REV. NO.	DESCRIPTION	REVISIONS	DATE

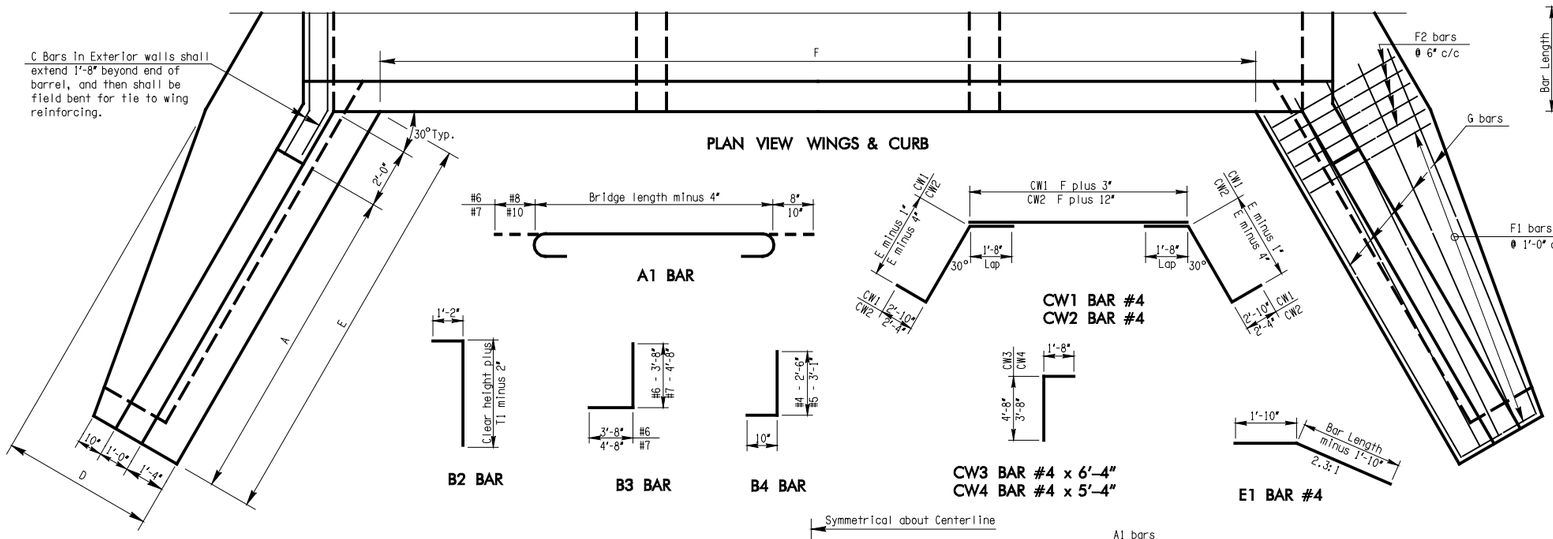
Design No.	Clear Span	Clear Height	Bridge Length	DIMENSIONS: BARREL T1	BARREL T2	BARREL T3	BARREL V	WINGS A	WINGS B	WINGS C	WINGS D	WINGS E	WINGS F
1	9'-6"	4'-6"	32'-6"	11 1/2"	1'-0 3/4"	1'-0"	6'-6 1/4"	8'-3"	3'-7"	2'-10 1/2"	5'-2"	11'-0 1/4"	27'-5"
2	9'-6"	6'-6"	32'-6"	11 1/2"	1'-0 3/4"	1'-0"	8'-6 1/4"	10'-6"	4'-6 3/4"	3'-10 3/4"	5'-9"	13'-3 1/4"	27'-5"
3	9'-6"	8'-0"	32'-6"	11 1/2"	1'-0 3/4"	1'-0"	10'-0 1/4"	12'-10"	5'-7"	4'-4 1/2"	6'-4"	15'-7 1/4"	27'-5"
4	9'-6"	9'-6"	32'-6"	11 1/2"	1'-0 3/4"	1'-0"	11'-6 1/4"	15'-1"	6'-6 3/4"	4'-10 3/4"	6'-11"	17'-10 1/4"	27'-5"
5	11'-0"	4'-6"	37'-0"	1'-0"	1'-1"	1'-0"	6'-7"	8'-3"	3'-7"	2'-11"	5'-2"	11'-0 1/4"	31'-11"
6	11'-0"	6'-6"	37'-0"	1'-0"	1'-1"	1'-0"	8'-7"	10'-6"	4'-6 3/4"	3'-11 1/4"	5'-9"	13'-3 1/4"	31'-11"
7	11'-0"	8'-0"	37'-0"	1'-0"	1'-1"	1'-0"	10'-1"	12'-10"	5'-7"	4'-5"	6'-4"	15'-7 1/4"	31'-11"
8	11'-0"	9'-6"	37'-0"	1'-0"	1'-1"	1'-0"	11'-7"	15'-1"	6'-6 3/4"	4'-11 1/4"	6'-11"	17'-10 1/4"	31'-11"
9	11'-0"	11'-0"	37'-0"	1'-0"	1'-1"	1'-0"	13'-1"	17'-5"	7'-6 3/4"	5'-5 1/4"	7'-6"	20'-2 1/4"	31'-11"
