

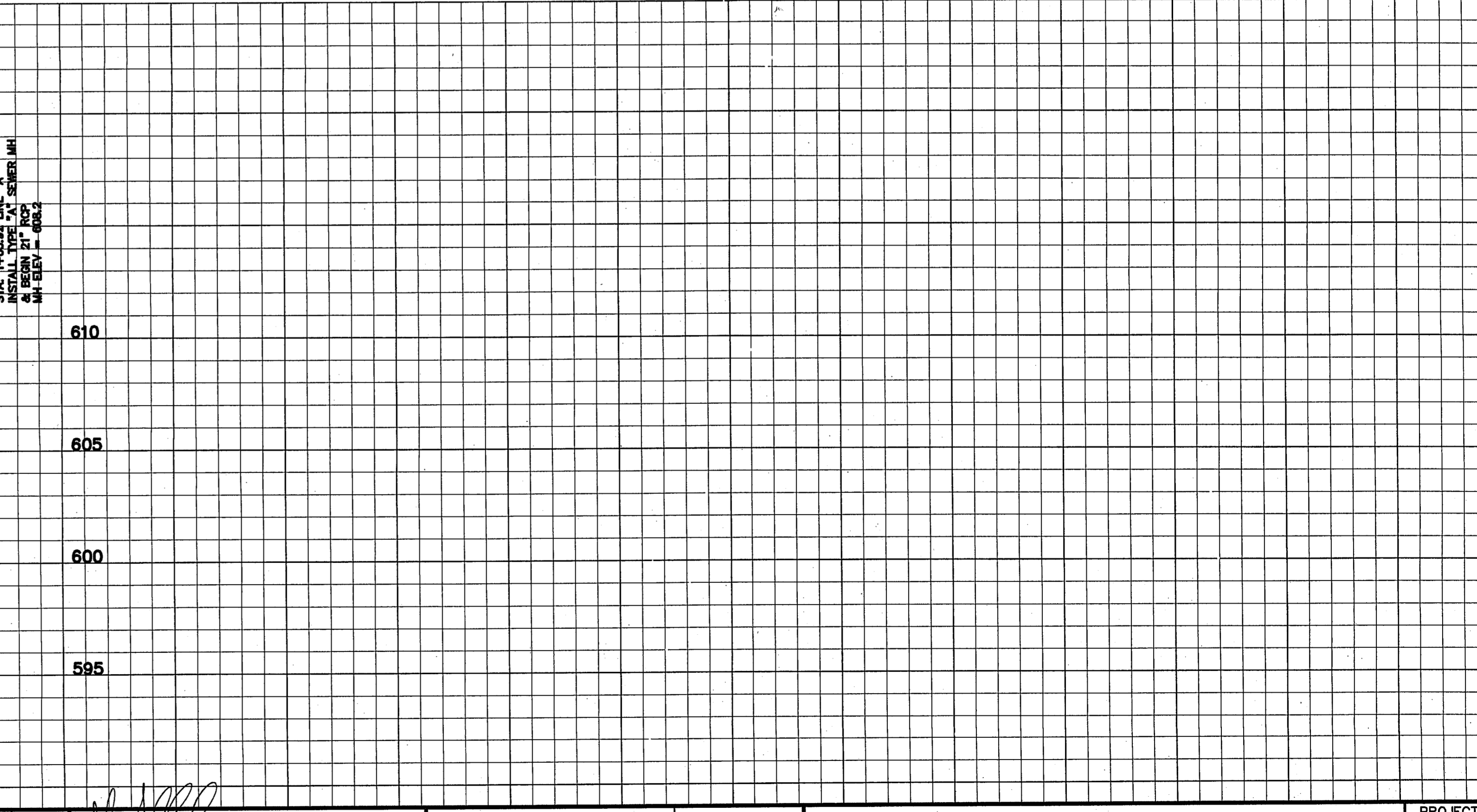
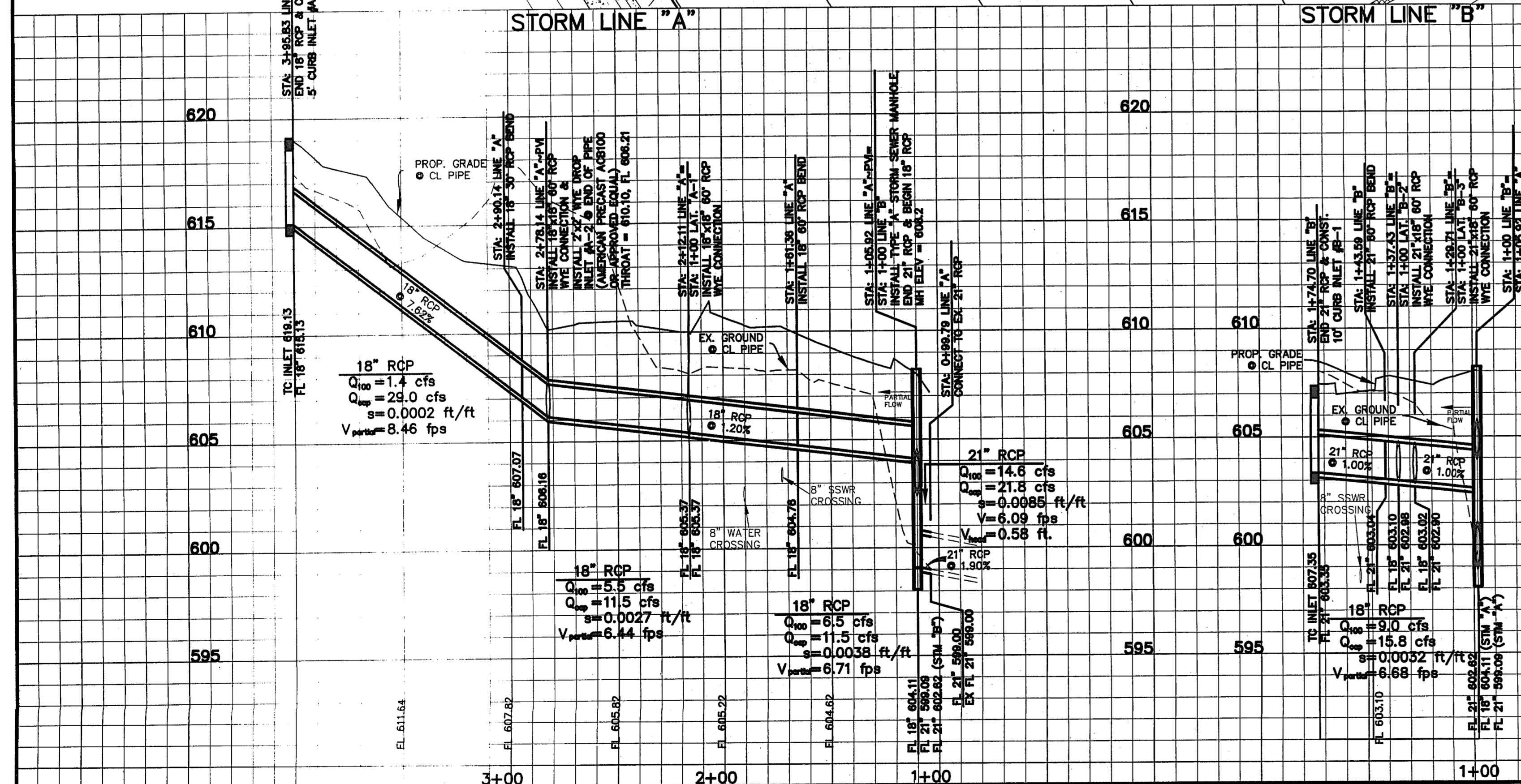
TYPE A STORM SEWER MANHOLE

