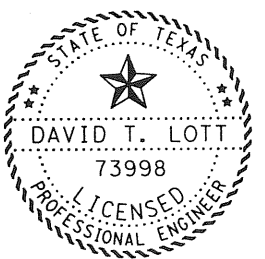


STORM SEWER CALCULATIONS SHEET 1 OF 2

FROM	TO	DA NO.	TOTAL DA (AC)	TOTAL CA	LENGTH (FT)	TIME OF CONCENTRATION			I (IN/HR)	Q (CFS)	DESIGN				
						ALONG SEWER LINE	INLET TIME	USED IN DESIGN			DIA. PIPE	SLOPE (%)	CAP. (CFS)	VEL. (FT/S)	
LINE	"C"														
CI-7	CI-6	14	0.19	0.16	83		1.52	10	6.93	1.13	18	0.639	8.8	3.70	
CI-6	MH-1C	14,16	1.72	1.41	67	$1.52+83/3.7X60=1.89$	3.13	10	6.93	9.81	18	1.500	13.5	8.30	
LINE	"D"														
CI-8	CI-9	17	0.73	0.63	145		1.67	10	6.93	4.37	18	5.276	25.5	11.00	
CI-9	CI-10	17,18	3.23	2.38	84	$1.67+145/11X60=1.89$	4.35	10	6.93	16.49	18	5.798	27	16.00	
CI-10	CI-10A	17,18,19/2	4.24	3.14	6	$4.35+84/16X60=4.37$	5.24	10	6.93	21.76	30	10.000	140	21.00	
CI-10A	JCT-1D	17,18,19	5.45	3.93	198	$5.24+6/21X60=5.24$	5.24	10	6.93	27.23	30	3.420	8	15.00	
JCT-1D	JCT-2D	17,18,19	5.45	3.93	145	$5.24+198/15X60=5.46$	5.46	10	6.93	27.23	36	0.983	70	9.50	
CI-11A	CI-11	20	2.7	1.89	6		8.11	10	6.93	13.1	18	4.667	24	14.00	
CI-11	JCT-2D	20	2.7	1.89	6	$8.11+6/14X60=8.13$	8.13	10	6.93	13.1	18	6.167	27	16.20	
JCT-2D	JCT-3D	17 - 20	8.15	5.82	30	$8.13+6/16.2X60=8.13$	8.11	10	6.93	40.33	36	0.983	70	11.50	
CI-12	JCT-3D	21	0.13	0.12	6		0.67	10	6.93	0.84	18	6.333	28	4.80	
JCT-3D	JCT-4D	17 - 21	8.28	5.94	45	$8.13+30/11.5X60=8.17$	8.11	10	6.93	41.16	36	0.983	70	10.50	
CI-13	JCT-4D	22	0.220	0.200	6		1.28	10	6.93	1.39	18	3.667	21	7.00	
JCT-4D	JCT-1F	17 - 22	8.50	6.14	29	$8.17+45/10.5X60=8.19$	8.11	10	6.93	42.55	36	0.983	70	11.00	
LINE	"E"														
DI-4	JCT-1E	26A	0.3	0.27	101		0.933	10	6.93	1.87	18	2.955	19	7	
DI-3	JCT-1E	26	0.7	0.59	16		0.667	10	6.93	4.09	18	13.625	40	15	
JCT-1E	JCT-2E	26,26A	1	0.86	291	$0.933+101/7X60=1.17$		10	6.93	5.96	18	2.740	18	7	
JCT-2E	JCT-3E	26,26A	1	0.86	5	$1.17+291/97X60=1.86$		10	6.93	5.96	24	1.595	31	4.5	
CI-14	JCT-3E	28	0.29	0.26	6			10	6.93	1.8	18	2.167	16	6.5	
JCT-3E	JCT-4F	26A,26,28	1.29	1.12	19	$1.86+5/4.5X60=1.88$		10	6.93	7.76	24	1.595	31	8.2	
LAT 5F															
CI-15	CI-16	30	0.3	0.27	45			10	6.93	1.87	18	9.644	34	11	
CI-16	JCT 5F	30-31	0.52	0.47	20			10	6.93	3.26	18	24.300	55	8.5	
LAT 6F															
CI-17	JCT 6F	32	0.54	0.49	32			10	6.93	3.4	18	19.250	50	16	
LINE	"F"														
DI-1	JCT 1F	23	5.04	3.53	4			10	6.93	24.26	24	3.640	46	15.5	
DI-2	JCT 2F	24	5.34	3.74	4			10	6.93	25.92	24	3.640	46	17	
JCT 2F	OUTFALL	17-24,26A,26,28,30-32	21.23	15.49	108			10	6.93	107.35	54	0.500	150	d/D	10
LINE	"G"														
CI-18	CI-19	25,27	4.59	3.43	18		3.91	10	6.93	23.77	24	3.316	44	9.00	
CI-19	CI-20	25,27,33	9.31	6.79	271	$3.91+38/9X60=3.98$	4.28	10	6.93	47.05	30	3.398	85	17.00	
CI-20	JCT-1G	25,27,33,34	10.07	7.4	236.5	$4.28+271/17X60=4.55$		10	6.93	51.28	30	5.035	100	21.00	
DI-5	JCT-1G	37	1.54	1.32	98			10	6.93	9.15	18	3.867	22	12.00	
JCT-1G	CI-21	25,27,33,34,37	11.61	8.72	53.5	$4.55+236.5/21X60=4.74$		10	6.93	60.43	30	5.035	100	22.00	
CI-21	CI-22	25,27,33-35,37	12.89	9.89	286	$4.74+53.5/22X60=4.78$		10	6.93	68.54	30	5.326	105	21.50	
DI-6	CI-22	38	3.57	2.57	104		7.35	10	6.93	17.81	36	2.60	115	12.00	
CI-22	CI-24	25,27,33-38	17.36	13.22	342	$7.35+104/12X60=7.49$		10	6.93	91.61	36	4.00	150	22.00	
CI-24	CI-25	25,27,33-38,40	18.28	13.97	45	$7.49+342/20X60=7.78$		10	6.93	96.81	36	4.00	150	22.00	
CI-25	JCT-3I	25,27,33-38,40,43	18.58	14.24	32	$7.78+45/22X60=7.81$		10	6.93	98.68	36	25.44	350	44.00	
LINE	"I"														
DI-7	JCT-1I	39	4.4	3.08	303		8.33	10	6.93	21.34	24	3.178	44	14.00	
CI-23	JCT-2I	42	0.56	0.48	28			10	6.93	3.33	18	23.390	120	17.00	
CI-26	JCT 4I	41	0.81	0.7	30			10	6.93	4.85	18	29.500	65	21.00	
EX. 66"	OUTFALL	25,27,33-44	90.05	64.49	102	$8.33+303/14X60=8.69$		10	6.93	624.05	72	1.50	550	23.00	



8/16/1999

David Lott, P.E.

HYDRAULIC
CALCULATIONS
SHEET 3 OF 5

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
6	STP 99 (413)MM	86
STATE	STATE DIST. NO.	COUNTY
TEXAS	18	ROCKWALL
CONT.	SECT.	JOB
1014	03	033
		HIGHWAY NO.
		FM 740