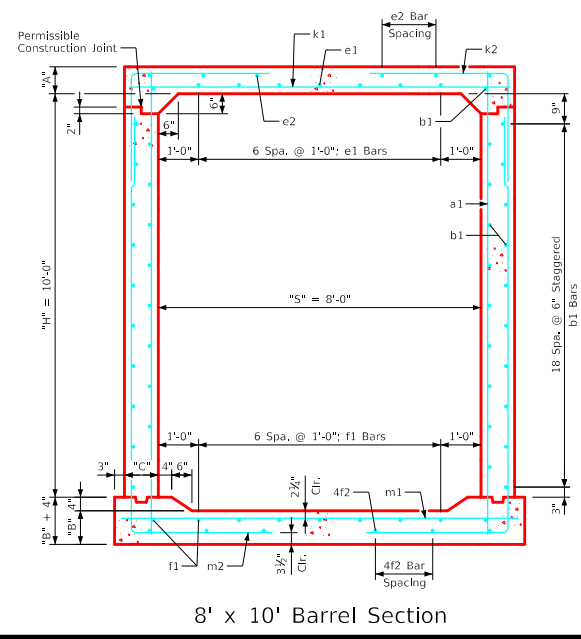
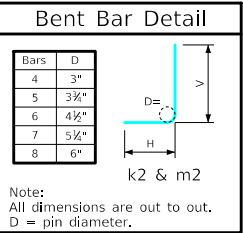


