

ENGLISH_LRFD_SIGNED_PEDESTRIAN_TUNNEL_STANDARDS.DGN - PT-RCB 14-12-20 - THIS SHEET ISSUED 08-2020

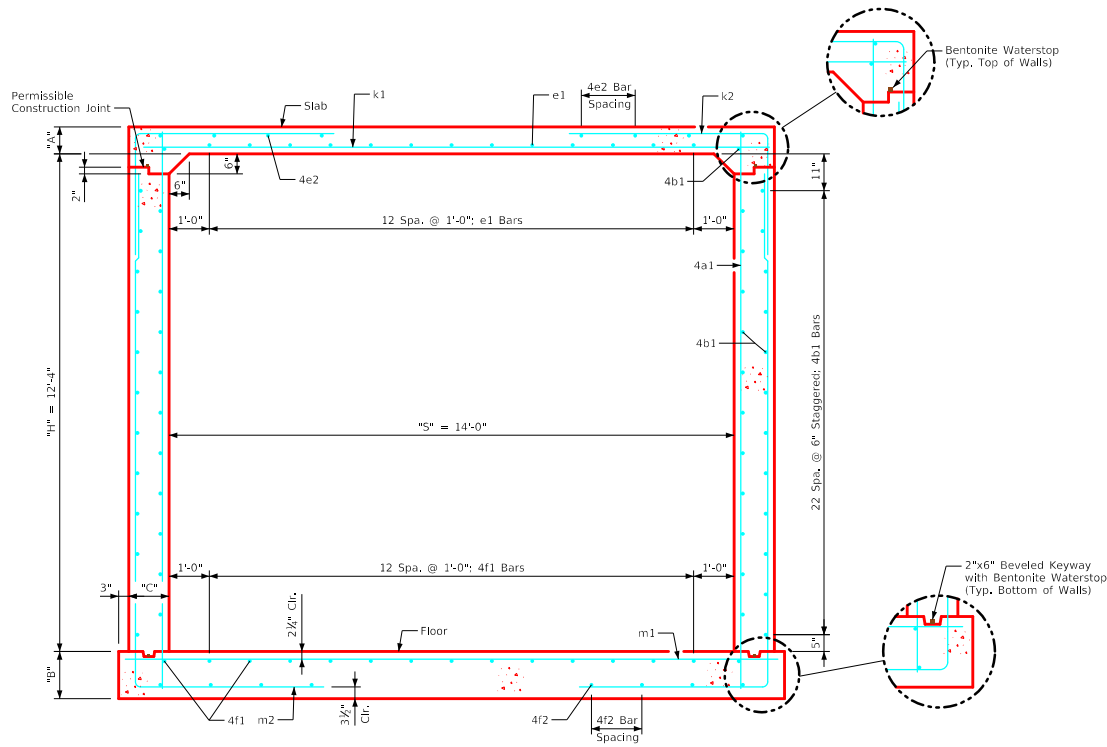
Variable Dimensions and Quantities for 14'-0" x 12'-4" Barrel Sections

Dimensions										Bar List																		Quantities																					
Fill	S	H	A	B	C	D	a1		b1			e1			e2			f1		f2		k1				k2				k9		m1		m2				m9				Concrete (CY/FT)				Steel (LB/FT)			
0	1	2	3	4-6	7-9	10-12	13-15	Size	Sp.	L	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.	L	Size	Sp.	L	Slab	Floor	Walls	Total					
0	14'-0"	12'-4"	14	15.5	12	9	6	9	14'-4"	4	6	48	5	12	13	4	15	12	4	12	15	4	15	12	7	9	15'-8"	6	9	13'-2"	9'-1	4'-1	-	-	7	9	16'-2"	6	9	20'-1	7'-5	12'-8"	6	16'-2"	0.731	0.785	0.887	2.403	360.18
1	14'-0"	12'-4"	13.5	15	12	9	5	9	14'-3"	4	6	48	5	12	13	4	15	12	4	12	15	4	16	12	7	9	15'-8"	6	9	13'-1	9'-1	4'-0	-	-	7	9	16'-2"	6	9	20'-5	7'-9	12'-8"	6	16'-2"	0.707	0.760	0.887	2.354	343.34
2	14'-0"	12'-4"	9	11	12	9	4	12	13'-6"	4	6	48	6	12	13	4	15	10	4	12	15	4	13	10	7	6	15'-8"	6	6	9'-8"	6'-1	3'-7	6	15'-8"	7	6	16'-2"	6	6	17'-9	5'-5	12'-4"	6	16'-2"	0.485	0.556	0.887	1.928	394.08
3	14'-0"	12'-4"	8.5	10.5	12	9	4	12	13'-5"	4	6	48	4	12	13	4	13	10	4	12	15	4	17	8	7	6	15'-8"	8	9	9'-9"	5'-5	4'-4	8	15'-8"	7	6	16'-2"	8	9	17'-4	5'-1	12'-3	8	16'-2"	0.460	0.531	0.887	1.878	418.66
4-6	14'-0"	12'-4"	8.5	11	12	9	4	12	13'-6"	4	6	48	4	12	13	4	16	8	4	12	15	4	16	8	7	6	15'-8"	7	6	8'-10	4'-11	3'-11	7	15'-8"	7	6	16'-2"	7	6	17'-2	4'-10	12'-4"	7	16'-2"	0.460	0.556	0.887	1.903	430.05
7-9	14'-0"	12'-4"	10	12.5	12	9	4	12	13'-9"	4	6	48	4	12	13	4	15	8	4	12	15	4	15	8	7	6	15'-8"	6	6	8'-4	4'-7	3'-9	6	15'-8"	8	6	16'-2"	6	6	17'-0	4'-7	12'-5	6	16'-2"	0.534	0.633	0.887	2.054	388.84
10-12	14'-0"	12'-4"	11	13.5	12	6	4	6	13'-11	4	6	48	4	12	13	4	13	8	4	12	15	4	13	8	8	6	15'-8"	7	6	8'-6	4'-3	4'-3	7	15'-8"	8	6	16'-2"	6	6	16'-9	4'-3	12'-6	6	16'-2"	0.583	0.683	0.887	2.153	445.66
13-15	14'-0"	12'-4"	12	14.5	12.5	6	4	6	14'-1	4	6	48	4	12	13	4	13	8	4	12	15	4	13	8	8	6	15'-9"	6	6	8'-4	4'-2	4'-2	6	15'-9"	8	6	16'-3	6	6	16'-9	4'-2	12'-7	6	16'-3	0.637	0.738	0.924	2.299	426.87

Bent Bar Details

Bars	D
6	4 1/2"
7	5 1/2"
8	6"

Note:
All dimensions are out to out.
D = pin diameter.



14'-0" x 12'-4" Barrel Section

Notes:

1. Dimensions listed on this sheet to be used in conjunction with Sheet PT G2-20.
2. Horizontal legs for the k2 and m2 bars may lap in low fill situations.
3. Dimensions "A", "B", "C", "D", and "Sp." listed in the bar list are in inches.
4. Dimensions "S", "H", "L", and "V" listed in the bar list are in feet and inches.

LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER	IOWADOT Highway Division	
		Cast-in-Place Standard Design - Walkways and Trails	
		Reinforced Concrete Pedestrian Tunnel	
		August, 2020	
		Tunnel Details 14'-0" x 12'-4"	PT-RCB 14-12-20