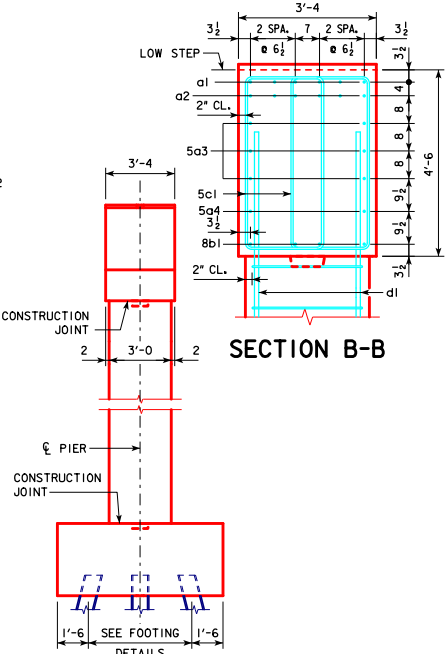
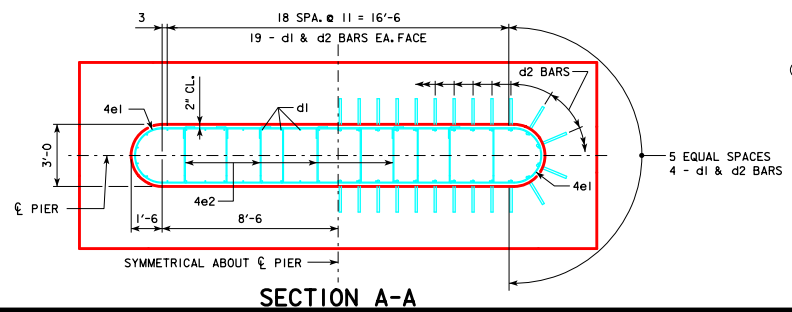
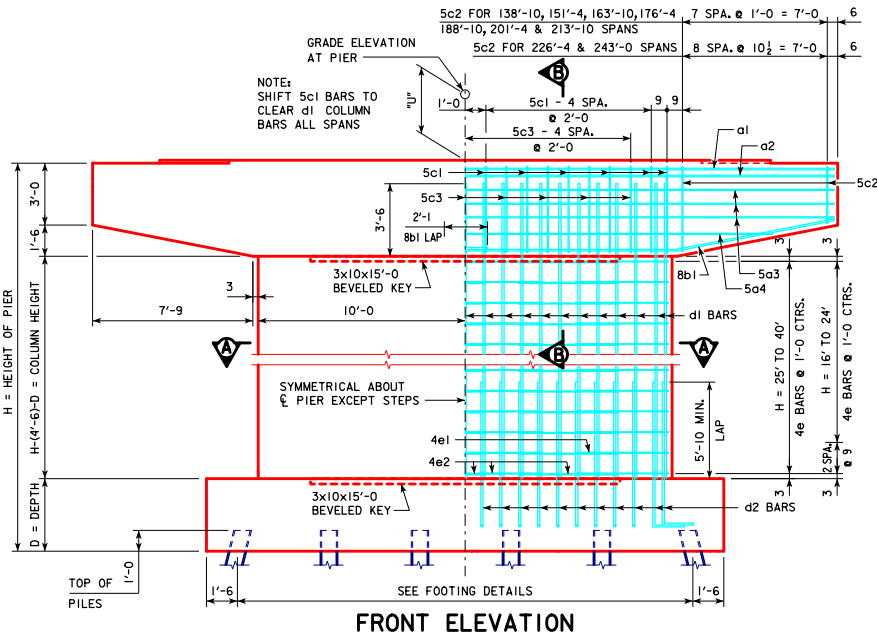
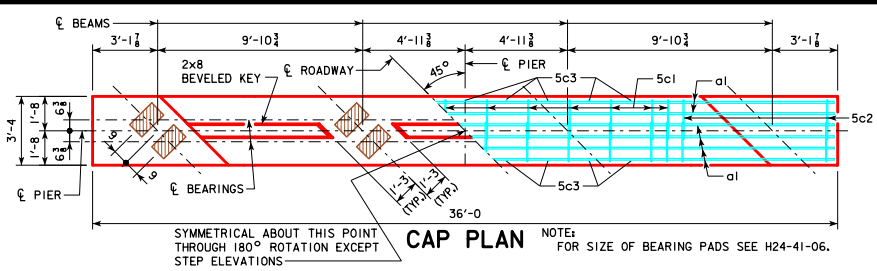