INLET DESIGN CALCULATIONS

No.	Location	Drainage Area No.	Design Storm Freq. (yr.)	Time of Conc. (min.)	Intensity I (in/hr.)	Runoff Coeff. "C"	Area (Ac.)	Q (c.f.s.)	Upstream Inlet Bypass and Crossover (c.f.s.)	To/From	Total Gutter Flow (c.f.s.)	Gutter Capacity (c.f.s.)	Gutter Slope (%)	Crown Type	SELECTED INLET				
															Length "L" (Feet)	Type	Inlet Capacity (c.f.s.)	Carry-Over Downstream (c.f.s.)	Q100 Intercepted at Inlet (c.f.s.)
A-3	Parking Space	A3	100	10	8.74	0.8	0.20	1.4	0.0	---	1.4	25.1	2.00	Straight	5	SAG	10.0	0.0	1.4
A-2	2'x2' DROP INLET	A2	100	10	8.74	0.8	0.64	4.5	0.0	---	4.5	---	---	GTD	---	WYE	16.0	0.0	4.5
A-1	2'x2' DROP INLET	A1	100	10	8.74	0.8	0.17	1.2	0.0	---	1.2	---	---	GTD	---	WYE	16.0	0.0	1.2
B-1	7+15.86 Stanford Court	B1	100	10	8.74	0.8	0.90	6.3	0.0	---	6.3	19.9	1.00	Straight	10	SAG	20.0	0.0	6.3
B-2	2'x2' DROP INLET	B2	100	10	8.74	0.8	0.08	0.6	0.0	---	0.6	---	---	GTD	---	WYE	16.0	0.0	0.6
B-3	7+45.86 Stanford Court	B3	100	10	8.74	0.8	0.31	2.2	0.0	---	2.2	19.9	1.00	Straight	5	ON GRADE	2.5	0.0	2.2

