



END BENTS - SPANS 20 FT TO 26 FT																			
20 FT. SPAN				22 FT. SPAN				24 FT. SPAN				26 FT. SPAN							
BAR	NO.	SIZE	UNIT LENGTH	UNIT TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	UNIT TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	UNIT TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	UNIT TOTAL LENGTH
S	40	1/2"	6'-6"	408'-0"	S	48	1/2"	6'-6"	408'-0"	S	48	1/2"	6'-6"	408'-0"	S	40	1/2"	6'-6"	408'-0"
V	20	1/2"	3'-5"	68'-0"	V	20	1/2"	3'-6"	70'-0"	V	20	1/2"	3'-7"	71'-0"	V	20	1/2"	3'-8"	73'-0"
W	8	1/2"	4'-0"	32'-0"	W	8	1/2"	4'-0"	32'-0"	W	8	1/2"	4'-0"	32'-0"	W	8	1/2"	4'-0"	32'-0"
Y	18	1/2"	3'-5"	63'-0"	Y	18	1/2"	3'-6"	63'-0"	Y	18	1/2"	3'-6"	63'-0"	Y	18	1/2"	3'-6"	63'-0"
Total 1/2" Bars				5 Pile Bent = 571'-4"-382"	Total 1/2" Bars				5 Pile Bent = 573'-0"-383"	Total 1/2" Bars				5 Pile Bent = 574'-9"-384"	Total 1/2" Bars				5 Pile Bent = 575'-4"-385"
A	10	1 1/2"	43'-8"	436'-8"	A	10	1 1/2"	43'-8"	436'-8"	A	10	1 1/2"	43'-8"	436'-8"	A	10	1 1/2"	43'-8"	436'-8"
Total 1 1/2" Bars				5 Pile Bent = 436'-8"-1872"	Total 1 1/2" Bars				5 Pile Bent = 436'-8"-1872"	Total 1 1/2" Bars				5 Pile Bent = 436'-8"-1873"	Total 1 1/2" Bars				5 Pile Bent = 436'-8"-1874"
Total 1" Bars				5 Pile Bent = 436'-8"-1872"	Total 1" Bars				5 Pile Bent = 436'-8"-1872"	Total 1" Bars				5 Pile Bent = 436'-8"-1873"	Total 1" Bars				5 Pile Bent = 436'-8"-1874"
5 Pile Bent				Class A Conc. = 8.55 Cu. Yds.	5 Pile Bent				Class A Conc. = 8.58 Cu. Yds.	5 Pile Bent				Class A Conc. = 8.61 Cu. Yds.	5 Pile Bent				Class A Conc. = 8.63 Cu. Yds.
5 Pile Bent				Rein. Steel = 2262 #	5 Pile Bent				Rein. Steel = 2262 #	5 Pile Bent				Rein. Steel = 2263 #	5 Pile Bent				Rein. Steel = 2264 #
5 Pile Bent				Rein. Steel = 1808 #	5 Pile Bent				Rein. Steel = 1808 #	5 Pile Bent				Rein. Steel = 1808 #	5 Pile Bent				Rein. Steel = 1808 #

SPAN	Y
20'	1'-9 1/4"
22'	1'-10 1/2"
24'	1'-11 1/4"
26'	2'-0 1/4"

INTERMEDIATE BENTS					
BAR	SIZE	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
4 PILE BENT					
S	1/2"	26	8'-6"	221'-0"	Hoops in Cap.
X	1/2"	36	3'-6"	126'-0"	Btm. Dowels.
Total 1/2" Bars = 347'-0"					232 Lbs.
A	1"	10	31'-2"	311'-8"	Cap.
Total 1" Bars = 311'-8"					1060 Lbs.
Class A Conc. = 5.07 Cu. Yds.					
Rein. Steel = 1292 Lbs.					
5 PILE BENT					
S	1/2"	26	8'-6"	221'-0"	Hoops in Cap.
X	1/2"	36	3'-6"	126'-0"	Btm. Dowels.
Total 1/2" Bars = 347'-0"					232 Lbs.
A	1"	10	31'-2"	311'-8"	Cap.
Total 1" Bars = 311'-8"					1060 Lbs.
Class A Conc. = 5.07 Cu. Yds.					
Rein. Steel = 1292 Lbs.					
6 PILE BENT					
S	1/2"	22	8'-6"	187'-0"	Hoops in Cap.
X	1/2"	36	3'-6"	126'-0"	Btm. Dowels.
Total 1/2" Bars = 313'-0"					209 Lbs.
A	1"	10	31'-2"	311'-8"	Cap.
Total 1" Bars = 311'-8"					1060 Lbs.
Class A Conc. = 5.04 Cu. Yds.					
Rein. Steel = 1269 Lbs.					

DESIGN LOAD - NUMBER AND SIZE OF PILES					
SPAN STD.	TOTAL DESIGN LOAD IN TONS	END BENT		INTERMEDIATE BENT	
		MIN. SIZE & NO. OF PILES	AV. PILE LOAD IN TONS	MIN. SIZE & NO. OF PILES	AV. PILE LOAD IN TONS
20'	129.2	14" - 5 @ 25.8 TONS 16" - 5 @ 25.8 TONS		14" - 5 @ 25.8 TONS 16" - 5 @ 27.8 TONS	139.1
22'	139.1	14" - 5 @ 27.8 TONS 16" - 5 @ 29.6 TONS		14" - 5 @ 27.8 TONS 16" - 5 @ 29.6 TONS	148.0
24'	148.0	14" - 5 @ 29.6 TONS 16" - 5 @ 31.4 TONS		14" - 6 @ 26.2 TONS 16" - 5 @ 31.4 TONS	157.1
26'	157.1	14" - 5 @ 31.4 TONS		14" - 6 @ 26.2 TONS 16" - 5 @ 31.4 TONS	157.1

Max. Allowable Loads Unless Otherwise Indicated By Bridge Design Cons.
 14" A.C. Piles = 30 Tons Per Pile.
 16" A.C. Piles = 34 Tons Per Pile.
 18" A.C. Piles = 39 Tons Per Pile.

** To provide for future extension of bridge, the End Bents are designed for same load as Intermediate Bents.

GENERAL NOTES:
 Construction Specs. Latest Approved La. Hwy. Dept. Std. Specs.
 Design Specifications - AASHTO, 1941.
 Live Load - H20S16.
 All concrete to be Class A.
 All dimensions to reinforcing steel are to bar centers.
 Quantities computed assuming use of 16" piling.
 Cost of expansion material to be included in price bid for other items.

STANDARD PLAN
REINFORCED CONCRETE PILE BENTS
 FOR R.C.D.G. SPANS-H20S16 LOADING
 30'-0" CLEAR ROADWAY-1'6" SIDEWALKS
 20 FT. TO 26 FT. SPANS
 DATED January, 1945 TO BE USED WITH STD. PLAN C-17-20

STATE OF LOUISIANA
 DEPARTMENT OF HIGHWAYS

DESIGNED	Husy	DATE	1/11/45
CHECKED	R. G. G. G.	DESCRIPTION	Rein. Steel
IN CHARGE OF	Dalbow	BY	J. E. T.

NO.	DESCRIPTION	DATE
1-5-45	Reinforcing Max. Allowable Loading	7/24/45
6-22-48	Reference to pile lengths omitted, C.H.	
Jan. 26	Gen. Notes & Std. Plan	