

**9" x 2½" STRUCTURAL PLATE ALUMINUM ALLOY PIPE (STEEL BOLTED)  
HEIGHT OF COVER LIMITS (ft.)**

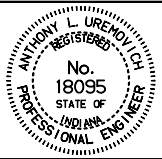
	AREA (sft)	DIAMETER (in.)	THICKNESS (in.)									
			0.100		0.125		0.150		0.175		0.200	
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
	19.6	60	1.0	31.1	1.0	45.5	1.0	60.1	1.0	70.7	1.0	81.5
	23.8	66	1.0	28.2	1.0	41.4	1.0	54.6	1.0	64.3	1.0	74.1
	28.3	72	1.0	25.9	1.0	37.9	1.0	50.0	1.0	58.9	1.0	67.9
	33.2	78	1.0	23.9	1.0	35.0	1.0	46.2	1.0	54.4	1.0	62.7
	38.5	84	1.0	22.2	1.0	32.5	1.0	42.9	1.0	50.5	1.0	58.2
	44.2	90	1.1	20.7	1.0	30.3	1.0	40.0	1.0	47.1	1.0	54.3
	50.3	96	1.1	19.4	1.0	28.4	1.0	37.5	1.0	44.2	1.0	50.9
	56.7	102	1.1	18.3	1.1	26.7	1.1	35.3	1.1	41.6	1.1	47.9
	63.6	108	1.2	17.2	1.1	25.3	1.1	33.3	1.1	39.3	1.1	45.3
	70.9	114	1.3	16.3	1.2	23.9	1.2	31.6	1.2	37.2	1.2	42.9
	78.5	120	1.3	15.5	1.3	22.7	1.3	30.0	1.3	35.3	1.3	40.7
	86.6	126	1.4	14.8	1.3	21.6	1.3	28.6	1.3	33.7	1.3	38.8
	95.0	132	1.4	14.1	1.4	20.7	1.4	27.3	1.4	32.1	1.4	37.0
	103.9	138	1.5	13.5	1.4	19.8	1.4	26.1	1.4	30.7	1.4	35.4
	113.1	144	1.6	12.9	1.5	18.9	1.5	25.0	1.5	29.4	1.5	33.9
	122.7	150			1.6	18.2	1.6	24.0	1.6	28.3	1.6	32.6
	132.7	156			1.6	17.5	1.6	23.1	1.6	27.2	1.6	31.3
	143.1	162					1.7	22.2	1.7	26.2	1.7	30.2
	153.9	168					1.8	21.4	1.8	25.2	1.8	29.1
	165.1	174					1.8	20.7	1.8	24.4	1.8	28.1
	176.7	180							1.9	23.5	1.9	27.1
	188.7	186							1.9	22.8	1.9	26.3
	201.1	192									2.0	25.4
	213.8	198									2.1	24.7
	227.0	204									2.1	23.9
	240.5	210										
	254.5	216										
	268.8	222										
	283.5	228										

**NOTE:**

- 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 717-PHCL-01

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