

AMENDMENT 3

TO PINE CREEK BASIN PLANNING STUDY FULLY DEVELOPED CONDITION BASIN MAP AND MASTER PLAN

LEGEND

- - - CURRENT MAJOR DRAINAGE BASIN BOUNDARY
- - - CURRENT SUB-BASIN BOUNDARY
- - - PREVIOUS MAJOR DRAINAGE BASIN BOUNDARY (AMENDMENT 2)
- - - LIMIT OF CURRENT STUDY
- - - UPPER LIMIT BRIARGATE MASTER PLAN
- - - EXISTING STORM DRAIN
- - - PROPOSED STORM DRAIN
- - - DETENTION FACILITY WITH DETENTION FACILITY IDENTIFICATION
- - - SIGNIFIES ON-SITE DETENTION REQUIREMENT OF 35% OF GROSS DEVELOPED = Q100 UNDEVELOPED FOR ALL NON-RESIDENTIAL PROPERTY EXCLUSIVE OF STREET RIGHT-OF-WAY WITHIN THE SUB-BASIN.
- - - ANALYSIS POINT (AP XX)
- - - XX XX BASIN IDENTIFICATION
- - - BASIN ACRES
- - - EXISTING 10 FOOT CONTOUR
- - - EXISTING 2 FOOT CONTOUR
- - - PROPOSED 10 FOOT CONTOUR
- - - PINE CREEK STUDY REACH IDENTIFICATION
- - - KEYED NOTE REFERENCE
- - - GENERAL PROPOSED DIRECTION OF DRAINAGE FLOW

500 250 0 500 1000

SCALE: 1" = 500'



GENERAL NOTES:

- FUTURE STORM SEWERS SHOWN ON THIS PLAN ARE ONLY INTENDED TO INDICATE GENERAL LOCATIONS AND APPROXIMATE SIZES OF FUTURE FACILITIES. ACTUAL STORM SEWER SIZES AND LOCATIONS SHALL BE DETERMINED WITH MORE DETAILED ANALYSIS. THE LOCATION OF THE FUTURE STORM SEWER 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 LOCATION 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:

- SECTION OF PINE CREEK TO BE ELIMINATED.
- FLOW IS TO BE DIVERTED TO A STORM SEWER IN FREQUENT EVENTS AND IS TO BE DIVIDED BETWEEN THE STORM SEWER AND NATURAL CHANNEL IN LARGER EVENTS.
- AN EMERGENCY OVERFLOW/RELIEF ROUTE SHOULD BE PLANNED ACROSS THIS SITE FROM THE LOW POINT OF TELSTAR DRIVE TO PINE CREEK.

PROPOSED TREATMENT FOR PINE CREEK CHANNEL:

REACH ID	WATERSHED AREA (acres) (sq. miles)	PEAK INFLOW Q ₁₀₀	PEAK OUTFLOW Q ₁₀₀	ESTIMATED PEAK V ₁₀₀	ADDITIONAL DATA	
					PROPOSED OWNERSHIP	STATUS
(PC 1)	LEAVE NATURAL WITH ONE DROP/CONTROL STRUCTURE. (COMPLETE)				PUBLIC	EXISTING
(PC 2)	LEAVE NATURAL WITH MINOR BED STABILIZATION AND MODIFICATIONS TO DF. NO. 1 RUNDOWN CHANNEL.				PUBLIC	EXISTING
(PC 3)	LEAVE NATURAL WITH GRADE CONTROL STRUCTURES.				PUBLIC	PROPOSED
(PC 4)	REGRADE TO PROVIDE WIDE DEPRESSED AREA TO SERVE AS EMERGENCY RELIEF CHANNEL. CONSTRUCT 54" STORM DRAIN TO CONVEY 100 YEAR DESIGN FLOW. (COMPLETE)				PUBLIC	EXISTING
(PC 5)	LEAVE NATURAL WITH GRADE CONTROL STRUCTURES.				PUBLIC	PROPOSED
(PC 6)	LEAVE NATURAL WITH GRADE CONTROL STRUCTURES.				PUBLIC	EXISTING
(PC 7)	LEAVE NATURAL WITH FREQUENT FLOWS CONVEYED IN BY-PASS STORM SEWER.				PUBLIC	EXISTING
(PC 8)	LEAVE NATURAL. FREQUENT FLOWS CONVEYED IN BY-PASS STORM SEWER.				PUBLIC	EXISTING
(PC 9)	LEAVE NATURAL WITH SOME RESHAPING. FREQUENT FLOWS CONVEYED IN BY-PASS STORM SEWER.				PUBLIC	EXISTING

** ACTUAL TREATMENT REQUIREMENT TO BE DETERMINED WITH FUTURE DETAILED HYDRAULIC ANALYSIS.

NATURAL CHANNEL WILL REQUIRE MONITORING TO VERIFY PERFORMANCE AFTER DEVELOPMENT OCCURS.

