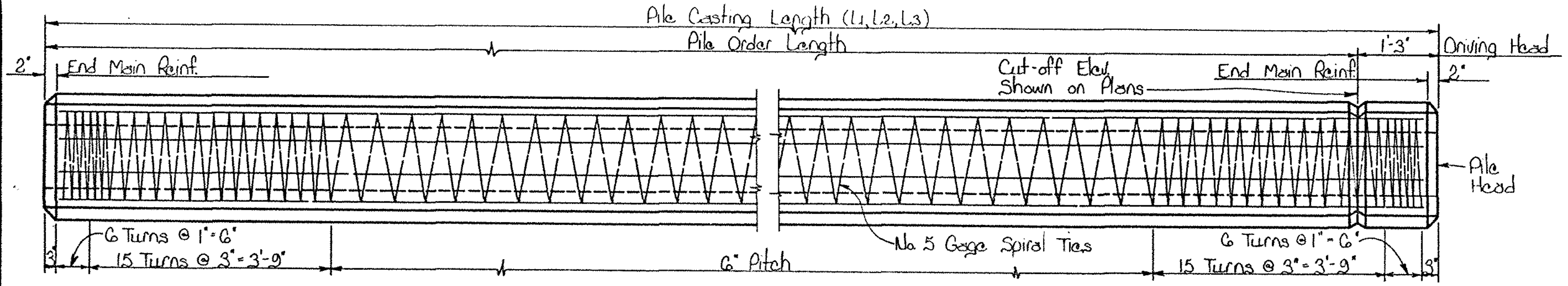
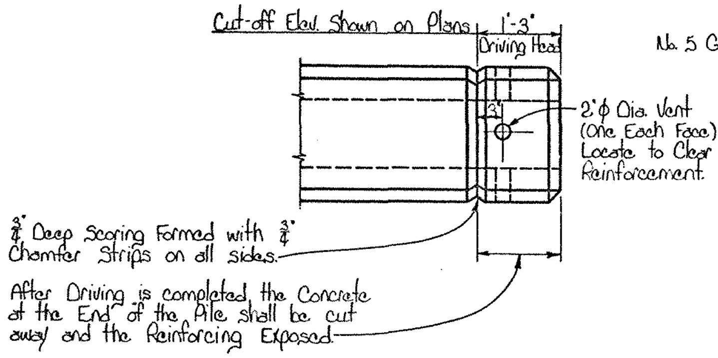
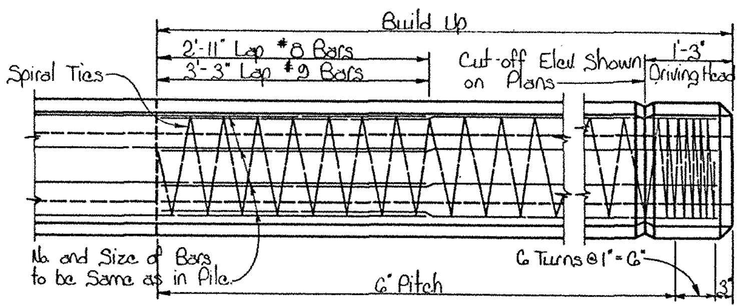
	STATE PROJECT	PARISH	SHEET NO.



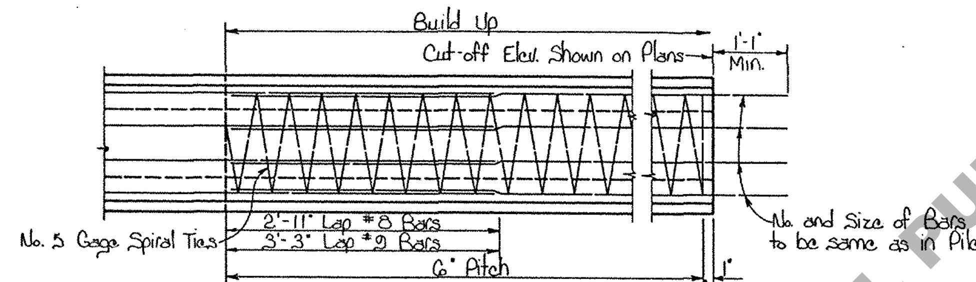


DETAIL OF PILE HEAD

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.

