4:1 SLOPE							
PIPE SIZE	H	L	W	S	GRATE C		GRATE B
					No.	LENGTH	LENGTH
17 x 13	1'–6	6'–0	2'–0	6'–1	1	3'–8	1'–0
21 x 15	1'–8	6'–8	2'–0	6'–9	1	4'–0	1'–4
24 x 18	1'–11	7'–8	3'–0	7'–9	2	2'–8	1'–0
28 x 20	2'–1	8'–4	3'–0	8'–5	2	3'–0	1'–0
35 x 24	2'–5	9'–8	4'–0	9'–9	3	2'–4	1'–4
42 x 29	2'–10	11'–4	4'–0	11'–5	5	2'–0	–
49 x 33	3'–2	12'–8	5'–0	12'–9	5	2'–0	1'–4
57 x 38	3'–7	14'–4	5'–0	14'–5	6	2'–0	1'–0
64 x 43	4'–0	16'–0	6'–0	16'–5	9	1'–8	–
71 x 47	4'–4	17'–4	6'–0	17'–9	9	1'–8	1'–4

10:1 SLOPE							
PIPE SIZE	H	L	W	S	GRATE C		GRATE B
					No.	LENGTH	LENGTH
17 x 13	1'–6	15'–0	2'–0	14'–9	2	4'–0	3'–4
21 x 15	1'–8	16'–8	2'–0	16'–5	3	4'–0	1'–0
24 x 18	1'–11	19'–2	3'–0	19'–1	5	2'–6	2'–4
28 x 20	2'–1	20'–10	3'–0	20'–9	5	3'–0	2'–4
35 x 24	2'–5	24'–2	4'–0	24'–1	8	2'–4	2'–0
42 x 29	2'–10	28'–4	4'–0	28'–1	10	2'–4	1'–4
49 x 33	3'–2	31'–8	5'–0	31'–9	17	1'–8	–
57 x 38	3'–7	35'–10	5'–0	35'–9	23	1'–4	1'–8
64 x 43	4'–0	40'–0	6'–0	40'–1	22	1'–8	–
71 x 47	4'–4	43'–4	6'–0	43'–5	24	1'–8	–

6:1 SLOPE							
PIPE SIZE	H	L	W	S	GRATE C		GRATE B
					No.	LENGTH	LENGTH
17 x 13	1'–6	9'–0	2'–0	8'–9	1	4'–0	2'–8
21 x 15	1'–8	10'–0	2'–0	9'–9	1	4'–0	3'–8
24 x 18	1'–11	11'–6	3'–0	11'–5	3	2'–8	1'–4
28 x 20	2'–1	12'–6	3'–0	12'–5	3	3'–0	1'–4
35 x 24	2'–5	14'–6	4'–0	14'–5	5	2'–0	2'–4
42 x 29	2'–10	17'–0	4'–0	17'–1	7	2'–0	1'–0
49 x 33	3'–2	19'–0	5'–0	19'–1	8	2'–0	1'–0
57 x 38	3'–7	21'–6	5'–0	21'–5	9	2'–0	1'–4
64 x 43	4'–0	24'–0	6'–0	24'–1	12	1'–8	2'–0
71 x 47	4'–4	26'–0	6'–0	26'–1	18	1'–4	–

APPROXIMATE QUANTITIES									
PIPE Size	4:1 SLOPE			6:1 SLOPE			10:1 SLOPE		
	Str. Steel, lb.	Conc., cys	Reinf. Steel, lb.	Str. Steel, lb.	Conc., cys	Reinf. Steel, lb.	Str. Steel, lb.	Conc., cys	Reinf. Steel, lb.
17 x 13	355	1.2	305	495	1.6	415	820	2.5	640
21 x 15	385	1.3	335	540	1.8	460	910	2.8	715
24 x 18	605	1.8	440	875	2.5	610	1445	3.9	935
28 x 20	645	2.0	465	940	2.7	645	1545	4.2	1020
35 x 24	975	2.7	615	1435	3.7	855	2375	5.8	1325
42 x 29	1145	3.1	700	1710	4.4	995	2750	6.9	1570
49 x 33	1520	4.0	880	2270	5.6	1230	3825	8.9	1960
57 x 38	1715	4.5	985	2525	6.4	1400	4400	10.2	2245
64 x 43	2295	5.7	1210	3335	8.1	1725	5560	12.9	2755
71 x 47	2470	6.2	1310	3735	8.9	1880	6005	14.2	3015

INDIANA DEPARTMENT OF TRANSPORTATION

GRATED BOX END SECTION TYPE II
DIMENSIONS AND QUANTITIES

JANUARY 1999

STANDARD DRAWING NO. **E 715–GBTT–06**

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

DESIGN STANDARDS ENGINEER

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

ORIGINALLY APPROVED 1-04-99