

**3" x 1" CORRUGATED ALUMINUM ALLOY PIPE (LOCK SEAM)  
HEIGHT OF COVER LIMITS (ft.)**

	AREA (sft)	DIAMETER (in.)	THICKNESS (in.)									
			0.060		0.075		0.105		0.135		0.164	
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
	4.9	30	1.0	71.2	1.0	89.4	1.0	100.0	1.0	100.0		
	5.9	33	1.0	59.3	1.0	74.5	1.0	100.0	1.0	100.0		
	7.1	36	1.0	59.3	1.0	74.5	1.0	100.0	1.0	100.0		
	9.6	42	1.0	50.8	1.0	63.8	1.0	89.1	1.0	100.0		
	12.6	48	1.0	44.5	1.0	55.9	1.0	78.0	1.0	100.0	1.0	100.0
	15.9	54	1.0	39.5	1.0	49.6	1.0	69.3	1.0	92.8	1.0	90.7
	19.6	60	1.0	35.6	1.0	44.7	1.0	62.4	1.0	83.5	1.0	81.6
	23.8	66	1.0	32.3	1.0	40.6	1.0	56.7	1.0	75.9	1.0	74.2
	28.3	72			1.0	37.2	1.0	52.0	1.0	69.6	1.0	68.0
	33.2	78			1.0	34.4	1.0	48.0	1.0	64.2	1.0	62.8
	38.5	84					1.0	44.5	1.0	59.6	1.0	58.3
	44.2	90					1.0	41.6	1.0	55.6	1.0	54.4
	50.3	96					1.0	38.1	1.0	51.3	1.0	51.0
	56.7	102							1.1	46.3	1.1	48.0
	63.6	108							1.1	41.8	1.1	45.3
	70.9	114									1.2	42.9
	78.5	120									1.3	40.1

**NOTE:**

1. The tabulated cover depths shall be measured from the bottom of the asphalt or concrete pavement to the top of the pipe.

INDIANA DEPARTMENT OF TRANSPORTATION  
**PIPE HEIGHT OF COVER LIMITS**  
JANUARY 1998  
STANDARD DRAWING NO. **E 715-PHCL-04**

	DETAILS PLACED IN THIS FORMAT 11-15-99
	/s/ Anthony L. Uremovich 11-15-99 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 11-15-99 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	ORIGINALLY APPROVED 1-02-98