10	13'-0"	6'-6"	43'-0"	1'-0 1/4"	1'-1 1/2"	1'-0"	8'-7 3/4"	10'-6"	4'-6 3/4"	3'-11 1/2"	5'-9"	13'-3 1/4"	37'-11"
11	13'-0"	8'-0"	43'-0"	1'-0 1/4"	1'-1 1/2"	1'-0"	10'-1 3/4"	12'-10"	5'-7"	4'-5 1/4"	6'-4"	15'-7 1/4"	37'-11"
12	13'-0"	9'-6"	43'-0"	1'-0 1/4"	1'-1 1/2"	1'-0"	11'-7 3/4"	15'-1"	6'-6 3/4"	4'-11 1/2"	6'-11"	17'-10 1/4"	37'-11"
13	13'-0"	11'-0"	43'-0"	1'-0 1/4"	1'-1 1/2"	1'-0"	13'-1 3/4"	17'-5"	7'-6 3/4"	5'-5 1/2"	7'-6"	20'-2 1/4"	37'-11"
14	13'-0"	13'-0"	43'-0"	1'-0 1/4"	1'-1 1/2"	1'-0"	15'-1 3/4"	19'-8"	8'-6 1/2"	6'-5 3/4"	8'-0"	22'-5 1/4"	37'-11"
15	14'-6"	6'-6"	47'-6"	1'-0 3/4"	1'-2"	1'-0"	8'-8 3/4"	10'-6"	4'-6 3/4"	4'-0"	5'-9"	13'-3 1/4"	42'-5"
16	14'-6"	8'-0"	47'-6"	1'-0 3/4"	1'-2"	1'-0"	10'-2 3/4"	12'-10"	5'-7"	4'-5 3/4"	6'-4"	15'-7 1/4"	42'-5"
17	14'-6"	9'-6"	47'-6"	1'-0 3/4"	1'-2"	1'-0"	11'-8 3/4"	15'-1"	6'-6 3/4"	5'-0"	6'-11"	17'-10 1/4"	42'-5"
18	14'-6"	11'-0"	47'-6"	1'-0 3/4"	1'-2"	1'-0"	13'-2 3/4"	17'-5"	7'-6 3/4"	5'-6"	7'-6"	20'-2 1/4"	42'-5"
19	14'-6"	13'-0"	47'-6"	1'-0 3/4"	1'-2"	1'-0"	15'-2 3/4"	19'-8"	8'-6 1/2"	6'-6 1/4"	8'-0"	22'-5 1/4"	42'-5"
20	14'-6"	14'-6"	47'-6"	1'-0 3/4"	1'-2"	1'-0"	16'-8 3/4"	22'-0"	9'-6 3/4"	7'-0"	8'-7"	24'-9 1/4"	42'-5"

