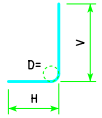
VARIABLE DIMENSIONS AND QUANTITIES FOR 8 x 5 BARREL SECTIONS

DIMENSIONS							BAR LIST																																							QUANTITIES				
							a1			b1			e1			e2			f1			f2			k1			k2					k9		m1			m2					m9		CONCRETE (CY/FT)				STEEL
FILL	S	H	A	B	C	D	SIZE	SP.	L	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	L	SIZE	SP.	L	H	V	SIZE	L	SIZE	SP.	L	SIZE	SP.	L	H	V	SIZE	L	SLAB	FLOOR	WALLS	TOTAL	(LB/FT)
0	8	5	12.5	11	9	9	4	9	6'-10	4	6	20	5	12	7	4	18	6	4	12	9	4	17	6	6	9	9'-2	5	12	6'-10	3'-7	3'-3	5	9'-2	6	9	9'-8	6	12	8'-9	3'-5	5'-4	6	9'-8	0.399	0.376	0.257	1.032	131.11
1	8	5	10.5	10.5	9	9	5	12	6'-8	4	6	20	5	12	7	4	17	6	4	12	9	4	15	6	6	9	9'-2	4	6	6'-6	3'-6	3'-0	4	9'-2	6	9	9'-8	4	6	8'-5	3'-1	5'-4	4	9'-8	0.340	0.361	0.257	0.958	129.16
2	8	5	8	10	9	9	5	12	6'-5	4	6	20	5	12	7	4	13	6	4	12	9	4	13	6	6	9	9'-2	4	6	5'-8	2'-10	2'-10	4	9'-2	5	6	9'-8	4	6	8'-0	2'-9	5'-3	4	9'-8	0.267	0.345	0.257	0.869	125.39
3	8	5	8	10	9	9	5	12	6'-5	4	6	20	4	12	7	4	11	6	4	12	9	4	11	6	6	9	9'-2	4	6	5'-4	2'-6	2'-10	4	9'-2	5	6	9'-8	4	6	7'-9	2'-6	5'-3	4	9'-8	0.267	0.345	0.257	0.869	121.21
4-7	8	5	8	10	9	9	4	9	6'-5	4	6	20	4	12	7	4	11	6	4	12	9	4	11	6	6	9	9'-2	4	6	5'-3	2'-5	2'-10	4	9'-2	5	6	9'-8	4	6	7'-9	2'-6	5'-3	4	9'-8	0.267	0.345	0.257	0.869	118.74
8-10	8	5	8	10	9	9	4	9	6'-5	4	6	20	4	12	7	4	10	6	4	12	9	4	10	6	6	9	9'-2	4	6	5'-2	2'-4	2'-10	4	9'-2	5	6	9'-8	4	6	7'-7	2'-4	5'-3	4	9'-8	0.267	0.345	0.257	0.869	118.08
11-15	8	5	8	10	9	6	4	6	6'-5	4	6	20	4	12	7	4	10	6	4	12	9	4	10	6	6	6	9'-2	5	9	5'-2	2'-4	2'-10	5	9'-2	6	6	9'-8	5	9	7'-7	2'-4	5'-3	5	9'-8	0.267	0.345	0.257	0.869	144.34
16-20	8	5	8.5	11	9	9	4	12	6'-6	4	6	20	4	12	7	4	10	6	4	12	9	4	9	6	6	6	9'-2	5	6	5'-2	2'-3	2'-11	5	9'-2	7	6	9'-8	5	6	7'-6	2'-2	5'-4	5	9'-8	0.282	0.376	0.257	0.915	163.18
21-25	8	5	10	12	9	9	4	12	6'-9	4	6	20	4	12	7	4	18	4	4	12	9	4	9	6	7	6	9'-2	5	6	5'-1	2'-1	3'-0	5	9'-2	7	6	9'-8	5	6	7'-7	2'-2	5'-5	5	9'-8	0.326	0.407	0.257	0.990	172.26
26-30	8	5	11	13.5	9	9	4	12	6'-11	4	6	20	4	12	7	4	18	4	4	12	9	4	18	4	7	6	9'-2	6	9	5'-6	2'-1	3'-5	6	9'-2	7	6	9'-8	6	9	7'-8	2'-1	5'-7	6	9'-8	0.355	0.453	0.257	1.065	173.29
31-35	8	5	12.5	14.5	9	6	4	6	7'-2	4	6	20	4	12	7	4	18	4	4	12	9	4	9	6	7	6	9'-2	6	12	5'-7	2'-1	3'-6	6	9'-2	7	6	9'-8	6	12	7'-10	2'-2	5'-8	6	9'-8	0.399	0.484	0.257	1.140	172.61
36-40	8	5	13.5	15.5	9	6	4	6	7'-4	4	6	20	4	12	7	4	18	4	4	12	9	4	9	6	9	9	9'-2	6	12	5'-8	2'-1	3'-7	6	9'-2	8	6	9'-8	6	12	7'-11	2'-2	5'-9	6	9'-8	0.428	0.515	0.257	1.200	191.34
41-45	8	5	14.5	17	9	6	4	6	7'-6	4	6	20	4	12	7	4	9	6	4	12	9	4	10	6	9	9	9'-2	6	12	5'-11	2'-2	3'-9	6	9'-2	8	6	9'-8	6	12	8'-1	2'-3	5'-10	6	9'-8	0.458	0.561	0.257	1.276	194.47
46-50	8	5	15.5	17.5	9.5	6	4	6	7'-8	4	6	20	4	12	7	4	10	6	4	12	9	4	10	6	8	6	9'-3	6	12	6'-1	2'-4	3'-9	6	9'-3	8	6	9'-9	6	12	8'-3	2'-4	5'-11	6	9'-9	0.492	0.582	0.271	1.345	203.00
51-55	8	5	16	18.5	10	6	4	6	7'-9	4	6	20	4	12	7	4	10	6	4	12	9	4	10	6	8	6	9'-4	6	12	6'-3	2'-5	3'-10	6	9'-4	8	6	9'-10	6	12	8'-5	2'-5	6'-0	6	9'-10	0.512	0.619	0.285	1.416	205.26

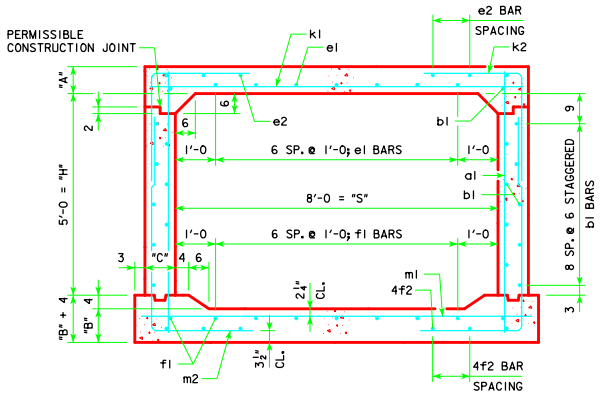
BENT BAR DETAIL

BARS	D
4	3
5	$3\frac{3}{4}$
6	$4\frac{1}{2}$



k2 & m2

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



8 x 5 BARREL SECTION

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

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN

SINGLE REINFORCED CONCRETE BOX CULVERTS

APRIL, 2012

CULVERT BARREL DETAILS

8 x 5 BARREL SECTIONS

RCB 8-5-12

ENGLISH,RCDSIGNEDSINGLECULVERTS.DGN - RCB 8-5-12 - THIS SHEET ISSUED 04-12.