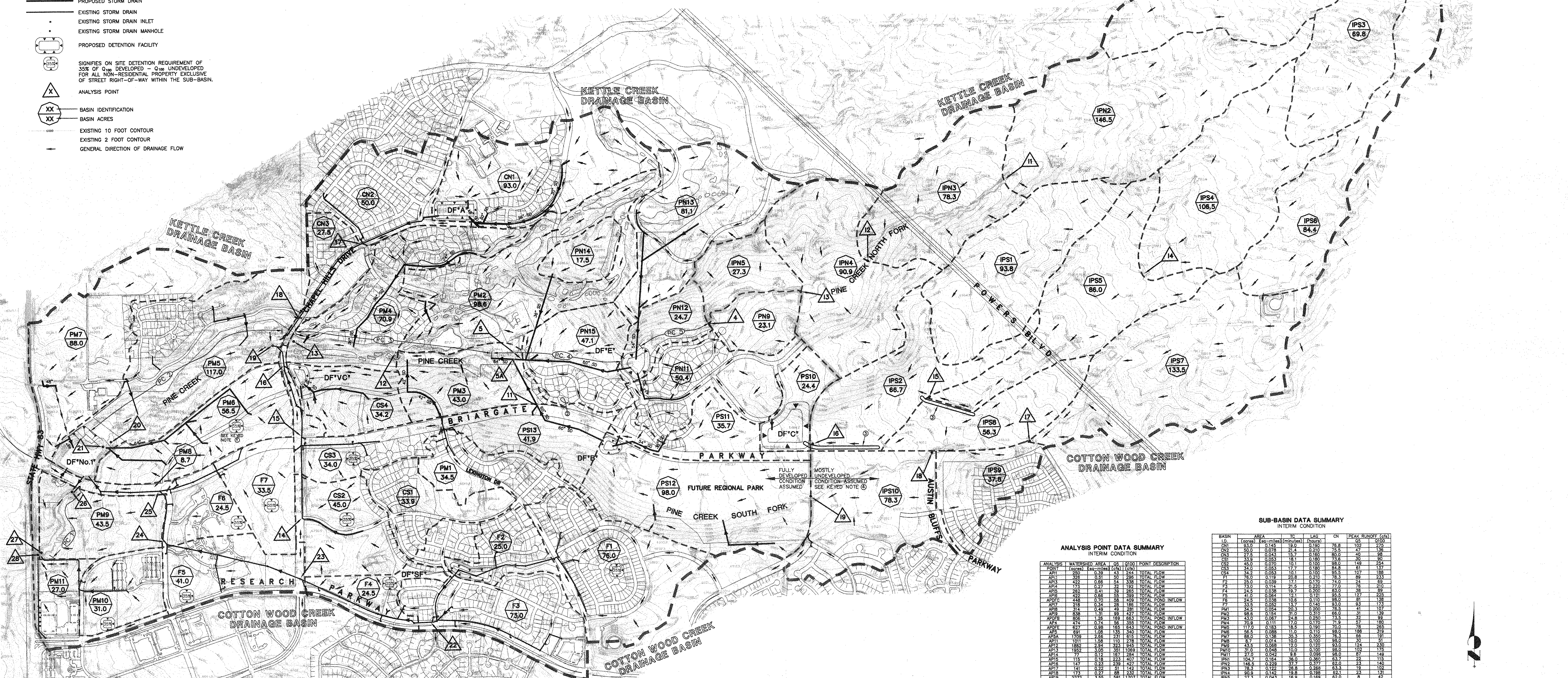


LEGEND

- MAJOR DRAINAGE BASIN BOUNDARY
- - - SUB-BASIN BOUNDARY
- FULL DEVELOPMENT LIMIT
- LIMITS OF CURRENT STUDY
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- EXISTING STORM DRAIN INLET
- EXISTING STORM DRAIN MANHOLE
- PROPOSED DETENTION FACILITY
- 955 SIGNIFIES ON SITE DETENTION REQUIREMENT OF 35% OF Q₁₀₀ DEVELOPED - Q₁₀₀ UNDEVELOPED FOR ALL NON-RESIDENTIAL PROPERTY EXCLUSIVE OF STREET RIGHT-OF-WAY WITHIN THE SUB-BASIN.
- X ANALYSIS POINT
- XX BASIN IDENTIFICATION
- XX BASIN ACRES
- EXISTING 10 FOOT CONTOUR
- EXISTING 2 FOOT CONTOUR
- GENERAL DIRECTION OF DRAINAGE FLOW

