

PLAN LEGEND

	= EXIST. DRAINAGE FLOW		= EXISTING FIRE HYDRANT
	= NEW DRAINAGE FLOW		= EX. WASTEWATER MANHOLE
	= EXIST. CONTOUR ELEV		= NEW FIRE HYDRANT
	= NEW GRADING CONTOUR		= NEW WW MANHOLE
	= NEW PAVING CONTOUR		= NEW STORM DRAIN MH
	= EXIST. SPOT ELEVATION		= WATER METER
	= NEW SPOT ELEVATION		= DCO = TWO-WAY WW CLEANOUT
	= DRAINAGE DIVIDE		= WV = WATER MAIN VALVE
	= DBL DETECTOR CHECK VAULT		= TEE CONNECTION
	= DBL DETECTOR CHECK VAULT		= TEE CONNECTION
	= DBL DETECTOR CHECK VAULT		= TEE CONNECTION

DRAINAGE AREA CALCULATIONS

(INDUSTRIAL DISTRICT)

DRAINAGE AREA MARK	AREA (acre)	Tc (min)	I100	C	Q100 (cfs)	REMARKS
A1	0.603	10	8.88	0.95	5.09	100-YR FREQUENCY
A2	1.196	10	8.88	0.95	10.09	100-YR FREQUENCY
B1	0.022	10	8.88	0.95	0.18	100-YR FREQUENCY
B2	0.019	10	8.88	0.95	0.16	100-YR FREQUENCY
C1	0.091	10	8.88	0.95	0.77	100-YR FREQUENCY
C2	0.041	10	8.88	0.95	0.34	100-YR FREQUENCY

STORMWATER DETENTION CALCULATIONS - AREA A1

(100-YEAR FREQUENCY) (ALLOWABLE OUTFLOW Q = 5.11 cfs)

AREA (acre)	Tc (min)	I100	C	Q100 (cfs)	VOL. in (c.f.)	VOL. out (c.f.)	DETAINED VOL. (c.f.)
0.60	15	7.52	0.95	4.31	3877.0	4598.7	0.0
0.60	20	6.80	0.95	3.90	5045.7	6131.6	0.0
0.60	30	5.75	0.95	3.29	7022.0	9197.4	0.0
0.60	40	5.00	0.95	2.86	8740.5	12263.2	0.0
0.60	50	4.90	0.95	2.81	10424.7	15329.1	0.0
0.60	60	3.91	0.95	2.24	11768.6	18394.9	0.0

NOTE:
 1. ALLOWABLE OUTFLOW IS BASED ON 12" PIPE AT 0.011 SLOPE WITH VELOCITY LESS THAN 15fps.
 2. DETAINED VOLUME IS EQUAL TO "VOLUME IN" MINUS "VOLUME OUT".

STORMWATER DETENTION CALCULATIONS - AREA A2

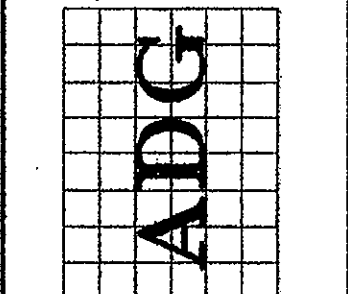
(100-YEAR FREQUENCY) (ALLOWABLE OUTFLOW Q = 14.84 cfs)

AREA (acre)	Tc (min)	I100	C	Q100 (cfs)	VOL. in (c.f.)	VOL. out (c.f.)	DETAINED VOL. (c.f.)
1.20	15	7.52	0.95	8.54	7689.8	13358.5	0.0
1.20	20	6.80	0.95	7.73	10007.6	17811.3	0.0
1.20	30	5.75	0.95	6.53	13927.5	26716.9	0.0
1.20	40	5.00	0.95	5.68	17336.1	35622.5	0.0
1.20	50	4.90	0.95	5.57	20676.6	44528.2	0.0
1.20	60	3.91	0.95	4.44	23342.1	53433.8	0.0

NOTE:
 1. ALLOWABLE OUTFLOW IS BASED ON 18" PIPE AT 0.011 SLOPE WITH VELOCITY LESS THAN 15fps.
 2. DETAINED VOLUME IS EQUAL TO "VOLUME IN" MINUS "VOLUME OUT".

EXPIRATION DATE:
 AFFIXATION DATE:

Addison Design Group, LLC
 Architecture - Interior Architecture
 1750 North Collins Blvd, Suite 214
 Richardson, Texas 75080
 Tel: (972) 437-4611 Fax: (972) 671-9191



AIRCORP
 15900 DOOLEY ROAD
 ADDISON, TEXAS

Job No. **00018**
 Plan No.
 Date **31 JAN 2005**

Drawn By **Ccei**

Revisions
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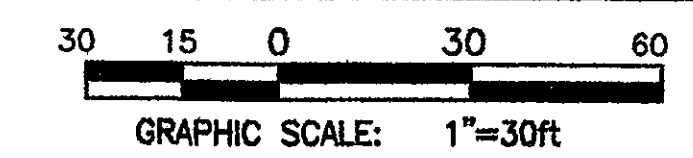
Sheet Title
ONSITE DRAINAGE AREA PLAN & CALCS

Sheet No.

C500

of 15

01 ONSITE DRAINAGE AREA PLAN



CARRERA consulting engineers, inc.
 Structural, Civil, & Construction Engineering

3930 Meredith Avenue Dallas, Texas 75211 Tel: (214) 330-4771 Fax: (214) 330-2167

