

- ☒ REV. 1-16-86 : REVISED NOTE CONCERNING REROLLING.
- ☒ REV. 4-1-86 : ADDED NOTE ALLOWING 16 GAUGE PIPE ON TEMPORARY DETOURS.
- ☒ REV. 7-29-94 : REDREW SHEET, REORGANIZED SHEET AND UPDATED TO 1994 STANDARDS.
- ☒ REV. 4-15-97: CHANGED GENERAL NOTE ③.

GENERAL NOTES

- A

PIPE SHALL CONFORM TO SECTION 915 OF THE STANDARD SPECIFICATIONS.
- B

THE VERTICAL ELONGATION OR STRUTTING OF PIPES IS NO LONGER SPECIFIED IN THIS STANDARD DRAWING. IF SUCH IS REQUIRED BY SPECIAL PROVISION OR NOTE IN THE PLANS, IT SHALL BE DONE ACCORDING TO STANDARD DRAWING NO. D-PS-1. IF PART OF A CULVERT IS ELONGATED, ALL OF IT MUST BE ELONGATED.
- C

FOR ALL SIDE DRAINS THE MINIMUM SHEET THICKNESS SHALL BE 16 GAUGE ON ALL CIRCULAR PIPE OTHER THAN STRUCTURAL PLATE PIPE.
- D

FOR ALL CROSS DRAINS THE MINIMUM SHEET THICKNESS SHALL BE 14 GAUGE ON ALL CIRCULAR PIPE OTHER THAN STRUCTURAL PLATE PIPE.
- E

THE HEIGHTS OF COVER SHOWN IN THE TABLES ARE FOR FINISHED CONSTRUCTION. A MINIMUM COVER OF FOUR (4) FEET SHALL BE PLACED OVER CULVERTS PRIOR TO DRIVING HEAVY CONSTRUCTION VEHICLES OVER THEM. THE WIDTH OF THIS EXTRA COVER SHALL BE WIDE ENOUGH TO FULLY ACCOMMODATE THE HEAVY CONSTRUCTION VEHICLES AND SHALL BE THE ONLY ACCESS ACROSS THESE CULVERTS DURING CONSTRUCTION.
- F

LENGTH OF PIPE SHALL BE IN INCREMENTS OF EVEN TWO (2) FEET FOR THE PURPOSE OF ESTIMATING PLANS QUANTITIES. SEE STANDARD DRAWING NO. D-PE-8 FOR METHOD OF MEASUREMENT OF PAYMENT, DETAILS OF BEVELED ENDS AND RIP-RAP PROTECTION.
- G

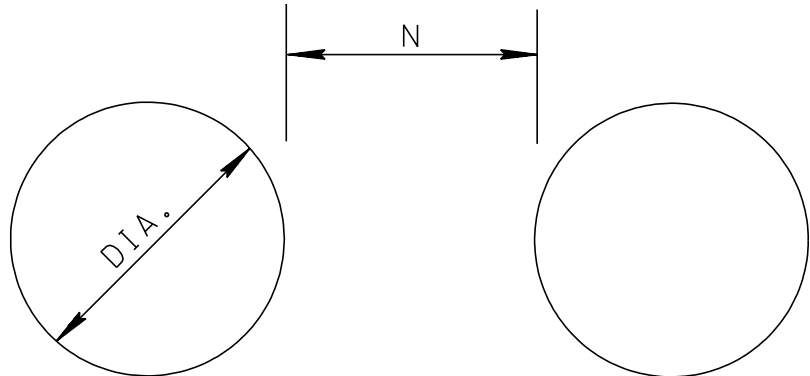
POLYMERIC COATED PIPE - ARCH, WHEN REQUIRED, SHALL CONFORM TO SECTION 915.03 OF THE STANDARD SPECIFICATIONS.
- H

VARIATION OF MATERIALS OR CORRUGATION WILL NOT BE PERMITTED IN ANY LINE OF PIPE.
- I

PLATES FOR STEEL STRUCTURAL PLATE STRUCTURES ARE STANDARD 6" X 2" CORRUGATION WITH FOUR (4) BOLTS PER FOOT IN EACH LONGITUDINAL SEAM (UNLESS OTHERWISE SHOWN).
- J

