VARIABLE DIMENSIONS AND QUANTITIES FOR TRIPLE 10 x 8 BARREL SECTIONS

DIMENSIONS													
FILL	S	H	A	B	C	D	E	R	T	U	W	X	Z
0	10	8	13	11	9	9	9	0'-0	0'-0	6'-5	2'-6	4'-4	3'-9
1	10	8	12.5	10.5	9	6	9	0'-7	0'-1	6'-5	2'-3	3'-7	3'-11
2	10	8	9.5	10	9	6	9	1'-1	0'-11	5'-8	2'-1	3'-5	3'-8
3-6	10	8	9	10	9	6	9	2'-3	2'-0	4'-8	2'-0	3'-0	3'-5
7-8	10	8	8.5	10.5	9	6	9	2'-9	2'-0	3'-6	2'-1	3'-0	3'-7
9-10	10	8	9	11	9	9	9	2'-10	2'-0	3'-5	2'-9	3'-6	3'-5
11-12	10	8	10	12	9	9	9	2'-11	1'-9	3'-4	2'-5	3'-7	3'-4
13-15	10	8	12	14	9	9	9	2'-11	1'-8	3'-4	2'-3	4'-2	3'-5
16-17	10	8	12.5	15	9	9	9	3'-6	2'-1	3'-4	2'-0	3'-11	3'-5
18-19	10	8	13.5	16	9	9	9	3'-6	1'-10	3'-4	1'-7	3'-11	3'-4
20-21	10	8	14.5	16.5	9.5	9	6	3'-6	1'-5	3'-5	1'-7	4'-1	3'-5
22-23	10	8	15.5	17.5	10	6	9	3'-4	1'-4	3'-5	1'-6	3'-11	3'-6
24-25	10	8	16.5	18.5	10	6	9	3'-8	1'-4	3'-6	1'-1	3'-11	3'-7

	BAR LIST																	
	a1			a2			b1			b2			e1			e2		
FILL	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	NO.
0	4	9	9'-11	6	9	9'-11	4	6	32	4	6	34	4	12	27	4	18	24
1	4	6	9'-10	6	9	9'-10	4	6	32	4	6	34	4	12	27	4	18	24
2	4	6	9'-6	6	9	9'-6	4	6	32	4	6	34	4	12	27	4	18	24
3-6	4	6	9'-6	6	9	9'-6	4	6	32	4	6	34	4	12	27	4	18	24
7-8	4	6	9'-6	6	9	9'-6	4	6	32	4	6	34	4	12	27	4	18	24
9-10	4	12	9'-7	6	9	9'-7	4	6	32	4	6	34	4	12	27	4	18	24
11-12	4	12	9'-9	6	9	9'-9	4	6	32	4	6	34	4	12	27	4	18	24
13-15	4	12	10'-1	6	9	10'-1	4	6	32	4	6	34	4	12	27	4	18	24
16-17	4	12	10'-2	6	9	10'-2	4	6	32	4	6	34	4	12	27	4	18	24
18-19	4	12	10'-4	6	9	10'-4	4	6	32	4	6	34	4	12	27	4	18	24
20-21	4	12	10'-6	5	6	10'-6	4	6	32	4	6	34	4	12	27	4	18	24
22-23	4	6	10'-8	7	9	10'-8	4	6	32	4	6	34	4	12	27	4	18	24
24-25	4	6	10'-10	7	9	10'-10	4	6	32	4	6	34	4	12	27	4	18	24

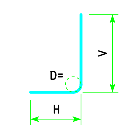
	BAR LIST																									
	f1			f2			k1			k2			k3			k4					k6			k7		
FILL	SIZE	SP.	NO.	SIZE	SP.	NO.	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	H	V	SIZE	SP.	L	SIZE	SP.	L
0	4	12	33	4	18	24	6	18	32'-8	6	18	10'-11	6	18	10'-9	5	12	9'-6	6'-3	3'-3	5	18	32'-8	6	18	12'-10
1	4	12	33	4	18	24	6	18	32'-8	6	18	10'-10	6	18	9'-7	4	6	9'-5	6'-3	3'-2	5	18	32'-8	6	18	12'-10
2	4	12	33	4	18	24	5	12	32'-8	5	12	10'-0	4	12	8'-7	5	6	7'-4	4'-4	3'-0	4	9	32'-8	4	9	11'-11
3-6	4	12	33	4	18	24	5	9	32'-8	4	9	7'-10	4	9	6'-3	5	6	6'-9	3'-10	2'-11	5	12	32'-8	5	12	10'-11
7-8	4	12	33	4	18	24	5	12	32'-8	5	12	7'-9	4	12	5'-3	6	9	6'-6	3'-3	3'-3	5	12	32'-8	6	12	7'-3
9-10	4	12	33	4	18	24	5	12	32'-8	5	12	7'-11	4	12	5'-1	5	6	6'-0	3'-0	3'-0	5	12	32'-8	6	12	7'-1
11-12	4	12	33	4	18	24	5	12	32'-8	5	12	8'-7	4	12	4'-11	5	6	6'-0	3'-0	3'-0	5	12	32'-8	6	12	6'-11
13-15	4	12	33	4	18	24	5	12	32'-8	5	12	8'-10	4	12	4'-11	5	6	6'-4	3'-2	3'-2	5	12	32'-8	6	12	7'-0
16-17	4	12	33	4	18	24	5	9	32'-8	4	9	8'-3	4	9	3'-9	5	6	6'-2	2'-11	3'-3	4	12	32'-8	7	12	7'-1
18-19	4	12	33	4	18	24	5	9	32'-8	4	9	8'-8	4	9	3'-9	5	6	6'-4	3'-0	3'-4	4	12	32'-8	7	12	7'-1
20-21	4	12	33	4	18	24	5	9	32'-10	4	9	9'-6	4	9	3'-10	6	9	6'-8	3'-0	3'-8	4	12	32'-10	7	12	7'-3
22-23	4	12	33	4	18	24	5	9	33'-0	4	9	9'-9	4	9	4'-2	6	12	6'-10	3'-1	3'-9	4	12	33'-0	7	12	7'-4
24-25	4	12	33	4	18	24	6	12	33'-0	5	12	9'-9	4	12	3'-6	6	12	7'-0	3'-2	3'-10	4	12	33'-0	7	12	7'-6

