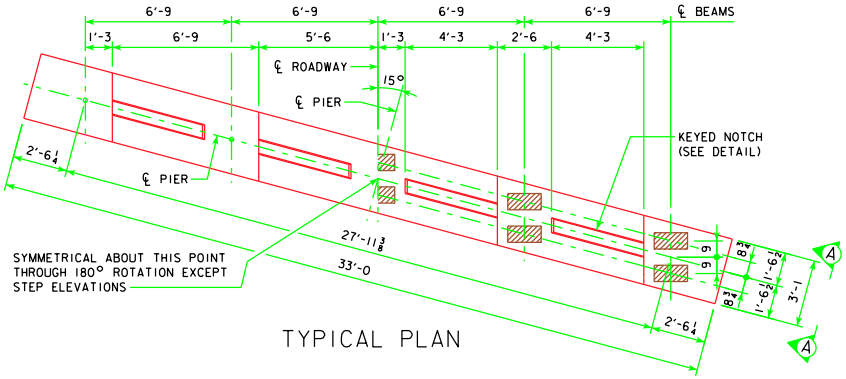


TYPICAL PLAN

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 H30-15-06 FOR "U" DIMENSION.

PILE BENT NOTES:

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

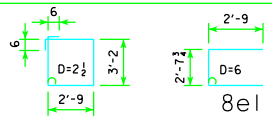
FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

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

			6 PILE BENT			7 PILE BENT			8 PILE BENT			9 PILE BENT		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	32'-8		8	9	889	8	9	889	6	9	666	6	9	666
a2	32'-8		4	8	349	4	8	349	4	8	349	4	8	349
b1	32'-8		4	8	349	4	9	444	4	9	444	4	8	349
5c1	12'-10		27	5	361	32	5	428	30	5	402	34	5	455
8e1	8'-2		4	8	87	4	8	87	4	8	87	4	8	87
(1) REINFORCING STEEL (LB.)			2035			2197			1948			1906		
STRUCTURAL CONCRETE (CY)		PILE TYPE 3	13.8			13.8			13.8			13.8		

BENT BAR DETAILS



5c1 8e1

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

FRICTION OR POINT BEARING PILING

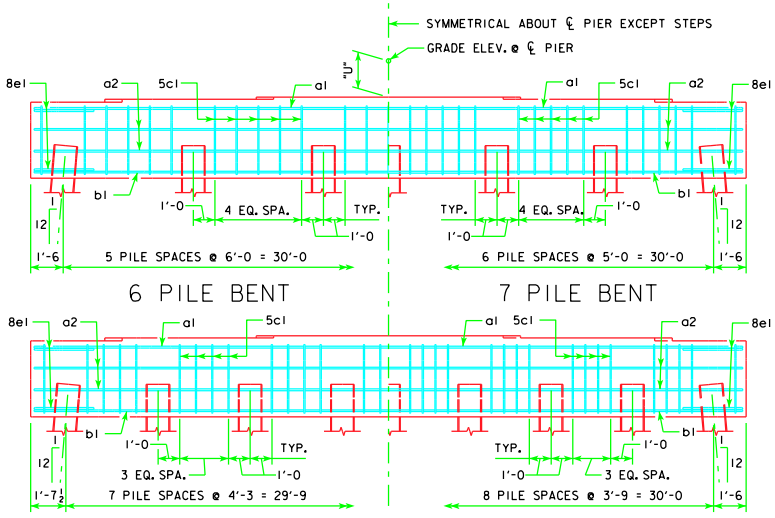
℄-℄ ABUTMENT BEARING	PIOL TYPE 3			
	NUMBER OF TRESTLE PILES	PILE	(2) DES. PILE BRG. (TONS)	(3) LRFD DES. BRG. (KIPS)
138'-10	6	HP14x73	55	160
	6	HP14x89	55	160
151'-4	6	HP14x73	58	168
	6	HP14x89	58	168
163'-10	6	HP14x73	63	182
	6	HP14x89	63	182
176'-4	7	HP14x73	56	163
	6	HP14x89	66	190
188'-10	7	HP14x73	59	170
	6	HP14x89	68	198
201'-4	8	HP14x73	57	166
	6	HP14x89	76	221
213'-10	8	HP14x73	60	174
	7	HP14x89	69	199
226'-4	8	HP14x73	63	184
	7	HP14x89	72	210
243'-0	9	HP14x73	59	172
	7	HP14x89	76	221

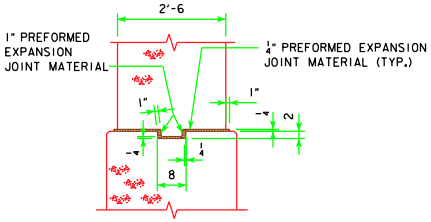
(1) SEE SHEET H30-17-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

(2) FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.

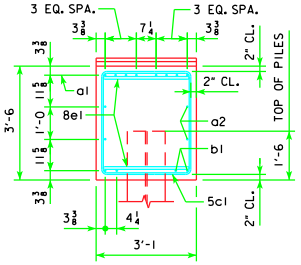
(3) FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

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

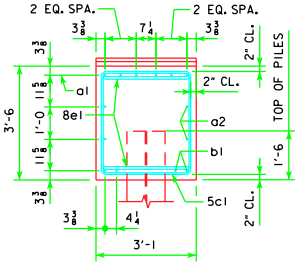




KEYED NOTCH DETAIL



VIEW A-A
FOR 6 & 7 PILE BENTS



VIEW A-A
FOR 8 & 9 PILE BENTS

07-10
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
DECEMBER, 2006

PILE BENT PIERS
HP14 PILES
15° SKEW

H30-50-06

REVISED 07-10 - THIS SHEET WAS ADDED FOR THE 14" PILE OPTION & CAP DEPTH IS 3'-6.