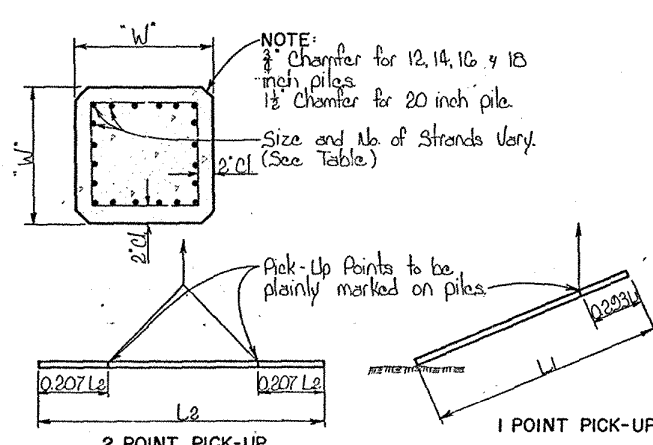
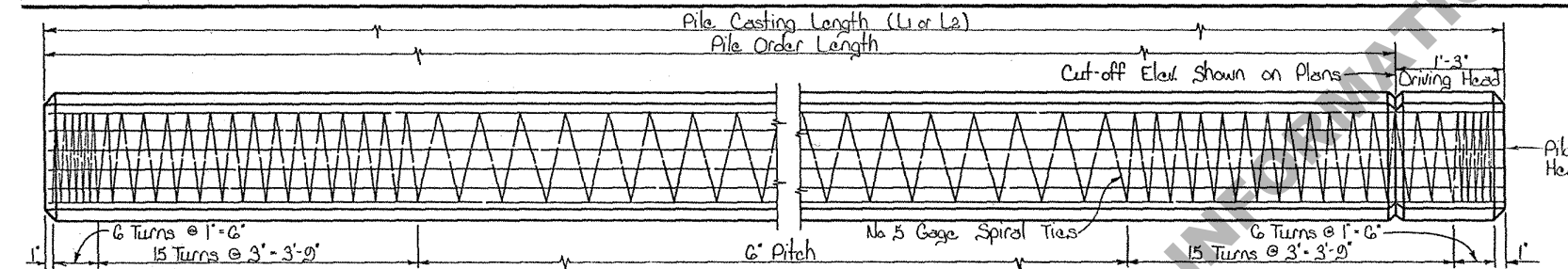
L1 AND L2 = PILE CASTING LENGTHS = ORDER LENGTHS + 1'-3"

TABLE OF PILE ELEMENTS									
PILE SIZE "W" IN.	WEIGHT PER FT. POUNDS	[TRANSF.] SECTION IN. ⁴	KD IN.	SIZE OF REINF.	N° OF BARS EA. FACE	TOTAL N° OF BARS	MAXIMUM PILE CASTING LENGTH		
							1 PT. PICK-UP L1	2 PT. PICK-UP L2	
12	150	476	2.38	*6	2	4	35'-3"	46'-3"	
14	204	1149	3.02	*8	2	4	41'-3"	56'-3"	
16	267	1716	4.00	*9	2	4	41'-3"	61'-3"	
18	338	4298	5.59	*9	3	8	53'-3"	76'-3"	
20	417	6365	6.02	*8	4	12	57'-3"	81'-3"	



