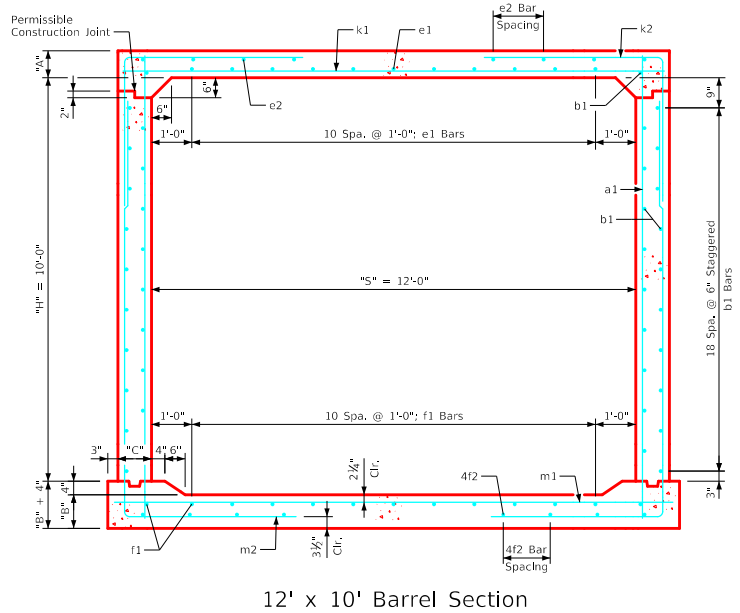
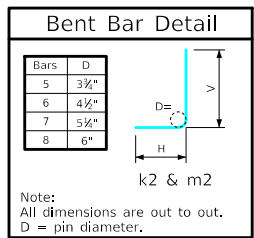


### Variable Dimensions and Quantities for 12' x 10' Barrel Sections

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.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Slab	Floor	Walls	Total												
0	12	10	13.5	13.5	10	9	4	12	12'-2	4	6	40	5	12	11	4	16	10	4	12	13	4	16	10	7	9	13'-4	5	6	11'-2	7'-8	3'-6	-	-	7	9	13'-10	5	6	16'-7	6'-0	10'-7	5	13'-10	0.604	0.629	0.594	1.827	271.92
1	12	10	12.5	13.5	10	9	4	12	12'-1	4	6	40	5	12	11	4	16	10	4	12	13	4	16	10	7	9	13'-4	5	6	11'-1	7'-8	3'-5	-	-	7	9	13'-10	5	6	17'-6	6'-11	10'-7	-	-	0.562	0.629	0.594	1.785	274.55
2	12	10	8.5	10.5	10	9	4	12	11'-6	4	6	40	6	12	11	4	14	10	4	12	13	4	16	8	7	6	13'-4	7	9	9'-5	5'-6	3'-11	7	13'-4	7	6	13'-10	7	9	15'-2	4'-10	10'-4	7	13'-10	0.394	0.498	0.594	1.486	334.76
3	12	10	8.5	10.5	10	9	5	12	11'-6	4	6	40	4	12	11	4	15	8	4	12	13	4	14	8	8	9	13'-4	5	6	7'-8	4'-7	3'-11	5	13'-4	7	6	13'-10	5	6	14'-8	4'-4	10'-4	5	13'-10	0.394	0.498	0.594	1.486	280.42
4-7	12	10	8.5	10.5	10	9	4	12	11'-6	4	6	40	4	12	11	4	15	8	4	12	13	4	14	8	7	6	13'-4	7	9	8'-4	4'-5	3'-11	7	13'-4	7	9	14'-7	4'-3	10'-4	7	13'-10	0.394	0.498	0.594	1.486	314.87			
8-10	12	10	9	12	10	9	4	12	11'-8	4	6	40	4	12	11	4	13	8	4	12	13	4	12	8	7	6	13'-4	7	9	8'-0	4'-0	4'-0	7	13'-4	7	9	14'-2	3'-9	10'-5	7	13'-10	0.415	0.563	0.594	1.572	310.79			
11-15	12	10	10.5	13	10	9	6	9	11'-10	4	6	40	4	12	11	4	12	8	4	12	13	4	17	6	8	6	13'-4	6	6	7'-6	3'-9	3'-9	6	13'-4	8	6	13'-10	5	6	14'-0	3'-6	10'-6	5	13'-10	0.478	0.607	0.594	1.679	352.97
16-20	12	10	12.5	15	11	9	5	12	12'-2	4	6	40	4	12	11	4	15	6	4	12	13	4	15	6	8	6	13'-6	7	9	7'-7	3'-4	4'-3	7	13'-6	8	6	14'-0	7	9	14'-0	3'-4	10'-8	7	14'-0	0.571	0.703	0.655	1.929	351.13
21-25	12	10	14.5	17	12	9	4	12	12'-6	4	6	40	4	12	11	4	15	6	4	12	13	4	16	6	8	6	13'-8	6	6	7'-6	3'-5	4'-1	6	13'-8	8	6	14'-2	6	6	14'-4	3'-6	10'-10	6	14'-2	0.667	0.802	0.714	2.183	353.16
26-30	12	10	16.5	19	13.5	9	4	9	12'-10	4	6	40	4	12	11	4	16	6	4	12	13	4	16	6	8	6	13'-11	6	6	7'-11	3'-8	4'-3	6	13'-11	9	6	14'-5	6	6	14'-9	3'-9	11'-0	6	14'-5	0.770	0.909	0.803	2.482	388.13
31-35	12	10	18	20.5	14.5	6	4	6	13'-1	4	6	40	4	12	11	4	16	6	4	12	13	4	17	6	9	6	14'-1	6	6	8'-2	3'-10	4'-4	6	14'-1	9	6	14'-7	6	6	15'-1	3'-11	11'-2	6	14'-7	0.847	0.990	0.862	2.699	426.55
36-40	12	10	19.5	22.5	15.5	9	6	9	13'-5	4	6	40	4	12	11	4	17	6	5	12	13	4	17	6	9	6	14'-3	7	9	8'-10	4'-0	4'-10	7	14'-3	9	6	14'-9	7	9	15'-5	4'-1	11'-4	7	14'-9	0.927	1.096	0.921	2.944	450.42
41-45	12	10	21	24	16.5	9	4	12	13'-8	4	6	40	4	12	11	4	12	8	5	12	13	4	12	8	9	6	14'-5	8	9	9'-8	4'-4	5'-4	8	14'-5	9	6	14'-11	8	9	15'-8	4'-3	11'-5	8	14'-11	1.008	1.180	0.980	3.168	471.42
46-50	12	10	22.5	25.5	17.5	6	5	6	13'-11	4	6	40	5	12	11	4	12	8	5	12	13	4	12	8	9	6	14'-7	8	12	9'-10	4'-5	5'-5	8	14'-7	9	6	15'-1	8	12	16'-0	4'-5	11'-7	8	15'-1	1.090	1.266	1.039	3.395	477.34
51-55	12	10	24	26.5	18	9	6	9	14'-1	4	6	40	5	12	11	4	12	8	5	12	13	4	12	8	9	6	14'-8	7	9	9'-7	4'-5	5'-2	7	14'-8	10	6	15'-2	7	9	16'-2	4'-6	11'-8	7	15'-2	1.167	1.321	1.069	3.557	501.97



- 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	
		<b>Culvert Barrel Details</b> 12' x 10' Barrel Sections	RCB 12-10-20

ENGLISH\FRDSIGNEDSINGLECULVERTS.DGN - RCB 12-10-20 - THIS SHEET ISSUED 07-2020.