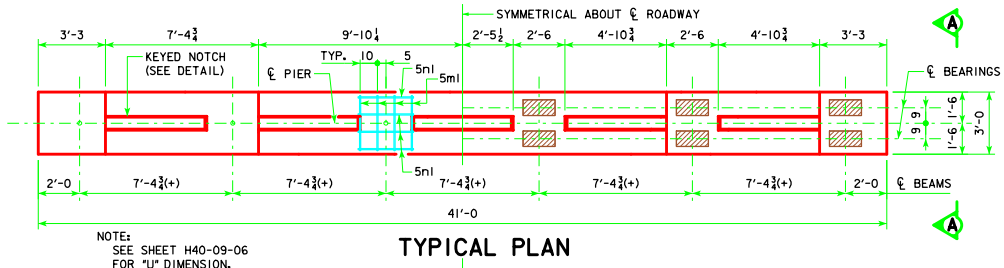
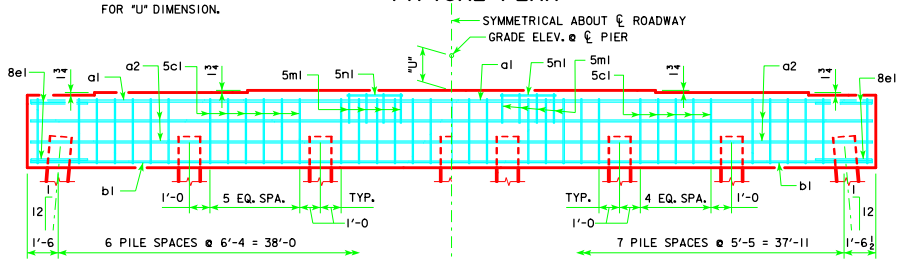


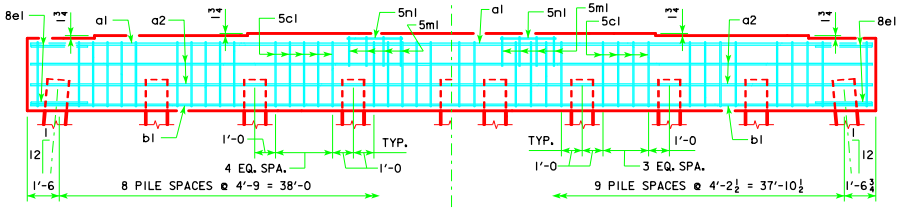
TYPICAL PLAN

NOTE:
SEE SHEET H40-09-06
FOR "U" DIMENSION.



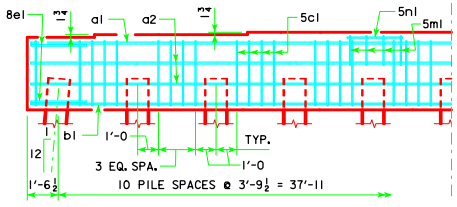
7 PILE BENT

8 PILE BENT

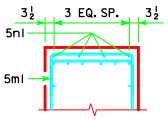


9 PILE BENT

10 PILE BENT



11 PILE BENT



5ml & 5nl
BAR LAYOUT

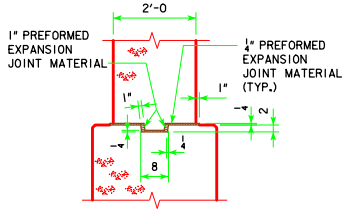
PILE BENT NOTES:

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

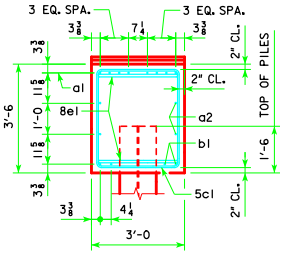
FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

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

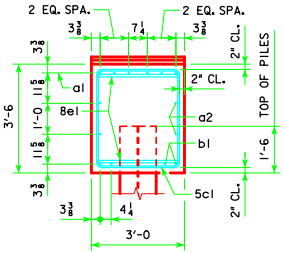
PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.



KEYED NOTCH DETAIL



VIEW A-A
FOR 7, 8 & 9 PILE BENTS

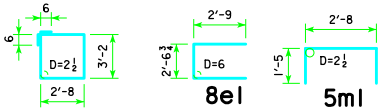


VIEW A-A
FOR 10 & 11 PILE BENTS

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	LENGTH	SHAPE	7 PILE BENT NO.	7 PILE BENT SIZE	7 PILE BENT WEIGHT	8 PILE BENT NO.	8 PILE BENT SIZE	8 PILE BENT WEIGHT	9 PILE BENT NO.	9 PILE BENT SIZE	9 PILE BENT WEIGHT	10 PILE BENT NO.	10 PILE BENT SIZE	10 PILE BENT WEIGHT	11 PILE BENT NO.	11 PILE BENT SIZE	11 PILE BENT WEIGHT
a1	40'-8		8	9	1106	8	9	1106	8	9	1106	6	9	830	6	9	830
a2	40'-8		4	8	434	4	8	434	4	8	434	4	8	434	4	8	434
b1	40'-8		4	9	553	4	9	553	4	9	553	4	9	553	4	9	553
5c1	12'-8		38	5	502	37	5	489	42	5	555	38	5	502	42	5	555
8e1	8'-1		4	8	86	4	8	86	4	8	86	4	8	86	4	8	86
5m1	5'-6		8	5	46	8	5	46	8	5	46	8	5	46	8	5	46
5n1	2'-8		8	5	22	8	5	22	8	5	22	8	5	22	8	5	22
REINFORCING STEEL (LB.)			2749			2736			2802			2473			2526		
STRUCTURAL CONCRETE (CY)	PILE TYPE 3		16.8			16.8			16.8			16.8			16.8		

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	① LRFD PU, STRENGTH I DES. LOAD (KIPS)
138'-10	7	HP14x73	170
	7	HP14x89	170
151'-4	7	HP14x73	179
	7	HP14x89	179
163'-10	8	HP14x73	169
	7	HP14x89	194
176'-4	8	HP14x73	177
	7	HP14x89	202
188'-10	8	HP14x73	185
	7	HP14x89	211
201'-4	9	HP14x73	183
	8	HP14x89	206
213'-10	10	HP14x73	173
	8	HP14x89	216
226'-4	10	HP14x73	182
	9	HP14x89	202
243'-0	11	HP14x73	174
	9	HP14x89	213

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.

REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.

05-13
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

AUGUST, 2009

PILE BENT PIERS HP14 PILES

0° SKEW

H40-47-06