TYPICAL PILE BUILD-UP WHERE REDRIVING IS NOT REQUIRED

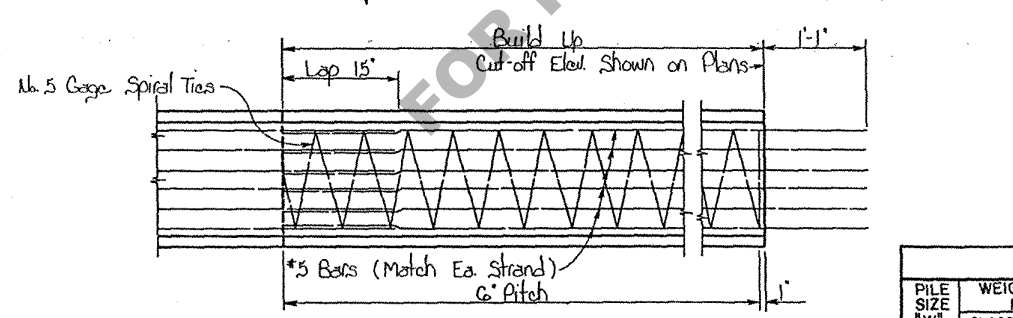
DETAILS OF 12-14-16-18 & 20 INCH SQ. PRECAST REINFORCED CONCRETE PILES



GENERAL NOTES:
PRECAST PRESTRESSED CONCRETE PILES
Construction Specifications: Latest Approved La. Dept. of Highways Std. Specs.
Design Specifications: A.A.S.H.O. Std. Specs. for Highway Bridges, 1953 as amended to Dec. 31, 1955.
Concrete shall be Class 'P' Concrete. Class 'W' Concrete may be substituted for Class 'P' Concrete when specified or by written permission of the Engineer.
Dimensions to Reinforcement are to Bar Faces.
Pre-tensioning Steel shall consist of 7-wire stress relieved cable strands. An initial tensile force of 18,000 pounds shall be applied to each 7/16 strand, 14,000 pounds shall be applied to each 3/8 strand and 10,150 pounds shall be applied to each 1/2 strand.
All Exposed Conc. corners to be chamfered as noted. Pick-up lengths have been computed on basis of no tension in the concrete with an allowance of 50% for impact and are based on careful handling. Rotation of pile in the sling is to be prevented until pile is in near vertical position.
Pick-up points for all piles to be clearly marked on pile. Piles may be made at a Central Plant and transported to the bridge site in trucks. The Contractor may use the Reinforced or Prestressed Pile at his option. No. 5 Gage Spiral Ties may be either cold drawn wire, A.S.T.M. A82 or Intermediate, Structural or Hard Grade A.S.T.M. A15. It will be permissible to substitute 1/4 inch round plain reinforcement of the same grade, and at the same spacing for the No. 5 Gage Spiral Ties.

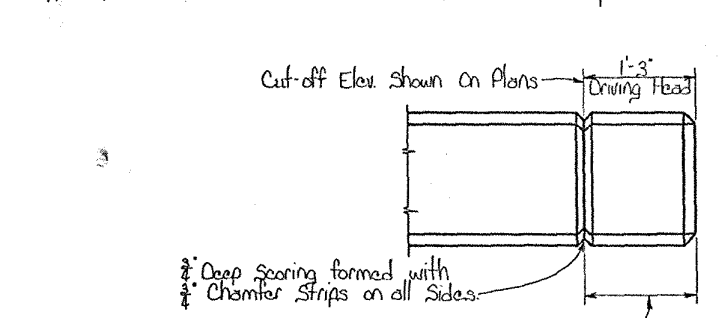
L1 AND L2 = PILE CASTING LENGTHS = ORDER LENGTHS + 1'-3"

TABLE OF PILE ELEMENTS									
PILE SIZE "W" IN.	WEIGHT PER FT. POUNDS	SECTION MODULUS IN. ³	SIZE OF STRANDS	N° OF STRANDS EA. FACE	TOTAL N° OF STRANDS	MAXIMUM PILE CASTING LENGTH			
						1 PT. PICK-UP L1	2 PT. PICK-UP L2		
12	150	100	288	3/8	3	35'-3"	46'-3"		
14	204	136	457	3/8	4	41'-3"	56'-3"		
16	267	178	683	3/8	5	41'-3"	61'-3"		
18	338	225	972	3/8	6	53'-3"	76'-3"		
20	417	278	1333	7/16	8	57'-3"	81'-3"		



TYPICAL PILE BUILD-UP WHERE REDRIVING IS NOT REQUIRED

DETAILS OF 12-14-16-18 & 20 INCH SQ. PRECAST PRESTRESSED CONCRETE PILES



NOTE:
Order Length furnished by the Engineer will not include the 1'-3" Driving Head, and no direct payment will be made for the Driving Head, nor will the Driving Head be included in measurement of cut-off.

STANDARD PLAN 12-14-16-18 & 20 INCH PRECAST CONCRETE PILES (REINFORCED OR PRESTRESSED)		
DATED: Sept. 5, 1957		
STATE OF LOUISIANA DEPARTMENT OF HIGHWAYS		
DESIGNED By: [Signature]	DETAILED By: [Signature]	TRACED By: [Signature]
CHECKED By: [Signature]	CHECKED By: [Signature]	CHECKED By: [Signature]
BRIDGE DESIGN SECTION		

REVISIONS			
1-6-66	General Notes	1-11-61	12" R.C. Pile Added & 12" Prest. Pile Str. Size Chgd
5-19-65	Reinforce and Eliminate Class 'V' Conc.	7-10-59	Gen. Notes & R.C. Size 16 Pile
10-2-61	No. 5 Gage Spiral Ties	8-1-61	20-31 Pile Wts for Light Wt. Conc.
3-9-61	4" Spiral Specifications	4-1-61	Revised Chamfer Size
1-13-61	Reinforced	1-13-61	20" P.C. Pile Added
1-11-61	12" R.C. Pile Added & 12" Prest. Pile Str. Size Chgd	1-13-61	General Notes Revised
10-21-57	Notes Regarding Order & Casting Laths & Diagrams	1-13-61	
DATE	DESCRIPTION	BY	