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.

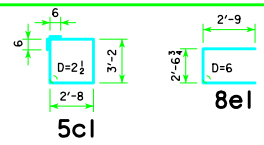
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT			14 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	57'-8		8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	9	1569
a2	57'-8		4	8	616	4	8	616	4	8	616	4	8	616	4	8	616	4	8	616	4	8	616
b1	57'-8		4	10	993	4	10	993	4	10	993	4	10	993	4	10	993	4	10	993	4	10	993
5c1	12'-8		71	5	938	82	5	1083	88	5	1163	106	5	1400	90	5	1189	86	5	1136	93	5	1229
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.)			4202			4347			4427			4664			4453			4400			4493		
STRUCTURAL CONCRETE (CY)		PILE TYPE 3	24.2			24.2			24.2			24.2			24.2			24.2			24.2		

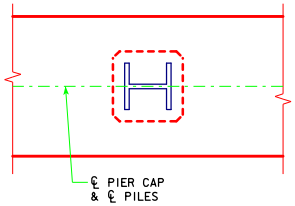
BENT BAR DETAILS



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

FRICTION OR POINT BEARING PILING

℄-℄ ABUTMENT BEARING	PIOL TYPE 3		
	NUMBER OF TRESTLE PILES	PILE SIZE	(2) LRFD Pu, STRENGTH I, DES. LOAD (KIPS)
160'-0	8	HP14x73	155
	8	HP14x89	155
180'-0	8	HP14x73	169
	8	HP14x89	169
200'-0	8	HP14x73	183
	8	HP14x89	183
220'-0	9	HP14x73	177
	8	HP14x89	199
240'-0	10	HP14x73	174
	8	HP14x89	218
260'-0	11	HP14x73	171
	9	HP14x89	209
280'-0	11	HP14x73	183
	9	HP14x89	224
300'-0	12	HP14x73	180
	10	HP14x89	216
320'-0	13	HP14x73	177
	11	HP14x89	209
340'-0	14	HP14x73	173
	11	HP14x89	220



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES

(1) SEE SHEET RS40-169-10 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

(2) 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.

05-13
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
HP14 PILES
45° SKEW

RS40-115-10

REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.