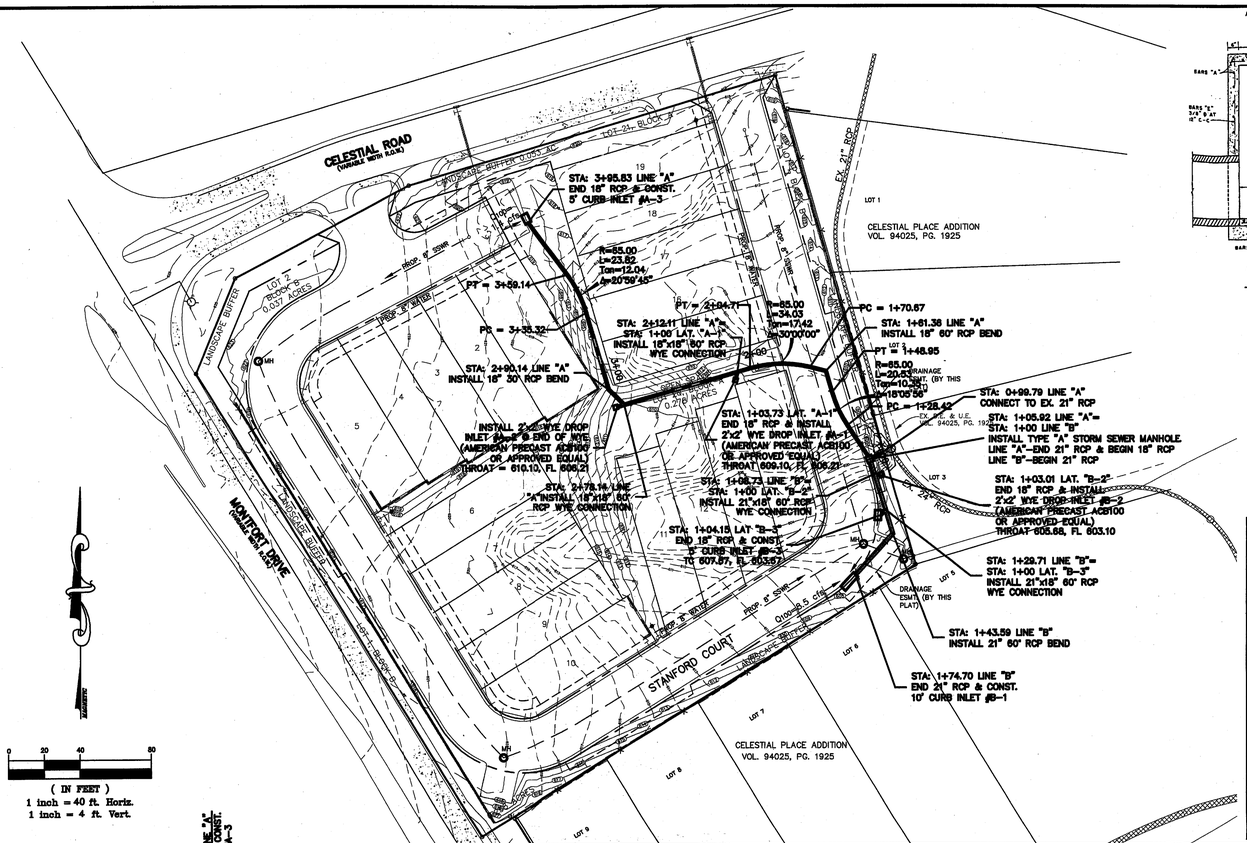
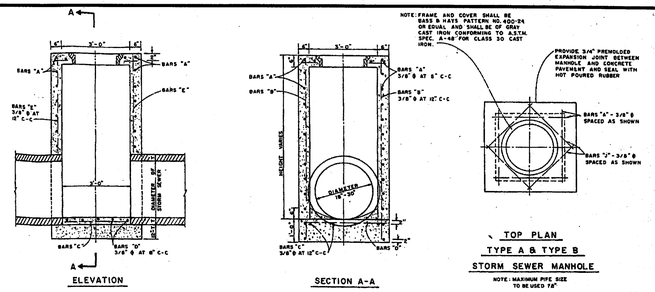




