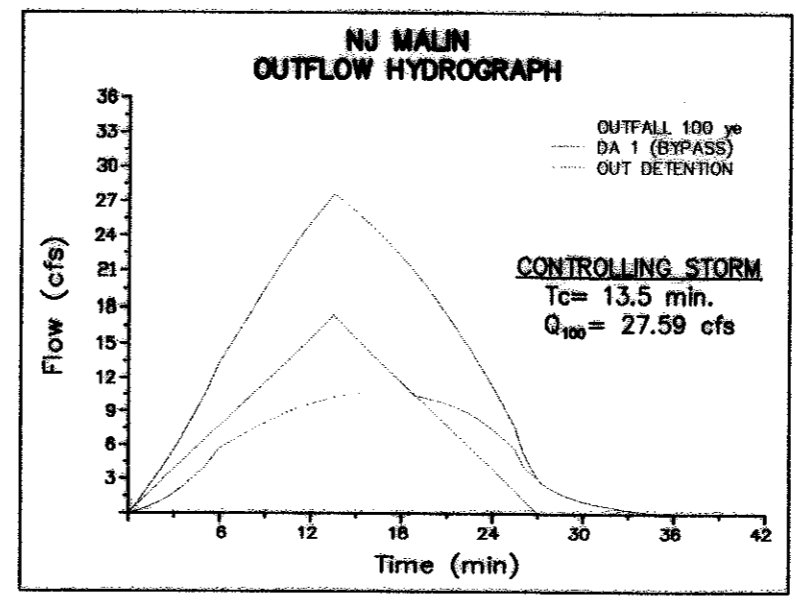


BENCH MARK LIST:
 BM #1 ALUMINUM DISK SET IN CONCRETE STAMPED "ARP 2 ADS" LOCATED ON THE ADDISON AIRPORT, APPROXIMATELY 400' EAST OF THE CONTROL TOWER ELEV=570.88

MIDWAY PARK NORTH II
 (VOL. 83035, PG. 1180)
 LOT 1



EXISTING DRAINAGE CONDITIONS
 A = 5.09 Acres
 Tc = 14 minutes
 I100 = 8.74 in/hr
 Ccomp = 0.69
 Q100 = 27.39 cfs - ALLOWABLE DISCHARGE
 * Ccomp = (3.92*0.8)+(1.17*0.3) / (3.92+1.17)
 WHERE 3.92 ACRES = EXISTING DEVELOPED CONDITIONS
 1.17 ACRES = EXISTING UNDEVELOPED CONDITIONS

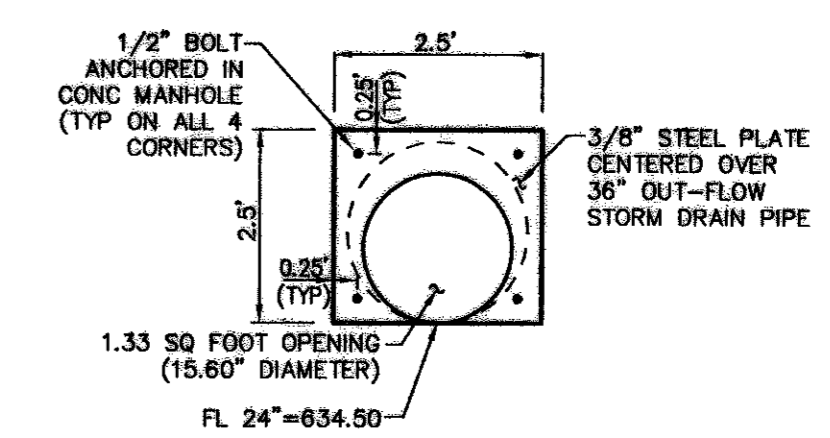
0 15' 30' 60' 90'
 GRAPHIC SCALE IN FEET

LEGEND

- B BOLLARD
- EM ELECTRIC METER
- PP POWER POLE
- LS LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- ICV IRRIGATION CONTROL VALVE
- FD FIRE HYDRANT
- CL CLEANOUT
- MH MANHOLE
- GM GAS METER
- TSC TRAFFIC SIGNAL CONTROL
- TSP TRAFFIC SIGNAL POLE
- TELE TELEPHONE BOX
- TV TV BOX
- FP FLAG POLE
- SNL TRAFFIC SIGN
- PL PROPERTY LINE
- FENCE
- 613 EXIST CONTOUR
- NEW IMPERVIOUS AREA (1.17 ACRES)
- 1/100 DRAINAGE AREA No. 0100 FLOW IN C.F.S.
- DRAINAGE AREA DIVIDE LINE

DRAINAGE AREA TABLE

DRAINAGE AREA No.	AREA (acres)	C	Tc (minutes)	I100 (Inch/hour)	Q100 (cfs)
1	2.73	0.8	13.5	7.95	17.37
2	0.55	0.8	10.0	8.74	3.85
3	0.21	0.8	10.0	8.74	1.47
4	0.56	0.8	10.0	8.74	3.92
5	1.04	0.8	10.0	8.74	7.27