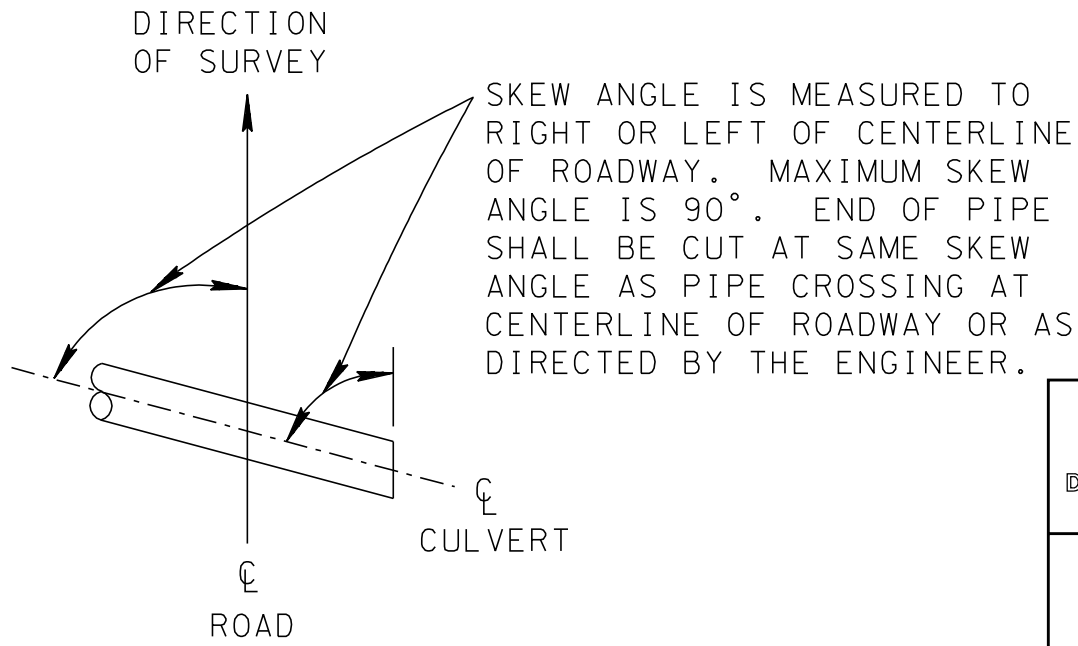
PLATES FOR ALUMINUM STRUCTURAL PLATE STRUCTURES ARE STANDARD 9" X 2½" CORRUGATION WITH FIVE AND ONE - THIRD (5 1/3) BOLTS PER FOOT IN EACH LONGITUDINAL SEAM (UNLESS OTHERWISE SHOWN).
- K

TYPE I AND TYPE II PIPE WITH HELICAL CORRUGATIONS SHALL BE REROLLED TO FORM ANNULAR (CIRCUMFERENTIAL) ENDS WHERE THE CULVERT IS TO BE JOINED. SEE CURRENT AASHTO SPECIFICATIONS M36 AN M196, SECTIONS ON END FINISH AND COUPLING BANDS. ONLY COUPLING BANDS WITH ANNULAR CORRUGATIONS SHALL BE ALLOWED. WHEN EXTENDING AN EXISTING CULVERT, A CONCRETE COLLAR SHALL BE USED IF A COUPLING BAND WITH ANNULAR CORRUGATIONS WILL NOT FIT.



DIAMETER	MINIMUM SPACE (N) BETWEEN PIPE WITH CLASS "B" OR "C" BEDDING
15" TO 24"	12"
30" TO 96"	½ DIAMETER OF PIPE
102" TO 120"	48"

WHEN CLASS "A" BEDDING IS USED, A DETAIL SHALL BE SHOWN ON PLANS FOR MINIMUM SPACE BETWEEN PIPE.