TYPE A STORM SEWER MANHOLE

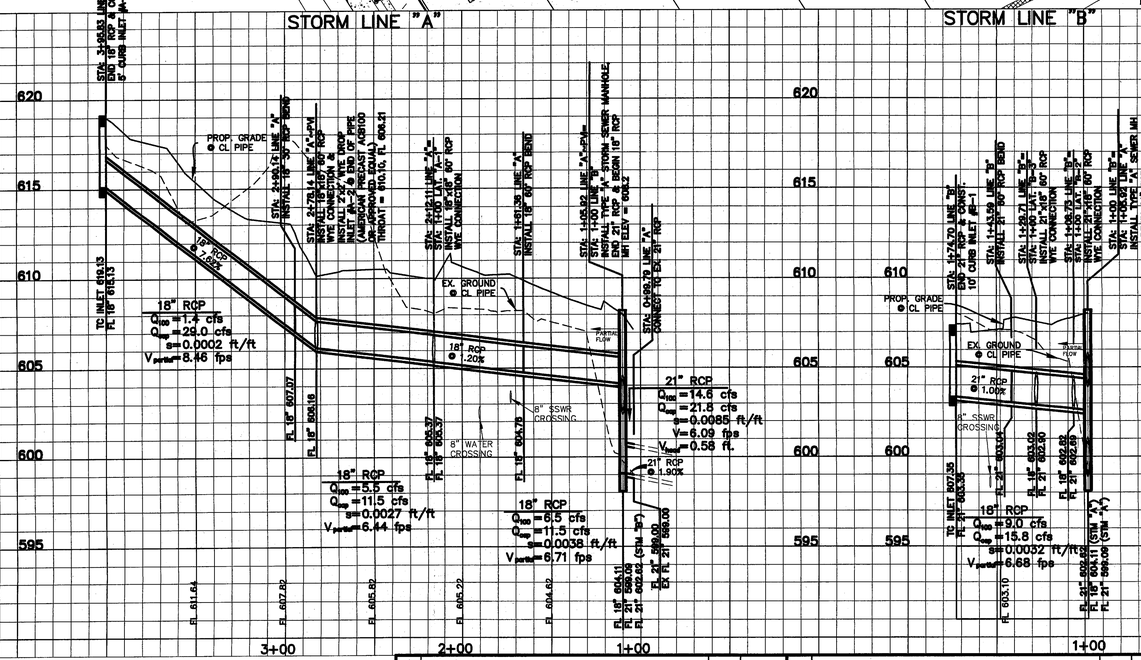
(FOR PIPE 18" TO 30" IN DIAMETER)

INLET DESIGN CALCULATIONS

INLET No.	INLET Location	AREA RUNOFF Q=CIA: Drainage Area No.	Design Storm Freq. (yrs.)	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	Sraight	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+15.96 Stanford Court	B1	100	10	8.74	0.8	0.90	6.3	0.0	—	6.3	19.9	1.00	Sraight	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	Sraight	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"	INCREM. "CA"	ACCUM. "CA"	TIME AT UPSTREAM STATION (MIN)	STORM FREQUENCY (YEARS)	INTENSITY "I" (IN/HR)	RUNOFF "Q" (CFS)	SLOPE HYDRAULIC GRADIENT "S" (FT/FT)	STORM SEWER SIZE (IN)	(BOX ONLY) PIPE AREA (FT^2)	(BOX ONLY) PIPE CONVEYANCE "K" (n=0.013)	VELOCITY "V" (FPS)	VELOCITY HEAD "V^2/2G" (FT)	"L"X"S"	Kj	PIPE SIZE CHANGE LOSSES	INLET & BEND LOSSES	FLOW TIME (MIN)	TIME AT DNSTREAM STATION (MIN)
STORM LINE A																							
395.83	280.14	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
280.14	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		0.26	0.00	0.00	0.27	12.50
278.14	212.11	66.03	A2	0.64	0.80	0.51	0.67	12.50	100	8.13	5.5	0.0027	18			3.09	0.15	0.18		0.14	0.00	0.36	12.85
212.11	181.36	50.75	A1	0.17	0.80	0.14	0.81	12.85	100	8.04	6.5	0.0038	18			3.86	0.21	0.19		0.06	0.00	0.23	13.08
181.36	105.92	55.44	60 DEG BEND	0.00	0.80	0.00	0.81	13.08	100	7.99	6.5	0.0038	18			3.85	0.21	0.21		0.48	0.00	0.25	13.33
105.92	99.79	6.13	LINE B1, MH	1.30	0.80	1.04	1.85	13.33	100	7.93	14.8	0.0085	21			6.09	0.58	0.05		0.37	0.00	0.02	13.35
STORM LINE B																							
174.70	129.71	44.99	B1	0.80	0.80	0.72	0.72	10.00	100	8.74	6.3	0.0016	21			2.62	0.11	0.07		0.48	0.09	0.29	10.29
129.71	108.73	20.98	B3	0.31	0.80	0.25	0.97	10.29	100	8.67	8.4	0.0028	21			3.49	0.19	0.06		0.48	0.02	0.10	10.39
108.73	100.00	8.73	B2	0.08	0.80	0.06	1.03	10.39	100	8.65	8.9	0.0032	21			3.71	0.21	0.03				0.04	10.43



BENCHMARKS:

BM #1 - CITY OF DALLAS WATER DEPARTMENT BENCHMARK, NORTHEAST 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	4/16/07	1.	REVSED PER CITY COMMENTS	LJG	7/28/06

STATE OF TEXAS
STEVEN S. CRAUFORD
92677
LICENSED PROFESSIONAL ENGINEER
4/16/07

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

Jones & Boyd, Inc.
17090 Dallas Parkway, Suite 200
Dallas, Texas 75248
972.248.7676 office
972.248.1414 fax
www.jones-boyd.com

- Engineering
- Surveying
- Planning
- Landscape Architecture
- Construction Management

STORM SEWER PLAN & PROFILE

STORM LINES "A" & "B"

STANFORD COURT VILLAS

Town of Addison, Dallas County, Texas

PROJECT NO. CDC004

SHEET NO. 7

2006-03

Plotted by: lgehrig Plot Date: 4/16/2007 5:10 PM

Drawing: H:\Projects\CDC004\dwg\CDC004ST.dwg Saved By: lgehrig Save Time: 4/16/2007 5:10 PM