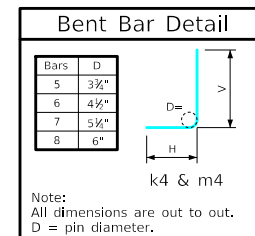


Variable Dimensions and Quantities for Triple 10' x 12' Barrel Sections

Dimensions															Bar List																																												
Fill	S	H	A	B	C	D	E	R	T	U	W	X	Z		a1			a2			b1			b2			e1			e2			f1			f2			k1			k2			k3			k4			k6			k7					
															Size	Sp.	L	Size	Sp.	L	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	Size	Sp.	No.	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
0	10	12	13	11.5	12	9	9	0'-0	0'-4	6'-4	2'-6	3'-9	3'-10	4	9	13'-11	7	9	13'-11	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	6	18	33'-8	5	18	11'-4	4	18	11'-0	6	9	10'-6	6'-7	3'-11	4	12	33'-8	4	12	12'-8		
1	10	12	12.5	11	12	9	9	0'-0	0'-4	6'-4	2'-5	3'-9	3'-11	4	9	13'-10	7	9	13'-10	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	6	18	33'-8	5	18	11'-0	4	18	9'-4	6	9	10'-6	6'-7	3'-11	4	12	33'-8	4	12	12'-8		
2	10	12	9	10	12	9	9	1'-0	1'-0	6'-11	2'-3	4'-3	3'-8	5	12	13'-6	7	9	13'-6	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	12	33'-8	5	12	10'-0	5	12	9'-0	7	9	11'-2	7'-2	4'-0	5	18	33'-8	7	18	13'-10		
3-6	10	12	8	10	12	6	9	2'-0	1'-8	4'-1	2'-3	3'-3	3'-9	4	6	13'-5	7	9	13'-5	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	12	33'-8	5	12	8'-4	5	12	7'-0	5	6	8'-4	5'-3	3'-1	5	12	33'-8	5	12	8'-5		
7-8	10	12	8	10.5	12	9	9	2'-10	2'-3	3'-5	2'-2	3'-1	3'-8	5	12	13'-5	7	9	13'-5	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	12	33'-8	5	12	7'-4	4	12	5'-4	7	9	8'-4	4'-6	3'-10	4	9	33'-8	5	9	6'-10		
9-10	10	12	8.5	11	12	9	9	2'-9	2'-2	3'-5	2'-10	4'-3	3'-6	5	12	13'-6	7	9	13'-6	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	12	33'-8	5	12	7'-8	4	12	5'-6	7	9	8'-4	4'-5	3'-11	5	12	33'-8	6	12	6'-11		
11-12	10	12	9.5	12	12	6	9	2'-8	2'-2	3'-5	2'-6	4'-3	3'-4	4	6	13'-8	7	9	13'-8	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	12	33'-8	5	12	7'-9	4	12	5'-8	7	9	8'-10	4'-5	4'-5	5	12	33'-8	6	12	6'-11		
13-15	10	12	11.5	14	12.5	6	9	2'-6	1'-8	3'-5	2'-3	4'-3	3'-7	4	6	14'-0	7	9	14'-0	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	6	18	33'-10	6	18	8'-9	4	18	6'-0	5	6	7'-10	4'-5	3'-5	5	12	33'-10	6	12	6'-11		
16-17	10	12	12	14.5	13	9	6	2'-7	1'-10	3'-5	2'-1	4'-4	3'-6	6	12	14'-1	6	6	14'-1	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	12	34'-0	5	12	8'-9	4	12	5'-11	6	6	8'-2	4'-4	3'-10	5	12	34'-0	6	12	6'-11		
18-19	10	12	13	15.5	13.5	9	6	2'-6	1'-6	3'-5	1'-11	4'-0	3'-7	6	9	14'-3	6	6	14'-3	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	12	34'-2	5	12	9'-3	4	12	6'-2	5	6	7'-11	4'-5	3'-6	5	12	34'-2	6	12	7'-0		
20-21	10	12	14	16.5	14	9	9	4'-1	1'-11	3'-6	1'-8	4'-0	3'-8	6	9	14'-5	8	9	14'-5	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	9	34'-4	4	9	8'-6	4	9	3'-0	5	6	8'-1	4'-6	3'-7	5	18	34'-4	8	18	7'-3		
22-23	10	12	15	17.5	14.5	6	9	3'-11	1'-8	3'-7	1'-7	4'-0	3'-8	4	6	14'-7	8	9	14'-7	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	9	34'-6	4	9	9'-0	4	9	3'-4	8	12	9'-8	4'-10	4'-10	5	18	34'-6	8	18	7'-5		
24-25	10	12	16.5	18.5	15	6	9	3'-3	1'-4	3'-9	1'-4	4'-0	3'-9	4	6	14'-10	8	9	14'-10	4	6	48	4	6	50	4	12	27	4	18	24	4	12	33	4	18	24	5	9	34'-8	4	9	9'-9	4	9	4'-9	8	12	9'-10	4'-11	5	18	34'-8	8	18	7'-8			

