

STEEL ROUND PIPE 2 2/3" x 1/2" CORRUGATIONS											
DIAMETER OF PIPE 'D' Inches	MINIMUM COVER ABOVE PIPE ① Inches	(H) MAXIMUM ALLOWABLE COVER IN FEET									
		16 GAGE (0.064")		14 GAGE (0.079")		12 GAGE (0.109")		10 GAGE (0.138")		8 GAGE (0.168")	
		Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated
12	12	70	-	76	-	-	-	-	-	-	-
15	12	56	-	61	-	-	-	-	-	-	-
18	12	40	-	48	-	64	-	-	-	-	-
24	12	23	-	26	-	33	-	-	-	-	-
30	12	-	-	18	30	22	43	25	51	-	-
36	12	-	-	15	25	17	33	19	38	-	-
42	12	-	-	-	-	14	28	16	31	17	34
48	12	-	-	-	-	13	25	14	27	15	29
54	18	-	-	-	-	12	24	13	25	13	26
60	18	-	-	-	-	-	-	12	23	12	25
66	18	-	-	-	-	-	-	11	22	12	23
72	18	-	-	-	-	-	-	11	17	11	21
78	24	-	-	-	-	-	-	-	-	11	17
84	24	-	-	-	-	-	-	-	-	11	13

STEEL ROUND PIPE 3" X 1" and 5" X 1" CORRUGATIONS											
DIAMETER OF PIPE 'D' Inches	MINIMUM COVER ABOVE PIPE ① Inches	(H) MAXIMUM ALLOWABLE COVER IN FEET									
		16 GAGE (0.064")		14 GAGE (0.079")		12 GAGE (0.109")		10 GAGE (0.138")		8 GAGE (0.168")	
		Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated
36	12	27	40	31	50	40	74	-	-	-	-
42	12	21	34	23	42	29	58	-	-	-	-
48	12	17	30	19	37	23	46	-	-	-	-
54	12	15	27	16	32	19	38	-	-	-	-
60	12	13	24	15	29	16	33	-	-	-	-
66	12	13	22	13	27	15	30	-	-	-	-
72	12	12	20	12	25	14	27	-	-	-	-
78	12	12	18	12	23	13	26	-	-	-	-
84	12	-	-	12	21	12	24	13	26	-	-
90	12	-	-	-	-	12	24	12	35	13	26
96	12	-	-	-	-	11	23	12	24	12	25
102	24	-	-	-	-	-	-	12	23	12	24
108	24	-	-	-	-	-	-	-	-	12	23
114	24	-	-	-	-	-	-	-	-	11	23
120	24	-	-	-	-	-	-	-	-	11	20

STRUCTURAL STEEL ROUND PIPE 6" X 2" CORRUGATIONS															
DIAMETER OF PIPE 'D' Inches	MINIMUM COVER ABOVE PIPE ① Inches	(H) MAXIMUM ALLOWABLE COVER IN FEET													
		12 GAGE (0.109")		10 GAGE (0.138")		8 GAGE (0.168")		7 GAGE (0.187")		5 GAGE (0.218")		3 GAGE (0.250")		1 GAGE (0.281")	
		Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated	Round	Elongated
60	12	35	35	43	52	51	67	-	-	-	-	-	-	-	-
66	12	29	32	35	45	41	61	-	-	-	-	-	-	-	-
72	12	25	29	29	43	34	56	-	-	-	-	-	-	-	-
78	12	22	27	25	40	29	52	31	60	-	-	-	-	-	-
84	12	19	25	22	37	25	48	27	53	-	-	-	-	-	-
90	12	18	23	20	34	22	44	23	47	-	-	-	-	-	-
96	12	16	22	18	32	20	40	21	42	-	-	-	-	-	-
102	24	15	21	17	30	18	36	19	38	-	-	-	-	-	-
108	24	14	19	16	29	17	34	18	36	-	-	-	-	-	-
114	24	14	18	15	27	16	32	17	33	18	36	-	-	-	-
120	24	13	18	14	26	15	30	16	31	17	33	-	-	-	-
126	24	13	-	13	25	14	29	15	30	16	31	-	-	-	-
132	24	12	-	13	24	14	27	14	28	15	30	-	-	-	-
138	24	12	-	13	23	13	26	14	27	14	29	-	-	-	-
144	24	12	-	12	22	13	26	13	26	14	27	-	-	-	-
150	24	12	-	12	21	12	25	13	26	13	27	14	28	-	-
156	24	11	-	12	20	12	24	12	25	13	26	13	27	-	-
162	24	11	-	12	19	12	24	12	24	13	25	13	26	13	27
168	24	11	-	11	19	12	23	12	24	12	25	13	25	13	26
174	24	11	-	11	18	12	23	12	23	12	24	12	25	13	25
180	24	11	-	11	17	11	23	11	23	12	24	12	24	12	25

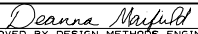
Unless specified otherwise, the Contractor may choose the type of corrugated pipe and installation to furnish as long as the selection conforms to the limits indicated for the type specified.

