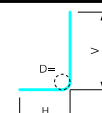


Variable Dimensions and Quantities for 16' x 10' Barrel Sections

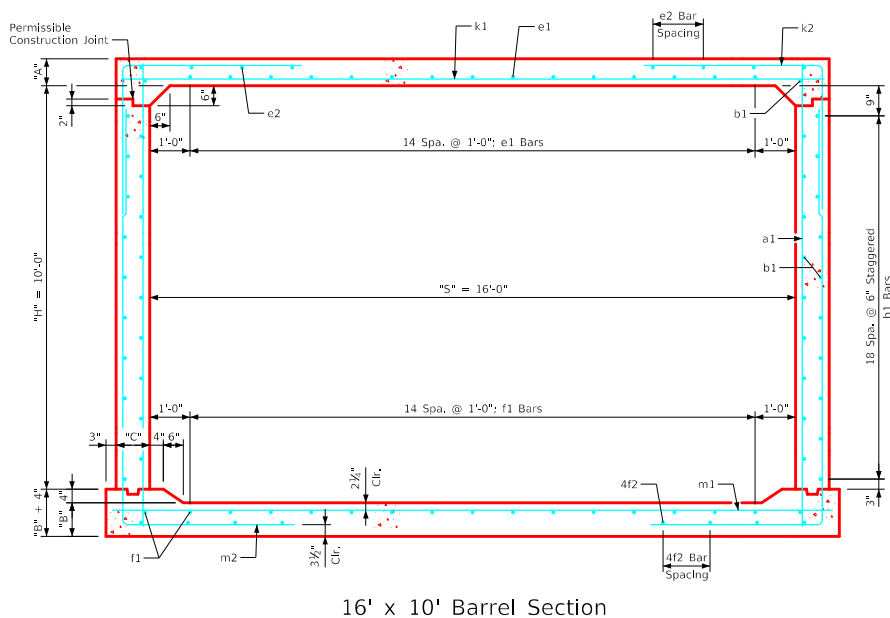
Dimensions										Bar List																		Quantities																					
Fill	S	H	A	B	C	D	a1		b1		e1		e2		f1		f2		k1		k2		k9		m1		m2		m9		Concrete (CY/FT)				Steel (LB/FT)														
0	16	10	14.5	15	10	9	Size	Sp.	L	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	Slab	Floor	Walls	Total													
1	16	10	14	15	10	9	6	12	12'-4"	4	6	40	5	12	15	4	16	10	4	12	17	4	14	10	8	9	17'-4"	5	6	9'-9"	6'-1"	3'-8"	5	17'-4"	8	9	17'-10"	5	6	16'-0"	5'-4"	10'-8"	5	17'-10"	0.826	0.880	0.594	2,300	346.26
2	16	10	10	12	10	9	4	12	11'-9"	4	6	40	6	12	15	4	17	8	4	12	17	4	17	8	9	17'-4"	6	6	8'-9"	5'-1"	3'-8"	6	17'-4"	7	6	17'-10"	6	6	15'-4"	4'-11"	10'-5"	6	17'-10"	0.580	0.711	0.594	1,885	392.21	
3-5	16	10	10	12.5	10	9	5	12	11'-9"	4	6	40	4	12	15	4	16	8	4	12	17	4	16	8	9	17'-4"	7	9	8'-8"	4'-8"	4'-0"	7	17'-4"	8	6	17'-10"	7	9	15'-2"	4'-8"	10'-6"	7	17'-10"	0.580	0.740	0.594	1,914	401.74	
6-8	16	10	10	12.5	10	9	4	12	11'-9"	4	6	40	4	12	15	4	15	8	4	12	17	4	14	8	8	6	17'-4"	8	9	8'-10"	4'-5"	4'-5"	8	17'-4"	8	9	14'-9"	4'-3"	10'-6"	8	17'-10"	0.580	0.740	0.594	1,914	445.21			
9-10	16	10	11.5	14.5	10	9	4	12	12'-1"	4	6	40	4	12	15	4	14	8	4	12	17	4	12	8	8	6	17'-4"	7	6	8'-4"	4'-2"	4'-2"	7	17'-4"	9	6	17'-10"	6	6	14'-5"	3'-9"	10'-8"	6	17'-10"	0.662	0.852	0.594	2,108	451.55
11-13	16	10	13	15.5	10	9	4	12	12'-3"	4	6	40	4	12	15	4	17	6	4	12	17	4	17	6	9	6	17'-4"	8	9	8'-3"	3'-7"	4'-8"	8	17'-4"	9	6	17'-10"	8	9	14'-4"	3'-7"	10'-9"	8	17'-10"	0.744	0.908	0.594	2,246	487.84
14-16	16	10	14.5	17.5	11	6	4	6	12'-7"	4	6	40	4	12	15	4	17	6	4	12	17	4	17	6	9	6	17'-6"	8	9	8'-4"	3'-7"	4'-9"	8	17'-6"	9	6	18'-0"	7	9	14'-6"	3'-7"	10'-11"	7	18'-0"	0.836	1.029	0.655	2,520	482.95

Bent Bar Detail

Bars	D
5	3 1/2"
6	4 1/2"
7	5 1/2"
8	6"



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



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	IOWADOT Highway Division	
		Standard Design Single Reinforced Concrete Box Culverts July, 2020	
		Culvert Barrel Details 16' x 10' Barrel Sections	RCB 16-10-20