STORM SEWER CALCULATIONS SHEET 2 OF 2

FROM	TO	DA NO.	TOTAL DA (AC)	TOTAL CA	LENGTH (FT)	TIME OF CONCENTRATION ALONG SEWER LINE	TIME OF CONCENTRATION INLET TIME	TIME OF CONCENTRATION USED IN DESIGN	I (IN/HR)	Q (CFS)	DESIGN DIA. PIPE	DESIGN SLOPE (%) PIPE	DESIGN CAP. (CFS)	DESIGN	DESIGN VEL. (FT/S)
LINE	"J"														
CGI-38	JCT-1J	58	0.51	0.44	39.5		2.98	10	6.93	3.05	18	0.762	9.5		4.80
CI-37	JCT-1J	57	0.51	0.44	74		2.98	10	6.93	3.05	18	1.081	11.5		5.50
JCT-1J	MH-1J	57,58	1.02	0.88	262.5	2.98+74/5.5X60=3.20		10	6.93	6.1	18	0.762	9.5		6.00
MH-1J	JCT 1	57,58	1.02	0.88	234.5	3.20+262.5/6X60=3.93		10	6.93	6.1	18	0.733	9.5		6.00
JCT 1	JCT-2J	56-58	1.69	1.46	42	3.93+234.5/6X60=4.58		10	6.93	10.12	24	1.000	25		7.50
CI-35	JCT-2J	55	0.67	0.58	74			10	6.93	4.02	18	1.959	15.5		7.50
JCT-2J	MH-2J	55-58	2.36	2.04	220.5	4.58+42/7.5X60=4.67		10	6.93	14.14	24	1.000	25		8.00
MH-2J	JCT 2	55-58	2.36	2.04	254.5	4.67+220.5/8X60=5.13		10	6.93	14.14	24	1.014	25		8.00
JCT 2	JCT-3J	53,55-58	2.97	2.57	42	5.13+254.5/8X60=5.66		10	6.93	17.81	24	1.000	25		9.70
CI-33	JCT-3J	54	0.61	0.53	74			10	6.93	3.67	18	1.297	12		6.00
JCT-3J	MH-3J	53-58	3.58	3.1	200.5	5.66+42/9.7X60=5.73		10	6.93	21.48	24	1.000	25		8.30
MH-3J	JCT 3	53-58	3.58	3.1	294.5	5.73+200.5/8.3X60=6.13		10	6.93	21.48	24	1.059	26		9.00
JCT 3	MH-4J	52-58	4.22	3.65	253.5	6.13+294.5/9X60=6.68		10	6.93	25.29	24	4.129	50		16.50
CI-31	MH-4J	51	1.09	0.85	74			10	6.93	5.89	18	2.068	15.5		9.20
MH-4J	JCT-5J	51-58	5.31	4.5	183.5	6.68+253.5/16.5X60=6.94		10	6.93	31.19	24	4.062	50		17.00
CI-30	JCT-5J	50	0.96	0.67	74			10	6.93	4.64	18	2.554	17.5		8.50
JCT-5J	JCT 4	50-58	6.27	5.17	270	6.94+183.5/17X60=7.12		10	6.93	35.83	24	4.062	50		17.00
JCT 4	JCT-6J	49-58	7.67	6.15	248	7.12+270/17X60=7.38		10	6.93	42.62	30	2.735	95		12.50
DI-10	CI-28	45	0.76	0.38	50			10	6.93	2.63	18	1.320	13		6.00
CI-28	JCT-6J	45,48	1.82	1.23	43			10	6.93	8.52	18	1.907	16.5		10.00
JCT-6J	JCT 5	45,48-58	9.49	7.38	52	7.38+248/12.5X60=7.71		10	6.93	51.14	30	2.736	80		16.00
JCT 5	MH-5J	45,47-58	9.77	7.62	92.5	7.71+52/16X60=7.76		10	6.93	52.81	30	1.646	60		12.00
