150 mm x 50 mm STRUCTURAL PLATE STEEL PIPE (BOLTED)
HEIGHT OF COVER LIMITS (m)

AREA (m^2)	DIAMETER (mm)	THICKNESS (mm)							
		4.78		5.54		6.32		7.11	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
1.77	1500	0.30	30.5	0.30	30.5	0.30	30.5	0.30	30.5
2.15	1655	0.30	28.3	0.30	30.5	0.30	30.5	0.30	30.5
2.57	1810	0.30	26.2	0.30	30.5	0.30	30.5	0.30	30.5
3.03	1965	0.30	24.1	0.30	29.0	0.30	30.5	0.30	30.5
3.53	2120	0.30	22.3	0.30	26.8	0.30	30.5	0.30	30.5
4.06	2275	0.30	20.7	0.30	25.0	0.30	29.6	0.30	30.5
4.64	2430	0.30	19.5	0.30	23.5	0.30	27.7	0.30	30.5
5.25	2585	0.34	18.3	0.34	22.3	0.34	26.2	0.34	28.7
5.90	2740	0.37	17.4	0.37	21.0	0.37	24.7	0.37	26.8
6.58	2895	0.37	16.5	0.37	19.8	0.37	23.5	0.37	25.6
7.31	3050	0.40	15.5	0.40	18.9	0.40	22.3	0.40	24.4
8.07	3205	0.43	14.9	0.43	18.0	0.43	21.0	0.43	23.2
8.87	3360	0.43	14.0	0.43	17.1	0.43	20.1	0.43	21.9
9.70	3515	0.46	13.4	0.46	16.5	0.46	19.2	0.46	21.0
10.58	3670	0.46	13.1	0.46	15.5	0.46	18.6	0.46	20.1
11.49	3825	0.49	12.5	0.49	14.9	0.49	17.7	0.49	19.5
12.44	3980	0.52	11.9	0.52	14.3	0.52	17.1	0.52	18.6
13.43	4135	0.52	11.6	0.52	14.0	0.52	16.5	0.52	18.0
14.45	4290	0.55	11.0	0.55	13.4	0.55	15.8	0.55	17.4
15.52	4445	0.58	10.7	0.58	12.8	0.58	15.2	0.58	16.8
16.62	4600	0.58	10.4	0.58	12.5	0.58	14.6	0.58	16.2
17.76	4755	0.61	10.1	0.61	12.2	0.61	14.3	0.61	15.5
18.93	4910	0.61	9.8	0.61	11.6	0.61	13.7	0.61	15.2
20.15	5065	0.64	9.4	0.64	11.3	0.64	13.4	0.64	14.6
21.40	5220	0.67	9.1	0.67	11.0	0.67	13.1	0.67	14.3
22.69	5375	0.67	8.8	0.67	10.7	0.67	12.5	0.67	13.7
24.02	5530	0.70	8.5	0.70	10.4	0.70	12.2	0.70	13.4
25.38	5685	0.73	8.2	0.73	10.1	0.73	11.9	0.73	13.1
26.79	5840	0.73	8.2	0.73	9.8	0.73	11.6	0.73	12.8
28.23	5995	0.76	7.9	0.76	9.4	0.76	11.3	0.76	12.5
29.71	6150	0.76	7.6	0.76	9.4	0.76	11.0	0.76	12.2
31.22	6305	0.79	7.6	0.79	9.1	0.79	10.7	0.79	11.9
32.78	6460			0.82	8.8	0.82	10.4	0.82	11.6

All dimensions are in mm unless otherwise specified.

NOTE:

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

2. The tabulated thickness reflects the required thickness for top and side plates. Refer to 908.08 (a) for the required bottom plate thickness.

INDIANA DEPARTMENT OF TRANSPORTATION

PIPE HEIGHT OF COVER LIMITS

JANUARY 1998

STANDARD DRAWING NO. **717-PHCL-08**

ANTHONY L. UREMOVICH REGISTERED No. 18095 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

/s/ Anthony L. Uremovich 1-02-98
DESIGN STANDARDS ENGINEER DATE

/s/ Donald W. Lucas 1-02-98
CHIEF HIGHWAY ENGINEER DATE

Source Sheet: NONE