

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.

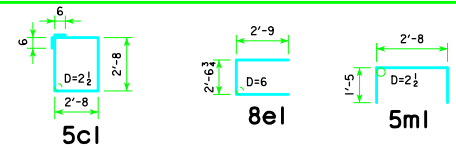
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

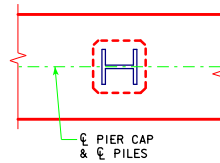
REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	LENGTH	SHAPE	7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	30'-8"		6	9	626	6	9	626	6	9	626	6	9	626	6	9	626	6	9	626
a2	30'-8"		4	8	328	4	8	328	4	8	328	4	8	328	4	8	328	4	8	328
b1	30'-8"		4	9	417	4	9	417	4	9	417	4	9	417	4	9	417	4	9	417
5c1	11'-8"		26	5	316	30	5	365	34	5	414	29	5	353	32	5	389	35	5	426
8e1	8'-1"		4	8	86	4	8	86	4	8	86	4	8	86	4	8	86	4	8	86
5m1	5'-6"		4	5	23	4	5	23	4	5	23	4	5	23	4	5	23	4	5	23
5n1	2'-8"		4	5	11	4	5	11	4	5	11	4	5	11	4	5	11	4	5	11
REINFORCING STEEL (LB.)			1807			1856			1905			1755			1791			1828		
STRUCTURAL PILE TYPE			1, 2			---			---			---			---			---		
CONCRETE (CY)			3			10.8			10.4			10.4			10.3			10.3		

BENT BAR DETAILS



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



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES

C-C ABUTMENT BEARING	FRICTION BEARING PILING			FRICTION OR POINT BEARING PILING		
	PIOL TYPE 1 OR 2			PIOL TYPE 3		
	NUMBER OF TRESTLE PILES	② "K" (INCHES)	③ LRFD P _u , STRENGTH I, DES. LOAD (KIPS)	NUMBER OF TRESTLE PILES	PILE SIZE	③ LRFD P _u , STRENGTH I, DES. LOAD (KIPS)
138'-10	10	14	93	7	HP10x57	134
	9	16	104	7	HP12x53	134
151'-4	---	---	---	7	HP10x57	141
	9	16	109	8	HP12x53	123
163'-10	---	---	---	8	HP10x57	133
	---	---	---	8	HP12x53	133
176'-4	---	---	---	8	HP10x57	139
	---	---	---	9	HP12x53	124
188'-10	---	---	---	9	HP10x57	130
	---	---	---	9	HP12x53	130
201'-4	---	---	---	9	HP10x57	145
	---	---	---	10	HP12x53	130
213'-10	---	---	---	10	HP10x57	137
	---	---	---	11	HP12x53	124
226'-4	---	---	---	10	HP10x57	144
	---	---	---	11	HP12x53	131
243'-0	---	---	---	11	HP10x57	138
	---	---	---	12	HP12x53	126

- ① 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.
- ② SEE STANDARD PIOL FOR "K" DIMENSION.
- ③ NOTE: P_u, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

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

REVISED 04-13 -- REVISION FOR LRFD PILE DESIGN.

LATEST REVISION DATE 04-13	APPROVED BY BRIDGE ENGINEER <i>Thomas E. M. Donnell</i>	 Iowa Department of Transportation Highway Division
		STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES DECEMBER, 2006
		PILE BENT PIERS H30-46-06 0° SKEW