REVISED 01-10-10 - SHEET WAS REVISED TO MEET LRFSD SPECIFICATIONS.
 REVISED 09-2016 - CHANGED TOP OF FOOTING TO TOP OF REBAR VERTICAL CLEARANCE TO 3" (WAS 2").
 REVISED 10-2018 - CHANGED BEVELED KEYWAY LENGTH OF PIER COLUMN CAP AND FOOTING TO BE 5'-0" LESS THAN WIDTH OF PIER COLUMN (WAS 17'-0").



END ELEVATION

SEE SHEET H24-31-06 FOR STEP REINFORCING STEEL QUANTITY AND DETAILS.

PIER NOTES:

SEE "TEE PIER NOTES" ON H24-02-06 FOR NOTES REGARDING APPLICATION OF THESE PIER STANDARDS.

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

ELIMINATE 2x8 BEVELED KEYWAY ON TOP OF CAP FOR EXPANSION PIERS.

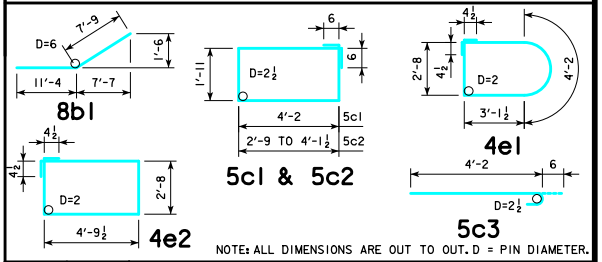
SEE SHEET H24-29-06 FOR "U" DIMENSION.

		CAP																							
REINFORCING STEEL		138'-10"		151'-4"		163'-10"		176'-4"		188'-10"		201'-4"		213'-10"		226'-4"		243'-0"							
BAR	LENGTH	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT			
a1	35'-8"	6	7	437	6	7	437	6	7	437	6	8	571	6	8	571	6	8	571	6	8	571	6	8	571
a2	35'-8"	6	7	437	6	7	437	6	7	437	6	7	437	6	7	437	6	8	571	6	8	571	6	8	571
5a3	35'-8"	6	5	223	6	5	223	6	5	223	6	5	223	6	5	223	6	5	223	6	5	223	6	5	223
5a4	29'-8"	2	5	62	2	5	62	2	5	62	2	5	62	2	5	62	2	5	62	2	5	62	2	5	62
8b1	19'-1"	8	8	408	8	8	408	8	8	408	8	8	408	8	8	408	8	8	408	8	8	408	8	8	408
5c1	13'-2"	24	5	330	24	5	330	24	5	330	24	5	330	24	5	330	24	5	330	24	5	330	24	5	330
5c2	VARIABLES	32	5	391	32	5	391	32	5	391	32	5	391	32	5	391	32	5	391	32	5	391	32	5	391
5c3	4'-8"	18	5	88	18	5	88	18	5	88	18	5	88	18	5	88	18	5	88	18	5	88	18	5	88
TOTAL (LB.)				2376		2376		2376		2510		2510		2644		2644		2850		2850					
STRUCTURAL CONCRETE (CY)				19.2		19.2		19.2		19.2		19.2		19.2		19.2		19.2		19.2					