AMENDMENT 2 TO PINE CREEK DRAINAGE BASIN PLANNING STUDY INTERIM CONDITION BASIN MAP AND MASTER PLAN



GENERAL NOTES:

- PROPOSED STORM DRAINS SHOWN ON THIS PLAN ARE ONLY INTENDED TO INDICATE GENERAL LOCATIONS AND APPROXIMATE SIZES OF FUTURE FACILITIES. ACTUAL STORM DRAIN SIZES AND LOCATIONS SHALL BE DETERMINED WITH MORE DETAILED ANALYSIS AT THE TIME OF DETAILED DESIGN OF THE FACILITIES. IT IS LIKELY THAT ADDITIONAL FACILITIES NOT SHOWN ON THIS PLAN WILL BE REQUIRED.
- PROPOSED DETENTION FACILITIES SHOWN ON THIS PLAN ARE ONLY INTENDED TO INDICATE GENERAL LOCATIONS AND LAND AREA REQUIRED FOR THESE FACILITIES. ACTUAL LOCATIONS AND LAND AREA REQUIRED SHALL BE DETERMINED AT THE TIME OF DETAILED DESIGN OF THE FACILITIES.
- EXCEPT AS OTHERWISE NOTED, THIS PLAN SHALL NOT MODIFY THE REQUIREMENTS OF PREVIOUSLY APPROVED MASTER DEVELOPMENT DRAINAGE PLANS AND FINAL DRAINAGE REPORTS.

KEYED NOTES:

- SUB-BASIN PM6 WAS ANALYZED ASSUMING FREE DISCHARGE FROM THE SUB-BASIN. FREE DISCHARGE FROM THE SUB-BASIN MAY BE ALLOWED PROVIDED THE OUTFALL SYSTEM TO PINE CREEK IS SIZED ACCORDINGLY.
- SECTION OF PINE CREEK TO BE ELIMINATED.
- TEMPORARY DIVERSION BERMS
- ASSUMED DEVELOPMENT IN BASINS WITH "I" (INTERIM) PREFIX IS LIMITED TO THE FOLLOWING:
 - 12.4 ACRES POWERS BOULEVARD CORRIDOR AT 80% IMPERVIOUS
 - 30 ACRES NORTH OF OLD RANCH ROAD AT 1 DU/AC
 - 23 ACRES OF BASIN IP99 (SAGEWOOD) AT 4 DU/AC
 - 10 ACRES OF BASIN IPS10 (YMCA) AT 50% IMPERVIOUS
 - 16 ACRES OF BASIN IPS10 (GATEHOUSE FILING NO. 5) AT 3 DU/AC

PROPOSED TREATMENT FOR PINE CREEK CHANNEL:

REACH ID	PROPOSED TREATMENT **
PC 1	LEAVE NATURAL WITH MINOR BANK AND BED STABILIZATION.
PC 2	LEAVE NATURAL.
PC 3	LEAVE NATURAL WITH MINOR BANK AND BED STABILIZATION.
PC 4	REGRADE TO PROVIDE WIDE DEPRESSED AREA TO SERVE AS EMERGENCY RELIEF CHANNEL. CONSTRUCT 54" STORM DRAIN TO CONVEY 100 YEAR DESIGN FLOW.
PC 5	LEAVE NATURAL WITH BED AND BANK STABILIZATION.

** ACTUAL TREATMENT REQUIREMENT TO BE DETERMINED WITH FUTURE DETAILED HYDRAULIC ANALYSIS.
- NATURAL CHANNEL WILL REQUIRE MONITORING TO VERIFY PERFORMANCE AFTER DEVELOPMENT OCCURS.

