

**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.

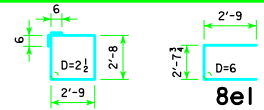
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

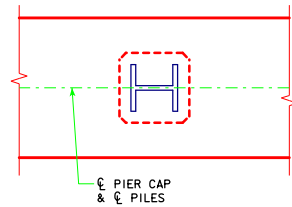
**REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT**

BAR	LENGTH	SHAPE	10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT			14 PILE BENT			15 PILE BENT			16 PILE BENT			17 PILE BENT		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	46'-8"	⎓	8	9	1269	6	9	952	6	9	952	6	9	952	6	9	952	6	9	952	6	9	952	4	9	635
a2	46'-8"	⎓	4	8	498	4	8	498	4	8	498	4	8	498	4	8	498	4	8	498	4	8	498	4	8	498
b1	46'-8"	⎓	4	9	635	4	9	635	4	9	635	4	9	635	4	9	635	4	9	635	4	9	635	4	9	635
5c1	11'-10"	⎓	38	5	489	42	5	518	46	5	568	50	5	617	54	5	666	58	5	716	47	5	580	50	5	617
8e1	8'-2"	⎓	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87
① REINFORCING STEEL (LB.)			2958			2690			2740			2789			2838			2888			2615			2335		
STRUCTURAL ② PILE TYPE			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			17.4		

**BENT BAR DETAILS**



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



**PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES**

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 LRFD PU, STRENGTH I DES. BRG. (KIPS)	NUMBER OF TRESTLE PILES	PILE SIZE	④ LRFD PU, STRENGTH I DES. BRG. (KIPS)
138'-10"	14	14	90	10	HP10x57	126
	12	16	105	10	HP12x53	126
	14	14	95	10	HP10x57	133
151'-4"	13	16	102	10	HP12x53	133
	16	14	90	10	HP10x57	144
163'-10"	14	16	103	11	HP12x53	131
	16	14	94	11	HP10x57	137
176'-4"	14	16	108	12	HP12x53	126
	-----	---	---	11	HP10x57	143
188'-10"	-----	---	---	12	HP12x53	131
	-----	---	---	13	HP10x57	136
201'-4"	-----	---	---	14	HP12x53	126
	-----	---	---	13	HP10x57	143
213'-10"	-----	---	---	14	HP12x53	132
	-----	---	---	14	HP10x57	139
226'-4"	-----	---	---	15	HP12x53	130
	-----	---	---	15	HP10x57	137
243'-0"	-----	---	---	16	HP12x53	128

- ① SEE SHEET H44-17-07 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 FT<sup>3</sup> 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 NOTE: PU, 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 05-13 -- REVISION FOR LRFD PILE DESIGN.

05-13 LATEST REVISION DATE  <i>Thomas E. M. Donnell</i> APPROVED BY BRIDGE ENGINEER		
	STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE <b>PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES</b> MARCH, 2007	
	<b>PILE BENT PIERS</b> 15° SKEW	<b>H44-43-07</b>