AS-BUILT PLANS 12/12/12

TABLE NO. 1R ROUND PIPE -SPIRAL RIB ALUMINUM MINIMUM THICKNESS OF STEEL AND ALUMINUM

PIPE DIAMETER (INCHES)	TYPE	MINIMUM COVER (INCHES)	HEIGHT OF FILL (FEET) ABOVE TOP OF PIPE 1-10	10-15	15-20	20-25	25-30	30-35	35-40	40-50	50-60	60-70	70-80	80-90
12														
15														
18	STEEL R	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.079	.079	
	ALUM R	12	.060	.060	.060	.060	.060	.060	.075	.075				
24	STEEL R	12	.064	.064	.064	.064	.064	.064	.064	.079	.079	.09	.09	
	ALUM R	12	.060	.060	.060	.060	.075	.075	.105	.105	.105			
30	STEEL R	12	.064	.064	.064	.064	.064	.064	.079	.079	.09	.09	.09	
	ALUM R	15	.060	.060	.060	.075	.075	.105	.105	.105				
36	STEEL R	12	.064	.064	.064	.064	.064	.064	.079	.09	.09	.09		
	ALUM R	18	.060	.060	.075	.075	.105	.105	.105	.135	.135			
42	STEEL R	12	.064	.064	.064	.064	.079	.079	.09	.09	.09			
	ALUM R	21	.075	.075	.075	.105	.105	.105	.135	.135				
48	STEEL R	12	.064	.064	.064	.079	.079	.09	.09	.09				
	ALUM R	24	.105	.105	.105	.105	.105	.135	.135					
54	STEEL R	15	.064	.064	.064	.079	.079	.09	.09					
	ALUM R	24	.105	.105	.105	.105	.135	.135						
60	STEEL R	15	.079	.079	.079	.079	.09	.09						
	ALUM R	24	.105	.105	.105	.105	.135							
66	STEEL R	18	.079	.079	.079	.09	.09	.09						
	ALUM R	24	.135	.135	.135	.135								
72	STEEL R	18	.09	.09	.09	.09	.09							
	ALUM R	27	.135	.135	.135	.135								
78	STEEL R	21	.09	.09	.09	.09								
84	STEEL R	21	.09	.09	.09	.09								
90														
96														
102														
108														
114														
120														

R DENOTES SPIRAL RIB PROFILE 3/4" X 3/4" X 7-1/2"

TABLE VALUES FOR ALUMINUM SPIRAL RIB PIPE ARE COMPUTED BASED UPON ALCLAD ALLOY 3004-H34 HAVING MINIMUM YIELD STRENGTH, f=24,000 PSI.
IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 (f=20,000 PSI), ALLOWABLE FILL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:
A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 IN. BECOMES 13.8 IN.)
B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FT. BECOMES 29.7-34.0 FT.)

MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD. MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

TRENCH CONSTRUCTION IS REQUIRED FOR ALL INSTALLATIONS.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

TABLE NO. 2 (PIPE-ARCH)

TABLE SHOWING MINIMUM THICKNESS IN INCHES OF CORRUGATED STEEL AND CORRUGATED ALUMINUM (PIPE-ARCH) AND MAXIMUM HEIGHTS OF FILL IN FEET ABOVE THE TOP OF THE PIPE-ARCH

DIAMETER OF PIPE OF EQUIV. RIB PERIOD. INCH	NOM.-MIN. SPAN INCH	NOM.-MIN. RISE INCH	MIN. THICKNESS (INCHES) CORR. STEEL @ .064	CORR. STEEL @	CORR. ALUMINUM	MIN. COVER (INCHES)	MAX. HT. FILL (FEET)
15	17	13			.060	18	15
18	21	15	.064			18	12
21	24	18	.064		.060	18	14
24	28	20	.064		.060	18	10
30	35	24	.064		.075	18	13
36	42	29	.064		.075	18	9
	40	31		.079	.105	18	9
42	49	33		.079	.105	18	7
	46	36		.079	.105	18	7
48	57	38		.09	.105	18	12
	53	41		.079	.135	18	7
54	64	43	.09			18	12
	60	46		.079	.135	18	7
60	71	47		.138	.164	18	7
	66	51				18	12
66	77	52		.079		18	7
	73	55	.168		.135	18	15
77	83	55		.079		18	14
	78	59		.079		18	12
78	87	63		.109		24	14
84	95	67		.109		24	11
90	103	71					

NOTE FOR TABLE NO. 2
ALTERNATE CORRUGATIONS FOR PIPE-ARCHES, HAVING EQUAL PERIPHERY TO THAT SHOWN, MAY BE SUBSTITUED IF LISTED IN AASHTO SPECIFICATION.

REVISION	DATE	BY

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
CONCRETE & METAL PIPE CULVERTS
SHEET 3 OF 3
(FILL HEIGHTS FOR SPIRAL RIB METAL PIPE & FOR PIPE ARCH)

NO SCALE — SEPT., 2001

DESIGNED ____ TRACED ____ CHECKED ____ REVISED ____

(SUBMITTED) STATE ROAD & TRANSPORT DESIGN ENGINEER
(APPROVED) CHIEF ENGINEER

NUMBER 1030D

THE LPA GROUP
TRANSPORTATION CONSULTANTS
A UNIT OF MICHAEL BAKER CORPORATION
3595 ENGINEERING DRIVE
NORCROSS, GEORGIA 30092
(770) 263-9118

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: INNOVATIVE PROGRAM DELIVERY
GEORGIA STANDARDS

DRAWING No. 41-004