Design No.	BARREL REINFORCING: A1 BARS SIZE	A1 BARS LENGTH	A2 BARS SIZE	A2 BARS LENGTH	A3 BARS SIZE	A3 BARS LENGTH	A4 BARS SIZE	A4 BARS LENGTH	B1 BARS SIZE	B1 BARS LENGTH	B2 BARS SIZE	B2 BARS LENGTH	B3 BARS SIZE	B3 BARS LENGTH	B4 BARS SIZE	B4 BARS LENGTH	C BARS NO.
1	#6	33'-6"	#5	32'-2"	#4	32'-2"	#6	32'-2"	#4	5'-1"	#5	6'-5"	#6	7'-4"	#4	3'-4"	137
2	#6	33'-6"	#5	32'-2"	#4	32'-2"	#6	32'-2"	#4	7'-1"	#5	8'-5"	#6	7'-4"	#4	3'-4"	145
3	#6	33'-6"	#5	32'-2"	#4	32'-2"	#6	32'-2"	#4	8'-7"	#5	9'-11"	#6	7'-4"	#4	3'-4"	153
4	#6	33'-6"	#5	32'-2"	#4	32'-2"	#6	32'-2"	#4	10'-1"	#5	11'-5"	#6	7'-4"	#4	3'-4"	161
5	#6	38'-0"	#6	36'-8"	#5	36'-8"	#6	36'-8"	#4	5'-2"	#5	6'-6"	#6	7'-4"	#4	3'-4"	152
6	#6	38'-0"	#6	36'-8"	#6	36'-8"	#6	36'-8"	#4	7'-2"	#5	8'-6"	#6	7'-4"	#4	3'-4"	160
7	#6	38'-0"	#6	36'-8"	#6	36'-8"	#6	36'-8"	#4	8'-8"	#5	10'-0"	#6	7'-4"	#4	3'-4"	168
8	#6	38'-0"	#6	36'-8"	#6	36'-8"	#6	36'-8"	#4	10'-2"	#5	11'-6"	#6	7'-4"	#4	3'-4"	176
9	#6	38'-0"	#6	36'-8"	#6	36'-8"	#6	36'-8"	#5	11'-8"	#5	13'-0"	#6	7'-4"	#4	3'-4"	184
10	#7	44'-4"	#6	42'-8"	#6	42'-8"	#7	42'-8"	#4	7'-2"	#6	8'-6"	#6	7'-4"	#4	3'-4"	175
11	#7	44'-4"	#6	42'-8"	#6	42'-8"	#7	42'-8"	#4	8'-8"	#6	10'-0"	#6	7'-4"	#4	3'-4"	183
12	#7	44'-4"	#6	42'-8"	#6	42'-8"	#7	42'-8"	#4	10'-2"	#6	11'-6"	#6	7'-4"	#4	3'-4"	191
13	#7	44'-4"	#6	42'-8"	#6	42'-8"	#7	42'-8"	#4	11'-8"	#6	13'-0"	#6	7'-4"	#4	3'-4"	199
14	#7	44'-4"	#6	42'-8"	#6	42'-8"	#7	42'-8"	#5	13'-8"	#6	15'-0"	#6	7'-4"	#4	3'-4"	207
15	#7	48'-10"	#7	47'-2"	#6	47'-2"	#7	47'-2"	#5	7'-2"	#6	8'-6"	#6	7'-4"	#5	3'-11"	187
16	#7	48'-10"	#7	47'-2"	#6	47'-2"	#7	47'-2"	#5	8'-8"	#6	10'-0"	#6	7'-4"	#5	3'-11"	195
17	#7	48'-10"	#7	47'-2"	#6	47'-2"	#7	47'-2"	#5	10'-2"	#6	11'-6"	#6	7'-4"	#5	3'-11"	203
18	#7	48'-10"	#7	47'-2"	#6	47'-2"	#7	47'-2"	#5	11'-8"	#6	13'-0"	#6	7'-4"	#5	3'-11"	211
19	#7	48'-10"	#7	47'-2"	#6	47'-2"	#7	47'-2"	#5	13'-8"	#7	15'-0"	#7	9'-4"	#5	3'-11"	219
20	#7	48'-10"	#7	47'-2"	#6	47'-2"	#7	47'-2"	#5	15'-2"	#7	16'-6"	#7	9'-4"	#5	3'-11"	227

