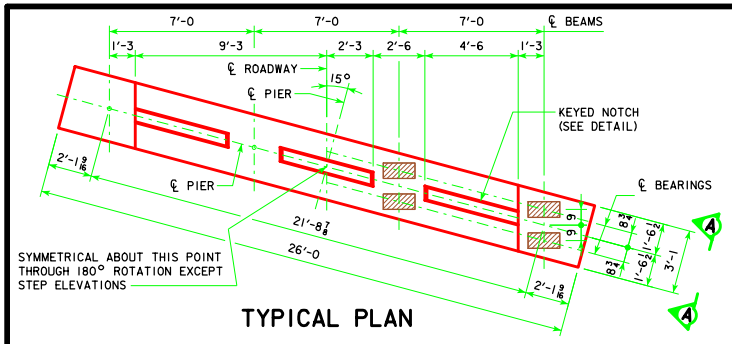


TYPICAL PLAN

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.

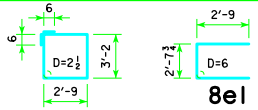
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

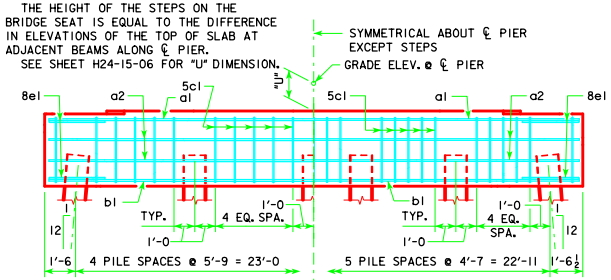
BAR	LENGTH	SHAPE	5 PILE BENT NO.	5 PILE BENT SIZE	5 PILE BENT WEIGHT	6 PILE BENT NO.	6 PILE BENT SIZE	6 PILE BENT WEIGHT	7 PILE BENT NO.	7 PILE BENT SIZE	7 PILE BENT WEIGHT	8 PILE BENT NO.	8 PILE BENT SIZE	8 PILE BENT WEIGHT
a1	25'-8		8	9	698	8	9	698	6	9	524	6	9	524
a2	25'-8		4	8	274	4	8	274	4	8	274	4	8	274
b1	25'-8		4	8	274	4	8	274	4	8	274	4	8	274
5c1	12'-10		22	5	294	27	5	361	26	5	348	23	5	308
8e1	8'-2		4	8	87	4	8	87	4	8	87	4	8	87
① REINFORCING STEEL (LB.)			1627			1694			1507			1467		
STRUCTURAL CONCRETE (CY)	PILE TYPE 3		10.7			10.7			10.7			10.7		

BENT BAR DETAILS



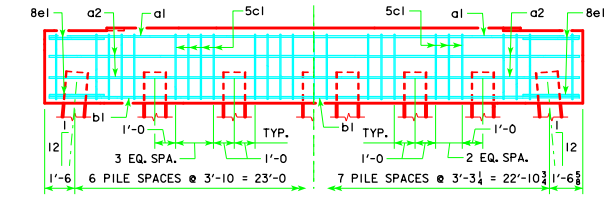
NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

NOTE:
THE HEIGHT OF THE STEPS ON THE BRIDGE SEAT IS EQUAL TO THE DIFFERENCE IN ELEVATIONS OF THE TOP OF SLAB AT ADJACENT BEAMS ALONG ℄ PIER.
SEE SHEET H24-15-06 FOR "U" DIMENSION.



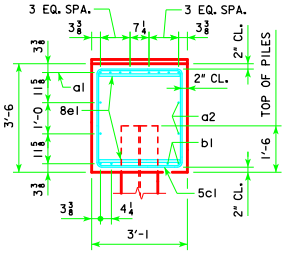
5 PILE BENT

6 PILE BENT

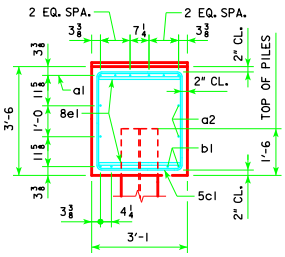


7 PILE BENT

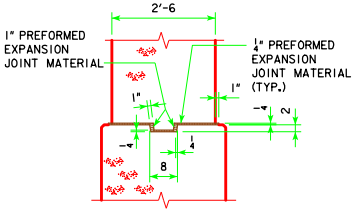
8 PILE BENT



VIEW A-A
FOR 5 & 6 PILE BENTS



VIEW A-A
FOR 7 & 8 PILE BENTS



KEYED NOTCH DETAIL

FRICTION OR POINT BEARING PILING

PIOL TYPE 3

℄-℄ ABUTMENT BEARING	NUMBER OF TRESTLE PILES	PILE SIZE	② LRFD Pu, STRENGTH I, DES. LOAD (KIPS)
138'-10	5	HP14x73	172
	5	HP14x89	172
151'-4	5	HP14x73	181
	5	HP14x89	181
163'-10	6	HP14x73	162
	5	HP14x89	195
176'-4	6	HP14x73	170
	5	HP14x89	204
188'-10	6	HP14x73	177
	5	HP14x89	212
201'-4	7	HP14x73	168
	6	HP14x89	196
213'-10	7	HP14x73	176
	6	HP14x89	206
226'-4	8	HP14x73	162
	6	HP14x89	217
243'-0	8	HP14x73	171
	7	HP14x89	195

① SEE SHEET H24-17-06 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 - 24' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

DECEMBER, 2006

PILE BENT PIERS HP14 PILES

15° SKEW

H24-45-06

REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.