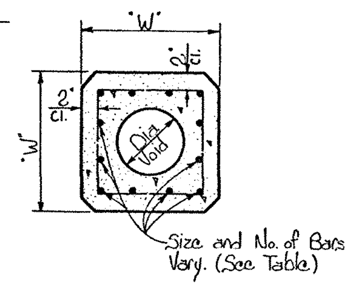


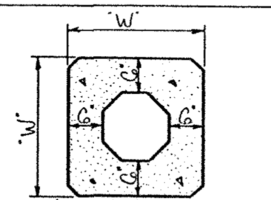
TYPICAL PILE BUILD-UP WHERE REDRIVING IS REQUIRED



TYPICAL PILE BUILD-UP WHERE REDRIVING IS NOT REQUIRED

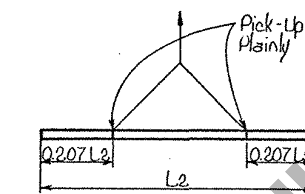
DETAILS OF 24,30 & 36 INCH SQ. PRECAST REINFORCED CONCRETE PILES



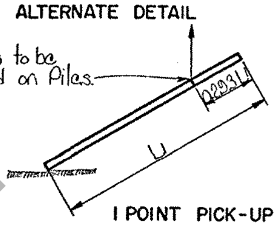


Octagonal Void may be used at Manufacturers option. (Pile Reinforcement same as Detailed for Circular Void.)

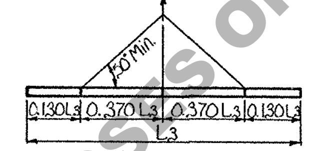
ALTERNATE DETAIL



2 POINT PICK-UP



1 POINT PICK-UP



3 POINT PICK-UP

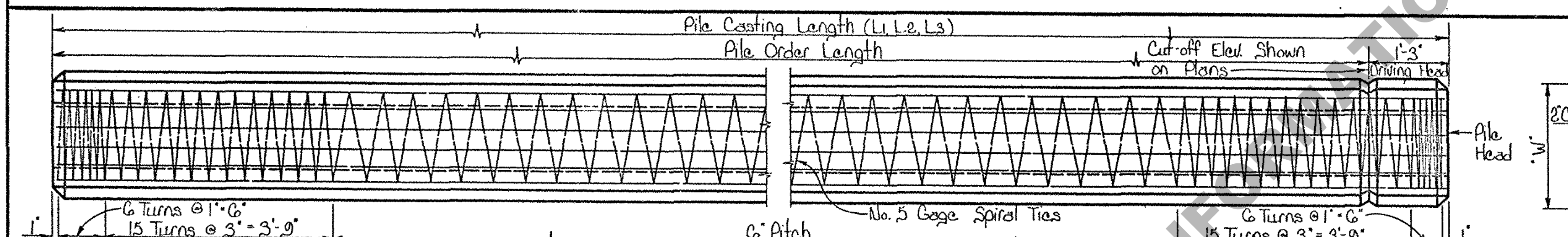
NOTE:
L1, L2, L3 = Pile Casting Lengths = Order Lengths + 1'-3"

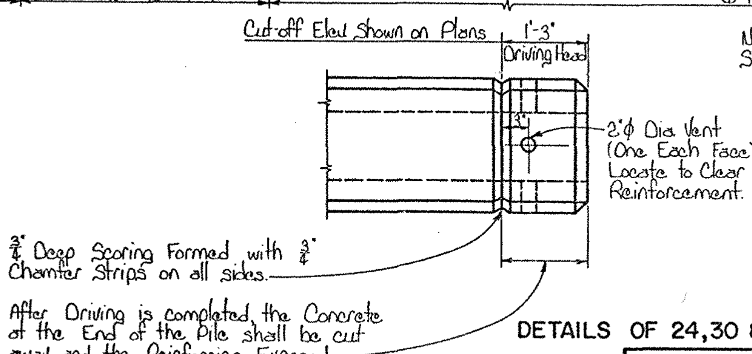
GENERAL NOTES:
PRECAST REINFORCED CONCRETE PILES

Construction Specifications: Latest Approved La. Dept. of Highways Std. Specs.
Design Specifications: A.A.S.H.O. Std. Specs. for Highway Bridges 1957 as amended to Dec. 31, 1958
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 Rail Steel A.S.T.M. A16 and shall conform to A.S.T.M. A 305.
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 at each splice, except that Corner Bars to be spliced shall be butted together in line and spliced with another Bar of Equal Size not less than 70 Diameters long.
All Exposed Concrete Corners to have 1½" Chamfer.
Pick-up Lengths have been computed using values of fs = 18,000 p.s.i. and fc = 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 ¼" round plain reinforcement of the same grade and at the same spacing for the No. 5 Gage Spiral Ties.

TABLE OF PILE ELEMENTS

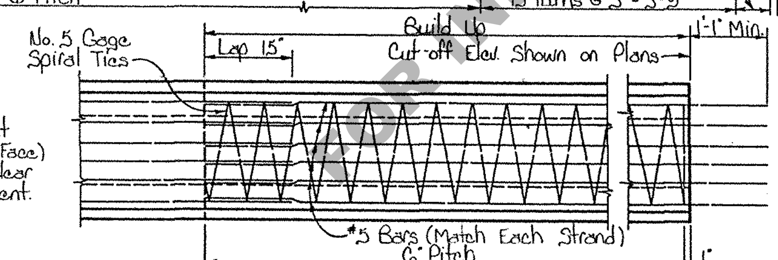
PILE SIZE W	VOID DIA.	CLASS OF CONC.	TYPE OF AGGREGATE	PILE WT. PER FT. (LBS)	SIZE OF REINF.	Nº OF BARS EA. FACE	TOTAL Nº OF BARS	MAXIMUM PILE LENGTHS 1 PT. PICK-UP L1 (FT.)	2 PT. PICK-UP L2 (FT.)	3 PT. PICK-UP L3 (FT.)
24"	12"	A	Sand & Gravel	483	#9	4	12	56'-3"	81'-3"	101'-3"
30"	18.70	A	Sand & Gravel	675	#8	5	16	61'-3"	86'-3"	121'-3"
36"	24.85	A	Sand & Gravel	879	#8	6	20	66'-3"	96'-3"	121'-3"





DETAIL OF PILE HEAD

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.

