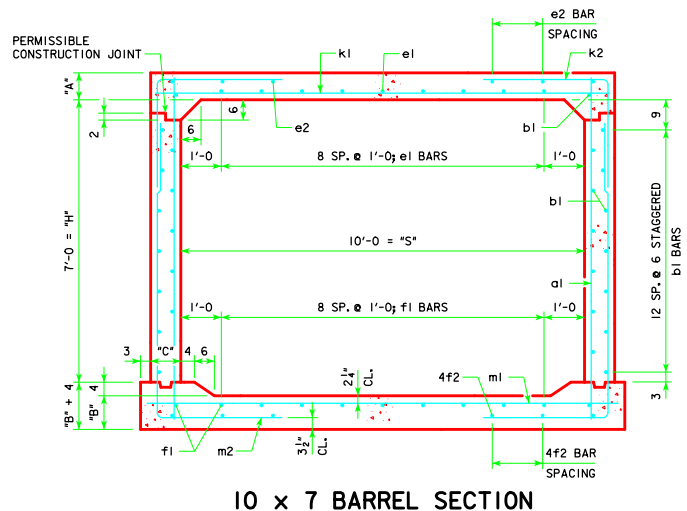
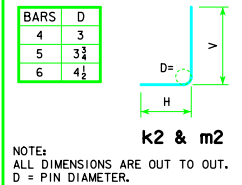


### VARIABLE DIMENSIONS AND QUANTITIES FOR 10 x 7 BARREL SECTIONS

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.	SIZE	SP.	NO.	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	10	7	12	12	9	6	4	6	8'-11	4	6	28	4	12	9	4	14	10	4	12	11	4	13	8	5	6	11'-2	5	9	8'-6	5'-4	3'-2	5	11'-2	7	9	11'-8	5	9	11'-5	4'-0	7'-5	5	11'-8	0.458	0.481	0.368	1.307	183.58
1	10	7	12	12	9	6	4	6	8'-11	4	6	28	4	12	9	4	17	8	4	12	11	4	13	8	5	6	11'-2	4	6	9'-1	5'-11	3'-2	--	--	5	6	11'-8	4	6	11'-4	3'-11	7'-5	4	11'-8	0.458	0.481	0.368	1.307	170.13
2	10	7	8	10	9	9	4	9	8'-5	4	6	28	4	12	9	4	12	8	4	12	11	4	18	6	6	6	11'-2	6	9	6'-10	3'-8	3'-2	6	11'-2	6	6	11'-8	6	9	10'-10	3'-7	7'-3	6	11'-8	0.316	0.407	0.368	1.091	204.82
3	10	7	8	10	9	9	4	12	8'-5	4	6	28	4	12	9	4	16	6	4	12	11	4	15	6	6	6	11'-2	5	6	6'-1	3'-3	2'-10	5	11'-2	6	6	11'-8	5	6	10'-5	3'-2	7'-3	5	11'-8	0.316	0.407	0.368	1.091	191.74
4-8	10	7	8	10	9	9	4	12	8'-5	4	6	28	4	12	9	4	15	6	4	12	11	4	15	6	6	6	11'-2	5	6	6'-2	3'-1	3'-1	5	11'-2	6	6	11'-8	5	6	10'-4	3'-1	7'-3	5	11'-8	0.316	0.407	0.368	1.091	191.76
9-10	10	7	8.5	10.5	9	9	4	12	8'-6	4	6	28	4	12	9	4	13	6	4	12	11	4	13	6	6	6	11'-2	5	6	5'-8	2'-10	2'-10	5	11'-2	7	6	11'-8	5	6	10'-2	2'-10	7'-4	5	11'-8	0.334	0.425	0.368	1.127	201.84
11-15	10	7	8.5	10.5	9	9	5	12	8'-6	4	6	28	4	12	9	4	13	6	4	12	11	4	12	6	7	6	11'-2	5	6	5'-8	2'-10	2'-10	5	11'-2	7	6	11'-8	5	6	10'-0	2'-8	7'-4	5	11'-8	0.334	0.425	0.368	1.127	219.95
16-20	10	7	10.5	12.5	9	6	4	6	8'-10	4	6	28	4	12	9	4	11	6	4	12	11	4	11	6	9	9	11'-2	6	9	5'-10	2'-6	3'-4	6	11'-2	8	6	11'-8	6	9	10'-0	2'-6	7'-6	6	11'-8	0.405	0.500	0.368	1.273	247.58
21-25	10	7	12.5	14.5	9	6	4	6	9'-2	4	6	28	4	12	9	4	11	6	4	12	11	4	11	6	8	6	11'-2	6	9	5'-11	2'-5	3'-6	6	11'-2	8	6	11'-8	6	9	10'-2	2'-6	7'-8	6	11'-8	0.476	0.574	0.368	1.418	257.00
26-30	10	7	14	16	9.5	9	5	12	9'-5	4	6	28	4	12	9	4	11	6	4	12	11	4	11	6	8	6	11'-3	5	6	5'-10	2'-6	3'-4	5	11'-3	8	6	11'-9	5	6	10'-4	2'-7	7'-9	5	11'-9	0.534	0.634	0.389	1.557	253.95
31-35	10	7	15	17.5	10	6	4	6	9'-7	4	6	28	4	12	9	4	12	6	4	12	11	4	12	6	8	6	11'-4	6	9	6'-5	2'-8	3'-9	6	11'-4	8	6	11'-10	6	9	10'-7	2'-8	7'-11	6	11'-10	0.575	0.696	0.409	1.680	263.76
36-40	10	7	16.5	19	11	6	4	6	9'-10	4	6	28	4	12	9	4	12	6	4	12	11	4	12	6	8	6	11'-6	6	9	6'-9	2'-10	3'-11	6	11'-6	8	6	12'-0	6	9	10'-10	2'-10	8'-0	6	12'-0	0.640	0.762	0.451	1.853	268.68
41-45	10	7	17.5	20	11.5	9	6	9	10'-0	4	6	28	4	12	9	4	12	6	4	12	11	4	13	6	9	6	11'-7	6	9	6'-11	2'-11	4'-0	6	11'-7	9	6	12'-1	6	9	11'-1	3'-0	8'-1	6	12'-1	0.682	0.807	0.471	1.960	320.39
46-50	10	7	19	21.5	12	9	6	12	10'-3	4	6	28	4	12	9	4	13	6	4	12	11	4	13	6	9	6	11'-8	6	9	7'-1	3'-0	4'-1	6	11'-8	9	6	12'-2	6	9	11'-4	3'-1	8'-3	6	12'-2	0.744	0.871	0.492	2.107	314.58
51-55	10	7	20	22.5	13	9	6	9	10'-5	4	6	28	4	12	9	4	13	6	5	12	11	4	14	6	9	6	11'-10	6	9	7'-4	3'-2	4'-2	6	11'-10	9	6	12'-4	6	9	11'-7	3'-3	8'-4	6	12'-4	0.794	0.923	0.532	2.249	333.50

#### BENT BAR DETAIL



#### NOTES:

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

LATEST REVISION DATE	 <small>APPROVED BY BRIDGE ENGINEER</small>	 <b>Iowa Department of Transportation</b> Highway Division STANDARD DESIGN <b>SINGLE REINFORCED CONCRETE BOX CULVERTS</b> APRIL, 2012	<b>CULVERT BARREL DETAILS</b> 10 x 7 BARREL SECTIONS <b>RCB 10-7-12</b>
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