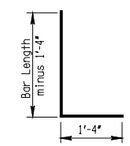
Design No.	WING REINFORCING: 12 D1 BARS LENGTH	D2 BARS NO.	D2 BARS LENGTH	12 D3 BARS SIZE	12 D3 BARS LENGTH	D4 BARS NO.	D4 BARS SIZE	D4 BARS LENGTH	D5 BARS NO.	D5 BARS SIZE	D5 BARS LENGTH	D6 BARS NO.	D6 BARS SIZE	D6 BARS LENGTH	8 E1 BARS LENGTH	E2 BARS NO.	E2 BARS LENGTH	E3 BARS NO.	E3 BARS LENGTH	F1 BARS NO.	F1 BARS LENGTH	40 F2 BARS LENGTH	G BARS NO.	G BARS LENGTH
1	6'-3"	36	2'-9" TO 6'-2"	#4	6'-3"	36	#4	2'-9" TO 6'-2"	44	#4	5'-4"	96	#4	3'-8"	10'-8"	24	2'-9" TO 7'-4"	24	9'-11"	72	2'-10" TO 4'-9"	4'-10"	40	10'-8"
2	8'-3"	44	3'-9" TO 8'-1"	#4	8'-3"	44	#4	3'-9" TO 8'-1"	52	#4	6'-4"	112	#4	3'-8"	13'-1"	32	2'-8" TO 9'-7"	32	12'-2"	88	2'-10" TO 5'-4"	5'-5"	40	12'-11"
3	9'-9"	52	4'-3" TO 9'-5"	#4	9'-9"	52	#4	4'-3" TO 9'-5"	60	#4	6'-10"	128	#4	3'-8"	15'-8"	40	2'-9" TO 11'-11"	40	14'-6"	104	2'-10" TO 5'-10"	6'-0"	40	15'-3"
4	11'-3"	60	4'-9" TO 10'-10"	#5	11'-3"	60	#5	4'-9" TO 10'-10"	68	#5	7'-4"	144	#5	4'-1"	18'-1"	48	2'-8" TO 14'-2"	40	16'-9"	120	2'-10" TO 6'-4"	6'-7"	48	17'-6"
5	6'-4"	36	2'-9" TO 6'-3"	#4	6'-4"	36	#4	2'-9" TO 6'-3"	44	#4	5'-5"	96	#4	3'-8"	10'-8"	24	2'-9" TO 7'-4"	24	9'-11"	72	2'-10" TO 4'-9"	4'-10"	40	10'-8"
6	8'-4"	44	3'-9" TO 8'-2"	#4	8'-4"	44	#4	3'-9" TO 8'-2"	52	#4	6'-5"	112	#4	3'-8"	13'-1"	32	2'-8" TO 9'-7"	32	12'-2"	88	2'-10" TO 5'-4"	5'-5"	40	12'-11"
7	9'-10"	52	4'-3" TO 9'-6"	#4	9'-10"	52	#4	4'-3" TO 9'-6"	60	#4	6'-11"	128	#4	3'-8"	15'-8"	40	2'-9" TO 11'-11"	40	14'-6"	104	2'-10" TO 5'-10"	6'-0"	40	15'-3"
8	11'-4"	60	4'-9" TO 10'-11"	#5	11'-4"	60	#5	4'-9" TO 10'-11"	68	#5	7'-5"	144	#5	4'-1"	18'-1"	48	2'-8" TO 14'-2"	40	16'-9"	120	2'-10" TO 6'-4"	6'-7"	48	17'-6"
9	12'-10"	72	5'-3" TO 12'-8"	#6	12'-10"	72	#6	5'-3" TO 12'-8"	80	#6	7'-11"	168	#6	4'-7"	20'-8"	56	2'-8" TO 16'-6"	48	19'-1"	144	2'-10" TO 7'-1"	7'-2"	48	19'-10"
10	8'-4"	44	3'-10" TO 8'-2"	#4	8'-4"	44	#4	3'-10" TO 8'-2"	52	#4	6'-5"	112	#4	3'-8"	13'-1"	32	2'-8" TO 9'-7"	32	12'-2"	88	2'-10" TO 5'-4"	5'-5"	40	12'-11"
11	9'-10"	52	4'-3" TO 9'-6"	#4	9'-10"	52	#4	4'-3" TO 9'-6"	60	#4	6'-11"	128	#4	3'-8"	15'-8"	40	2'-9" TO 11'-11"	40	14'-6"	104	2'-10" TO 5'-10"	6'-0"	40	15'-3"
12	11'-4"	60	4'-10" TO 10'-11"	#5	11'-4"	60	#5	4'-10" TO 10'-11"	68	#5	7'-5"	144	#5	4'-1"	18'-1"	48	2'-8" TO 14'-2"	40	16'-9"	120	2'-10" TO 6'-4"	6'-7"	48	17'-6"
13	12'-10"	72	5'-4" TO 12'-8"	#6	12'-10"	72	#6	5'-4" TO 12'-8"	80	#6	7'-11"	168	#6	4'-7"	20'-8"	56	2'-8" TO 16'-6"	48	19'-1"	144	2'-10" TO 7'-1"	7'-2"	48	19'-10"
14	14'-10"	80	6'-4" TO 14'-7"	#7	14'-10"	80	#7	6'-4" TO 14'-7"	88	#7	8'-11"	184	#7	5'-4"	23'-1"	64	2'-7" TO 18'-9"	56	21'-4"	160	2'-10" TO 7'-6"	7'-8"	56	22'-1"
15	8'-4"	44	3'-10" TO 8'-2"	#4	8'-4"	44	#4	3'-10" TO 8'-2"	52	#4	6'-6"	112	#4	3'-8"	13'-1"	32	2'-8" TO 9'-7"	32	12'-2"	88	2'-10" TO 5'-4"	5'-5"	40	12'-11"
16	9'-10"	52	4'-4" TO 9'-7"	#4	9'-10"	52	#4	4'-4" TO 9'-7"	60	#4	6'-11"	128	#4	3'-8"	15'-8"	40	2'-9" TO 11'-11"	40	14'-6"	104	2'-10" TO 5'-10"	6'-0"	40	15'-3"
17	11'-4"	60	4'-10" TO 10'-11"	#5	11'-4"	60	#5	4'-10" TO 10'-11"	68	#5	7'-6"	144	#5	4'-1"	18'-1"	48	2'-8" TO 14'-2"	40	16'-9"	120	2'-10" TO 6'-4"	6'-7"	48	17'-6"
18	12'-10"	72	5'-4" TO 12'-9"	#6	12'-10"	72	#6	5'-4" TO 12'-9"	80	#6	8'-0"	168	#6	4'-7"	20'-8"	56	2'-8" TO 16'-6"	48	19'-1"	144	2'-10" TO 7'-1"	7'-2"	48	19'-10"
19	14'-10"	80	6'-4" TO 14'-7"	#7	14'-10"	80	#7	6'-4" TO 14'-7"	88	#7	9'-0"	184	#7	5'-4"	23'-1"	64	2'-7" TO 18'-9"	56	21'-4"	160	2'-10" TO 7'-6"	7'-8"	56	22'-1"
20	16'-4"	88	6'-10" TO 16'-0"	#8	16'-4"	88	#8	6'-10" TO 16'-0"	96	#8	9'-6"	200	#8	6'-3"	25'-8"	72	2'-8" TO 21'-1"	56	23'-8"	176	2'-10" TO 8'-0"	8'-3"	56	24'-5"