☒ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

FERROUS AND
ALUMINUM
CORRUGATED
METAL PIPE

D-PG-3

CIRCULAR C.M. PIPE (STEEL)

2 2/3" X 1½" CORRUGATIONS

PIPE DIAMETER INCHES	SHEET THICKNESS IN INCHES (GAUGE)																	
	0.064(16 GA.)				0.079(14 GA.)			0.109(12 GA.)			0.138(10 GA.)			0.168(8 GA.)				
	HEIGHT OF COVER LIMITS - MINIMUM IN INCHES - MAXIMUM IN FEET																	
	MIN. (IN)	MAX. (FT)			MIN. (IN)	MAX. (FT)			MIN. (IN)	MAX. (FT)			MIN. (IN)	MAX. (FT)				
		①	②		①	②		①	②		①	②		①	②		①	②
15	12	74	170	12	80	213	12	104	298	12	108	383	12	113	469			
18	12	61	142	12	67	177	12	86	248	12	90	319	12	94	391			
24	12	46	106	12	50	133	12	65	186	12	68	239	12	71	293			
30	12	37	85	12	40	106	12	52	149	12	54	191	12	56	234			
36	12	30	71	12	33	88	12	43	124	12	45	159	12	47	195			
42	12	34	60	12	47	76	12	74	106	12	77	137	12	81	167			
48	12	30	53	12	41	66	12	65	93	12	68	119	12	71	146			
54				14	36	59	12	57	82	12	60	106	12	63	130			
60							12	52	74	12	54	95	12	57	117			
3" X 1" AND 5" X 1" CORRUGATIONS																		
36	12	53	81	12	66	102	12	98	143	12	118	184	12	130	225			
42	12	45	69	12	56	87	12	84	122	12	101	157	12	112	193			
48	12	39	54	12	49	68	12	73	95	12	88	122	12	98	150			
54	12	35	48	12	44	60	12	65	84	12	78	109	12	87	133			
60	12	31	43	12	39	54	12	58	76	12	70	98	12	78	120			
66	13	29	39	12	36	49	12	53	69	12	64	89	12	71	109			
72	14	26	36	13	33	45	12	49	63	12	59	82	12	65	100			
78	16	24	33	14	30	42	12	45	58	12	54	75	12	60	92			
84	17	22	31	15	28	39	13	42	54	12	50	70	12	56	85			
90	18	21	29	16	26	36	14	39	51	12	47	65	12	52	80			
96				17	24	34	15	36	47	13	44	61	12	49	75			
102				18	23	32	15	34	45	14	41	57	13	46	70			
108							16	32	42	14	39	54	14	43	66			
114							17	31	40	15	37	51	15	41	63			
120							18	29	38	16	35	49	15	39	60			
126										17	33	52	16	37	64			
132										17	32	50	17	35	61			
138													18	34	58			
144													18	32	56			

- ① ANNULAR CORRUGATIONS
- ② HELICAL CORRUGATIONS
- ③ THE 5" X 1" CORRUGATIONS BEGIN WITH 48" PIPE AND END WITH 120" PIPE ON HELICAL CORRUGATED PIPE ONLY. THIS IS AN EQUAL ALTERNATE TO THE 3" X 1" CORRUGATED PIPE CULVERT.

CIRCULAR C.M. PIPE (STEEL STR. PLATE)- 6" X 2" CORR.

PIPE DIAMETER INCHES	SHEET THICKNESS IN INCHES (GAUGE)													
	0.109 (12 GA.)		0.138 (10 GA.)		0.168 (8 GA.)		0.188 (7 GA.)		0.218 (5 GA.)		0.249 (3 GA.)		0.280 (1 GA.)	
	HEIGHT OF COVER LIMITS - MINIMUM IN INCHES - MAXIMUM IN FEET													
	MIN. (IN)	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR	MAX. (FT) ANNULAR				
60	12	46	68	90	103	124	146	160						
66	12	42	62	81	93	113	133	145						
72	12	38	57	75	86	103	122	133						
78	12	35	53	69	79	95	112	123						
84	12	33	49	64	73	88	104	114						
90	12	31	45	60	68	83	97	106						
96	12	29	43	56	64	77	91	100						
102	13	27	40	52	60	73	86	94						
108	14	25	38	50	57	69	81	88						
114	15	24	36	47	54	65	77	84						
120	15	23	34	45	51	62	73	80						
126	16	22	32	42	49	59	69	76						
132	17	21	31	40	46	56	66	72						
138	18	20	29	39	44	54	63	69						
144	18	19	28	37	43	51	61	66						
150	19	18	27	36	41	49	58	64						
156	20	17	26	34	39	47	56	61						
162	21	17	25	33	38	46	54	59						
168	21	16	24	32	36	44	52	57						
174	22	16	23	31	35	42	50	55						
180	23	15	22	30	34	41	48	53						

