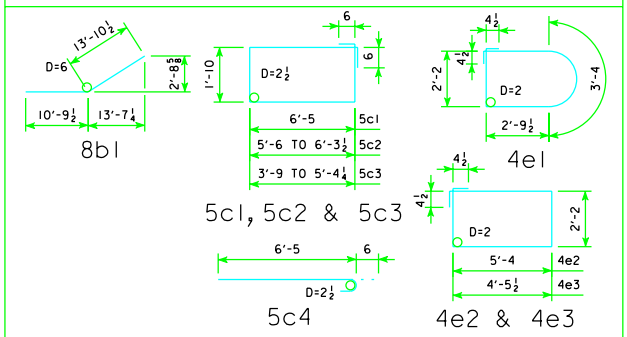
BENT BAR DETAILS



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

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	46'-8		8	9	1269	8	9	1269	8	9	1269	8	9	1269	8	10	1606	8	10	1606	8	10	1606	8	10	1606	8	11	1984
a2	46'-8		8	8	997	8	8	997	8	9	1269	8	9	1269	8	9	1269	8	9	1269	8	10	1606	8	10	1606	8	10	1606
6a3	46'-8		8	6	561	8	6	561	8	6	561	8	6	561	8	6	561	8	6	561	8	6	561	8	6	561	8	6	561
6a4	VARIES		4	6	220	4	6	220	4	6	220	4	6	220	4	6	220	4	6	220	4	6	220	4	6	220	4	6	220
8b1	24'-8		8	8	527	8	8	527	8	8	527	8	8	527	8	8	527	8	8	527	8	8	527	8	8	527	8	8	527
5c1	17'-6		30	5	548	30	5	548	30	5	548	30	5	548	30	5	548	30	5	548	30	5	548	30	5	548	30	5	548
5c2	VARIES		20	5	343	20	5	343	20	5	343	20	5	343	20	5	343	28	5	481	28	5	481	28	5	481	28	5	481
5c3	VARIES		36	5	517	36	5	517	36	5	517	36	5	517	36	5	517	36	5	517	36	5	517	36	5	517	36	5	517
5c4	6'-11		16	5	115	16	5	115	16	5	115	16	5	115	16	5	115	16	5	115	16	5	115	16	5	115	16	5	115
① TOTAL (LB.)			5097			5097			5369			5369			5706			5844			6181			6181			6559		
STRUCTURAL CONCRETE (CY)			34.1			34.1			34.1			34.1			34.1			34.1			34.1			34.1			34.1		

COLUMN

H IN FEET	COLUMN HEIGHT	STRUCTURAL CONCRETE (CY)	REINFORCING STEEL: d1 BAR				4e1 BAR				4e2 BAR				4e3 BAR				TOTAL WEIGHT (LB.)
			NO.	SIZE	LENGTH	WEIGHT	NO.	SIZE	LENGTH	WEIGHT	NO.	SIZE	LENGTH	WEIGHT	NO.	SIZE	LENGTH	WEIGHT	
16	5'-9	9.8	48	9	8'-6	1387	12	4	11'-10	95	12	4	15'-9	126	12	4	14'-0	112	1720
17	6'-9	11.5	48	9	9'-6	1550	14	4	11'-10	111	14	4	15'-9	147	14	4	14'-0	131	1939
18	7'-9	13.2	48	9	10'-6	1714	16	4	11'-10	126	16	4	15'-9	168	16	4	14'-0	150	2158
19	8'-9	15.0	48	9	11'-6	1877	18	4	11'-10	142	18	4	15'-9	189	18	4	14'-0	168	2376
20	9'-9	16.7	48	9	12'-6	2040	20	4	11'-10	158	20	4	15'-9	210	20	4	14'-0	187	2595
21	10'-9	18.4	48	9	13'-6	2203	22	4	11'-10	174	22	4	15'-9	231	22	4	14'-0	206	2814
22	11'-9	20.1	48	9	14'-6	2366	24	4	11'-10	190	24	4	15'-9	253	24	4	14'-0	224	3033
23	12'-9	21.8	48	9	15'-6	2530	26	4	11'-10	206	26	4	15'-9	274	26	4	14'-0	243	3253
24	13'-9	23.5	48	9	16'-6	2693	28	4	11'-10	221	28	4	15'-9	295	28	4	14'-0	262	3471
25	14'-3	24.4	48	9	17'-0	2774	30	4	11'-10	237	30	4	15'-9	316	30	4	14'-0	281	3608
26	15'-3	26.1	48	9	18'-0	2938	32	4	11'-10	253	32	4	15'-9	337	32	4	14'-0	299	3827
27	16'-3	27.8	48	9	19'-0	3101	34	4	11'-10	269	34	4	15'-9	358	34	4	14'-0	318	4046
28	17'-3	29.5	48	9	20'-0	3264	36	4	11'-10	285	36	4	15'-9	379	36	4	14'-0	337	4265
29	18'-3	31.2	48	9	21'-0	3427	38	4	11'-10	300	38	4	15'-9	400	38	4	14'-0	355	4482
30	19'-3	32.9	48	9	22'-0	3590	40	4	11'-10	316	40	4	15'-9	421	40	4	14'-0	374	4701
31	20'-3	34.6	48	9	23'-0	3754	42	4	11'-10	332	42	4	15'-9	442	42	4	14'-0	393	4921
32	21'-3	36.3	48	9	24'-0	3917	44	4	11'-10	348	44	4	15'-9	463	44	4	14'-0	411	5139
33	22'-3	38.0	48	9	25'-0	4080	46	4	11'-10	364	46	4	15'-9	484	46	4	14'-0	430	5358
34	23'-3	39.7	48	9	26'-0	4243	48	4	11'-10	379	48	4	15'-9	505	48	4	14'-0	449	5576
35	24'-3	41.5	48	9	27'-0	4406	50	4	11'-10	395	50	4	15'-9	526	50	4	14'-0	468	5795
36	25'-3	43.2	48	9	28'-0	4570	52	4	11'-10	411	52	4	15'-9	547	52	4	14'-0	486	6014
37	26'-3	44.9	48	9	29'-0	4733	54	4	11'-10	427	54	4	15'-9	568	54	4	14'-0	505	6233
38	27'-3	46.6	48	9	30'-0	4896	56	4	11'-10	443	56	4	15'-9	589	56	4	14'-0	524	6452
39	28'-3	48.3	48	9	31'-0	5059	58	4	11'-10	458	58	4	15'-9	610	58	4	14'-0	542	6669
40	29'-3	50.0	48	9	32'-0	5222	60	4	11'-10	474	60	4	15'-9	631	60	4	14'-0	561	6888

① SEE SHEET H44-17-07 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

REVISED 11-09 - SHEET WAS REVISED TO MEET LRFD SPECIFICATIONS.

11-09
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED
CONCRETE BEAM BRIDGES
MARCH, 2007

TEE PIER
CAP AND COLUMN
15° SKEW

H44-59-07