Design No.	CURB REINFORCING: 4 H1 BAR LENGTH	H2 BAR NO.	CURTAIN WALL REINFORCING: 8 CW1 BARS LENGTH	8 CW2 BARS LENGTH	CW3 BARS NO.	CW4 BARS NO.	QUANTITIES *: CONC. - CY BARREL	CONC. - CY WINGS	REINF. LBS. BARREL	REINF. LBS. WINGS	Design No.
1	32'-2"	68	58'-6"	57'-9"	114	112	3.10	34.9	537.150	3430	1
2	32'-2"	68	63'-0"	62'-3"	122	120	3.40	43.8	566.870	4110	2
3	32'-2"	68	67'-8"	66'-11"	132	130	3.62	53.2	590.496	4820	3
4	32'-2"	68	72'-2"	71'-5"	140	140	3.84	63.5	614.122	6270	4
5	36'-8"	76	63'-0"	62'-3"	122	120	3.53	36.5	651.781	3590	5
6	36'-8"	76	67'-6"	66'-9"	132	130	3.82	45.5	715.161	4280	6
7	36'-8"	76	72'-2"	71'-5"	140	140	4.05	54.9	738.787	4990	7
8	36'-8"	76	76'-8"	75'-11"	150	148	4.27	65.2	762.413	6440	8
9	36'-8"	76	81'-4"	80'-7"	158	158	4.49	76.8	838.539	8690	9
10	42'-8"	88	73'-6"	72'-9"	144	142	4.39	47.6	908.192	4500	10
11	42'-8"	88	78'-2"	77'-5"	152	152	4.61	57.0	934.572	5200	11
12	42'-8"	88	82'-8"	81'-11"	162	160	4.83	67.3	960.952	6660	12
13	42'-8"	88	87'-4"	86'-7"	170	170	5.05	78.9	987.332	8920	13
14	42'-8"	88	91'-10"	91'-1"	180	178	5.35	92.5	1082.224	12120	14
15	47'-2"	98	78'-0"	77'-3"	152	150	4.89	49.2	1085.717	4660	15
16	47'-2"	98	82'-8"	81'-11"	162	160	5.11	58.6	1118.847	5380	16
17	47'-2"	98	87'-2"	86'-5"	170	170	5.33	69.0	1151.977	6830	17
18	47'-2"	98	91'-10"	91'-1"	180	178	5.56	80.6	1185.107	9100	18
19	47'-2"	98	96'-4"	95'-7"	188	188	5.85	94.2	1292.269	12300	19
20	47'-2"	98	101'-0"	100'-3"	198	196	6.07	108.1	1328.651	16230	20