MH-5J	JCT-7J	45,47-58	9.77	7.62	8	7.76+92.5/12X60=7.89		10	6.93	52.81	42	4.547	95		10.50
DI-9	JCT-7J	72	28.1	14.05	17		47	47	2.95	41.45	30	1.941	65		13.00
JCT-7J	JCT-8J	45,47-58,72	37.87	21.67	448	7.89+8/10.5X60=7.90		10	6.93	150.17	42	4.547	240		24.00
LINE	"K"														
DI-8	JCT 1K	73	1.86	0.93	66			10	6.93	6.44	24	2.030	35		9.50
LINE	"L"														
CI-47	JCT-1L	67	2	1.32	233		6.17	10	6.93	9.15	18	1.575	14.0		8.50
CI-46	JCT-1L	66	1.2	0.67	73		7.5	10	6.93	6.64	18	1.192	12.0		7.00
JCT-1L	MH-1L	66-67	3.2	1.99	133.5	7.5+73/6X60=7.70		10	6.93	13.79	24	1.500	29		9.50
CI-45	MH 1L	65	1.55	0.84	73		7.58	10	6.93	5.82	18	1.027	11		6.70
MH 1L	JCT-3L	65-67	4.75	2.83	143.5	7.70+133.5/6.7X60=8.03		10	6.93	19.61	30	0.612	35		7.00
CI-44	JCT-3L	64	1.02	0.57	73		7.61	10	6.93	3.95	18	1.315	12.5		6.50
JCT-3L	JCT 4L	64-67	5.77	3.4	74	8.03+143.5/7X60=8.37		10	6.93	23.56	30	0.612	35		7.50
JCT 4L	MH-2L	62,64-67	6.49	4.05	210.5	8.37+74/7.5X60=8.54		10	6.93	28.07	36	0.732	60		9.50
CI-43	MH-2L	63	0.83	0.55	73		8.03	10	6.93	3.81	18	1.658	14		7.00
MH-2L	MH-3L	62-67	7.32	4.6	491	8.54+210.5/9.5X60=8.91		10	6.93	31.88	36	0.735	60		9.00
CI-41	MH-3L	61	0.85	0.63	73		4.27	10	6.93	4.37	18	1.000	11		6.00
MH-3L	CGI-40	61-67	8.17	5.23	245.5	8.91+491/9X60=9.82	9.97	10	6.93	36.24	36	0.741	63		9.00
CI-39	JCT 5L	59	0.96	0.59	73		2.98	10	6.93	4.09	18	1.137	11.5		6.00
CGI-40	HW-2	59-67	9.83	6.45	70			10	6.93	44.7	42	0.400	70		7.50
LINE	"M"														
DI-12	CI-49	71	1.55	0.84	97		6.25	10	6.93	5.82	18	1.371	13		7.20
CI-49	JCT-1M	70-71	3.5	1.9	89	6.25+97/7.2X60=6.47	6.94	10	6.93	13.17	24	0.904	24		7.80
CI-48	JCT-1M	69	1.4	0.9	18			10	6.93	6.24	18	2.566	18		9.50
JCT-1M	JCT 2M	69-71	4.9	2.8	109	6.94+8.9/7.8X60=7.13		10	6.93	19.4	24	0.904	24		8.50
DI-11	SET	68-71	6.65	3.68	110	7.13+109/8.5X60=7.34		10	6.93	25.5	30	0.500	32		7.00

STATE OF TEXAS
DAVID T. LOTT
73998
LICENSED
PROFESSIONAL ENGINEER

8/16/, 1999

David Lott, P.E.

HYDRAULIC CALCULATIONS

SHEET 4 OF 5

FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
6	STP 99(413)99	57

STATE	STATE DIST. NO.	COUNTY	
TEXAS	18	ROCKWALL	
CONT.	SECT.	JOB	HIGHWAY NO.
1014	03	033	FM 740