Variable Dimensions and Quantities for 8' x 10' Barrel Sections

Dimensions										Bar List																		Quantities																					
Fill	S	H	A	B	C	D	a1		b1		e1		e2		f1		f2		k1			k2			k9		m1		m2			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	8	10	12.5	11	10	6	4	6	11'-10"	4	6	40	5	12	7	4	13	8	4	12	9	4	13	8	6	9	9'-4"	4	6	8'-7"	5'-6"	3'-1"	-	-	5	6	9'-10"	4	6	15'-10"	5'-6"	10'-4"	-	-	0.408	0.384	0.594	1.386	188.32
1	8	10	10.5	11	10	6	4	6	11'-8"	4	6	40	5	12	7	4	13	8	4	12	9	4	13	8	6	9	9'-4"	4	6	8'-5"	5'-6"	2'-11"	-	-	5	6	9'-10"	4	6	15'-10"	5'-6"	10'-4"	-	-	0.348	0.384	0.594	1.326	187.42
2	8	10	8	10	10	6	4	6	11'-5"	4	6	40	5	12	7	4	13	8	4	12	9	4	13	8	5	6	9'-4"	5	9	8'-9"	5'-8"	3'-1"	-	-	6	6	9'-10"	5	9	15'-11"	5'-8"	10'-3"	-	-	0.274	0.352	0.594	1.220	202.16
3-4	8	10	8	10	10	9	5	12	11'-5"	4	6	40	4	12	7	4	13	8	4	12	9	4	13	8	6	9	9'-4"	4	6	8'-3"	5'-6"	2'-9"	-	-	5	6	9'-10"	4	6	15'-9"	5'-6"	10'-3"	-	-	0.274	0.352	0.594	1.220	177.39
5-8	8	10	8	10	10	9	4	9	11'-5"	4	6	40	4	12	7	4	13	8	4	12	9	4	13	8	6	9	9'-4"	4	6	8'-3"	5'-6"	2'-9"	4	9'-4"	5	6	9'-10"	5	6	14'-11"	4'-8"	10'-3"	5	9'-10"	0.274	0.352	0.594	1.220	193.84
9-10	8	10	8	10	10	9	4	12	11'-5"	4	6	40	4	12	7	4	17	6	4	12	9	4	17	6	6	9	9'-4"	6	9	7'-0"	3'-6"	3'-6"	6	9'-4"	5	6	9'-10"	6	9	13'-9"	3'-6"	10'-3"	6	9'-10"	0.274	0.352	0.594	1.220	189.45
11-15	8	10	8	10	10	9	4	9	11'-5"	4	6	40	4	12	7	4	16	6	4	12	9	4	15	6	6	6	9'-4"	5	6	6'-8"	3'-4"	3'-4"	5	9'-4"	6	6	9'-10"	5	6	13'-6"	3'-3"	10'-3"	5	9'-10"	0.274	0.352	0.594	1.220	210.08
16-20	8	10	9	11	11	9	4	9	11'-7"	4	6	40	4	12	7	4	16	6	4	12	9	4	16	6	6	6	9'-6"	7	9	7'-6"	3'-6"	4'-0"	7	9'-6"	7	6	10'-0"	7	9	13'-10"	3'-6"	10'-4"	7	10'-0"	0.311	0.390	0.655	1.356	259.84
21-25	8	10	10	12.5	12	6	4	6	11'-9"	4	6	40	4	12	7	4	14	6	4	12	9	4	15	6	8	9	9'-8"	5	6	6'-6"	3'-3"	3'-3"	5	9'-8"	7	6	10'-2"	5	6	13'-11"	3'-5"	10'-6"	5	10'-2"	0.349	0.446	0.714	1.509	241.87
26-30	8	10	11.5	14	13	9	5	9	12'-0"	4	6	40	4	12	7	4	15	6	4	12	9	4	16	6	8	9	9'-10"	5	6	6'-10"	3'-5"	3'-5"	5	9'-10"	8	9	10'-4"	5	6	14'-2"	3'-7"	10'-7"	5	10'-4"	0.404	0.504	0.773	1.681	243.61
31-35	8	10	12.5	15	14	6	4	6	12'-2"	4	6	40	4	12	7	4	15	6	4	12	9	4	16	6	8	9	10'-0"	7	9	7'-10"	3'-7"	4'-3"	7	10'-0"	7	6	10'-6"	7	9	14'-4"	3'-8"	10'-8"	7	10'-6"	0.444	0.547	0.832	1.823	286.84
36-40	8	10	13.5	16	15.5	9	6	9	12'-4"	4	6	40	4	12	7	4	15	6	4	12	9	4	15	6	8	9	10'-3"	5	6	7'-4"	3'-8"	3'-8"	5	10'-3"	7	6	10'-9"	5	6	14'-6"	3'-9"	10'-9"	5	10'-9"	0.490	0.596	0.921	2.007	270.84
41-45	8	10	14.5	17	16	6	4	6	12'-6"	4	6	40	4	12	7	4	15	6	4	12	9	4	16	6	7	6	10'-4"	8	12	8'-7"	3'-9"	4'-10"	8	10'-4"	7	6	10'-10"	8	12	14'-9"	3'-11"	10'-10"	8	10'-10"	0.528	0.635	0.951	2.114	303.45
46-50	8	10	15	18	17.5	6	4	6	12'-8"	4	6	40	4	12	7	4	16	6	4	12	9	4	16	6	7	6	10'-7"	6	6	8'-2"	4'-1"	4'-1"	6	10'-7"	7	6	11'-1"	6	6	14'-11"	4'-0"	10'-11"	6	11'-1"	0.560	0.687	1.039	2.286	310.79
51-55	8	10	16	19	18.5	6	4	6	12'-10"	4	6	40	4	12	7	4	12	8	4	12	9	4	16	6	7	6	10'-9"	7	9	9'-2"	4'-7"	4'-7"	7	10'-9"	9	9	11'-3"	7	9	15'-2"	4'-2"	11'-0"	7	11'-3"	0.604	0.734	1.098	2.436	319.58



- 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 8' x 10' Barrel Sections	RCB 8-10-20

ENGLISHLRFDDESIGNEDSINGLECULVERTS.DGN - RCB 8-10-20 - THIS SHEET ISSUED 07-2020.