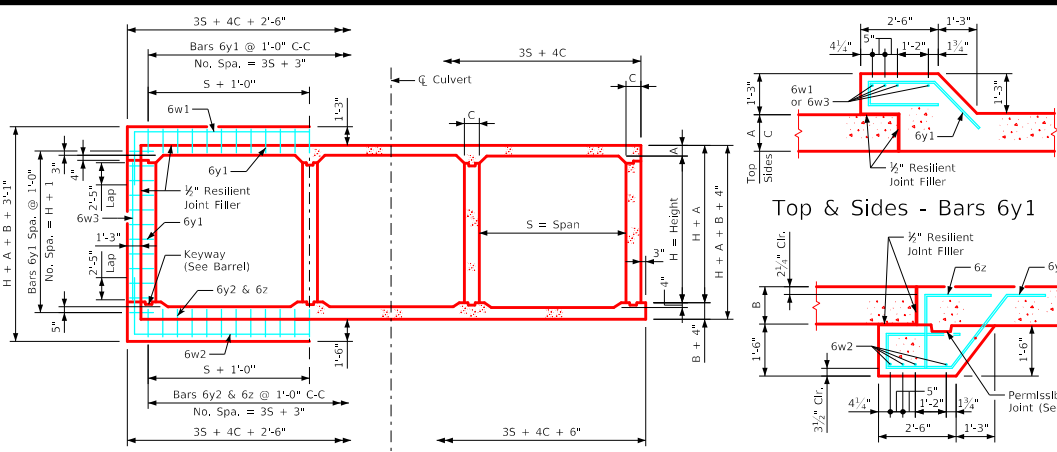


ENGLISH\DESIGNED\TRIPLECULVERTS.DGN - TRCBJ 1-20 - THIS SHEET ISSUED 07-2020.

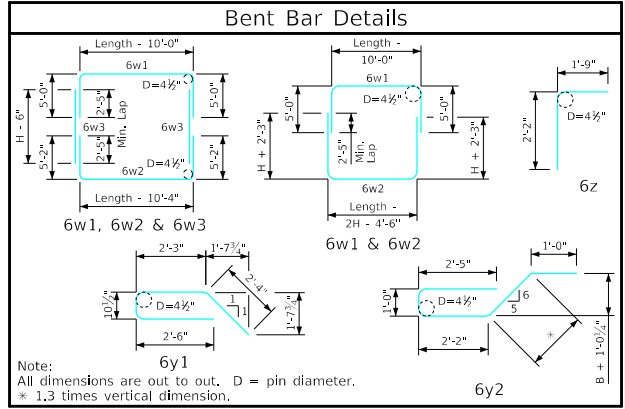


Joint Detail
Section thru Barrel

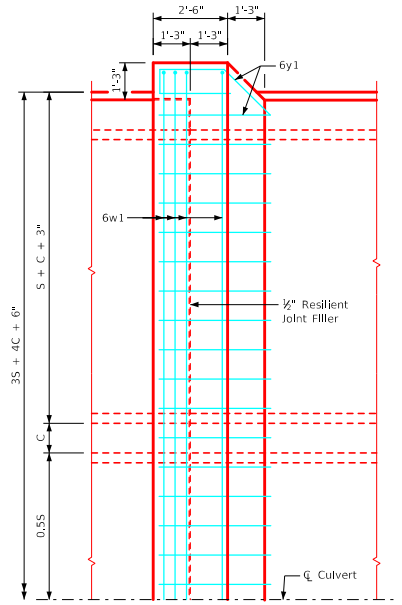
Bill of Reinforcing Steel		10' x 4'			10' x 5'			10' x 6'			10' x 7'			10' x 8'			
Bar	Location	Shape	No.	Length	Weight	No.	Length	Weight	No.	Length	Weight	No.	Length	Weight	No.	Length	Weight
6w1	Slab & Walls	[Symbol]	4	45'-0"	270	4	45'-0"	270	4	45'-0"	270	4	45'-0"	270	4	45'-0"	270
6w2	Floor & Walls	[Symbol]	4	47'-6"	285	4	49'-6"	297	4	45'-4"	272	4	45'-4"	272	4	45'-4"	272
6w3	Walls	[Symbol]	--	--	--	--	--	--	8	5'-6"	66	8	6'-6"	78	8	7'-6"	90
6y1	Top & Sides	[Symbol]	46	8'-0"	553	48	8'-0"	577	50	8'-0"	601	52	8'-0"	625	54	8'-0"	649
6y2	Bottom	[Symbol]	34	9'-6"	485	34	9'-6"	485	34	9'-6"	485	34	9'-6"	485	34	9'-6"	485
6z	Bottom & Floor	[Symbol]	34	3'-11"	200	34	3'-11"	200	34	3'-11"	200	34	3'-11"	200	34	3'-11"	200
Total Weight (LB)																	
Total Concrete (CY)																	

