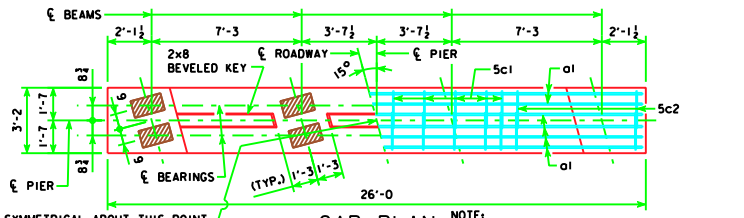
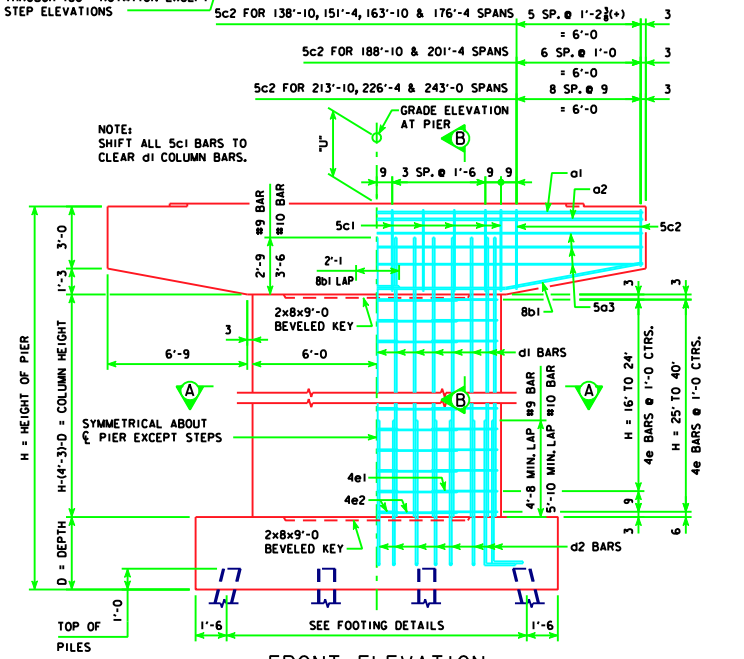
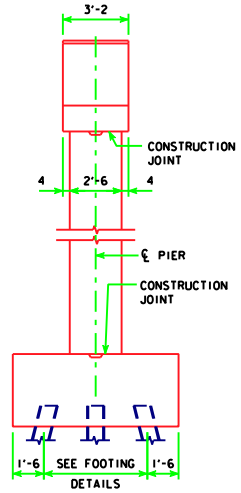


CAP PLAN

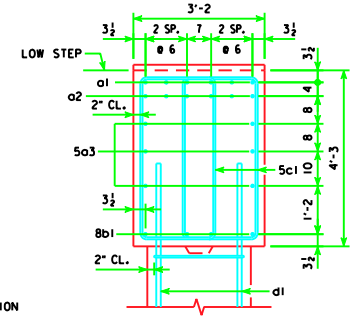
NOTE: FOR SIZE OF BEARING PADS SEE H24-41-06.