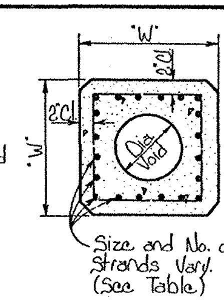


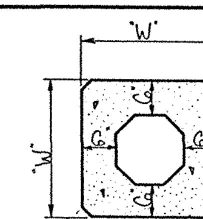
TYPICAL PILE BUILD-UP WHERE REDRIVING IS NOT REQUIRED

DETAILS OF 24,30 & 36 INCH SQ. PRECAST PRESTRESSED CONCRETE PILES

TABLE OF PILE ELEMENTS

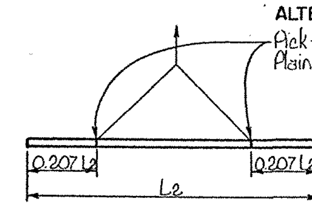
PILE SIZE W	VOID DIA.	CLASS OF CONC.	TYPE OF AGGREGATE	PILE WT. PER FT. (LBS)	SIZE OF STRANDS	Nº OF STRANDS EA. FACE	TOTAL Nº OF STRANDS	MAXIMUM PILE LENGTHS 1 PT. PICK-UP L1 (FT.)	2 PT. PICK-UP L2 (FT.)	3 PT. PICK-UP L3 (FT.)
24"	12"	P	Sand & Gravel	483	7/16	6	20	56'-3"	81'-3"	101'-3"
24"	12"	W	Lt. Wt. Aggregate	322	7/16	6	20	71'-3"	96'-3"	126'-3"
30"	18.70	P	Sand & Gravel	675	7/16	9	32	61'-3"	86'-3"	121'-3"
30"	18.70	W	Lt. Wt. Aggregate	450	7/16	9	32	76'-3"	106'-3"	136'-3"
36"	24.85	P	Sand & Gravel	879	7/16	11	40	66'-3"	96'-3"	121'-3"
36"	24.85	W	Lt. Wt. Aggregate	583	7/16	11	40	81'-3"	116'-3"	151'-3"



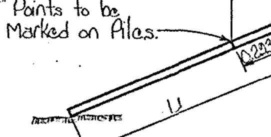


Octagonal Void may be used at Manufacturers Option. (Pile Reinforcement same as Detailed for Circular Void.)

ALTERNATE DETAIL



2 POINT PICK-UP



1 POINT PICK-UP

3 POINT PICK-UP

NOTE:
L1, L2, L3 = Pile Casting Lengths = Order Lengths + 1'-3"

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 1957 as amended to Dec. 31, 1958.
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 18,900 Lbs. shall be applied to each 7/16" Strand.
All Exposed Concrete Corners to have 1½" Chamfer.
Pick-up lengths have been computed on basis of no tension in the concrete with 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 Intermediate, Structural or Hard Grade A.S.T.M. A15.
It will be permissible to substitute ¼" round plain Reinforcement of the same grade and at the same spacing for the No. 5 Gage Spiral Ties.

REVISIONS

DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY
5-27-65	Eliminate Class "V" Conc.	RGG/C.O.	7-10-59	Added Sand & Gravel Aggr.	L.O./S.L.P.
10-2-61	No. 5 Gage Spiral Ties	S.L.P./E.C.	9-15-58	Octagonal Void Added	L.O./S.L.P.
8-9-61	¼"ϕ Spiral Specifications	W.P./R.M.	9-5-58	Vent Holes Added	L.O./S.L.P.
5-23-61	Retraced	RGW/E.H.	11-26-57	General Notes Revised	L.O./S.L.P.
8-6-59	Class of Concrete & Prestressed Piles	L.O./S.L.P.			
5-27-65	Retraced	AG/C.O.			

PILES

STANDARD PLAN
24-30 AND 36 INCH PRECAST CONCRETE PILES (REINFORCED OR PRESTRESSED)
DATED Oct. 7, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED S.L.P.	DETAILED Acevedo	TRACED C. Dendy
CHECKED McCraney	CHECKED S.L.P.	CHECKED [illegible]

BRIDGE DESIGN SECTION

C.S. 171

FOR INFORMATIONAL PURPOSES ONLY