FLOW REDUCER PLATE
ORIFACE PLATE CALCS
 Q = CA√2gh = 10.95 cfs
 C = 0.65 (discharge coefficient)
 A = AREA OPENING (sq ft)
 g = 32.2 ft/sec
 h = 2.5 (depth of water)
 A = 1.33 SQUARE FOOT

GRADING AND DRAINAGE GENERAL NOTES

- REFER TO GEOTECHNICAL REPORT FOR REQUIREMENTS REGARDING FILL COMPACTION AND MOISTURE CONTENT.
- UNLESS NOTED, ALL FILL IS TO BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY WITHIN 3% OF OPTIMUM MOISTURE CONTENT. FILL TO BE PLACED IN A MAXIMUM OF 6" LIFTS.
- ALL WALKS TO HAVE A MAXIMUM CROSS SLOPE OF 2%.
- GRADING OF ALL HANDICAPPED SPACES AND ROUTES TO CONFORM TO STATE, LOCAL AND FEDERAL GUIDELINES.
- UNLESS NOTED, STORM DRAIN LINES MAY BE OF THE FOLLOWING MATERIALS:
 - A. RCP C-76, CLASS III (WITHIN ALL PUBLIC RIGHT-OF-WAY)
 - B. ADS N-12
 - C. HANCOR HI-Q
 AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS & TOWN OF ADDISON SPECIFICATIONS.
- UNLESS NOTED, GRATE INLET TO BE "AMERICAN INDUSTRIAL PRE-CAST PRODUCTS, INC." PRECAST CATCH BASIN, SIZED AS SHOWN, OF APPROVED EQUAL.
- FINAL PAVING, CURB AND SIDEWALK ELEVATIONS WILL BE PLACED AT PLUS OR MINUS 0.03 FOOT.
- REFER TO LANDSCAPE SPECIFICATION FOR SEEDING AND SODDING REQUIREMENTS.
- ANY CONCRETE, ROCK OR MATERIAL DEEMED UNSUITABLE FOR SUBGRADE, BY ENGINEER, SHALL BE DISPOSED OF OFFSITE AT CONTRACTOR'S EXPENSE.
- TRENCH BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.10, AND SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH NCTCOG ITEM 6.2.9 TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
- EMBEDMENT SHALL CONFORM TO THE REQUIREMENTS OF NCTCOG ITEM 6.2.9 UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN THE STANDARD CITY SPECIFICATIONS.
- A ROUND MANHOLE COVER MEETING CITY SPECIFICATIONS SHALL BE PLACED IN ALL INLET TOPS. THE MANHOLE COVER SHALL BE PLACED NEAR THE OUTLET PIPE.
- ALL CONCRETE FOR INLETS AND DRAINAGE STRUCTURES SHALL CONFORM TO NCTCOG ITEM 7.4.5, CLASS "A" UNLESS OTHERWISE SHOWN ON THESE PLANS OR STATED IN STANDARD CITY SPECIFICATIONS.
- CRUSHED STONE BEDDING OR APPROVED EQUAL SHALL BE PROVIDED BY THE CONTRACTOR WHEN ROCK IS ENCOUNTERED IN TRENCHES. THERE SHALL BE NO ADDITIONAL PAY ITEM OF THE CRUSHED STONE BEDDING.
- IF REQUIRED DUE TO CONSTRUCTION, POWER POLES TO BE BRACED OR RELOCATED AT CONTRACTORS EXPENSE.

RECORD DRAWING
 THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.
 CONTRACTOR: PHOENIX COMMERCIAL INC.
 DATE REVISED: 11/18/2002

STORM SEWER CALCULATIONS

LINE / STATION	SIZE	Q100 (cfs)	C (cfs)	V (fps)	V ² /2g	S _f
LINE "ST-1" (0+00 - 0+72.31)	24"	10.95	18.65	3.49	0.19	0.002343
LINE "ST-2" (0+00 - 1+13.20)	21"	11.19	15.20	4.65	0.34	0.006796
LINE "ST-2" (1+24.21 - 2+18.01)	18"	7.27	10.92	4.11	0.26	0.004790
LINE "ST-3" (0+00 - 2+65.87)	12"	3.85	3.90	4.90	0.39	0.011678

15800 MIDWAY ROAD Ltd.
 (VOL. 83174, PG. 4932)

11/18/2002 RECORD DRAWING

Pacheco Koch Consulting Engineers
 9401 LBJ FREEWAY SUITE 300 DALLAS, TEXAS 75243 972.235.3031

STORM SEWER PLAN
NJ MALIN EXPANSION
MIDWAY ROAD
ADDISON, TEXAS
CITY OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
CJE	JLM	JULY 03, 2001	1"=30'			C4.0



M:\DWG-22\2006-01-07\A-C4.0 STORM SEWER PLAN.DWG