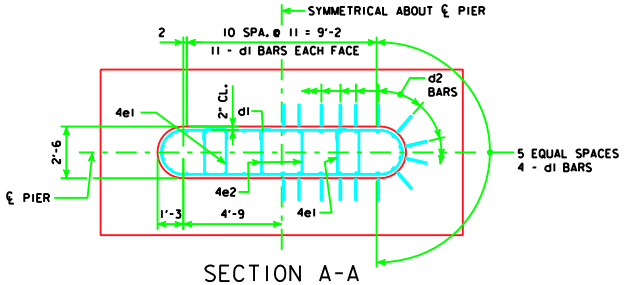
FRONT ELEVATION



END ELEVATION



SECTION B-B



SECTION A-A

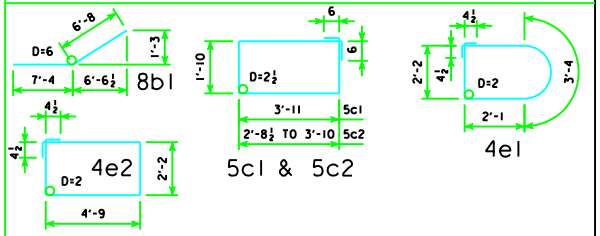
CAP

REINFORCING STEEL	℄ - ℄ ABUT. BEARINGS		138'-10			151'-4			163'-10			176'-4			188'-10			201'-4			213'-10			226'-4			243'-0		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	25'-8		6	7	315	6	7	315	6	7	315	6	8	411	6	8	411	6	8	411	6	8	411	6	9	524	6	9	524
a2	25'-8		6	7	315	6	7	315	6	7	315	6	7	315	6	7	315	6	8	411	6	8	411	6	8	411	6	8	411
5a3	25'-8		6	5	161	6	5	161	6	5	161	6	5	161	6	5	161	6	5	161	6	5	161	6	5	161	6	5	161
8b1	14'-0		8	8	299	8	8	299	8	8	299	8	8	299	8	8	299	8	8	299	8	8	299	8	8	299	8	8	299
5c1	12'-6		20	5	261	20	5	261	20	5	261	20	5	261	20	5	261	20	5	261	20	5	261	20	5	261	20	5	261
5c2	VARIES		24	5	282	24	5	282	24	5	282	24	5	282	28	5	329	28	5	329	36	5	422	36	5	422	36	5	422
① TOTAL (LB.)			1633			1633			1633			1729			1776			1872			1965			2078			2078		
STRUCTURAL CONCRETE (CY)			12.3			12.3			12.3			12.3			12.3			12.3			12.3			12.3			12.3		

COLUMN

H IN FEET	COLUMN HEIGHT	STRUCTURAL CONCRETE (CY)	REINFORCING STEEL: d1 BAR				4e1 BAR				4e2 BAR				TOTAL WEIGHT (LB.)
			NO.	SIZE	LENGTH	WEIGHT	NO.	SIZE	LENGTH	WEIGHT	NO.	SIZE	LENGTH	WEIGHT	
16	8'-3	8.8	30	9	11'-0	1122	18	4	10'-5	125	18	4	14'-7	175	1422
17	9'-3	9.8	30	9	12'-0	1224	20	4	10'-5	139	20	4	14'-7	195	1558
18	10'-3	10.9	30	9	13'-0	1326	22	4	10'-5	153	22	4	14'-7	214	1693
19	11'-3	11.9	30	9	14'-0	1428	24	4	10'-5	167	24	4	14'-7	234	1829
20	12'-3	13.0	30	9	15'-0	1530	26	4	10'-5	181	26	4	14'-7	253	1964
21	13'-3	14.1	30	9	16'-0	1632	28	4	10'-5	195	28	4	14'-7	273	2100
22	14'-3	15.1	30	9	17'-0	1734	30	4	10'-5	209	30	4	14'-7	292	2235
23	15'-3	16.2	30	9	18'-0	1836	32	4	10'-5	223	32	4	14'-7	312	2371
24	16'-3	17.2	30	9	19'-0	1938	34	4	10'-5	237	34	4	14'-7	331	2506
25	16'-9	17.8	30	9	19'-6	1989	34	4	10'-5	237	34	4	14'-7	331	2557
26	17'-9	18.8	30	9	20'-6	2091	36	4	10'-5	251	36	4	14'-7	351	2693
27	18'-9	19.9	30	9	21'-6	2193	38	4	10'-5	264	38	4	14'-7	370	2827
28	19'-9	21.0	30	9	22'-6	2295	40	4	10'-5	278	40	4	14'-7	390	2963
29	20'-9	22.0	30	9	23'-6	2397	42	4	10'-5	292	42	4	14'-7	409	3098
30	21'-9	23.1	30	9	24'-6	2499	44	4	10'-5	306	44	4	14'-7	429	3234
31	22'-9	24.1	30	9	25'-6	2601	46	4	10'-5	320	46	4	14'-7	448	3369
32	23'-9	25.2	30	9	26'-6	2703	48	4	10'-5	334	48	4	14'-7	468	3505
33	24'-9	26.3	30	9	27'-6	2805	50	4	10'-5	348	50	4	14'-7	487	3640
34	25'-9	27.3	30	9	28'-6	2907	52	4	10'-5	362	52	4	14'-7	507	3776
35	26'-9	28.4	30	9	29'-6	3009	54	4	10'-5	376	54	4	14'-7	526	3911
36	27'-9	29.5	30	9	30'-6	3111	56	4	10'-5	390	56	4	14'-7	546	4047
37	28'-9	30.5	30	10	32'-3	4163	58	4	10'-5	404	58	4	14'-7	565	5132
38	29'-9	31.6	30	10	33'-3	4292	60	4	10'-5	418	60	4	14'-7	585	5295
39	30'-9	32.6	30	10	34'-3	4421	62	4	10'-5	431	62	4	14'-7	604	5456
40	31'-9	33.7	30	10	35'-3	4550	64	4	10'-5	445	64	4	14'-7	623	5618

BENT BAR DETAILS



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

① SEE SHEET H24-17-06 FOR STEP REINFORCING STEEL QUANTITY AND DETAILS.

PIER NOTES:

SEE "TEE PIER NOTES" ON H24-01-06 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 H24-15-06 FOR "U" DIMENSION.

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

HL93 SUPERSTRUCTURE DECEMBER, 2006 HS25 SUBSTRUCTURE

TEE PIER CAP AND COLUMN
15° SKEW

H24-51-06