

PILE BENT NOTES:

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

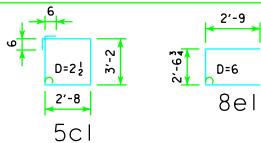
FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

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

			7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	43'-8"		8	9	1188	8	9	1188	8	9	1188	8	9	1188	8	9	1188	8	9	1188	8	9	1188
a2	43'-8"		4	8	466	4	8	466	4	8	466	4	8	466	4	8	466	4	8	466	4	8	466
b1	43'-8"		4	10	752	4	10	752	4	10	752	4	10	752	4	10	752	4	9	594	4	9	594
5c1	12'-8"		42	5	555	49	5	647	56	5	740	65	5	859	72	5	951	57	5	753	62	5	819
8e1	8'-1"		4	8	86	4	8	86	4	8	86	4	8	86	4	8	86	4	8	86	4	8	86
① REINFORCING STEEL (LB.)			3047			3139			3232			3351			3443			3087			3153		
STRUCTURAL PILE TYPE			3																				
CONCRETE (CY)			18.1			18.1			18.1			18.1			18.1			18.1			18.1		

BENT BAR DETAILS

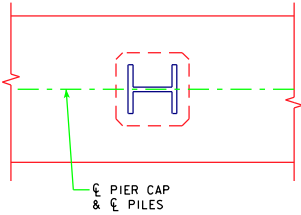


NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

FRICTION OR POINT BEARING PILING

E-E ABUTMENT BEARING	PIOL TYPE 3			
	NUMBER OF TRESTLE PILES	PILE SIZE	② DES. PILE BRG. (TONS)	③ LRFD DES. BRG. (KIPS)
160'-0"	7	HPI4x73	60	174
	7	HPI4x89	60	174
180'-0"	8	HPI4x73	57	166
	7	HPI4x89	65	189
200'-0"	8	HPI4x73	62	179
	7	HPI4x89	71	205
220'-0"	9	HPI4x73	60	174
	7	HPI4x89	77	224
240'-0"	10	HPI4x73	59	171
	8	HPI4x89	74	214
260'-0"	10	HPI4x73	64	185
	9	HPI4x89	71	206
280'-0"	11	HPI4x73	62	181
	9	HPI4x89	76	221
300'-0"	12	HPI4x73	61	178
	10	HPI4x89	74	214
320'-0"	13	HPI4x73	60	175
	11	HPI4x89	71	207
340'-0"	13	HPI4x73	64	184
	11	HPI4x89	75	218

- ① SEE SHEET RS40-167-10 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.
- ② FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- ③ FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES

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

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER



Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES
ROLLED STEEL BEAM BRIDGES

JUNE, 2010

PILE BENT PIERS
HPI4 PILES
20° SKEW

RS40-107-10