

**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**

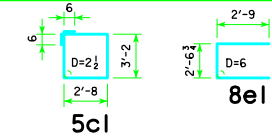
BAR	LENGTH	SHAPE	8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT			14 PILE BENT		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	57'-8		8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	9	1569	8	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)			3			24.2			24.2			24.2			24.2			24.2			24.2		

NOTE: THE REINFORCING STEEL QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE CONCRETE QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE PILE TYPE IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

**BENT BAR DETAILS**



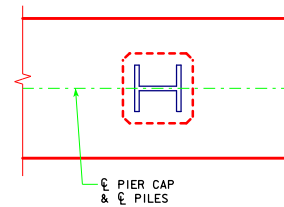
NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

**FRICTION OR POINT BEARING PILING**

℄-℄ ABUTMENT BEARING	PIOL TYPE 3		
	NUMBER OF TRESTLE PILES	PILE SIZE	② LRFD P <sub>u</sub> , STRENGTH I, DES. LOAD (KIPS)
160'-0	8	HP14x73	155
180'-0	8	HP14x89	155
200'-0	8	HP14x73	169
220'-0	8	HP14x89	169
240'-0	8	HP14x73	183
260'-0	8	HP14x89	183
280'-0	9	HP14x73	177
300'-0	8	HP14x89	199
320'-0	10	HP14x73	174
340'-0	8	HP14x89	218
360'-0	11	HP14x73	171
380'-0	9	HP14x89	209
400'-0	11	HP14x73	183
420'-0	9	HP14x89	224
440'-0	12	HP14x73	180
460'-0	10	HP14x89	216
480'-0	13	HP14x73	177
500'-0	11	HP14x89	209
520'-0	14	HP14x73	173
540'-0	11	HP14x89	220

① SEE SHEET RS40-169-14 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

② NOTE: P<sub>u</sub>, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



**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 <i>Thomas E. Mc Donnell</i>	<b>IOWA DOT</b> Highway Division	
		STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES	
		<b>ROLLED STEEL BEAM BRIDGES</b>	
OCTOBER, 2014			
<b>PILE BENT PIERS HP14 PILES</b> 45° SKEW		<b>RS40-115-14</b>	