

PILE BENT NOTES:

THESE PIER BENTS ARE DESIGNED FOR USE WITH STANDARD H44-07 PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

PIER PILES ARE TO BE DRIVEN TO THE DESIGN BEARING VALUE W/O IMPACT.

FOR DETAILS OF TRESTLE PILES, TYPES 1, 2 AND 3, SEE STANDARD P10A.

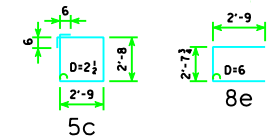
DETAILS SHOWN FOR CONCRETE PILES. FOR ORIENTATION OF STEEL PILES, SEE STANDARD P10A.

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	SHAPE	10 PILE BENT	11 PILE BENT	12 PILE BENT	13 PILE BENT	14 PILE BENT	15 PILE BENT	16 PILE BENT	17 PILE BENT
9a		6 46'-8 952	6 46'-8 952	6 46'-8 952	6 46'-8 952	6 46'-8 952	6 46'-8 952	4 46'-8 635	4 46'-8 635
8b		8 46'-8 997	8 46'-8 997	8 46'-8 997	8 46'-8 997	8 46'-8 997	8 46'-8 997	8 46'-8 997	8 46'-8 997
5c		38 11'-10 469	42 11'-10 518	35 11'-10 432	50 11'-10 617	54 11'-10 666	44 11'-10 543	32 11'-10 395	34 11'-10 420
8e		4 8'-2 87	4 8'-2 87	4 8'-2 87	4 8'-2 87	4 8'-2 87	4 8'-2 87	4 8'-2 87	4 8'-2 87
④ REINFORCING STEEL (LB.)		2505	2554	2468	2653	2702	2579	2114	2139
② PILE TYPE									
STRUCTURAL ②	1, 2	-----	-----	16.8	16.8	16.7	16.7	16.6	16.6
CONCRETE (CY)	3	17.4	17.4	17.4	17.4	17.4	17.4	-----	-----

BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

C-C ABUTMENT BEARING	FRICTION BEARING PILING				FRICTION OR POINT BEARING PILING			
	P10A TYPE 1 OR 2				P10A TYPE 3			
	NUMBER OF TRESTLE PILES AND SPACING	① "K" (INCHES)	DES. PILE BRG.(TONS) W/O IMPACT	DES. PILE BRG.(TONS) W/O IMPACT	NUMBER OF TRESTLE PILES AND SPACING	① "K" (INCHES)	DES. PILE BRG.(TONS) W/O IMPACT	DES. PILE BRG.(TONS) W/O IMPACT
138'-10	14 PILES @ 3'-4 1/2 CTRS.	14	30	28	10 PILES @ 4'-10 1/2 CTRS.	16	42	39
	12 PILES @ 4'-0 CTRS.	16	35	33	10 PILES @ 4'-10 1/2 CTRS.	18	42	39
151'-4	15 PILES @ 3'-1 1/2 CTRS.	14	30	27	10 PILES @ 4'-10 1/2 CTRS.	16	44	41
	13 PILES @ 3'-8 CTRS.	16	34	32	10 PILES @ 4'-10 1/2 CTRS.	18	44	41
163'-10	16 PILES @ 2'-11 CTRS.	14	30	28	10 PILES @ 4'-10 1/2 CTRS.	16	48	45
	14 PILES @ 3'-4 1/2 CTRS.	16	34	32	11 PILES @ 4'-4 1/2 CTRS.	18	44	41
176'-4	17 PILES @ 2'-9 CTRS.	14	30	28	11 PILES @ 4'-4 1/2 CTRS.	16	46	43
	14 PILES @ 3'-4 1/2 CTRS.	16	36	34	11 PILES @ 4'-4 1/2 CTRS.	18	46	43
188'-10	16 PILES @ 2'-11 CTRS.	14	33	31	11 PILES @ 4'-4 1/2 CTRS.	16	48	45
	15 PILES @ 3'-1 1/2 CTRS.	16	36	33	12 PILES @ 4'-0 CTRS.	18	44	42
201'-4	17 PILES @ 2'-9 CTRS.	16	36	34	13 PILES @ 3'-8 CTRS.	16	47	44
					14 PILES @ 3'-4 1/2 CTRS.	18	44	41
213'-10	17 PILES @ 2'-9 CTRS.	16	38	36	13 PILES @ 3'-8 CTRS.	16	49	46
					14 PILES @ 3'-4 1/2 CTRS.	18	46	43
226'-4	-----	--	--	--	14 PILES @ 3'-4 1/2 CTRS.	16	48	45
					15 PILES @ 3'-1 1/2 CTRS.	18	44	42
243'-0	-----	--	--	--	14 PILES @ 3'-4 1/2 CTRS.	16	50	47
					15 PILES @ 3'-1 1/2 CTRS.	18	46	44

① SEE STANDARD P10A FOR "K" DIMENSION.

② CONCRETE QUANTITIES SHOWN HAVE HAD THE VOLUME OF EMBEDDED PILES DEDUCTED FOR TYPES 1 AND 2 BASED ON 0.8 FT³ PER FOOT OF EMBEDMENT. THE CONCRETE QUANTITIES FOR TYPE 3 PILES DO NOT REQUIRE REDUCTION FOR PILE EMBEDMENT.

③ FOR ESTIMATING PILE LENGTHS AND FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.

④ SEE SHEET H44-17-07 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

* TYPE 2 ONLY.

LATEST REVISION DATE	<i>Thomas E. McQuinn</i> APPROVED BY BRIDGE ENGINEER		
		STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE	
		PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES HL93 SUPERSTRUCTURE MARCH, 2007 HS25 SUBSTRUCTURE	
PILE BENT DETAILS 15° SKEW		H44-41-07	