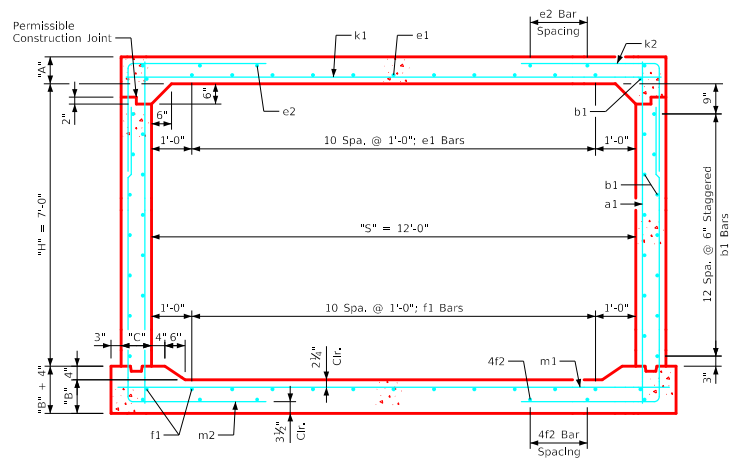
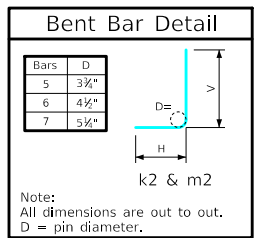


