

LEGEND

- DRAINAGE AREA NUMBER
- PROPOSED DRAINAGE AREA (ACRES)
- PROPOSED RUNOFF, Q (CFS)
- PROPOSED DRAINAGE DIVIDE
- EXISTING CONTOURS
- PROPOSED FLOW DIRECTION
- PROPOSED INLET LABEL

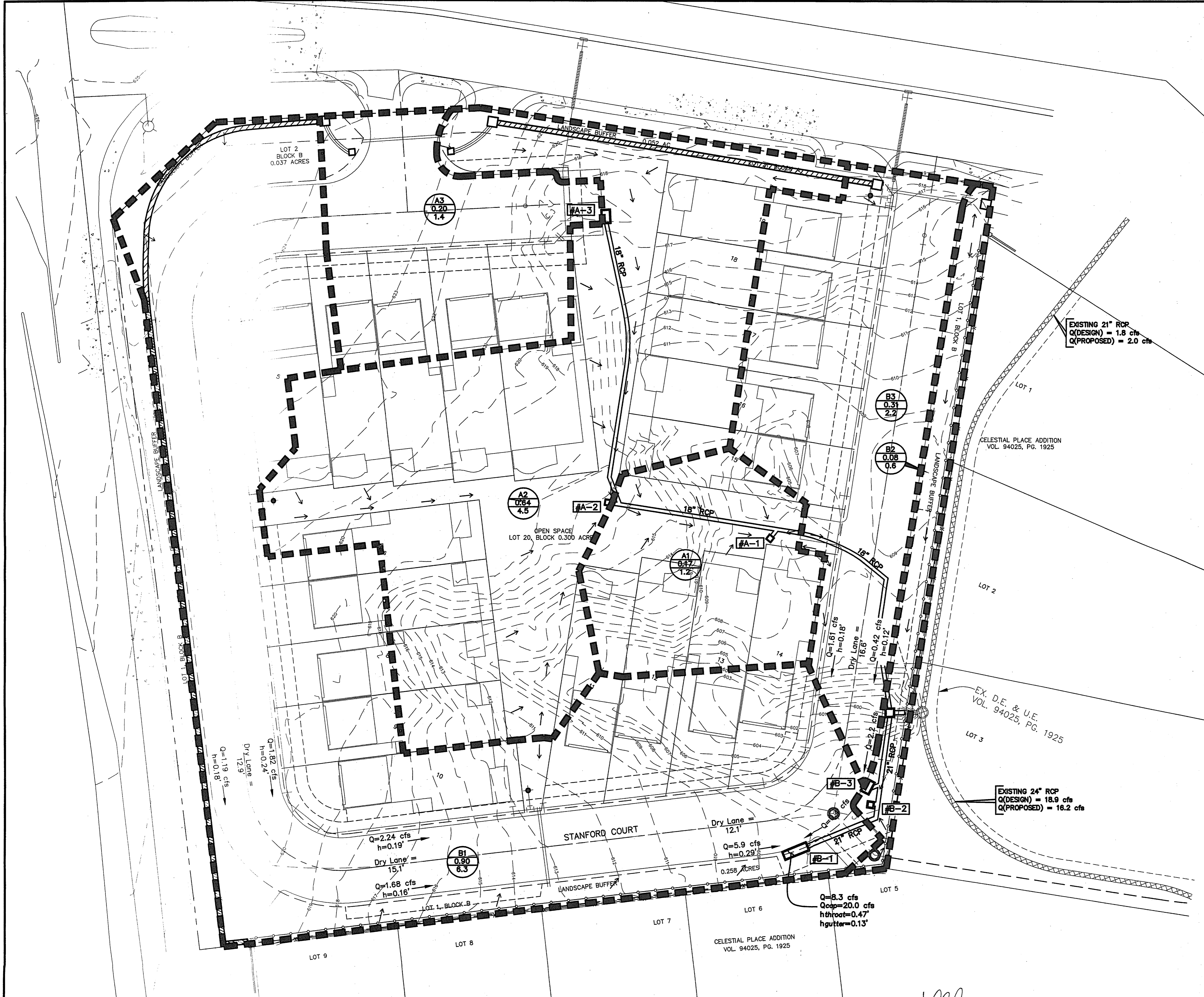
Sample Calculation of Capacity of Parabolic Crown
 Calcs per Manning's Equation

Street width (F-F) =	26 ft.
Crown =	4 in.
slope =	2 %
n (manning) =	0.0175
Area (one side) =	1.4444 ft ²
WP (one side) =	13.5043 ft
R (one side) =	0.107
Capacity (one side) =	3.91 c.f.s.
Area (both sides) =	7.2222 ft ²
WP (both sides) =	27.0085 ft
R (both sides) =	0.267
Capacity (both sides) =	36.00 c.f.s.
Velocity (Q/A) =	4.98 ft/s
n (1-1/2 in. above TC) =	0.02
Area (1-1/2 in. above TC) =	11.35
WP (1-1/2 in. above TC) =	40.01
R (1-1/2 in. above TC) =	0.28
Capacity (1-1/2 in. above TC) =	58.82 c.f.s.
Velocity (Q/A) =	5.16 ft/s

ON-SITE RUNOFF CALCULATIONS (DEVELOPED CONDITIONS)

Drainage Area #	Area (Acres)	Runoff Coeff.	Intensity (in./hr.)	Time (conc.) (minutes)	Discharge (c.f.s.)	Comment
	"A"	"C"	"I"	TC	"Q"	
A1	0.17	0.8	8.74	10.0	1.2	Developed - Town Home
A2	0.84	0.8	8.74	10.0	4.5	Developed - Town Home
A3	0.20	0.8	8.74	10.0	1.4	Developed - Town Home
B1	0.90	0.8	8.74	10.0	6.3	Developed - Town Home
B2	0.08	0.8	8.74	10.0	0.6	Developed - Town Home
B3	0.31	0.8	8.74	10.0	2.2	Developed - Town Home

DRAINAGE DESIGN THEORY
 Rational Method
 Q=CIA



BENCHMARKS:
 BM #1 - CITY OF DALLAS WATER DEPARTMENT BENCHMARK, NORTH-EAST 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

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DRAINAGE AREA MAP

STANFORD COURT VILLAS

Town of Addison, Dallas County, Texas

PROJECT NO. CDC004
 SHEET NO. 6

Plotted by: scrauford Plot Date: 4/13/2007 9:27 AM
 Drawing: H:\Projects\CD00004\dwg\CD00004A.dwg Saved By: Igehrig Save Time: 4/11/2007 8:44 AM

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