CIRCULAR C.M. PIPE (ALUMINUM STR. PLATE) - 9" X 2 ½" CORRUGATIONS

PIPE DIAMETER INCHES	SHEET THICKNESS IN INCHES (GAUGE)															
	0.100		0.125		0.150		0.175		0.200		0.225		0.250			
	④ HEIGHT OF COVER LIMITS - MINIMUM IN INCHES - MAXIMUM IN FEET															
	MIN. (IN)	MAX. (FT) ANNULAR	MIN. (IN)	MAX. (FT) ANNULAR	MIN. (IN)	MAX. (FT) ANNULAR	MIN. (IN)	MAX. (FT) ANNULAR	MIN. (IN)	MAX. (FT) ANNULAR	MIN. (IN)	MAX. (FT) ANNULAR	MIN. (IN)	MAX. (FT) ANNULAR		
60	12	29 / 31	12	38 / 45	12	49 / 60	12	58 / 70	12	58 / 81	12	58 / 92	12	58 /103		
66	12	26 / 28	12	35 / 41	12	44 / 54	12	53 / 64	12	53 / 74	12	53 / 84	12	53 / 94		
72	13	24 / 25	12	32 / 38	12	41 / 50	12	48 / 59	12	48 / 68	12	48 / 77	12	48 / 86		
78	14	22 / 23	12	29 / 35	12	38 / 46	12	45 / 54	12	45 / 62	12	45 / 71	12	45 / 79		
84	15	21 / 22	13	27 / 32	12	35 / 42	12	41 / 50	12	41 / 58	12	41 / 66	12	41 / 73		
90	16	19 / 20	14	25 / 30	13	32 / 40	12	39 / 47	12	39 / 54	12	39 / 61	12	39 / 69		
96	17	18 / 19	15	24 / 28	14	30 / 37	13	36 / 44	12	36 / 51	12	36 / 57	12	36 / 64		
102	18	17 / 18	16	22 / 26	15	29 / 35	14	34 / 41	13	34 / 48	13	34 / 54	13	34 / 60		
108	19	16 / 17	17	21 / 25	16	27 / 33	14	32 / 39	14	32 / 45	14	32 / 51	14	32 / 57		
114	20	15 / 16	18	20 / 24	16	26 / 31	15	30 / 37	15	30 / 42	15	30 / 48	15	30 / 54		
120	21	14 / 15	19	19 / 22	17	24 / 30	16	29 / 35	15	29 / 40	15	29 / 46	15	29 / 51		
126	22	13 / 14	20	18 / 21	18	23 / 28	17	27 / 33	16	27 / 38	16	27 / 44	16	27 / 49		
132	23	13 / 14	21	17 / 20	19	22 / 27	18	26 / 32	17	26 / 37	17	26 / 42	17	26 / 47		
138	24	12 / 13	22	16 / 19	20	21 / 26	18	25 / 30	18	25 / 35	18	25 / 40	18	25 / 44		
144	25	12 / 12	22	16 / 18	21	20 / 25	19	24 / 29	18	24 / 33	18	24 / 38	18	24 / 43		
150			23	15 / 18	21	19 / 24	20	23 / 28	19	23 / 32	19	23 / 36	19	23 / 41		
156			24	14 / 17	22	18 / 23	21	22 / 27	20	22 / 31	20	22 / 35	20	22 / 39		
162					23	18 / 22	21	22 / 26	21	21 / 30	21	21 / 34	21	21 / 38		
168					24	17 / 21	22	20 / 25	21	20 / 29	21	20 / 33	21	20 / 36		
174					25	17 / 20	23	20 / 24	22	20 / 28	22	20 / 31	22	20 / 35		
180							24	19 / 23	23	19 / 27	23	19 / 30	23	19 / 34		

- ④ VALUES TO LEFT OF SLASH MARK (/) ARE FOR USE OF ALUMINUM BOLTS ON SEAMS AND VALUES TO RIGHT ARE FOR USE OF STEEL BOLTS ON SEAMS.