REGIONAL DETENTION FACILITY DATA SUMMARY
INTERIM CONDITION

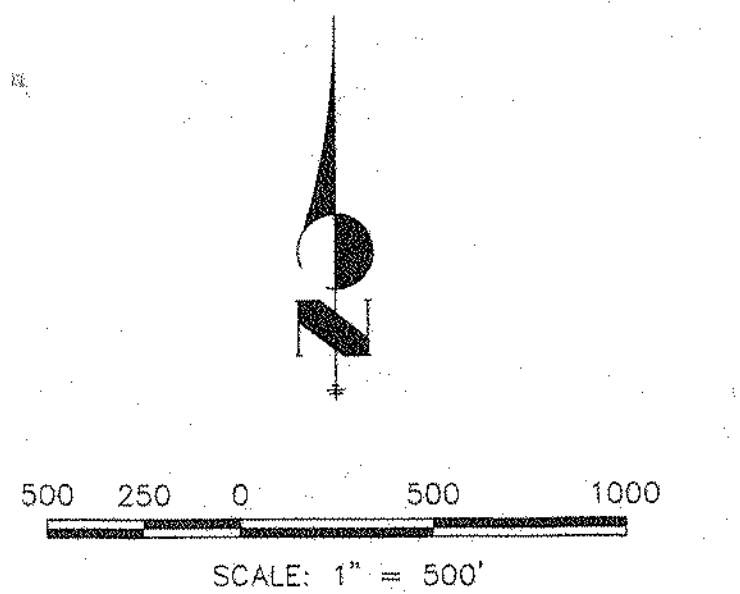
DETENTION FACILITY I.D.	PEAK INFLOW (cfs)	PEAK INFLOW (cfs) @ 10:00	PEAK OUTFLOW (cfs)	PEAK OUTFLOW (cfs) @ 10:00	ESTIMATED PEAK STORAGE (cfs-h)
A	159	228	6	9	4
B	169	663	102	286	2
C	158	408	0	8	10
E	158	843	97	60	2
No. 1	1251	2744	452	1130	37

ANALYSIS POINT DATA SUMMARY
INTERIM CONDITION

ANALYSIS POINT I.D.	WATERSHED AREA (acres)	CG (feet)	Q100 (cfs)	POINT DESCRIPTION
AP1	255	0.39	43	244 TOTAL FLOW
AP2	326	0.51	50	296 TOTAL FLOW
AP3	423	0.66	64	358 TOTAL FLOW
AP4	173	0.27	32	192 TOTAL FLOW
AP5	141	0.22	25	142 TOTAL FLOW
AP6	222	0.68	55	389 TOTAL FLOW
AP7	246	0.70	58	409 TOTAL FLOW
AP8	314	0.49	48	281 TOTAL FLOW
AP9	126	0.26	19	114 TOTAL FLOW
AP10	806	1.26	159	683 TOTAL FLOW
AP11	627	0.69	103	551 TOTAL FLOW
AP12	691	1.08	135	340 TOTAL FLOW
AP13	1709	2.66	431	615 TOTAL FLOW
AP14	1031	1.58	110	278 TOTAL FLOW
AP15	188	0.24	30	124 TOTAL FLOW
AP16	1552	3.05	351	1083 TOTAL FLOW
AP17	77	0.12	15	284 TOTAL FLOW
AP18	115	0.18	22	40 TOTAL FLOW
AP19	147	0.23	29	422 TOTAL FLOW
AP20	141	0.22	25	142 TOTAL FLOW
AP21	173	0.27	32	237 TOTAL FLOW
AP22	2272	3.55	449	1923 TOTAL FLOW
AP23	2392	3.74	489	1923 TOTAL FLOW
AP24	2445	3.82	747	2084 TOTAL FLOW
AP25	102	0.14	19	110 TOTAL FLOW
AP26	173	0.27	181	337 TOTAL FLOW
AP27	NA	NA	77	SURFACE FLOW
AP28	NA	NA	260	PIPE FLOW
AP29	198	0.31	194	331 TOTAL FLOW
AP30	NA	NA	299	PIPE FLOW
AP31	NA	NA	33	SURFACE FLOW
AP32	237	0.37	281	508 TOTAL FLOW
AP33	NA	NA	159	SURFACE FLOW
AP34	NA	NA	350	PIPE FLOW
AP35	224	0.46	NA	461 PIPE FLOW
AP36	NA	NA	175	SURFACE FLOW
AP37	2835	4.43	452	2744 TOTAL FLOW
AP38	2835	4.43	452	1130 TOTAL FLOW
AP39	2835	4.43	452	1130 TOTAL FLOW
AP40	2835	4.43	452	1130 TOTAL FLOW
AP41	2835	4.43	452	1130 TOTAL FLOW