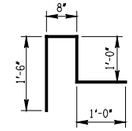
* Wing Quantities include Wing footings, Curtain walls and Curbs.



PLAN VIEW WINGS & CURB

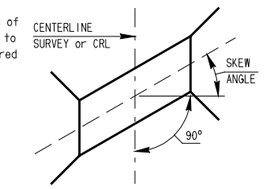


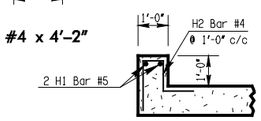
D5 & D6 BARS



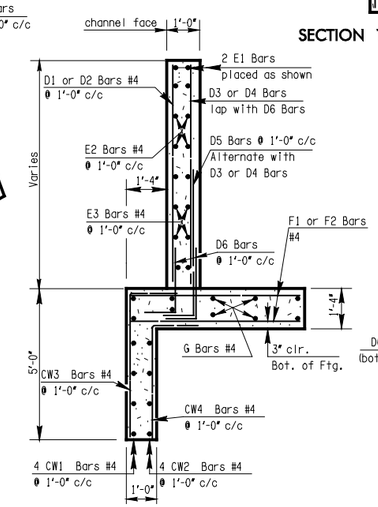
H2 BAR #4 x 4'-2"

The skew angle is defined as the angle between the line of the structure crossing feature and a line perpendicular to the centerline survey or the CRL (Stationing Line) measured at the centerline station of the structure.