When polyethylene pipe is used, Class "A" Bedding is required. Maximum allowable cover for all sizes and installations of polyethylene pipe is 15 feet.

Depth of cover values were determined in accordance with "AASHTO Standard Specifications for Highway Bridges," Section 12, with the following assumptions:

Iowa DOT Class "A" bedding conditions
Density of soil, W = 120 pcf
Soil stiffness factor, k = 0.55

- ① Minimum cover for roadway culverts is 24 inches. Minimum cover for entrance culverts is 12 inches.

 Iowa Department of Transportation STANDARD ROAD PLAN	REVISION	
	8	10-16-07
	RF-32	
	SHEET 1 of 2	
REVISIONS: Combined with RF-33. Added entry to structural steel round pipe table.		
 APPROVED BY DESIGN METHODS ENGINEER		
DEPTH OF COVER TABLES FOR CORRUGATED PIPE		

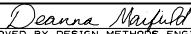
STEEL ARCH PIPE 2 2/3" X 1/2" CORRUGATIONS								
SPAN Inches	RISE Inches	R _c ^② Inches	MINIMUM COVER ABOVE PIPE Inches ^①	(H) MAXIMUM ALLOWABLE COVER IN FEET				
				16 GA. (0.064")	14 GA. (0.079")	12 GA. (0.109")	10 GA. (0.138")	8 GA. (0.168")
17	13	3.5	18	6	6	-	-	-
21	15	4.125	18	6	6	-	-	-
24	18	4.875	18	5	5	-	-	-
28	20	5.5	18	5	5	-	-	-
35	24	6.875	18	5	5	-	-	-
42	29	8.25	18	4	4	-	-	-
49	33	9.625	18	-	-	4	4	4
57	38	11.0	18	-	-	4	4	4
64	43	12.375	18	-	-	4	4	4
71	47	13.75	18	-	-	-	4	4
77	52	15.125	18	-	-	-	-	4
83	57	16.5	18	-	-	-	-	4

STEEL ARCH PIPE 3" X 1" CORRUGATIONS								
SPAN Inches	RISE Inches	R _c ^② Inches	MINIMUM COVER ABOVE PIPE Inches ^①	(H) MAX. ALLOWABLE COVER IN FT.				
				16 GA. (0.064")	14 GA. (0.079")	12 GA. (0.109")	10 GA. (0.138")	
60	46	18.75	18	6	6	-	-	
66	51	20.75	18	6	6	-	-	
73	55	22.875	18	8	8	-	-	
81	59	20.875	18	-	7	7	-	
87	63	22.625	18	-	7	7	-	
95	67	24.375	18	-	6	6	-	
103	71	26.125	24	-	-	6	-	
112	75	27.75	24	-	-	5	-	
117	79	29.5	24	-	-	5	-	
128	83	31.25	24	-	-	-	5	

STRUCTURAL STEEL ARCH PIPE 6" X 2" CORRUGATIONS							
SPAN Inches	RISE Inches	R _c ^② Inches	MINIMUM COVER ABOVE PIPE Inches ^①	(H) MAXIMUM ALLOWABLE COVER IN FEET			
				12 GA. (0.109")	10 GA. (0.138")	8 GA. (0.168")	7 GA. (0.187")
73	55	18	18	8	-	-	-
84	61	18	18	7	-	-	-
95	67	18	18	6	-	-	-
106	73	18	24	6	-	-	-
117	79	18	24	5	-	-	-
131	85	18	24	5	-	-	-
142	91	18	24	4	-	-	-
154	100	18	24	4	-	-	-
159	112	31	24	6	-	-	-
170	118	31	24	6	-	-	-
184	124	31	24	-	6	-	-
195	130	31	36	-	5	-	-
206	136	31	36	-	5	-	-
217	142	31	36	-	-	5	-
231	148	31	36	-	-	4	-
239	154	31	36	-	-	4	-
247	158	31	36	-	-	-	4

① Minimum cover for roadway culverts is 24 inches. Minimum cover for entrance culverts is 12 inches.

② Radius of the lower corners of the arch pipe.

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