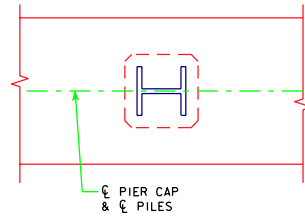


PILE BENT NOTES:

THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

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

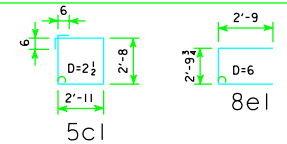
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.



PILE ORIENTATION DETAIL FOR
TYPE 3 TRESTLE BENT PILES

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT														
BAR	LENGTH	SHAPE	10 PILE BENT		12 PILE BENT		14 PILE BENT		16 PILE BENT		18 PILE BENT		19 PILE BENT	
			NO.	LENGTH/WEIGHT	NO.	LENGTH/WEIGHT	NO.	LENGTH/WEIGHT	NO.	LENGTH/WEIGHT	NO.	LENGTH/WEIGHT	NO.	LENGTH/WEIGHT
a1	51'-8"		8	9 1405	8	9 1405	8	1405	6	9 1054	6	9 1054	6	9 1054
a2	51'-8"		4	8 552	4	8 552	4	8 552	4	8 552	4	8 552	4	8 552
b1	51'-8"		4	9 703	4	9 703	4	9 703	4	9 703	4	8 552	4	8 552
5c1	12'-2"		47	5 596	46	5 584	67	5 850	62	5 787	53	5 673	56	5 711
8e1	8'-4"		4	8 89	4	8 89	4	8 89	4	8 89	4	8 89	4	8 89
REINFORCING STEEL (LB.)			3345		3333		3599		3185		2920		2958	
STRUCTURAL CONCRETE (CY)	② PILE TYPE													
	1, 2		-----		19.8		19.7		19.7		19.6		19.5	
	3		20.4		20.4		20.4		20.4		-----		-----	

BENT BAR DETAILS

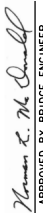


NOTE: ALL DIMENSIONS ARE
OUT TO OUT. D=PIN DIAMETER.

E-E ABUTMENT BEARING	FRICTION BEARING PILING				FRICTION OR POINT BEARING PILING			
	PIOL TYPE 1 OR 2				PIOL TYPE 3			
	NUMBER OF TRESTLE PILES	③ "K" (INCHES)	④ DES. PILE BRG. (TONS)	⑤ LRFD DES. BRG. (KIPS)	NUMBER OF TRESTLE PILES	PILE SIZE	④ DES. PILE BRG. (TONS)	⑤ LRFD DES. BRG. (KIPS)
138'-10"	14	14	32	92	10	HP10x57	44	129
	12	16	37	107	10	HP12x53	44	129
151'-4"	16	14	29	85	10	HP10x57	47	135
	14	16	33	97	12	HP12x53	39	113
163'-10"	16	14	32	92	12	HP10x57	42	122
	14	16	36	105	12	HP12x53	42	122
176'-4"	18	14	29	85	12	HP10x57	44	128
	16	16	33	96	12	HP12x53	44	128
188'-10"	18	14	31	89	12	HP10x57	46	134
	16	16	35	100	12	HP12x53	46	134
201'-4"	19	14	33	94	14	HP10x57	44	128
	18	16	34	100	14	HP12x53	44	128
213'-10"	18	16	36	105	14	HP10x57	46	134
					16	HP12x53	41	118
226'-4"	19	16	36	104	14	HP10x57	49	141
					16	HP12x53	43	124
243'-0"	19	16	38	109	16	HP10x57	45	130
					16	HP12x53	45	130

- ① SEE SHEET H44-24-07 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.
- 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 SEE STANDARD PIOL FOR "K" DIMENSION.
- ④ FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- ⑤ FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

NOTE: FRICTION BEARING INCLUDES SIDE FRICTION AND END BEARING IN SOIL.
POINT BEARING INCLUDES SIDE FRICTION AND POINT BEARING IN ROCK.

11-09 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division	
		STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES MARCH, 2007	
		PILE BENT PIERS 30° SKEW	H44-47-07