															Bar List												Quantities														
Fill	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Size	Sp.	L	Slab	Floor	Walls	Total	Steel (LB/FT)
0	4	4.5	33'-8	5	12	34'-2	4	12	7'-3	4	12	3'-6	6	9	21'-6	9'-1	12'-5	4	9	34'-2	4	9	7'-7	4	4.5	34'-2	1.462	1.315	1.715	4.492	564.63										
1	4	4.5	33'-8	5	12	34'-2	4	12	7'-3	4	12	3'-6	6	9	18'-10	6'-6	12'-4	5	18	34'-2	7	18	7'-9	7	4.5	34'-2	1.410	1.262	1.715	4.387	557.95										
2	7	4.5	33'-8	5	12	34'-2	5	12	7'-7	4	12	2'-6	6	9	17'-6	5'-3	12'-3	4	12	34'-2	6	12	7'-4	6	4.5	34'-2	1.043	1.156	1.715	3.914	612.42										
3-6	5	4.5	33'-8	5	12	34'-2	5	12	7'-4	4	12	4'-6	5	6	17'-0	4'-9	12'-3	4	9	34'-2	5	9	7'-6	7	4.5	34'-2	0.938	1.156	1.715	3.809	581.05										
7-8	5	4.5	33'-8	5	12	34'-2	5	12	7'-9	4	12	4'-10	7	9	16'-10	4'-6	12'-4	5	18	34'-2	8	18	7'-4	8	4.5	34'-2	0.938	1.209	1.715	3.862	603.26										
9-10	6	4.5	33'-8	5	9	34'-2	4	9	6'-5	4	9	2'-6	7	9	16'-9	4'-5	12'-4	4	12	34'-2	7	12	7'-0	7	4.5	34'-2	0.990	1.262	1.715	3.967	617.39										
11-12	6	4.5	33'-8	5	9	34'-2	4	9	7'-2	4	9	2'-6	7	9	16'-10	4'-5	12'-5	5	12	34'-2	6	12	6'-9	6	4.5	34'-2	1.095	1.368	1.715	4.178	633.45										
13-15	6	4.5	33'-10	5	9	34'-4	4	9	7'-9	4	9	2'-6	5	6	17'-1	4'-6	12'-7	5	18	34'-4	8	18	7'-4	8	4.5	34'-4	1.314	1.591	1.787	4.692	596.34										
16-17	6	4.5	34'-0	5	9	34'-6	4	9	8'-1	4	9	2'-5	5	6	17'-1	4'-5	12'-8	5	12	34'-6	6	12	7'-1	6	4.5	34'-6	1.375	1.654	1.858	4.887	631.68										
18-19	6	4.5	34'-2	5	9	34'-8	4	9	8'-9	4	9	3'-2	5	6	17'-3	4'-6	12'-9	5	12	34'-8	6	12	7'-4	6	4.5	34'-8	1.491	1.771	1.929	5.191	635.92										
20-21	8	4.5	34'-4	5	9	34'-10	4	9	9'-3	4	9	3'-2	5	6	17'-5	4'-7	12'-10	5	12	34'-10	6	12	7'-6	6	4.5	34'-10	1.607	1.890	2.000	5.497	661.26										
22-23	8	4.5	34'-6	6	12	35'-0	5	12	9'-5	4	12	3'-2	8	12	17'-7	4'-8	12'-11	5	12	35'-0	6	12	7'-7	6	4.5	35'-0	1.725	2.009	2.072	5.806	703.45										
24-25	8	4.5	34'-8	6	12	35'-2	5	12	9'-11	4	12	3'-3	8	12	17'-8	4'-8	13'-0	5	12	35'-2	6	12	7'-9	6	4.5	35'-2	1.898	2.130	2.143	6.171	713.03										



- Notes:
- Dimensions listed on this sheet to be used in conjunction with Sheet TRRCB G3-20.
 - 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	<i>[Signature]</i> APPROVED BY BRIDGE ENGINEER	IOWADOT Highway Division
		Standard Design Triple Reinforced Concrete Box Culverts July, 2020
		Culvert Barrel Details 10' x 12' Barrel Sections
		TRRCB 10-12-20 Sheet 2 of 2

ENGLISHLRFDDESIGNEDTRIPLECULVERTS.DGN - TRRCB 10-12&20 - THIS SHEET ISSUED 07-2020.