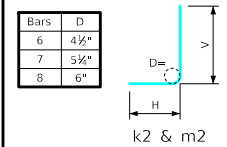


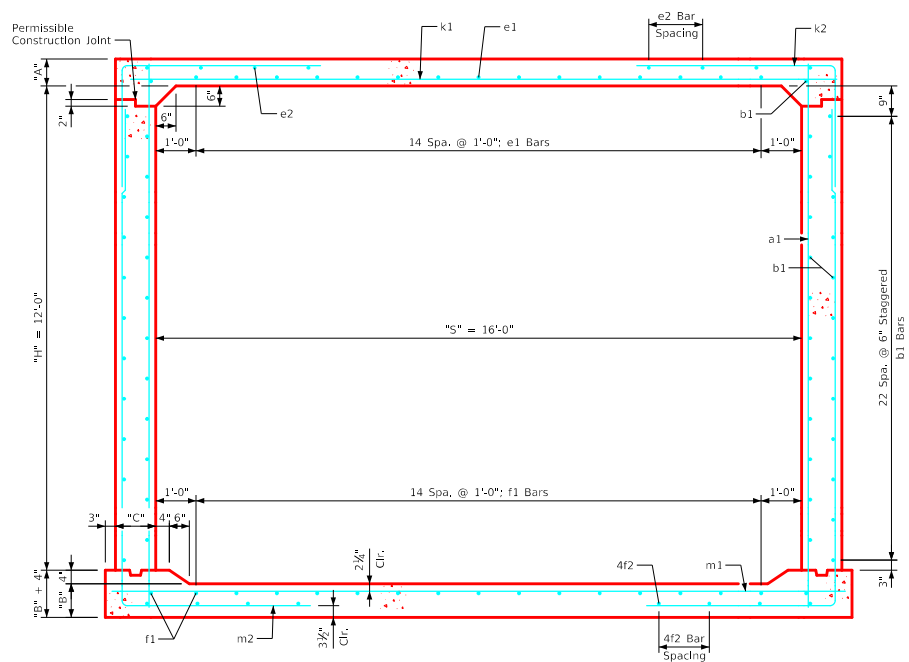
Variable Dimensions and Quantities for 16' x 12' Barrel Sections

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	3-5	6-8	9-10	11-13	14-16	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	Size	Sp.	Slab	Floor	Walls	Total									
0	16	12	15	15.5	12	9	4	9	14'-5"	4	6	48	5	12	15	5	18	12	4	12	17	4	16	10	8	9	17'-8"	8	12	15'-3"	10'-5"	4'-10"	-	-	8	9	18'-2"	8	12	19'-1"	6'-4"	12'-9"	8	18'-2"	0.873	0.926	0.862	2.661	437.24
1	16	12	14	15.5	12	9	4	12	14'-4"	4	6	48	5	12	15	4	18	12	4	12	17	4	17	10	8	9	17'-8"	8	12	15'-2"	10'-5"	4'-9"	-	-	8	9	18'-2"	8	12	19'-4"	6'-7"	12'-9"	8	18'-2"	0.818	0.926	0.862	2.606	427.58
2	16	12	9.5	11.5	12	9	4	12	13'-8"	4	6	48	6	12	15	4	15	10	4	12	17	4	14	10	9	9	17'-8"	8	9	10'-3"	5'-11"	4'-4"	8	17'-8"	7	6	18'-2"	8	9	18'-1"	5'-8"	12'-5"	8	18'-2"	0.568	0.698	0.862	2.128	472.47
3-5	16	12	9.5	12.5	12	9	4	12	13'-9"	4	6	48	4	12	15	4	14	10	4	12	17	4	18	8	7	6	17'-8"	7	6	9'-6"	5'-6"	4'-0"	7	17'-8"	7	6	18'-2"	6	6	17'-10"	5'-4"	12'-6"	6	18'-2"	0.568	0.755	0.862	2.185	422.74
6-8	16	12	10	12.5	12	9	4	12	13'-9"	4	6	48	4	12	15	4	16	8	4	12	17	4	16	8	8	6	17'-8"	7	6	8'-10"	4'-10"	4'-0"	7	17'-8"	8	6	18'-2"	7	6	17'-4"	4'-10"	12'-6"	7	18'-2"	0.596	0.755	0.862	2.213	496.87
9-10	16	12	11	14	12	9	6	12	14'-0"	4	6	48	4	12	15	4	15	8	4	12	17	4	15	8	8	6	17'-8"	7	6	9'-2"	4'-7"	4'-7"	7	17'-8"	8	6	18'-2"	6	6	17'-2"	4'-7"	12'-7"	6	18'-2"	0.651	0.841	0.862	2.354	484.34
11-13	16	12	13	16	12	9	6	12	14'-4"	4	6	48	4	12	15	4	14	8	4	12	17	4	14	8	9	6	17'-8"	7	6	8'-8"	4'-4"	4'-4"	7	17'-8"	9	6	18'-2"	6	6	17'-1"	4'-4"	12'-9"	6	18'-2"	0.762	0.955	0.862	2.579	533.74
14-16	16	12	14.5	17.5	13	9	5	12	14'-7"	4	6	48	4	12	15	4	13	8	4	12	17	4	13	8	9	6	17'-10"	8	9	9'-0"	4'-3"	4'-9"	8	17'-10"	9	6	18'-4"	8	9	17'-3"	4'-4"	12'-11"	8	18'-4"	0.856	1.052	0.934	2.842	544.53

Bent Bar Detail



Note:
All dimensions are out to out.
D = pin diameter.



16' x 12' 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		RCB 16-12-20
16' x 12' Barrel Sections		

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