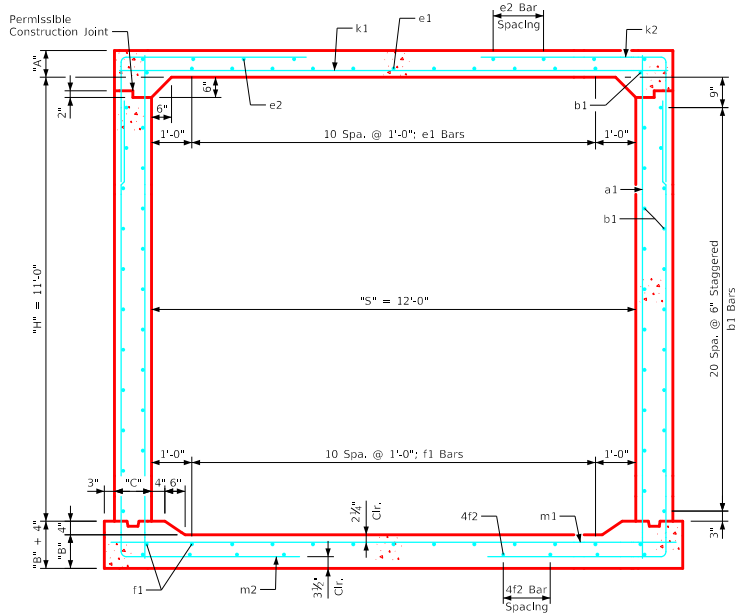
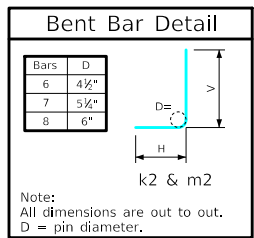


Variable Dimensions and Quantities for 12' x 11' Barrel Sections

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)		
							Size	Sp.	L	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Slab	Floor	Walls	Total			
0	12	11	13.5	13.5	11	9	4	9	13'-2	4	6	44	5	12	11	4	16	10	4	12	13	4	16	10	7	9	13'-6	6	9	11'-11	8'-0	3'-11	-	-	7	9	14'-0	6	9	18'-9	7'-2	11'-7	-	-	0.614	0.636	0.723	1.973	292.84
1	12	11	12.5	13.5	11	9	4	9	13'-1	4	6	44	5	12	11	4	16	10	4	12	13	4	16	10	7	9	13'-6	6	9	11'-10	8'-0	3'-10	-	-	7	9	14'-0	6	9	19'-7	8'-0	11'-7	-	-	0.571	0.636	0.723	1.930	295.84
2	12	11	8.5	10.5	11	9	4	12	12'-6	4	6	44	5	12	11	4	16	10	4	12	13	4	17	8	8	9	13'-6	7	9	10'-1	6'-2	3'-11	7	13'-6	7	6	14'-0	7	9	16'-5	5'-1	11'-4	7	14'-0	0.400	0.504	0.723	1.627	340.45
3	12	11	8	10.5	11	9	4	12	12'-5	4	6	44	4	12	11	4	17	8	4	12	13	4	16	8	8	9	13'-6	7	9	8'-10	5'-0	3'-10	7	13'-6	6	6	14'-0	7	9	16'-1	4'-9	11'-4	7	14'-0	0.379	0.504	0.723	1.606	310.53
4-8	12	11	8.5	10.5	11	9	4	12	12'-6	4	6	44	4	12	11	4	15	8	4	12	13	4	14	8	7	6	13'-6	6	6	8'-1	4'-7	3'-6	6	13'-6	7	6	14'-0	6	6	15'-9	4'-5	11'-4	6	14'-0	0.400	0.504	0.723	1.627	333.89
9-10	12	11	9	11.5	11	9	4	12	12'-7	4	6	44	4	12	11	4	12	8	4	12	13	4	12	8	7	6	13'-6	6	6	7'-10	3'-11	3'-11	6	13'-6	7	6	14'-0	6	6	15'-4	3'-11	11'-5	6	14'-0	0.422	0.548	0.723	1.693	329.97
11-15	12	11	10.5	13	11	9	4	9	12'-10	4	6	44	4	12	11	4	13	8	4	12	13	4	12	8	7	6	13'-6	7	9	8'-2	4'-1	4'-1	7	13'-6	8	6	14'-0	7	9	15'-5	3'-11	11'-6	7	14'-0	0.486	0.614	0.723	1.823	347.66
16-20	12	11	12.5	15	12	9	4	12	13'-2	4	6	44	4	12	11	4	12	8	4	12	13	4	17	6	8	6	13'-8	6	6	7'-10	3'-11	3'-11	6	13'-8	8	6	14'-2	6	6	15'-4	3'-8	11'-8	6	14'-2	0.580	0.713	0.788	2.081	366.18
21-25	12	11	14.5	17.5	13.5	9	5	12	13'-7	4	6	44	4	12	11	4	12	8	4	12	13	4	17	6	8	6	13'-11	6	6	8'-0	4'-0	4'-0	6	13'-11	8	6	14'-5	6	6	15'-10	3'-11	11'-11	6	14'-5	0.682	0.841	0.886	2.409	383.95
26-30	12	11	16.5	19	14.5	9	6	9	13'-10	4	6	44	4	12	11	4	17	6	4	12	13	4	17	6	8	6	14'-1	7	9	8'-6	3'-11	4'-7	7	14'-1	8	6	14'-7	7	9	16'-0	4'-0	12'-0	7	14'-7	0.781	0.921	0.951	2.653	406.63
31-35	12	11	18	21	16	6	5	6	14'-2	4	6	44	4	12	11	4	18	6	4	12	13	4	12	8	9	6	14'-4	7	9	8'-11	4'-2	4'-9	7	14'-4	9	6	14'-10	7	9	16'-5	4'-3	12'-2	7	14'-10	0.865	1.032	1.049	2.946	461.92
36-40	12	11	19.5	22.5	17	9	4	9	14'-5	4	6	44	4	12	11	4	12	8	5	12	13	4	12	8	9	6	14'-6	8	9	9'-7	4'-5	5'-2	8	14'-6	9	6	15'-0	8	9	16'-9	4'-5	12'-4	8	15'-0	0.946	1.116	1.115	3.177	489.79
41-45	12	11	21	24	18	9	8	12	14'-8	4	6	44	4	12	11	4	12	8	5	12	13	4	13	8	9	6	14'-8	8	12	9'-10	4'-6	5'-4	8	14'-8	9	6	15'-2	8	12	17'-0	4'-7	12'-5	8	15'-2	1.028	1.202	1.180	3.410	505.16
46-50	12	11	22.5	25.5	19	9	6	9	14'-11	4	6	44	5	12	11	4	13	8	5	12	13	4	13	8	9	6	14'-10	6	6	9'-4	4'-8	4'-8	6	14'-10	9	6	15'-4	6	6	17'-4	4'-9	12'-7	6	15'-4	1.111	1.289	1.245	3.645	497.18
51-55	12	11	24	26.5	20	9	8	12	15'-1	4	6	44	5	12	11	4	13	8	5	12	13	4	13	8	9	6	15'-0	8	12	10'-4	4'-9	5'-7	8	15'-0	9	6	15'-6	8	12	17'-6	4'-10	12'-8	8	15'-6	1.197	1.353	1.311	3.861	521.95



12' x 11' 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 Single Reinforced Concrete Box Culverts July, 2020	
		Culvert Barrel Details 12' x 11' Barrel Sections	RCB 12-11-20