	BAR LIST																
	k9			m1			m2			m3			m4				
FILL	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	H	V
0	6	4.5	32'-8	5	12	33'-2	4	12	7'-1	4	12	2'-1	6	12	14'-8	6'-4	8'-4
1	6	4.5	32'-8	4	9	33'-2	4	9	7'-6	4	9	3'-7	4	6	14'-1	5'-9	8'-4
2	4	4.5	32'-8	5	12	33'-2	5	12	7'-9	4	12	3'-11	4	6	12'-5	4'-2	8'-3
3-6	5	4.5	32'-8	5	12	33'-2	5	12	7'-10	4	12	4'-9	4	6	11'-10	3'-7	8'-3
7-8	6	4.5	32'-8	5	12	33'-2	5	12	7'-10	4	12	4'-9	5	9	11'-5	3'-1	8'-4
9-10	6	4.5	32'-8	5	9	33'-2	4	9	6'-7	4	9	3'-9	5	6	11'-4	3'-0	8'-4
11-12	6	4.5	32'-8	5	9	33'-2	4	9	7'-3	4	9	3'-7	5	6	11'-4	2'-11	8'-5
13-15	6	4.5	32'-8	5	9	33'-2	4	9	8'-0	4	9	2'-5	5	6	11'-7	3'-0	8'-7
16-17	7	4.5	32'-8	5	9	33'-2	4	9	8'-5	4	9	2'-11	5	6	11'-8	3'-0	8'-8
18-19	7	4.5	32'-8	5	9	33'-2	4	9	9'-4	4	9	2'-11	5	6	11'-10	3'-1	8'-9
20-21	7	4.5	32'-10	6	12	33'-4	5	12	9'-4	4	12	2'-8	6	9	11'-11	3'-1	8'-10
22-23	7	4.5	33'-0	6	12	33'-6	5	12	9'-7	4	12	3'-0	6	12	12'-1	3'-2	8'-11
24-25	7	4.5	33'-0	6	12	33'-6	5	12	10'-0	4	12	3'-0	6	12	12'-3	3'-3	9'-0

	BAR LIST									QUANTITIES				
	m6			m7			m9			CONCRETE (CY/FT)				STEEL
FILL	SIZE	SP.	L	SIZE	SP.	L	SIZE	SP.	L	SLAB	FLOOR	WALLS	TOTAL	(LB/FT)
0	4	9	33'-2	4	9	7'-6	4	4.5	33'-2	1.405	1.219	0.840	3.464	453.32
1	5	18	33'-2	7	18	7'-10	7	4.5	33'-2	1.354	1.167	0.840	3.361	460.45
2	4	12	33'-2	6	12	7'-5	6	4.5	33'-2	1.049	1.115	0.840	3.004	458.97
3-6	4	9	33'-2	5	9	7'-0	5	4.5	33'-2	0.998	1.115	0.840	2.953	470.21
7-8	5	18	33'-2	8	18	7'-4	8	4.5	33'-2	0.947	1.167	0.840	2.954	466.29
9-10	4	12	33'-2	7	12	7'-0	7	4.5	33'-2	0.998	1.219	0.840	3.057	472.66
11-12	4	12	33'-2	7	12	7'-0	7	4.5	33'-2	1.100	1.322	0.840	3.262	475.32
13-15	5	18	33'-2	8	18	7'-3	8	4.5	33'-2	1.303	1.529	0.840	3.672	481.26
16-17	5	18	33'-2	8	18	7'-3	8	4.5	33'-2	1.354	1.632	0.840	3.826	487.26
18-19	5	18	33'-2	8	18	7'-2	8	4.5	33'-2	1.456	1.736	0.840	4.032	491.50
20-21	4	12	33'-4	7	12	7'-4	7	4.5	33'-4	1.568	1.798	0.887	4.253	506.18
22-23	4	12	33'-6	7	12	7'-6	7	4.5	33'-6	1.682	1.913	0.934	4.529	521.66
24-25	4	12	33'-6	7	12	7'-8	7	4.5	33'-6	1.784	2.017	0.934	4.735	533.18

BENT BAR DETAIL

BARS	D
4	3
5	3¾
6	4½



k4 & m4

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

NOTES:

1. DIMENSIONS LISTED ON THIS SHEET TO BE USED IN CONJUNCTION WITH SHEET TRRCB G2-12.
2. DIMENSIONS "A", "B", "C", "D", "E", 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

TRIPLE REINFORCED CONCRETE BOX CULVERTS

APRIL, 2012

CULVERT BARREL DETAILS

10 x 8 BARREL SECTIONS

TRRCB 10-8-12

SHEET 2 OF 2

ENGLISHLRFDSIGNEDTRIPLECULVERTS.DGN - TRRCB 10-8s2-12 - THIS SHEET ISSUED 04-12.