COLUMN

H IN FEET	COLUMN HEIGHT	STRUCTURAL CONCRETE (CY)	REINFORCING STEEL						TOTAL WEIGHT (LB.)						
			4e1 BAR		4e2 BAR		5c3								
			NO.	SIZE	NO.	SIZE	NO.	SIZE		NO.	SIZE				
16	8'-0"	17.2	46	10	11'-6"	2276	18	4	13'-10"	166	36	4	15'-8"	377	2819
17	9'-0"	19.4	46	10	12'-6"	2474	20	4	13'-10"	185	40	4	15'-8"	419	3078
18	10'-0"	21.5	46	10	13'-6"	2672	22	4	13'-10"	203	44	4	15'-8"	460	3335
19	11'-0"	23.7	46	10	14'-6"	2870	24	4	13'-10"	222	48	4	15'-8"	502	3594
20	12'-0"	25.8	46	10	15'-6"	3068	26	4	13'-10"	240	52	4	15'-8"	544	3852
21	13'-0"	28.0	46	10	16'-6"	3266	28	4	13'-10"	259	56	4	15'-8"	586	4111
22	14'-0"	30.1	46	10	17'-6"	3464	30	4	13'-10"	277	60	4	15'-8"	628	4369
23	15'-0"	32.3	46	10	18'-6"	3662	32	4	13'-10"	296	64	4	15'-8"	670	4628
24	16'-0"	34.4	46	10	19'-6"	3860	34	4	13'-10"	314	68	4	15'-8"	712	4886
25	16'-6"	35.5	46	10	20'-0"	3959	34	4	13'-10"	314	68	4	15'-8"	712	4985
26	17'-6"	37.6	46	10	21'-0"	4157	36	4	13'-10"	333	72	4	15'-8"	754	5244
27	18'-6"	39.8	46	10	22'-0"	4355	38	4	13'-10"	351	76	4	15'-8"	795	5501
28	19'-6"	41.9	46	10	23'-0"	4553	40	4	13'-10"	370	80	4	15'-8"	837	5760
29	20'-6"	44.1	46	10	24'-0"	4751	42	4	13'-10"	388	84	4	15'-8"	879	6018
30	21'-6"	46.2	46	10	25'-0"	4948	44	4	13'-10"	407	88	4	15'-8"	921	6276
31	22'-6"	48.4	46	10	26'-0"	5146	46	4	13'-10"	425	92	4	15'-8"	963	6534
32	23'-6"	50.5	46	10	27'-0"	5344	48	4	13'-10"	444	96	4	15'-8"	1005	6793
33	24'-6"	52.7	46	10	28'-0"	5542	50	4	13'-10"	462	100	4	15'-8"	1047	7051
34	25'-6"	54.8	46	10	29'-0"	5740	52	4	13'-10"	481	104	4	15'-8"	1088	7309
35	26'-6"	57.0	46	10	30'-0"	5938	54	4	13'-10"	499	108	4	15'-8"	1130	7567
36	27'-6"	59.1	46	10	31'-0"	6136	56	4	13'-10"	517	112	4	15'-8"	1172	7825
37	28'-6"	61.3	46	10	32'-0"	6334	58	4	13'-10"	536	116	4	15'-8"	1214	8084
38	29'-6"	63.4	46	10	33'-0"	6532	60	4	13'-10"	554	120	4	15'-8"	1256	8342
39	30'-6"	65.6	46	10	34'-0"	6730	62	4	13'-10"	573	124	4	15'-8"	1298	8601
40	31'-6"	67.7	46	10	35'-0"	6928	64	4	13'-10"	591	128	4	15'-8"	1340	8859

BENT BAR DETAILS



Iowa Department of Transportation
 Highway Division

STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

DECEMBER, 2006

LATEST REVISION DATE

10-2016

APPROVED BY BRIDGE ENGINEER

Thomas E. McQuill

TEE PIER CAP AND COLUMN

45° SKEW

H24-71-06