Bill of Reinforcing Steel		10' x 9'			10' x 10'			10' x 11'			10' x 12'			
Bar	Location	Shape	No.	Length	Weight	No.	Length	Weight	No.	Length	Weight	No.	Length	Weight
6w1	Slab & Walls	[Symbol]	4	45'-2"	271	4	45'-6"	273	4	45'-10"	275	4	46'-4"	278
6w2	Floor & Walls	[Symbol]	4	45'-6"	273	4	45'-10"	275	4	46'-2"	277	4	46'-8"	280
6w3	Walls	[Symbol]	8	8'-6"	102	8	9'-6"	114	8	10'-6"	126	8	11'-6"	138
6y1	Top & Sides	[Symbol]	56	8'-0"	673	58	8'-0"	697	60	8'-0"	721	62	8'-0"	745
6y2	Bottom	[Symbol]	34	9'-7"	489	34	9'-6"	485	34	9'-6"	485	34	9'-6"	485
6z	Bottom & Floor	[Symbol]	34	3'-11"	200	34	3'-11"	200	34	3'-11"	200	34	3'-11"	200
Total Weight (LB)														
Total Concrete (CY)														

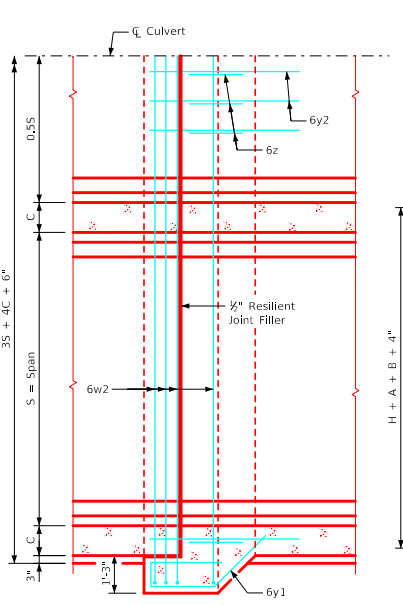
Barrel Size	Barrel Dimension			Bell Joint Quantities (CY)		
	A	B	C	Footing	Walls	Slab
10' x 4'	12.5	14.5	9	6.511	1.047	5.441
10' x 5'	12.5	14.5	9	6.511	1.332	5.441
10' x 6'	12.5	14.5	9	6.511	1.618	5.441
10' x 7'	12.5	14.5	9	6.511	1.903	5.441
10' x 8'	12.5	15	9	6.522	2.189	5.441
10' x 9'	12.5	15	9.5	6.551	2.474	5.464
10' x 10'	12.5	14.5	10.5	6.596	2.760	5.512
10' x 11'	12	14.5	11.5	6.654	3.045	5.548
10' x 12'	12	14.5	13	6.739	3.331	5.619



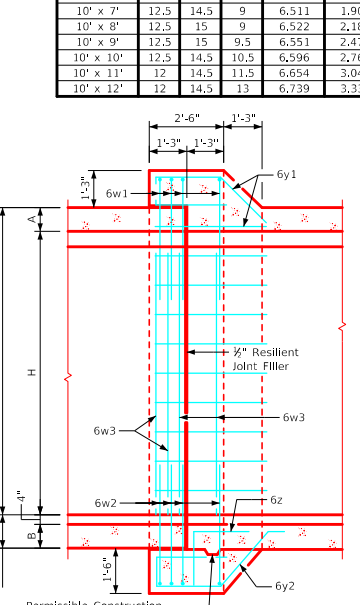
- Notes:
- 1. Dimensions and quantities shown are based on slab, floor, and wall thicknesses (A, B, and C, respectively). Values for these dimensions, under varying fill conditions, can be found on the TRRCB culvert barrel detail sheets.
 - 2. Change lengths of bars 6w1, 6w2, 6z, and adjust reinforcing steel and concrete quantities accordingly for slab, wall, and floor thicknesses other than shown.
 - 3. All bar lengths are estimated with a 2" clearance from concrete edge to outside of bar, except as noted.
 - 4. Material and construction to be in accordance with the current Standard Specifications of I.D.O.T.
 - 5. See Sheet TRRCB G2-20 for General Notes, Specifications, and Design Stresses.
 - 6. Bars 6w1 & 6w2 may be furnished in two equal lengths adding 2'-5" to the overall length to obtain a 2'-5" min. lap. The above is to be performed at no additional cost to the contracting authority.
 - 7. Barrel floor bars m1 & m9 are to be shortened 6" in length at bell joints.
 - 8. Dimensions "A", "B" and "C" are in inches. "Length" dimensions in bar lists are in feet and inches.



Plan View - Slab



Plan View - Floor



Longitudinal Section

LATEST REVISION DATE APPROVED BY BRIDGE ENGINEER 	 Standard Design Triple Reinforced Concrete Box Culverts July, 2020
	Culvert Bell Joints 10' Span
	TRCBJ 1-20