Variable Dimensions and Quantities for 12' x 7' Barrel Sections

Dimensions										Bar List																		Quantities																					
Fill	S	H	A	B	C	D	a1		b1		e1		e2		f1		f2		k1		k2		k9		m1		m2		m9		Concrete (CY/FT)				Steel (LB/FT)														
0	1	2-3	4-6	7-8	9-10	11-15	16-20	21-25	26-30	34-35	36-40	41-45	46-50	51-55	Size	Sp.	L	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Slab	Floor	Walls	Total				
0	12	7	13.5	13	9	9	4	12	9'-1	4	6	28	5	12	11	4	14	8	4	12	13	4	14	8	7	9	13'-2	6	12	8'-6	4'-3	4'-3	6	13'-2	7	9	13'-8	7	12	11'-8	4'-2	7'-6	7	13'-8	0.595	0.598	0.368	1.561	219.58
1	12	7	12.5	13	9	9	4	12	9'-0	4	6	28	5	12	11	4	15	8	4	12	13	4	13	8	7	9	13'-2	5	6	7'-10	4'-4	3'-6	5	13'-2	7	9	13'-8	5	6	11'-4	3'-10	7'-6	5	13'-8	0.553	0.598	0.368	1.519	220.42
2-3	12	7	8.5	10.5	9	6	4	6	8'-6	4	6	28	5	12	11	4	18	6	4	12	13	4	18	6	8	9	13'-2	5	6	6'-8	3'-7	3'-1	5	13'-2	7	6	13'-8	5	6	10'-11	3'-7	7'-4	5	13'-8	0.387	0.490	0.368	1.245	250.61
4-6	12	7	8.5	10.5	9	9	5	9	8'-6	4	6	28	4	12	11	4	17	6	4	12	13	4	17	6	8	9	13'-2	5	6	6'-10	3'-5	3'-5	5	13'-2	7	6	13'-8	5	6	10'-9	3'-5	7'-4	5	13'-8	0.387	0.490	0.368	1.245	247.63
7-8	12	7	8.5	10.5	9	9	5	12	8'-6	4	6	28	4	12	11	4	16	6	4	12	13	4	16	6	7	6	13'-2	5	6	6'-6	3'-3	3'-3	5	13'-2	7	6	13'-8	6	6	10'-7	3'-3	7'-4	6	13'-8	0.387	0.490	0.368	1.245	265.42
9-10	12	7	9	11.5	9	9	4	12	8'-7	4	6	28	4	12	11	4	16	6	4	12	13	4	15	6	7	6	13'-2	7	9	7'-2	3'-3	3'-11	7	13'-2	7	6	13'-8	7	9	10'-7	3'-2	7'-5	7	13'-8	0.407	0.534	0.368	1.309	269.39
11-15	12	7	10.5	12.5	9	9	4	12	8'-10	4	6	28	4	12	11	4	14	6	4	12	13	4	14	6	8	6	13'-2	7	9	7'-0	2'-11	4'-1	7	13'-2	8	6	13'-8	7	9	10'-5	2'-11	7'-6	7	13'-8	0.470	0.577	0.368	1.415	301.89
16-20	12	7	12.5	15	9	6	4	6	9'-2	4	6	28	4	12	11	4	11	6	4	12	13	4	12	6	8	6	13'-2	5	6	6'-0	2'-6	3'-6	5	13'-2	8	6	13'-8	5	6	10'-3	2'-7	7'-8	5	13'-8	0.553	0.685	0.368	1.606	282.24
21-25	12	7	14.5	17	9.5	9	6	12	9'-6	4	6	28	4	12	11	4	11	6	4	12	13	4	11	6	9	6	13'-3	6	9	6'-8	2'-7	4'-1	6	13'-3	9	6	13'-9	6	9	10'-5	2'-7	7'-10	6	13'-9	0.642	0.777	0.389	1.808	331.39
26-30	12	7	16.5	19	10.5	6	4	6	9'-10	4	6	28	4	12	11	4	12	6	4	12	13	4	12	6	9	6	13'-5	5	6	6'-7	2'-9	3'-10	5	13'-5	9	6	13'-11	5	6	10'-10	2'-10	8'-0	5	13'-11	0.736	0.874	0.431	2.041	332.05
34-35	12	7	18	20.5	11	9	5	9	10'-1	4	6	28	4	12	11	4	13	6	4	12	13	4	13	6	9	6	13'-6	5	6	6'-10	2'-11	3'-11	5	13'-6	9	6	14'-0	5	6	11'-1	2'-11	8'-2	5	14'-0	0.806	0.946	0.451	2.203	337.32
36-40	12	7	19.5	22	11.5	9	6	9	10'-4	4	6	28	4	12	11	4	14	6	5	12	13	4	13	6	9	6	13'-7	6	9	7'-8	3'-2	4'-6	6	13'-7	9	6	14'-1	6	9	11'-4	3'-1	8'-3	6	14'-1	0.876	1.019	0.471	2.366	361.29
41-45	12	7	21	23.5	12.5	9	6	9	10'-7	4	6	28	4	12	11	4	13	6	5	12	13	4	14	6	9	6	13'-9	5	6	7'-4	3'-2	4'-2	5	13'-9	9	6	14'-3	5	6	11'-8	3'-3	8'-5	5	14'-3	0.954	1.100	0.512	2.566	364.68
46-50	12	7	22.5	25	13	9	6	9	10'-10	4	6	28	5	12	11	4	14	6	5	12	13	4	15	6	10	6	13'-10	6	9	8'-1	3'-4	4'-9	6	13'-10	10	6	14'-4	6	9	11'-11	3'-5	8'-6	6	14'-4	1.026	1.175	0.532	2.733	426.61
51-55	12	7	24	26.5	13.5	9	6	9	11'-1	4	6	28	5	12	11	4	15	6	5	12	13	4	15	6	10	6	13'-11	5	6	7'-11	3'-6	4'-5	5	13'-11	10	6	14'-5	5	6	12'-2	3'-6	8'-8	5	14'-5	1.100	1.251	0.553	2.904	429.50



12' x 7' Barrel Section

- Notes:
- Dimensions listed on this sheet to be used in conjunction with Sheet RCB G3-20.
  - The k2 and m2 bars horizontal legs may lap in low fill situations.
  - Fill dimensions "S" and "H" are in feet.
  - Dimensions "A", "B", "C", "D", and "Sp." listed in the bar list are in inches.
  - Dimensions "L", "H", "V" are in feet and inches.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Standard Design <b>Single Reinforced Concrete Box Culverts</b> July, 2020	
		Culvert Barrel Details	RCB 12-7-20
		12' x 7' Barrel Sections	

ENGLISHLRFD\DESIGNED\CULVERTS.DGN - RCB 12-7-20 - THIS SHEET ISSUED 07-2020.