SUB-BASIN DATA SUMMARY
INTERIM CONDITION

BASIN I.D.	AREA (acres)	IC (minutes)	LAG (hours)	Q100 (cfs)	PEAK RUNOFF (cfs)	Q5 (cfs)	Q100 (cfs)
CN1	50.0	0.114	0.0	75.8	75.8	107	158
CN2	27.5	0.078	0.0	39.4	39.4	54	82
CN3	27.5	0.043	15.7	0.180	80.0	40	88
CS1	33.9	0.053	18.1	0.180	73.6	39	82
CS2	45.0	0.070	10.1	0.100	98.0	149	254
CS3	34.2	0.053	10.1	0.100	85.8	51	137
CS4	34.2	0.053	10.1	0.100	85.5	107	188
F1	76.0	0.118	20.9	0.210	76.3	89	233
F2	23.0	0.039	12.1	0.120	75.5	24	89
F3	73.0	0.114	21.5	0.220	77.0	78	210
F4	24.5	0.038	19.9	0.205	83.0	38	89
F5	41.0	0.064	12.1	0.121	85.5	127	225
F6	24.5	0.038	19.9	0.205	83.0	31	89
F7	34.5	0.054	20.3	0.200	78.3	41	107
PM1	88.0	0.154	0.0	0.0	88.0	0	39
PM2	56.5	0.097	0.0	0.0	56.5	0	39
PM3	43.5	0.067	0.0	0.0	43.5	0	39
PM4	20.9	0.111	0.0	0.0	20.9	0	39
PM5	117.0	0.133	18.5	0.180	70.0	78	255
PM6	56.5	0.088	11.0	0.110	98.0	198	311
PM7	88.0	0.138	23.3	0.260	75.3	86	191
PM8	8.7	0.014	10.0	0.100	98.0	30	35
PM9	13.5	0.028	12.0	0.120	93.0	124	230
PM10	31.0	0.048	10.0	0.100	98.0	102	175
PM11	104.7	0.042	9.8	0.098	98.0	81	148
PM12	104.7	0.164	30.4	0.304	82.0	22	148
PM13	148.5	0.228	32.7	0.327	82.0	23	140
PM14	78.3	0.122	19.2	0.265	83.1	19	102
PM15	80.9	0.142	19.8	0.188	69.1	23	131
PM16	21.3	0.045	18.4	0.189	58.9	20	61
PM17	21.3	0.045	18.4	0.189	58.9	20	61
PM18	50.4	0.078	18.9	0.180	76.7	55	150
PM19	24.7	0.039	12.0	0.120	82.0	12	89
PM20	80.9	0.127	19.5	0.205	74.0	73	215
PM21	17.5	0.027	10.0	0.100	74.3	17	50
PM22	NA	NA	77	SURFACE FLOW	74.3	17	50
PM23	47.1	0.074	18.6	0.180	72.7	39	120
PM24	83.8	0.147	29.5	0.295	83.1	17	84
PM25	66.7	0.104	20.0	0.200	62.4	15	88
PM26	89.8	0.109	20	0.200	62.0	15	88
PM27	108.5	0.126	20.0	0.200	63.0	20	118
PM28	86.0	0.134	20.2	0.205	63.5	15	84
PM29	84.4	0.132	20.0	0.200	63.0	15	84
PM30	133.5	0.088	26.5	0.265	62.7	13	71
PM31	37.6	0.059	12.0	0.120	74.9	39	108
PM32	56.3	0.088	26.5	0.265	62.7	13	71
PM33	78.3	0.122	17.8	0.178	71.5	60	191
PM34	24.4	0.038	19.9	0.190	74.9	21	88
PM35	88.0	0.153	23.3	0.230	69.0	32	189
PM36	41.8	0.065	14.8	0.150	74.1	42	122
TOTAL	2938.5	4.59	14.8	0.150	74.1	42	122



PINE CREEK DRAINAGE BASIN STUDY
INTERIM CONDITION BASIN MAP
& MASTER PLAN 10/12/98

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SHEET 1 OF 1
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