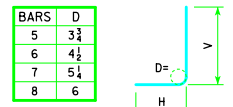


**VARIABLE DIMENSIONS AND QUANTITIES FOR 12 x 10 BARREL SECTIONS**

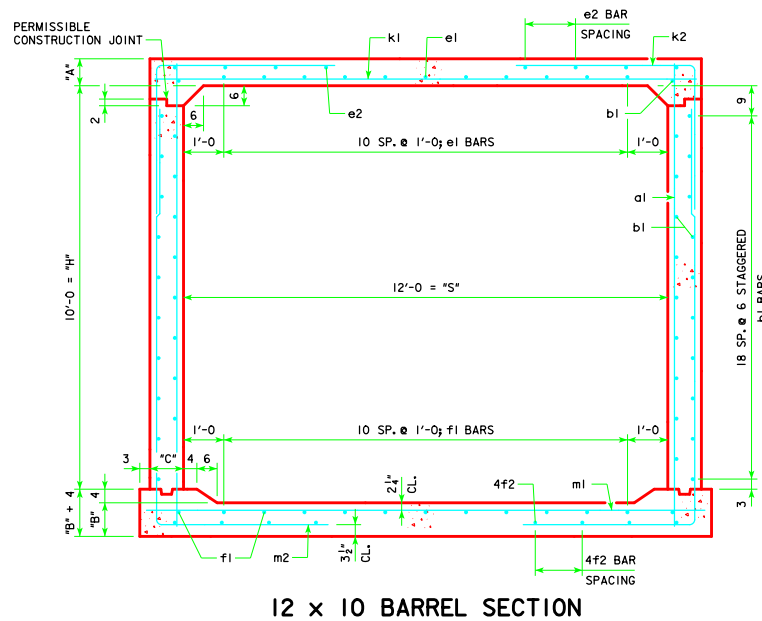
FILL	DIMENSIONS								BAR LIST																				QUANTITIES																					
	S	H	A	B	C	D	a1		b1		e1		e2		f1		f2		k1		k2			k9		m1		m2		CONCRETE (CY/FT)			STEEL (LB/FT)																	
							SIZE	SP.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	L	H	V	SIZE	L	SIZE	SP.	L	H	V	SIZE	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	6	6	13'-4	5	6	10'-10	7	7	3'-3	--	--	7	9	13'-10	5	6	16'-7	6'-0	10'-7	5	13'-10	0.604	0.629	0.594	1.827	273.08
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	10'-9	7	7	3'-2	--	--	7	9	13'-10	5	6	17'-6	6'-11	10'-7	--	--	0.562	0.629	0.594	1.785	273.16
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'-3	5'-6	3'-9	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	333.82	
3	12	10	8.5	10.5	10	9	4	12	11'-6	4	6	40	4	12	11	4	16	8	4	12	13	4	15	8	7	6	13'-4	7	9	8'-6	4'-9	3'-9	7	13'-4	7	6	13'-10	7	9	14'-10	4'-6	10'-4	7	13'-10	0.394	0.498	0.594	1.486	317.24	
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'-2	4'-5	3'-9	7	13'-4	7	6	13'-10	7	9	14'-7	4'-3	10'-4	7	13'-10	0.394	0.498	0.594	1.486	313.89	
8-10	12	10	9	12	10	9	4	12	11'-8	4	6	40	4	12	11	4	18	6	4	12	13	4	18	6	7	6	13'-4	6	6	6'-11	3'-8	3'-3	6	13'-4	7	6	13'-10	6	6	14'-1	3'-8	10'-5	6	13'-10	0.415	0.563	0.594	1.572	308.84	
11-15	12	10	10.5	12.5	10	9	4	12	11'-10	4	6	40	4	12	11	4	16	6	4	12	13	4	17	6	8	6	13'-4	6	6	6'-10	3'-5	3'-5	6	13'-4	8	6	13'-10	6	6	14'-0	3'-6	10'-6	6	13'-10	0.478	0.585	0.594	1.657	342.50	
16-20	12	10	12.5	15	11	9	6	9	12'-2	4	6	40	4	12	11	4	17	6	4	12	13	4	16	6	8	6	13'-6	6	6	7'-2	3'-7	3'-7	6	13'-6	8	6	14'-0	5	6	14'-1	3'-5	10'-8	5	14'-0	0.571	0.703	0.655	1.929	353.13	
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'-2	3'-5	3'-9	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	351.13	
26-30	12	10	16.5	19	13.5	9	4	9	12'-10	4	6	40	4	12	11	4	17	6	4	12	13	4	16	6	8	6	13'-11	6	6	7'-10	3'-11	3'-11	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	387.63	
31-35	12	10	18	20.5	14.5	6	4	6	13'-1	4	6	40	4	12	11	4	17	6	4	12	13	4	17	6	9	6	14'-1	6	6	8'-0	4'-0	4'-0	6	14'-1	9	6	14'-7	6	6	15'-1	3'-11	11'-2	6	14'-7	0.847	0.990	0.862	2.639	425.53	
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'-8	4'-0	4'-8	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	449.47	
41-45	12	10	21	24	16.5	9	4	12	13'-8	4	6	40	4	12	11	4	17	6	5	12	13	4	12	8	9	6	14'-5	8	9	9'-8	4'-1	5'-7	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	470.11	
46-50	12	10	22.5	25.5	17.5	9	4	9	13'-11	4	6	40	5	12	11	4	17	6	5	12	13	4	12	8	9	6	14'-7	8	9	9'-11	4'-3	5'-8	8	14'-7	9	6	15'-1	8	9	16'-0	4'-5	11'-7	8	15'-1	1.090	1.266	1.039	3.395	487.11	
51-55	12	10	24	27	18	9	6	9	14'-2	4	6	40	5	12	11	4	12	8	5	12	13	4	12	8	9	6	14'-8	7	9	9'-6	4'-5	5'-1	7	14'-8	9	6	15'-2	7	9	16'-2	4'-6	11'-8	7	15'-2	1.167	1.345	1.069	3.581	474.08	

**BENT BAR DETAIL**



**K2 & m2**

NOTE:  
ALL DIMENSIONS ARE OUT TO OUT.  
D = PIN DIAMETER.



**NOTES:**

- DIMENSIONS LISTED ON THIS SHEET TO BE USED IN CONJUNCTION WITH SHEET RCB G2-12.
- THE K2 AND m2 BARS HORIZONTAL LEGS MAY LAP IN LOW FILL SITUATIONS.
- DIMENSIONS "A", "B", "C", "D" AND "SP." LISTED IN THE BAR LIST ARE IN INCHES.

LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER <i>Thomas E. Mc Donnell</i>	 <b>Iowa Department of Transportation Highway Division</b>
		STANDARD DESIGN <b>SINGLE REINFORCED CONCRETE BOX CULVERTS</b> APRIL, 2012
		<b>CULVERT BARREL DETAILS</b> 12 x 10 BARREL SECTIONS
		<b>RCB 12-10-12</b>