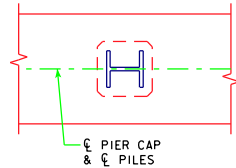


PILE BENT NOTES:

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.

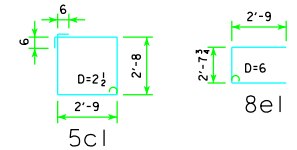
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.



PILE ORIENTATION DETAIL FOR
TYPE 3 TRESTLE BENT PILES

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT																								
BAR	LENGTH	SHAPE	7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT			
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	
a1	32'-8"		6	9	666	6	9	666	6	9	666	6	9	666	4	9	666	4	9	444	4	9	444	
a2	32'-8"		4	8	349	4	8	349	4	8	349	4	8	349	4	8	349	4	8	349	4	8	349	
b1	32'-8"		4	9	444	4	9	444	4	9	444	4	9	444	4	9	444	4	8	349	4	8	349	
5c1	11'-10"		26	5	321	30	5	370	34	5	420	38	5	469	32	5	395	35	5	432	26	5	321	
8e1	8'-2"		4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	
REINFORCING STEEL (L.B.)			1867			1916			1966			2015			1941			1661			1550			
① PILE TYPE																								
STRUCTURAL ②			-----			-----			11.5			11.4			11.4			11.3			11.3			
CONCRETE (CY)			1, 2			3			11.9			11.9			11.9			11.9			-----			

BENT BAR DETAILS

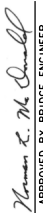


NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

C-C ABUTMENT BEARING	FRICTION BEARING PILING				FRICTION OR POINT BEARING PILING			
	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"	10	14	33	95	7	HP10x57	47	135
	9	16	36	105	8	HP12x53	41	119
151'-4"	11	14	31	91	7	HP10x57	49	143
	10	16	34	100	8	HP12x53	43	125
163'-10"	12	14	31	90	8	HP10x57	47	135
	10	16	37	108	9	HP12x53	41	120
176'-4"	12	14	32	94	8	HP10x57	49	141
	11	16	35	103	9	HP12x53	43	126
188'-10"	13	14	31	91	9	HP10x57	45	131
	11	16	37	107	9	HP12x53	45	131
201'-4"	13	16	35	101	10	HP10x57	45	132
					10	HP12x53	45	132
213'-10"	13	16	37	107	10	HP10x57	48	138
					11	HP12x53	43	126
226'-4"	-----	--	--	--	11	HP10x57	46	133
					11	HP12x53	46	133
243'-0"	-----	--	--	--	11	HP10x57	48	139
					12	HP12x53	44	128

- SEE SHEET H30-17-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.
- 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.
- SEE STANDARD PIOL FOR "K" DIMENSION.
- FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- 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.

07-10 LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division	
		STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES DECEMBER, 2006	
		PILE BENT PIERS 15° SKEW	H30-49-06