EXCEPT FOR THE REACHES NOTED ABOVE, PINE CREEK CHANNEL WILL BE BY-PASSED WITH STORM DRAIN CONVEYANCES AND ELIMINATED WITHIN THE STUDY AREA.

REGIONAL DETENTION FACILITY DATA SUMMARY FULLY DEVELOPED CONDITION

ANALYSIS POINT ID	WATERSHED AREA (acres) (sq. miles)	Q ₅ (cfs)	Q ₁₀₀ (cfs)	POINT DESCRIPTION
E1	204.6	0.32	131	239 TOTAL FLOW
E2	NA	0.41	158	340 TOTAL FLOW
E3	NA	0.40	164	310 TOTAL FLOW
E4	NA	0.40	164	310 TOTAL FLOW
E5	345.6	0.54	238	543 TOTAL FLOW
E6	NA	0.48	199	370 FLOW TO CHANNEL
E7	NA	0.48	199	370 FLOW TO CHANNEL
E8	NA	0.06	41	72 FLOW TO CHANNEL
E9	89.6	0.14	107	281 TOTAL FLOW
E10	83.2	0.15	80	144 TOTAL FLOW
E11	84.0	0.10	198	345 TOTAL FLOW FROM PNE11 & PNE12
E12	NA	0.10	131	239 TOTAL FLOW
E13	518.4	0.81	470	1178 TOTAL FLOW TO RUNDOWN
E14	NA	110	437	1070 TOTAL FLOW
E15	189.2	1.28	159	258 TOTAL FLOW
E16	1851.2	2.58	313	531 TOTAL FLOW
E17	NA	0.25	57	100 TOTAL FLOW
E18	345.6	0.54	260	478 TOTAL FLOW
E19	68.0	0.57	280	547 TOTAL FLOW
E20	NA	0.10	42	72 FLOW TO CHANNEL
E21	498.2	0.78	637	1190 TOTAL FLOW
E22	NA	0.56	80	144 TOTAL FLOW
E23	627.2	1.56	755	1755 TOTAL FLOW
E24	NA	0.08	30	57 TOTAL FLOW
E25	691.2	1.08	745	304 TOTAL FLOW
E26	NA	0.10	30	57 TOTAL FLOW
E27	1875.2	2.93	372	899 TOTAL FLOW
E28	1945.6	3.04	399	1017 TOTAL FLOW
E29	NA	0.17	224	407 TOTAL FLOW
E30	108.8	0.17	224	407 TOTAL FLOW
E31	153.6	0.24	242	433 TOTAL FLOW
E32	NA	0.17	224	407 TOTAL FLOW
E33	147.2	0.23	231	407 TOTAL FLOW
E34	2246.4	3.51	609	1655 TOTAL FLOW
E35	NA	0.14	224	407 TOTAL FLOW
E36	2400.0	3.75	712	1943 TOTAL FLOW
E37	2510.8	4.00	750	2003 TOTAL FLOW
E38	172.8	0.22	161	322 TOTAL FLOW
E39	225	0.01	77	144 SURFACE FLOW
E40	NA	0.01	77	144 SURFACE FLOW
E41	198.4	0.31	194	331 TOTAL FLOW
E42	NA	0.17	224	407 TOTAL FLOW
E43	238.3	0.32	194	331 TOTAL FLOW
E44	NA	0.14	224	407 TOTAL FLOW
E45	236.8	0.37	274	480 TOTAL FLOW
E46	NA	0	140	274 TOTAL FLOW
E47	294.4	0.48	421	581 TOTAL FLOW
E48	NA	0	120	581 TOTAL FLOW
E49	295.4	0.51	421	581 TOTAL FLOW
E50	286.0	4.40	465	1170 TOTAL FLOW
E51	286.0	4.47	466	1170 TOTAL FLOW
E52	2918.4	4.56	563	1193 TOTAL FLOW

PINE CREEK DBPS
AMENDMENT 3
BASIN MAP & MASTER PLAN
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SHEET 1 OF 5
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J-R ENGINEERING
A Subsidiary of Westrim

430 ArrowWest Drive • Colorado Springs, CO 80907
719-539-2593 • Fax 719-528-6613 • www.engineering.com