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

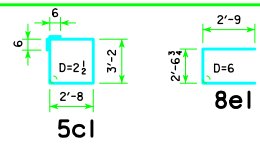
			7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	41'-8		8	9	1133	8	9	1133	8	9	1133	8	9	1133	8	9	1133	6	9	850	6	9	850
a2	41'-8		4	8	445	4	8	445	4	8	445	4	8	445	4	8	445	4	8	445	4	8	445
b1	41'-8		4	9	567	4	10	717	4	9	567	4	9	567	4	10	717	4	9	567	4	9	567
5c1	12'-8		42	5	555	49	5	647	56	5	740	56	5	740	62	5	819	57	5	753	50	5	661
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.)			2786			3028			2971			2971			3200			2701			2609		
STRUCTURAL CONCRETE (CY)	PILE TYPE 3		17.2			17.2			17.2			17.2			17.2			17.2			17.2		

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

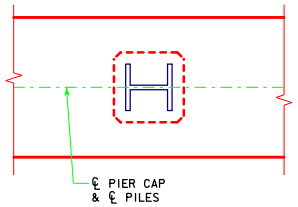
NOTE: THE CONCRETE QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

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.



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES

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	7	HP14x73	173
	7	HP14x89	173
180'-0	8	HP14x73	165
	7	HP14x89	189
200'-0	8	HP14x73	179
	7	HP14x89	204
220'-0	9	HP14x73	174
	7	HP14x89	223
240'-0	10	HP14x73	171
	8	HP14x89	214
260'-0	10	HP14x73	185
	9	HP14x89	205
280'-0	11	HP14x73	180
	9	HP14x89	221
300'-0	12	HP14x73	178
	10	HP14x89	213
320'-0	13	HP14x73	175
	11	HP14x89	207
340'-0	13	HP14x73	184
	11	HP14x89	218

(1) SEE SHEET RS40-166-14 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.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWADOT Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

OCTOBER, 2014

PILE BENT PIERS
HP14 PILES
10° SKEW

RS40-103-14