STORM SEWER PIPE HYDRAULIC CALCULATIONS

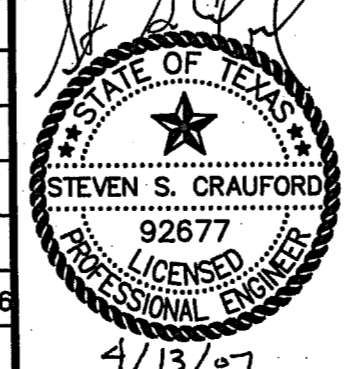
UPSTREAM STATION	DNSTREAM STATION	DISTANCE	AREA NO.	AREA "A" (ACRES)	RUNOFF COEF. "C"	INCRM. "CA"	ACCLM. "CA"	TIME AT UPSTREAM STATION (MIN)	STORM FREQUENCY (YEARS)	INTENSITY "I" (IN/HR)	RUNOFF "Q" (CF8)	SLOPE HYDRAULIC GRADIENT "S" (FT/FT)	STORM SEWER SIZE (IN)	PIPE AREA (FT ²)	PIPE CONVEYANCE "K" (M=0.013)	VELOCITY "V" (FPS)	VELOCITY HEAD "V ² /2G" (FT)	PIPE SIZE CHANGE LOSS	PIPE BEND LOSS	FLOW TIME (MIN)	TIME AT DNSTREAM STATION (MIN)		
																						PIPE CHANGE LOSS	PIPE BEND LOSS
STORM LINE A																							
385.83	290.14	105.69	A3	0.20	0.80	0.16	0.16	10.00	100	8.74	1.4	0.0002	18			0.79	0.01	0.02			2.23	12.23	
290.14	278.14	12.00	30 DEG BEND	0.00	0.80	0.00	0.16	12.23	100	8.20	1.3	0.0002	18			0.74	0.01	0.00	0.14	0.00	0.27	12.50	
278.14	212.11	66.03	A2	0.84	0.80	0.61	0.67	12.50	100	8.13	6.5	0.0027	18			3.09	0.15	0.18			0.36	12.85	
212.11	161.38	60.75	A1	0.17	0.80	0.14	0.81	12.85	100	8.04	6.6	0.0038	18			3.68	0.21	0.19	0.08	0.00	0.23	13.08	
161.38	105.92	55.44	60 DEG BEND	0.00	0.80	0.00	0.81	13.08	100	7.99	6.6	0.0038	18			3.65	0.21	0.21	0.48	0.00	0.10	0.25	13.33
105.92	98.79	6.13	LINE B1, MH	1.30	0.80	1.04	1.85	13.33	100	7.93	14.8	0.0085	21			8.09	0.68	0.05			0.02	13.35	
STORM LINE B																							
174.70	137.43	37.27	B1	0.90	0.80	0.72	0.72	10.00	100	8.74	8.3	0.0016	21			2.82	0.11	0.08	0.48	0.02	0.08	0.24	10.24
137.43	128.71	7.72	B2	0.08	0.80	0.06	0.76	10.24	100	8.69	8.8	0.0016	21			2.83	0.12	0.01	0.48	0.08	0.05	10.28	
128.71	100.00	28.71	B3	0.31	0.80	0.25	1.03	10.28	100	8.67	8.9	0.0052	21			3.72	0.22	0.09			0.13	10.42	



BENCHMARKS:
 BM #1 - CITY OF DALLAS WATER DEPARTMENT BENCHMARK, NOR THEAST CORNER OF CELESTIAL ROAD AND MONTFORT DRIVE, SQUARE CUT ON CONCRETE BASE OF 6 FOOT BRICK WALL. ELEVATION = 626.81'
 BM #2 - SOUTHEAST CORNER OF CELESTIAL ROAD AND MONTFORT DRIVE, "X" CUT IN CONCRETE SIDEWALK, APPROXIMATELY 22 FEET NORTH OF THE CURB RETURN ON MONTFORT DRIVE. ELEVATION = 624.51'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	REVISIONS DURING PLAN REVIEW	BY	DATE
1.	ADDED INLETS B-2 & B-3	LJG	4/10/07	1.	REVISED PER CITY COMMENTS	LJG	7/28/06
							4/13/07

The seal appearing on this document was authorized by Steven S. Crauford, P.E. 92677. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.



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STORM SEWER PLAN & PROFILE		PROJECT NO. CDC004 SHEET NO. 7
STORM LINES "A" & "B"		
STANFORD COURT VILLAS		
Town of Addison, Dallas County, Texas		