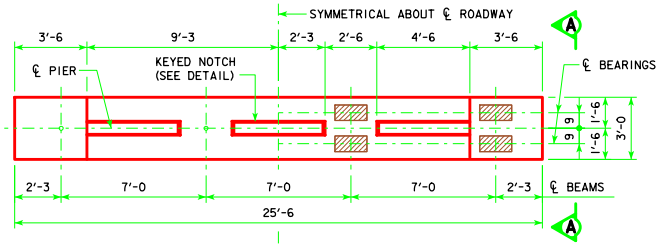
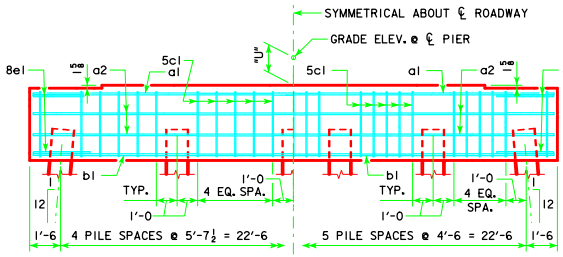


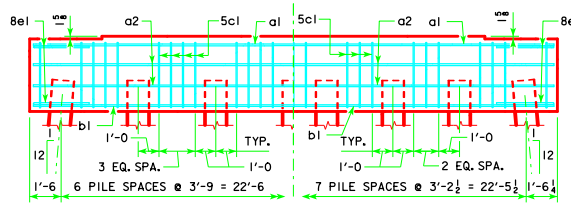
TYPICAL PLAN

NOTE:
SEE SHEET H24-09-06 FOR "U" DIMENSION.



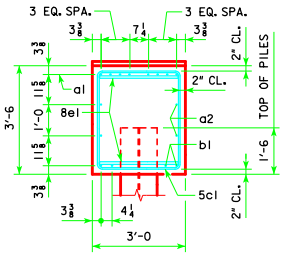
5 PILE BENT

6 PILE BENT



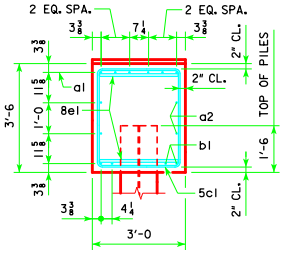
7 PILE BENT

8 PILE BENT



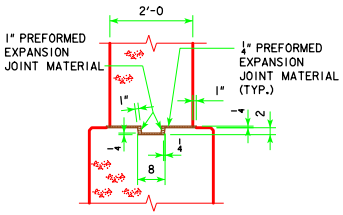
VIEW A-A

FOR 5 & 6 PILE BENTS



VIEW A-A

FOR 7 & 8 PILE BENTS



KEYED NOTCH DETAIL

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.

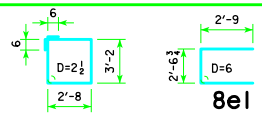
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

			5 PILE BENT			6 PILE BENT			7 PILE BENT			8 PILE BENT		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	25'-2		8	9	685	8	9	685	6	9	513	6	9	513
a2	25'-2		4	8	269	4	8	269	4	8	269	4	8	269
b1	25'-2		4	8	269	4	8	269	4	8	269	4	8	269
5c1	12'-8		22	5	291	27	5	357	26	5	343	23	5	304
8e1	8'-1		4	8	86	4	8	86	4	8	86	4	8	86
REINFORCING STEEL (LB.)			1600			1666			1480			1441		
STRUCTURAL CONCRETE (CY)		PILE TYPE 3	10.2			10.2			10.2			10.2		

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 SIZE	① LRFD Pu, STRENGTH I, DES. LOAD (KIPS)
138'-10	5	HP14x73	170
	5	HP14x89	170
151'-4	5	HP14x73	179
	5	HP14x89	179
163'-10	6	HP14x73	161
	5	HP14x89	193
176'-4	6	HP14x73	168
	5	HP14x89	201
188'-10	6	HP14x73	175
	5	HP14x89	210
201'-4	7	HP14x73	166
	6	HP14x89	194
213'-10	7	HP14x73	174
	6	HP14x89	203
226'-4	7	HP14x73	184
	6	HP14x89	214
243'-0	8	HP14x73	169
	6	HP14x89	226

① 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

0° SKEW

H24-43-06

REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.