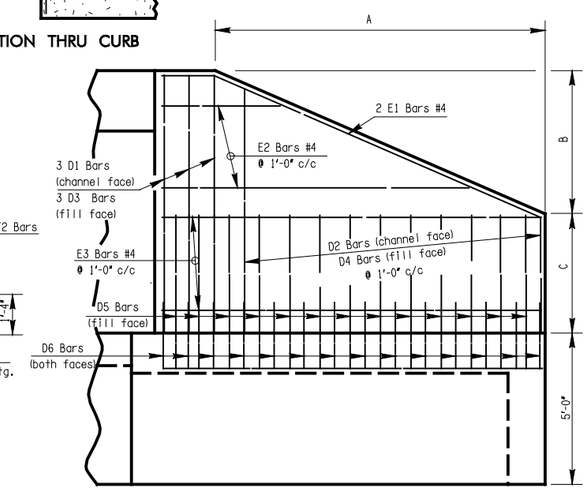




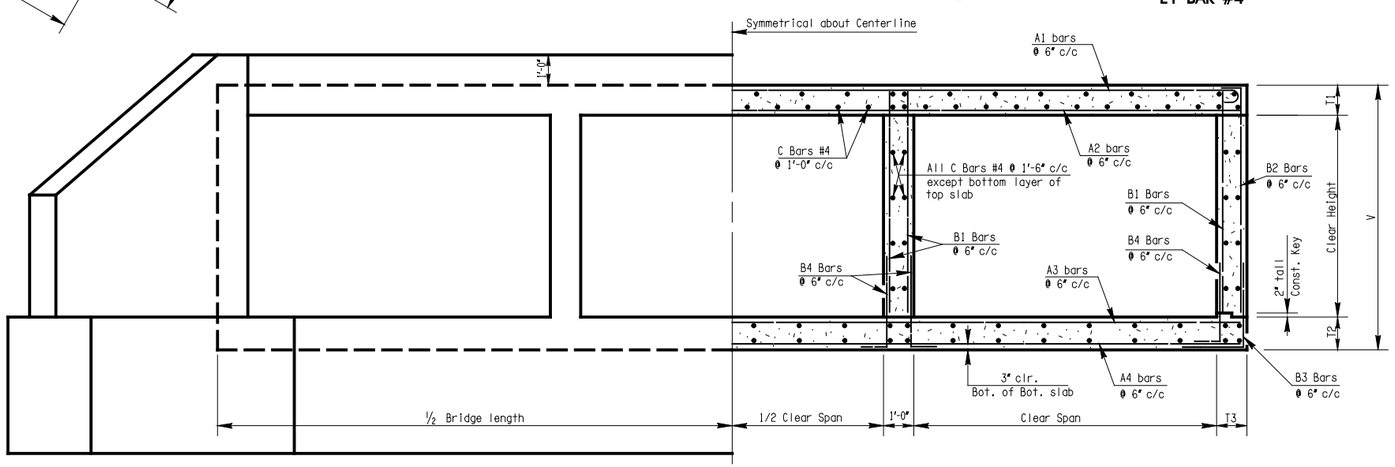
SECTION THRU CURB



SECTION THRU WING



WING ELEVATION



HALF END ELEVATION

TYPICAL CROSS SECTION

NOTE: If rock is encountered during excavation for curtain walls, the curtain walls will be keyed a minimum of 6" into the rock.

NOTES:
All construction and materials shall be in accordance with the current Oklahoma Standard Specifications.

All concrete edges shall have a 1½" chamfer unless otherwise shown or noted. All chamfer strips shall be sized lumber.

All reinforcing steel shall have 2" clearance unless otherwise shown or noted.

Roughen surface at all Construction Joints.

DESIGN DATA
Class "A" Concrete f'c = 3000 psi
Reinforcing Steel (Grade 60) fy = 60000 psi
Loading: HS 20
Design: Load Factor Design

APPROVED BY BRIDGE ENGINEER DATE

OKLAHOMA DEPARTMENT OF TRANSPORTATION
COUNTY BRIDGE STANDARD (ENGLISH)

TRIPLE CELL REINFORCED CONCRETE BOX
SKEWED 0° (FILLS LESS THAN 5'-0")

1999 SPECIFICATIONS | RCB3B-2 | 00E

CB-37E